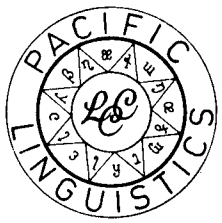
PACIFIC LINGUISTICS
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A WORLD OF LANGUAGE:

PAPERS PRESENTED TO PROFESSOR S.A. WURM ON HIS 65TH BIRTHDAY

Donald C. Laycock and Werner Winter, eds



Department of Linguistics
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THE AUSTRALIAN NATIONAL UNIVERSITY

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FOREWORD

Editing a Festschrift, it turns out, is rather like running an international conference. There are participants from a score of countries, and of as many nationalities, and more, who need to be kept *au courant* in an enterprise where even the organisers have difficulty in remembering everything that has to be done. There are those who get their papers in too early, and who then feel they can rewrite it from the beginning when they receive their proofs 18 months later; and there are those who delay to the last minute, at which stage there is sure to be a problem with maps, or tables, or photographs. The peripateticity of academics often ensured that, at crucial moments, one or the other of the editors would be in Nepal, or Perth, or Norfolk Island, or that a contributor who was the only person in the world who could answer a question about a paper would be incommunicado in China, or the Solomon Islands, or Leningrad. The ultimate deadline overtook two of the contributors to this volume: it is with extreme regret that we record the passing, in 1986, of Arthur Capell and Nguyễn Đăng Liêm — and also in 1984, of Sir John Crawford, whose support meant so much in the early days of *Pacific Linguistics*. But, in a community of scholars, there is an understanding of such problems, and the 75 contributors represented in this volume have shown remarkable patience and understanding, and we hope that they are as satisified with the final product as are the editors.

Keeping this Festschrift a secret from Stephen Wurm himself has involved an international conspiracy of gigantic proportions. Only once, in 1984, did the editors consult in person, in connection with the preparation of this volume; since then there has been extensive correspondence between them, and with several hundred linguists scattered around the world, either as contributors or gratulands. The editing and typing of manuscripts, and the preparation of maps and photographs, have been carried on in Stephen Wurm's own Department, within the framework of the series, *Pacific Linguistics*, founded by him. It is with pride that we point out that this volume is numbered C-100 in that series — that is, the hundredth full-length book in our now internationally renowned Departmental publication.

Fortunately, Stephen Wurm's frequent absences overseas made the task much easier. But those very overseas travels, with their extensive contact with other linguists, increased the risk that someone, somewhere, would drop a remark about the impending Festschrift. Indeed, with Chinese correspondents sending their letters to the editors via Stephen himself, and with typists hiding papers every time he walked into the room, and, finally, with the necessity of lining him up against the wall for photographs, we would be very surprised if the secret has been fully maintained. Nevertheless, Stephen has played the game with decorum, and has dropped no hint of any knowledge of this volume. This is as it should be.

Of necessity, the main burden of overseeing the preparation of manuscripts, and the final printing of this volume, has fallen on the senior editor in Canberra. The entire staff of *Pacific Linguistics* has had a hand in the preparation of the volume — Dianne Stacey, Ling Matsay, Jeanette Coombes, Anne Rees and Sye Tys have all added their skills to the typesetting of the volume, and have carried on much of the routine correspondence with the authors. The bulk of the typesetting in fact fell upon the last three persons, who deserve our special thanks. Rosemary Butt did sterling service in proofreading typescripts in a number of exotic linguistic fields. Evelyn Winburn checked all material dealing with Stephen's work on the language of the Reef and Santa Cruz islands, and corrected the complex diacritics. The maps were produced by Theo Baumann, in time snatched from the preparation of maps for the Language Atlas of China — fortunately that project has not fallen behind schedule. Mei Wah Lee also took time off from the China Atlas to translate letters and articles from our Chinese colleagues, and to advise on place names within China and Mongolia. Lois Carrington has been indispensable, not only in the checking of bibliographical references (covering a multitude of linguistic disciplines) but also in the obtaining and preparation of all the photographs in this volume. Annegret Schemberg searched through personal and correspondence files for items for Stephen Wurm's bibliography, and for addresses of contributors; she also provided the signature of Stephen Wurm that graces the photograph. Mira Kwasik took charge of *Pacific Linguistics* operations only after the volume was under way, but threw herself into it with enthusiasm, and has kept track of the seemingly enormous number of manuscripts and their various recensions, as well as keeping authors to the signing of publication contracts. Colleagues within the Department of Linguistics — Darrell Tryon, Tom Dutton, Bert Voorhoeve, and Malcolm Ross — not only contributed papers, but also offered expert advice on their particular linguistic areas, when a difficult point came up in some other author's manuscript.

Outside the Department, a particularly useful contribution was made by Igor de Rachewiltz, of the Department of Far Eastern History, in reading the contributions dealing with Mongolian, and making valuable suggestions for improvements in the translation; he also drew the three ḥPags-pa characters in the paper by Junast. Some of the biographical data on Stephen was supplied by his wife, Helen Groger-Wurm, who has also taken pleasure in being part of this project from its inception. Photographs were prepared by the Photographic Unit of the University, and the printing carried out, in record time, by the ANU Printing Service. As usual binding was undertaken by Frank Maccarone, of Adriatic Bookbinders. Mr Maccarone also generously made available the fine leather binding of the presentation copies, as his own personal tribute to Stephen Wurm. The frontispiece photograph was taken by Bob Cooper, of the University's Photographic Unit.

The contributors deserve our special thanks; without them there would be no Festschrift. Those who contributed personal memoirs have provided us with an opportunity to add a human touch to a volume that will otherwise make heavy intellectual demands on the reader. And those who contributed linguistic articles have given us the opportunity to revive an ancient but appropriate word: *sportule*, which is a little basket (Latin *sportula*) of gifts offered as a present. (The only quote in the Oxford Dictionary dates from 1726.)

The Tabula Gratulatoria could easily have been expanded to five times its length, but we felt it appropriate to exercise moderation, and list only the names of those who have had direct academic contact with Stephen Wurm during his long career. In this way, the list of contributors and gratulands reads like a

roll-call of old friends — colleagues, visitors to the Department, former and present students, informants, missionaries, translators, and officials. A few — very few — whose names should have appeared proved uncontactable.

Finally, our thanks go to Stephen Wurm himself, for his friendship and academic interaction with both editors over so many years, and for his patience with the Canberra editor during the preparation of this volume. He may now discover why all the members of his Department have appeared to be less productive over the last two years than has actually been the case.

Nevertheless, it is with a sense of sadness that we dedicate this volume to Stephen Wurm, on the occasion of his 65th birthday on 19 August 1987. His influence within the world of linguistics in general, and on the linguistic study of the western Pacific region in particular, has been so great, and so far-reaching, that we find it hard to imagine a time when he is no longer directing such research. But retirement from a professorship does not mean cessation of academic activity, and Stephen already has projects planned that would keep a less energetic person busy for two lifetimes. We hope only that he has time to read this volume, and to learn of the esteem in which he is held by his colleagues.

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April 1987

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STEPHEN WURM, LINGUIST

STEPHEN WURM: A LINGUISTIC MIGRATION

D.C. Laycock

My first meeting with Stephen Wurm set the pattern for a working relationship that has now lasted almost 30 years. I arrived, as a young postgraduate student, in the totally unfamiliar environment of the 'old hospital buildings' at the Australian National University. The first person I met in the corridor, as I was wandering about wondering who I had to see, was Stephen Wurm. His very name presented a problem that had to be tackled full on; I asked him, using my best German accent for the first version, whether I should call him 'Doctor [VURM]' or 'Doctor [wɜ:m]'. 'Neither', he replied; 'you call me Stephen'. And it is as 'Stephen' that he has been known by staff and students alike for his entire academic career in Australia.

It was not till some time later that I learned that he prefers his surname pronounced like *worm* in English-speaking countries, and his given name as *Stephen*; but both names change according to the country or company that he is in, and the language he is speaking; in France he is *Etienne*, in Germany *Stefan*, in Spain *Esteban*, in the USSR *Stepan*, in Hungary *Istvan* (or, preferably, *Pista*). With native control of perhaps a dozen languages, and fluency in several dozen others,[1] it is not surprising that he can adopt such a chameleon-like profile, and appear as a member of any major national group.

Stephen Wurm was born as Istvan (Stephan) Adolphe Wurm in Budapest, on 19 August 1922, of a Hungarian mother and a German-speaking father. Unable, for various reasons, to take the nationality of his father or of his mother, or of his country of residence (Austria), Stephen was born stateless, and remained so until he took out Australian citizenship in 1957. As his father died when he was very young, he was brought up by his mother, mostly in Vienna, but with vacations in Hungary, and frequent travels with family to all parts of Europe. It was these travels, coupled with a background of sufficient substance that permitted tutors or governesses in various languages for the growing child, that provided Stephen with, as he claims (Wurm 1985) "neuf langues maternelles".

Nevertheless, the language in which one is educated plays a significant role. In Stephen's case, this was German, in Vienna - the city of all his schooling, and, ultimately, the city in which he took his Ph.D. A fascination with languages even as a primary school pupil was remarked on by all who knew him, and by high-school years a proccupation with linguistic issues can be seen in a picaresque schoolboy novel that he wrote in longhand in an exercise-book at the age of 15 or 16:

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 3-14. *Pacific Linguistics*, C-100, 1987.
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> ... sagte dann etwas auf Albanesisch, was ich aber nicht verstand, da mir davon nur sehr wenig Worte geläufig waren. Ich fragte aber auf Serbisch, welches ich ganz gut sprechen konnte: „Sprichts du nicht ungarisch oder vielleicht türkisch?"[2]
>
> Einen von ihnen rief ich an und erkundigte mich auf serbisch nach einem Gasthaus. Der Mann musterte uns nach der Reihe und schüttelte dann den Kopf. Ich wiederholte meine Frage auf türkisch, hatte aber denselben Erfolg. Nun versuchte Toranyi, der als einziger von uns bulgarisch sprach, es mit dieser Sprache, aber es half nichts. Nun nahm ich alle meine albanesischen Sprachkenntnisse zusammen und erkundigte mich bei dem Mann nach einem „Khan", was auf albanesisch Gasthaus bedeutet.
>
> Er musterte uns kurz und grüßte albanesisch. Ich fragte auf Serbisch, ob er nicht deutsch oder ungarisch spreche.
>
> Ich fragte ihn hierauf, ob er nicht irgendein Lehrbuch des Albanesischen habe. „Doch", antwortete er, „ich habe es zufällig in der Tasche." Er zog es heraus. „In diesem Buch sind die gebräuchlichen Wendungen und Worte der albanesischen Sprache nebst Grammatik übersichtlich geordnet", meinte er. „Wenn Sie wollen, verkauf ich es Ihnen um 2. alb. Franc." Ich war einverstanden und kaufte das Buch um den gebotenen Preis.
>
> „Ich glaube", fuhr Körösy fort, „wir können jetzt mit dem albanesischen Studium aufhören. Wie ich sehe, verstehst du das Albanesische schon ganz gut, sonst hättest du die beiden nicht belauschen können. Ich verstehe von früher her auch einiges und verständigen können wir uns zur Not auch. Ich denke, wir sehen uns noch einem anderen Zeitvertreib um." „Ich werde dem Portier einmal fragen", meinte ich, ging hinunter und erkundigte mich beim Portier, ob er uns nicht einige Bücher oder irgendein Gesellschaftsspiel zur Verfügung stellen könne. Er antwortete, er könne mit einer kleinen Bibliothek, einem Schach- und einem Kartenspiel dienen. Ich wählte die Bibliothek, und bald darauf waren wir bis 8^{h} abends, die Pausezeit ausgenommen, über die Lekture der meist serbischen und türkischen Bücher gebeugt.

Stephen's commencement of tertiary education coincided very closely with the German *Anschluss* of Austria; but the consequent upheaval did not prevent his completing his education - especially since he was able to avoid military service because of his statelessness. After a few false starts - commencing in *Welthandel*, undertaking courses in diplomatic languages in the Konsularakademie, and considering a future in biology - Stephen came to concur with the advice of his professors that his future lay in the study of languages, and he enrolled in the Orientalisches Institut of the University of Vienna, studying mainly - but not exclusively - Turkic languages. In 1944 he was awarded his doctorate for his *Der özbekische Dialekt von Andidschan* which was immediately accepted for publication by the Österreichische Akademie der Wissenschaften.

Postwar Vienna - the Vienna of Harry Lime - had its difficulties, but Stephen was nevertheless able to spend six years at the University of Vienna as a lecturer in Altaic linguistics (1945-1951), and to marry, in 1946 Helene Maria Gröger

a student of ethnography who completed her own doctorate (on African ethnography and languages) in the same year. Early in this period he became interested in the languages of the New Guinea area, in the first instance Kiwai, which he learned about from the works of S.H. Ray; and he commenced a correspondence with Dr Arthur Capell (who had been a student of Sidney Ray, who had in turn been a student of Otto Dempwolff - so the apostolic succession goes in linguistics). Capell generously turned over to the young linguist, 21 years his junior, all his material on Kiwai, and a monograph (1951) on the Kiwai languages was Stephen's second published book - and his first venture into the field of Papuan linguistics that later became his main field of study.

The Territory of Papua and New Guinea looked more attractive than Vienna, and Stephen applied for the post of Government Linguist in Port Moresby - a newly-created position akin to that of Government Anthropologist, and one that suffered from as many public-service frustrations. One can only speculate on the future of linguistics within Papua and New Guinea had Stephen Wurm taken the position; but mail to Vienna was slow, and while waiting for a reply from the Australian Department of Territories, he accepted a position in London, in association with the Foreign Office and St Anthony's College, Oxford, to help set up the Central Asian Research Institute. Two weeks later, he was offered the position of Government Linguist in Port Moresby - but the two-year contract for London had been signed.

The years with the Central Asian Research Institute (located within the purview of the School of Oriental and African Studies of the University of London) overlapped with the coronation of Queen Elizabeth II - a fortunate coincidence which allowed Stephen to meet with his first Papuan: Mr (later Sir) John Guise, then a member of the Royal Papuan Constabulary, and later to be the first Governor-General of an independent Papua New Guinea. A note in the *Pacific Islands Monthly* (August 1953) tells the story:

> VIENNESE MOTU
>
> A Port Moresby resident tells us that Dr Stefan Wurm, a lecturer at the Vienna University, who was in London at Coronation time, astounded the native members of the P-NG Royal Constabulary Contingent by talking fluent and pure Motu and excellent Pidgin, although he had never visited Papua and New Guinea.
>
> In talking with them he further disclosed his close academic knowledge of the Territory by naming the local district of each member as he gave his home district.
>
> The natives were so impressed by his fluency that both Motu and New Guinea members asked how he could know their language so well when he had never been in their country.
>
> It is believed that in the early post-war years, Dr Wurm applied for a position with the Administration as a native language expert, but the salary offered was too low.

Such contacts facilitated Stephen's later fieldwork in Papua and New Guinea, working on Kiwai and the Highlands languages.

In 1954 Stephen moved closer, geographically, to the sphere of his future interests, taking a position with Dr Arthur Capell as a Research Fellow in Oceanic Linguistics in the Anthropology Department of Sydney University. In 1956 he and

Dr Capell founded the influential series of *Oceania Linguistic Monographs*. Funds for fieldwork and travel were very limited, but he was able to make his first investigations into Queensland Aboriginal languages such as Wakawaka and Dungidjau - work which, unfortunately, has largely remained unpublished.

In 1957 he accepted an appointment as Senior Fellow in Linguistics at the Australian National University, in Canberra - again within a Department of Anthropology, at that time under Dr W.E. Stanner as Acting Head, before the appointment of Professor John A. Barnes. It was a period of expansion for the Australian National University, then a mere decade old,[3] and the Research School of Pacific Studies was becoming the academic home of a number of famous scholars who looked to the Pacific and to South-east Asia and East Asia - regions at that time little known in Australia. For a linguist, a particularly strong magnet was the virtually uncharted region of Papua (then an Australian colony), and the United Nations Trust Territory of New Guinea, then mandated to Australia. There was money for fieldwork, and so in 1958 Stephen, accompanied by his wife, paid his first visit to New Guinea. He established the existence of a large group of languages in the Highlands areas of New Guinea, a finding which contradicted the previous views of the area (gained from scattered observations in the more accessible coastal areas)[4] as a congeries of unrelated languages. A major contribution at that time was the paper 'Is New Guinea a Babel?', an address to the New Guinea Society in 1959.

I joined the ANU as Stephen's first student just at that time (early 1959) - fresh from a bachelor's degree in modern languages, and a year as a research assistant in aboriginal languages, with T.G.H. Strehlow. I had expected to continue research into Australian aboriginal languages; I had hardly even heard of New Guinea. But Stephen Wurm talked me into attending his informal classes (taken mainly by anthropological students) in New Guinea Pidgin; and three months later I found myself in the Sepik.

This is not my story; but from that time on my life was closely intertwined with that of Stephen Wurm, and most of the events now to be described derive from personal (if sometimes faulty) memory. In 1961 we co-authored our first joint paper, and the following year became Foundation Members of the Australian Institute of Aboriginal Studies, and later members of its Linguistics Committee. Stephen is still a member of that Committee, and was its Chairman, and a member of the Executive Council of the AIAS, for the years 1966-72. We were also foundation members of the Linguistic Circle of Canberra, but that was a very different type of organisation; I do not recall that it had a membership list, or a constitution, or - apart from a conference in May 1964 - that it ever held meetings. Virtually all persons having to do with languages who ever passed through Canberra were automatically members - John Harris, the Secretary (over whose signature the first announcement about the Publications of the Linguistic Circle went out), Göran Malmqvist, Chris Court, Charles Ruhle, Hermann Bluhme; without a membership list it is hard to be sure. The Circle was an organisation that existed largely in name only, as a convenient non-departmental publishing aegis for obtaining funds (Sir John Crawford, then Director of the Research School of Pacific Studies, found £200 which started the whole thing off) for printing the Linguistic Circle of Canberra Publications (now *Pacific Linguistics*; but the observant reader can still find the letters LCC on the logo on the front cover). The first numbers of the series appeared in 1963 (see article by Carrington, in this volume).

The 1960s saw many developments on the linguistic front in Australia, among them the moves that led to the establishment of independent teaching departments of linguistics in Australia (Monash 1965, ANU 1970, Sydney 1975, Newcastle 1975);

Stephen had some input into all of these. He was also one of the prime movers in the formation of the Linguistic Society of Australia,[5] as the interim President who called the inaugural meeting in May 1967, and the Society's first elected President (1967-70), as well as vice-president at various later times. Since 1967 Stephen has also been the Australian representative on the UNESCO Comité International Permanent de Linguistes (CIPL), with which body the Australian Linguistic Society is affiliated.



1964
Fieldwork in the Australian language Dungidjau, with Willie Mackenzie, the last speaker (Photo: *Sunday Mail*)

During the 1960s Stephen was still doing research on Australian aboriginal languages, and occasional publications on these languages can still be found in the 1970s; but by the time of the publication (1972) of his outline survey of the languages of Australia and Tasmania, it was clear that his primary interest was in the languages of the New Guinea area - and, for the most part, 'Papuan' languages rather than Austronesian languages. Slowly, and mainly as a consequence of Stephen's writings, the designation 'Papuan' replaced the clumsy 'non-Austronesian', although it is still necessary to explain that the use of the term does not imply a genetic grouping including all the languages. Nevertheless, wider and wider groupings came to be claimed by Wurm and his colleagues (see Laycock 1975:57ff for a discussion of the development of Papuan linguistics).

In 1968, by a process of schismogenesis, new departments of Linguistics and Prehistory were created from the parent Anthropology and Sociology department, with Stephen Wurm as the first (and to date only) professor of the former. Shortly afterwards, in 1970, a Department of Linguistics was formed within the Faculty of Arts; as the term 'Department of General Linguistics' was unacceptable to that department, and 'Department of Pacific Linguistics' was unacceptable to us, the present-day situation of mild confusion was created.

New staff members joined the Department; Dr C.L. Voorhoeve in 1965, Dr D.T. Tryon in 1967 and Dr T.E. Dutton in 1969. After 1972, when the University began a period of consolidation and retrenchment, it became clear that there would be no further growth in the tenured staff, but we did succeed in retaining a Research Fellow position, which has been held by three of the graduates of the Department, Dr Kenneth McElhanon, Dr Jacques Guy, and Dr Malcolm Ross. Support staff, however, was not quite so limited; and with the growth of *Pacific Linguistics* there has always been a lively band of linguistic assistants preparing manuscripts, along with an able Research Assistant.



1975
Presenting a copy of the first volume of *New Guinea area languages and language study* to Mr Austin Sapias, First Secretary (Information) of the Papua New Guinea High Commission in Canberra. (Australian National University photograph)

With such help, the Department's work, under Stephen's general guidance, proceeded apace. The years 1975-1977 saw the publication of *New Guinea area languages and language study*, three massive volumes on the languages of Papua New Guinea, and still the major reference work in this area. The volumes were conceived at the 9th International Conference of Linguists in Bologna in 1972, and were originally to have been published by Mouton, and edited by Thomas A. Sebeok; when that deal fell through, *Pacific Linguistics* somewhat nervously took over. It was the biggest publication we had attempted - though not the largest volume, a record which is still held by the Festschrift for Arthur Capell, which we jointly edited in 1970. During the preparation of these volumes, another milestone project was conceived: the *Language atlas of the Pacific*. With Stephen Wurm, to conceive a project is usually to achieve it; and within a short time he had the project accepted by the Australian Academy of Humanities (to which he was elected as a Fellow in 1977),[6] and by the Japan Academy, and had persuaded Professor Shirô Hattori to be a co-editor. Within less than ten years, the first volume of multicoloured maps was available (1981); the second volume followed in 1983. The magnificence of the atlas stands as a major milestone in Stephen Wurm's career; nothing quite comparable had been seen in the linguistic world before.



1979

Planning the Language atlas of the Pacific: Donald C. Laycock, Darrell T. Tryon, C.L. Voorhoeve, Theo Baumann (cartographer), Thomas E. Dutton, and Stephen Wurm. (Australian National University photograph)



1984
The complete *Language atlas of the Pacific area* is launched by Mr Barry Jones, Minister for Science and Technology. (Australian National University photograph)



1985
Planning the Language atlas of China, with Professor Wang Jun. (Australian National University photograph)

Linguistic mapping now became a major interest of Stephen, and he was fortunate in obtaining the services, for his Department, of Mr Theo Baumann, the cartographer who designed and drew all the maps in the *Language atlas of the Pacific*, and who constantly solved problems in the cartographic representation of the linguistically most complex region of the world. Shortly thereafter, another project sponsored by the Academy of Humanities (in conjunction with the Chinese Academy) was under way: the *Language atlas of China* (relying heavily on the Chinese-language skills of Mei Wah Lee as assistant editor and translator). Tentative work has begun on an Atlas of Languages and Intercultural Communication in the Pacific, in collaboration with Peter Mühlhäusler, of Oxford. Also under discussion is the possibility of a linguistic atlas of South America.

Stephen, as a working academic, has also worn many other hats — member of major and minor University committees, acting Director of the Research School of Pacific Studies, member (since 1976) of the Ongoing Committee of the International Congress of Austronesian Linguistics (and President thereof 1981 to 1984), President of the Australian Academy of Humanities, and President of the Union Académique Internationale. In all this, however, he has continued to publish widely on the linguistic — especially sociolinguistic — problems of the Pacific region. With Peter Mühlhäusler he recently edited the long-awaited *Handbook of Tok Pisin* — an event of some significance, since the first announcement of the book in fact appeared in Bulletin No.1 of the Linguistic Circle of Canberra — in 1964! In progress is a dictionary of the complex Äŷiwo language of Santa Cruz in the Solomon Islands — a language for which Stephen established the current orthography, in collaboration with his principal informants Patrick Bwakolo and John Mealue.

Stephen has also been involved in the supervision, and organisation of such matters as fieldwork and funding, for the 34 postgraduate students who have successfully obtained doctorates in the years since 1962. No theses in the Department of Linguistics have ever been failed by the examiners (always chosen from outside the University), and many of the graduates (listed in the Appendix) have gone on to become important academic linguists in their own right.

This volume is intended to accompany Stephen Wurm into retirement — but not, we expect, into inactivity. He has linguistic projects still in their infancy, and others which perhaps have not yet been promulgated.[7] The separation of Stephen Wurm from Pacific linguistics, and from *Pacific Linguistics*, is not envisaged for many years yet.



China atlas project: S.A. Wurm, editor, Mei Wah Lee, editorial assistant, and Theo Bauman, cartographer (photograph by Bert Voorhoeve)

NOTES

[1]Linguists, more than any other group, know how hard it is to decide when one can claim to 'speak' a language, and at what level. Stephen himself has claimed command of some 30 to 40 languages, on various occasions; over the years I have known him, I have heard him carrying on conversations in some 17 different languages, and am prepared to take perhaps as many more on trust. This falls short of the dubious 'seventy and Bolognese' (more likely about 27) claimed for Cardinal Mezzofanti, but it is in the world record class, and a rare feat among linguists (who often despise the label of 'polyglot').

[2]These are two interesting corrections from the first draft of this story, which read: 'Albanesich, was ich aber nicht verstand, weil mir davon höchstens 20 Worte geläufig waren', and 'Serbisch, welches ich ganz leidlich, wenn auch mit falscher Satzstellung, sprechen konnte'.

[3]The Australian National University was established by Act of Parliament in 1946, in order to provide postgraduate education for young Australians, to obviate the necessity of their going abroad. It began recruiting staff in 1949. Originally, there were just five Research Schools: Pacific Studies, Social Sciences, Physics, Chemistry, and the John Curtin School of Medical Research. It offered postgraduate degrees only; but in 1962 the original ANU was merged (becoming the Institute of Advanced Studies) with the Canberra University College, which was a campus of the University of Melbourne. Since then the University has expanded in many directions, and two new Research Schools (Earth Sciences and Biological Sciences) have been added.

[4]Many of the observations derived from the early-settled Sepik and Madang areas, which are linguistically the most complex in Papua New Guinea (and perhaps in the whole world). Even there, the original observers were unlucky, in that they gained their impressions of diversity from a selection of languages longitudinally along the coast, without perceiving the extensive relationships that extended inland.

[5]Renamed, in 1978, the Australian Linguistic Society, so that the official abbreviation (ASL) would be distinct from that of the Linguistic Society of America (LSA).

[6]Stephen was also elected Fellow of the Academy of Social Sciences, in 1976. Membership of both the AHA and the ASSA is a distinction which has fallen to very few academics in Australia.

[7]One such project is an autobiography - which is likely to be very different from what is written here.

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APPENDIX - Successful Doctorates in Linguistics, RSPacS, 1962-1987

YEAR OF AWARD	NAME	THESIS TITLE	LINGUISTIC GROUPING
1962	Donald C. Laycock	The Ndu language family (Sepik District, New Guinea)	Papuan (SERP)
1965	Alan J. Healey	The Ok language family in New Guinea	Papuan (TNGP)
1966	Phyllis M. Healey	Levels, constituent strings and agreement in Telefol syntax	Papuan (TNGP)
1967	Nguyễn Đăng Liêm	A contrastive phonological and grammatical study of English and Vietnamese	Mon-Khmer
1968	Darrell T. Tryon	The languages of the Loyalty Islands	Oceanic Austronesian
1969	Thomas E. Dutton	The Koiarian languages of Central Papua: an historical, and descriptive linguistic study	Papuan (TNGP)
1969	Aurelie Tran Huong Mai	Stress, tones and intonation in South Vietnamese	Mon-Khmer
1969	Johann A. Z'graggen	Classificatory and typological studies in languages of the Western Madang District	Papuan and Oceanic Austronesian
1969	D. John Prentice	The Murut language of Sabah	Western Austronesian
1970	Joy Kinslow Harris	Descriptive and comparative study of the Gunwingguan languages, Northern Territory	Australian Aboriginal
1970	David W. Dellinger	Akha: a transformational syntax	Tibeto-Burman
1970	Kenneth A. McElhanon	The Selepet language within the Finisterre-Huon Phylum (New Guinea)	Papuan (TNGP)
1970	Andrew J. Taylor	Syntax and phonology of Motu (Papua): a transformational approach	Oceanic Austronesian
1971	Ranier Lang	Enga questions: structural and semantic studies	Papuan (TNGP)
1971	C. Adrienne Lang	Nouns and classificatory verbs in Enga (New Guinea): a semantic study	Papuan (TNGP)
1972	Edward R. Hope	The deep syntax of Lisu sentences: a transformational approach	Tibeto-Burman
1972	C.D. Metcalfe	Bardi verb morphology - a transformational analysis	Australian Aboriginal

APPENDIX (cont'd)

YEAR OF AWARD	NAME	THESIS TITLE	LINGUISTIC GROUPING
1973	Jacques B.M. Guy	A grammar of the Northern Dialect of Sakao, a Melanesian language of Espiritu Santo (New Hebrides)	Oceanic Austronesian
1974	Warren W. Glover	Sememic and grammatical structures in Gurung (Nepal)	Tibeto-Burman
1975	Christine A. Kilham	Thematic organization of Wik-Munkan discourse	Australian Aboriginal
1975	David B.W. Birk	The Malakmalak language, Daly River (Western Arhnem Land)	Australian Aboriginal
1975	Clive H. Beaumont	The Tigak language of New Ireland	Oceanic Austronesian
1976	Peter Mühlhäusler	Growth and structure of the lexicon of New Guinea Pidgin	Pidgins and Creoles
1978	Graham K. Scott	The Fore language of Papua New Guinea	Papuan (TNGP)
1978	Raymond L. Johnston	Nakanai syntax	Oceanic Austronesian
1980	Leslie P. Bruce, Jr	A grammar of Alamblak (Papua New Guinea)	Papuan (SERP)
1981	Alan T. Walker	Sawu: a language of Eastern Indonesia	Eastern Austronesian
1981	Ross C. Caughley	The syntax and morphology of the verb in Chepang	Tibeto-Burman
1983	Peter J. Silzer	The Ambai language (Irian Jaya) and its linguistic situation	Eastern Austronesian
1985	Walter Seiler	The main structure of Imonda - a Papuan language	Papuan (TNGP)
1985	Jeffrey A. Siegel	Plantation languages in Fiji	Pidgins and Creoles
1986	Otto M. Nekitel	Sociolinguistic aspects of Abu', a Papuan language of the Sepik area, Papua New Guinea	Papuan (TP)
1986	Alan N. Baxter	Kristang (Malacca Creole Portuguese)	Pidgins and Creoles
1987	Malcolm D. Ross	Proto-Oceanic and the Austronesian languages of Western Melanesia	Oceanic Austronesian

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A HISTORY OF PACIFIC LINGUISTICS

Lois Carrington

1. IN WHICH DUE THANKS ARE GIVEN

To begin with a difference from the usual run of Pacific Linguistics papers, or indeed from the wider run of academic writing, the thanks come first. No account of Stephen Wurm's contribution to a quarter century of linguistic publishing could really be written without the sage guidance of the 'in-house staff', neither linguists nor scholars, but the people who devoted long continuous years to the day-to-day production of Pacific Linguistics volumes. To Hilda Leach, to the late Mary Craft, to Sally Sinisoff, Miriam Tadd and to Sue Tys and Jeanette Coombes are owed most especial thanks for their assistance in many ways, over many years. Others too will be mentioned as this account develops.

2. STEPHEN WURM'S ADVENT INTO THE PACIFIC AREA

Stephen Wurm, as you may read in Don Laycock's introduction to this volume, joined the Department of Anthropology in the Research School of Pacific Studies at the Australian National University in the late 1950s. One has only to turn to the last pages of *Linguistic bibliography* for the year 1959 to appreciate the sparsity of linguistic publications dealing with what was to become Wurm's chief area of interest for most of his academic life. General works on Austronesian languages occupy less than half a page, as do the total of works published on Melanesian languages; some seven items on Papuan languages and three or four on Australian languages, with another half dozen on the pidgins of the area, make up the total. The field was very small, and awaited only such a one as he to develop it.

2.1 The Linguistic Circle of Canberra

Wurm was ever one to encourage the efforts not only of the more established scholars (who could often find outlets for their work in the linguistic journals, in collections of papers and the like) but of up-and-coming scholars whose talents, and whose usefulness in furthering urgently needed linguistic work in this area, he perceived acutely. He and others had established a Linguistic Circle of Canberra, during his first year in Canberra (see, again,

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Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 35-46. *Pacific Linguistics*, C-100, 1987.

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the introductory article by Don Laycock), and the Circle became the medium through which the first dozen or so of the books were put out. There was from the beginning a close association with the Australian National University. Later, once the Department of Linguistics had become an established reality, the series continued under the auspices of the Department; so, from 1966, Pacific Linguistics assumed the former publishing role of the LCC, although the Pacific Linguistics logo still bears at its centre the LCC insignia, to commemorate the beginnings.

2.2 Pacific Linguistics: beginnings

The year 1961 had seen the appearance of a single map; in 1963 came Series A, No.1, Wurm's 12-page paper on the role of language in the assimilation of Australian Aborigines, and Wurm and Harris's *Police Motu*, which ran to 81pp. Alan Healey's *Handling unsophisticated linguistic informants,* Series A, No.2, published in 1964 (and reprinted several times in the ensuing years) was only 30 pages long; typeset on a varityper, space-and-a-half, these initial publications were modest in size. Already, though, they had assumed the format which has distinguished Pacific Linguistics volumes ever since: green-bound, 25cm shelf height, spines lettered top-to-bottom. Wurm's publishing enterprise was on its way.

The books appeared in four series: Series A was devoted to occasional papers, grouped according to linguistic 'regions', Series B to monographs (the more modest in size of the Pacific Linguistics works by a single author), Series C to books, that is to more substantial works of a single author, to dictionaries, and to miscellanies of which the Capell Festschrift, edited by Wurm and Laycock, was the forerunner of a distinguished number; Series D was set up at the suggestion of Don Laycock to include special publications such as archival materials (for example from missions), bulletins, and maps, and later expanded to include special series, as will be seen.

2.3 Pacific Linguistics progresses

As time passed, the four divisions proved adaptable, and as size and scope of most volumes grew, so the four series accommodated edited volumes of papers, such as Bradley's *Tonation* in the A series; books wholly produced on a computer began to make their appearance, for example Keesing's *Kwaio grammar*, Series B, No.88. (In special cases, computer-produced camera-ready work was accepted from outside the university, such as the Festschrift Benedict, and Ferrell's *Paiwan dictionary*.) A development of note was the production of dictionaries and the like by computer/laser printer, a fine example being Brown's *Comparative dictionary of Orokolo*.

2.4 Pacific Linguistics increases and multiplies

There came works so substantial that they needed to appear in sets, such as Wurm's New Guinea sociolinguistic work, C-40, of 1449 pages, in two fascicles, or the *SICAL proceedings* (1497 pages, also in two volumes) which Wurm co-edited with Lois Carrington; there were also in series C the sets of TICAL (4 volumes) and FOCAL (2 volumes) papers, co-edited by Wurm with, respectively, Amran Halim and Lois Carrington, and Paul Geraghty and Lois Carrington; subseries such as Nguyễn Đăng Liêm's *South-East Asian linguistic studies* appeared in C series, and so, too, did the two parts of the imposing Wurm and Hattori *Language atlas of the Pacific area* which although an Australian Academy of the Humanities/Japan Academy production was issued jointly with Pacific Linguistics. Mention might be made of the 'special numbers' notably the Rensch Wallis-French and Futuna-French dictionaries, and Tom Dutton's *New course in Tok Pisin*, which because of their purpose were published in a format different from Pacific Linguistics' usual. These led the way towards other venturesome works which are intended to meet diverse needs, Darrell Tryon's *Let's talk Bislama* being a case in point.

The D series adapted in one notable way, over the years, and that was to include the subseries *Materials in languages of Indonesia*, edited by Wim Stokhof, with the assistance, especially, of Alma E. Almanar. Included are not only the early vocabularies from the Jakarta Museum, known collectively as the *Holle lists*, and published in upwards of 15 volumes, but also a representative sampling of theses and other serious works by modern Indonesian linguists, which has led Pacific Linguistics to be regarded as in the forefront of linguistic publishing in the Western Austronesian area. To cater for the diversity of WAN material received, the subseries *Papers in Western Austronesian linguistics* has been activated in the A series, under the editorship of Hein Steinhauer. Volumes to do with neighbouring linguistic areas which are also of no little significance have included the *South-East Asian linguistic studies* edited by Nguyễn Đăng Liêm, *Papers in South-East Asian linguistics*, of recent years under the guidance of David Bradley, the ASANAL IV volume on language standardisation edited by Perez, Santiago and Liêm, and the Smalley volume on orthography and language planning in Thailand.

3. STEPHEN WURM AND HIS PROFESSIONAL TEAM

Stephen Wurm himself has remained the General Editor, with associate editors being the senior fellows of the Department of Linguistics, Don Laycock, Bert Voorhoeve, Darrell Tryon and Tom Dutton; each and every work, be it brief paper or major volume, is submitted to two linguistic referees familiar with the field it represents; generally, one is taken from the above four (or from among other scholars within the department), and one from outside. The impressive list of Editorial Advisers which appears on the verso of the title page in each volume speaks well for Wurm's ability to build up first-rate connections in the field of Pacific linguistics. Many of these scholars have contributed a great deal by lending their expertise to the selection of work for publication: outstanding among them, in recent years, must be Mühlhäusler, McElhanon, Lynch, Franklin, T'sou, Ross, Bradley, and also people like J.N. Sneddon and Peter Austin. Several among the Advisers have also edited major Pacific Linguistics publications; these include Bender, Clyne, Stokhof, Liêm, Pawley, and others.

3.1 Also in the picture

As Pacific Linguistics has grown, other members of departmental staff have been to greater or less degree involved in editorial and publication duties; in early days Hilda Leach took on responsibilities of correspondence with authors, routine pre-publication checking, liaison with printer and binder, organisation of distribution; later Robyn Radburn and then Miriam Curnow joined her as 'the bookshop', handling invoicing, sales, distribution, Miriam later replacing Hilda Leach upon her retirement, to be joined by a succession of 'bookshop ladies' including Tuula Vauhkonen, Liliane Horton-Stephens, Beverley Gribble. Miriam Curnow (now Tadd) was in turn replaced by Jennifer Barreda, who guided most ably a period of expansion in publishing, then Lin Ramsey came, from the Contemporary China Centre, and lately it has been Mira Kwasik who has deftly turned her skills in economics towards bookselling and production. The day-to-day running of routine activities has grown considerably over 25 years.

4. WURM AS GENERAL EDITOR

Initially, main editorial work was in the hands of S.A. Wurm himself — this entailed not only enlisting the expert services of referees, the selection of material for publication, liaison with authors over finer points of what might better be said, drawing up of a practicable system of typesetting as the typesetters changed over to IBM multiple type unit machines, but also bibliographical checking, much of the proofreading, and so on. Wurm built up a team of typesetters of special aptitude, who were not only adept at this rather complex kind of typesetting but who could assume responsibility for setting out of linguistic material, and who could, under Wurm's direction, handle most aspects of turning a manuscript into a printed item. But until recent years Wurm, to use a pet phrase of his own, did the lion's share of the editing.

4.1 Wurm's technical team of assistants

Chief among these ladies, who gave Pacific Linguistics years of devoted service, were Sally Sinisoff, Sue Tys, Mary Craft, and later Chris Waring, Jeanette Coombes, Elaine Sommer, Christine Billerwell, Judy Wise, Evelyn Winburn, and more recently Suse Benz, Dianne Stacey, Ling Matsay, and Anne Rees. Each became a specialist in some aspect of the work: Sally was largely responsible for assisting in setting up of the PL typeface system; as an instance of Sally's qualities, she typed beautifully and word-perfectly in Thai, a language of which she had no knowledge! Sue established many of the criteria which came to be adopted as Pacific Linguistics standards advanced until books were being produced at international level; she has typeset some of the more distinguished publications of recent years, such as the *Handbook of Tok Pisin*, Oetomo's Pasuruan study, and the FOCAL papers.

Mary Craft was a perfectionist, whose logical mind produced work of elegance which all aspired to; Mary produced a concordance to the Fox dictionary which was excellent of its kind. Chris Waring was the energetic one! Jeanette can

take a bundle of papers and thoughtfully turn it into a tome; she has been responsible for many of the delightful small illustrations which now and then grace Pacific Linguistics books. Elaine had the ability to run the office, take a myriad phone calls, cope with the key-seekers, and yet imperturbably carry on typesetting. Chris Billerwell produced some splendid books in her days with Pacific Linguistics, chief among which might be the large Coppell Austronesian catalogue, and the earlier TICAL volumes, wherein Chris had the task of introducing the updated typestyle. Judy too, and Suse and Dianne, produced a goodly share of 'PL' books during their term in the Department. Dianne also produced title-pages and catalogues, and saw to the allocation of ISBN and ISSN numbers to the volumes.



Pillars of Pacific Linguistics, past and present:
at the back: Annegret Schemberg, Ling Matsay, Sue Tys,
Lois Carrington and Sally Sinisoff; in the centre:
Miriam Tadd (Curnow), Jeanette Coombes and Anne Rees;
in front: Rosemary Butt and Mira Kwasik.

Evelyn quickly became a specialist, producing books on the DEC-10 computer; she pioneered much of the magnificent dictionary setting by laser printer which is now the norm; her intelligent resetting of Brown's Orokolo-Toaripi-English dictionary remains an example unto us all. Our diligent Ling is a graduate in

linguistics who happens to be bilingual in Indonesian and English, which is a great asset! She too has been a pioneer in the design of computer-set Pacific Linguistics publications. Anne's excellent typesetting is characterised most conspicuously by her speed! Her painstaking, discerning work is a pleasure to read. Much of the setting of this volume is Anne's work. In the course of time these 'specialists' will be joined by more of their kind. As microcomputers, both within and outside the Department of Linguistics, assume greater importance in overall book production, there remains still a role for typewriters to play; as new skills develop, and experimental typestyles become, indeed, stylesetters in linguistic publishing one likes to feel that Wurm and his staff have made major contributions to linguistic presentation stylistically, as well in the more obvious academic ways.

4.2 Aided and abetted by...

Others whose duties have included work for Pacific Linguistics include Annegret Schemberg, who as Projects Officer has handled certain important correspondence, and Theo Baumann, whose maps are the mainstay of almost every publication; known widely for his magnificent work on the large language atlases, Theo carries out the greater part of the cartographic work for Pacific Linguistics. Other members of the cartography staff such as Lio Pancino, Keith Mitchell and Suzie Jeffcoat have worked on PL maps and diagrams from time to time. Basil Wilson, who was departmental Research Assistant until 1975, is recalled chiefly for the indispensable 'Wurm and Wilson' — the finderlist of reconstructions. Lois Carrington inherited Basil's post, and brought her experience of publishing to an ever greater involvement with upgrading of the series, assuming much of the bibliographical and routine editorial work for Pacific Linguistics; she has co-edited several of the larger miscellanies of recent years. Manifestly, not all of these people have worked full-time for Pacific Linguistics — there is a deal of other work within a linguistics department requiring their skills — but all have contributed, under Wurm's guidance, to the success of the series.

No amount of technical expertise within Pacific Linguistics itself would achieve the overall result without the assistance of those most important ancillaries, the printers and binders. The Australian National University printery has ably handled production of the books, for some years under the direction of Mr O. Kreitels, and more recently under that of Mr Charles Hutchinson; friendly expertise has ever been available from Ian Cottrell and Zdena Jezek; devotion to camera work and collation has been the province of Eddie Terribile, Henry Gottlob, and Ernie Brandt; the whole team has helped. For many years covers were prepared by Patria Printers; the Papps became 'family friends'. But none could qualify as more of a 'family friend' than our binder, Frank Maccarone, who with daughter Lucy and the rest of the staff have ever seen to Pacific Linguistics' best interests, and, thus, to the series' success.

5. THE MEASURE OF SUCCESS

How can one measure that success? In numbers of books produced in a year? In quality of authors and works published? In sales figures? In all of these ways, and then others, perhaps. To look at a table of publications per annum might be useful:

Table 1: Pacific Linguistics books by year of publication

YEAR	SERIES A	SERIES B	SERIES C	SERIES D	TOTAL
1961	1	-	-	-	1
1962	-	-	-	-	-
1963	1	1	-	-	2
1964	3	2	-	1	6
1965	2	1	1	1	5
1966	2	1	1	-	4
1967	5	1	3	-	9
1968	3	3	1	-	7
1969	6	4	2	-	12
1970	4	4	5	2	15
1971	4	3	6	4	17
1972	3	1	1	1	6
1973	3	5	4	2	14
1974	3	6	5	2	16
1975	3	9	6	2	20
1976	4	4	6	1	15
1977	3	2	7	1	13
1978	2	6	4	2	14
1979	4	10	4	4	22
1980	5	11	4	9	29
1981	1	5	5	7	18
1982	2	7	6	10	25
1983	2	1	4	9	16
1984	2	3	7	3	15
1985	3	2	5	5	15
1986	2	4	8	4	18
	72	96	95	71	334

Manifestly, publication dates do not always indicate the actual date of appearance, so that the leaner years, as tabulated, were evened out in practice. Allowing for the fact that in some years major projects occupied a deal of editorial and typesetting time, which perhaps reduced the number of smaller works to be produced (this occurred, for instance, around 1972-73, when the huge *NGALLS* trilogy was in course of preparation), and that in some other years numbers of shorter, more straightforward works were produced, there is evidence in the table of a steady upwards increase in production. It is interesting to note that, in the 12 volumes produced in 1969, there were 1527 pages (excluding preliminary pages), whilst in 1982 when 24 books were produced, there was a total of 5680 pages (again excluding preliminary material). It should be noted, as well, that 1982 marked the introduction of single-spaced typesetting to Pacific Linguistics; the figure would have been higher, had the old system pertained entirely. Another point of some interest is that, of the eight books published in C series in 1986 (a total of more than 2300 pages) two were computer set, which, introducing a new process as it did, was more time-consuming than usual. So, one may see, comparing the output, that PL books had become, averaged out, nigh on twice as big, as well as more numerous, over the 13 years! This trend has continued, by and large, as Wurm considered it more economical to produce more substantial volumes.

5.1 The overall situation

To record this mass of linguistic output, three indexes have been produced: the first was D-9, which indexed to the end of 1970; the 1981 index (known unto us as the PLindex) included an author/title index, cross-referencing by language, by topic, by region, included a maps index and a detailed catalogue; the 1987 index takes up where the previous one left off; a cumulative 'PLindex' is maintained on computer. The *List of publications* has appeared from the start at the back of each volume. This, as a catalogue, with current prices, can be had separately. Many of the earlier titles are now out of print; reprinting occurs as demand occasions. A half-price sale held 1986/87 proved a most popular innovation, and served the urgent purpose of freeing storage space for incoming stocks from the printers!

6. PACIFIC LINGUISTICS: THE CURRENT STATE

The new system, introduced in 1981, answered to world requirements of style, format and — important! — price. But it did, however, demand much higher standards of editing, as greater numbers of papers were assembled between the one set of covers; this became a more important feature of PL activities, and people such as Don Laycock, Lois Carrington and Miriam Curnow, as well as Stephen Wurm himself, now had a deal more to do, before the MSS could be placed into the care of the typesetters. Based upon the experience of years, an in-house Styleguide was compiled; this has been added to, as later experience accumulated. Then a small *Styleguide for authors* was produced; this continues to be circulated widely. In-house proofreading as a normal precedent to despatching Final Proofs to authors was established; the burden of this, as output increased, was eased by engaging part-time assistance from linguistics graduates well qualified in the world of books: Geraldine Triffitt was succeeded by Rosemary Butt, a lady of wide experience in facets of linguistic publishing, to relieve Lois Carrington of part of the task. In all these ways, the product ameliorates, continually. Stephen Wurm returns from every overseas visit full of the plaudits of the linguistic world.

6.1 Pacific Linguistics in transition

Pacific Linguistics now faces a transitional period, for two main reasons. One is technical, and is simply that the time has arrived to phase out most of the faithful IBM typewriters, and to turn to book production by computer. Evelyn Winburn and Ling Matsay have led the way in the understanding of what may, or may not, be produced on the mainframe system. Now the department has acquired its first two microcomputers, with a laser printer, and by the time of Stephen Wurm's 65th birthday one expects that the first books to be produced thus will be well on the way. Malcolm Ross and the typesetters have made brave beginnings!

The second reason, of course, is the very retirement from the Chair in the Department of Linguistics of S.A. Wurm. Whatever the future holds, one predicts that Pacific Linguistics will continue to be a major specialist publisher. But that must wait to be seen.

7. WURM AND PUBLISHING POLICIES

Before an overall evaluation of the place of the PL books in Pacific linguistic publishing, one might consider the major projects which have been dearest, perhaps, to Wurm's heart, over the years. Certainly, as already noted, he has ever maintained firmly that work from relatively unknown but promising people should be printed; this continues today. So, too, does the policy of presenting substantial works of individual scholarship, especially ones closely related to the main areas of the work done by scholars in Wurm's own Department of Linguistics, and closely allied ones; (see, once again, the Laycock introductory essay, for elaboration of this). Here, as it affects publishing, one might mention, say, the definitive works of Darrell Tryon on classification of New Hebrides and Solomon Islands languages, or the Wurm and Mühlhäusler *Handbook of Tok Pisin*, or John Lynch's work on Erromango and Tanna; C.L. Voorhoeve's work on Irian Jaya and Halmahera, McElhanon and Voorhoeve's study of the Trans-New Guinea Phylum (B-16), or the work of J.B.M. Guy on glottochronology. Another aspect includes work published under the 'Languages for intercultural communication in the Pacific area' project: books on Tok Pisin, Solomons Pijin, Bislama are all included here. T.E. Dutton's historical examination of various New Guinea pidgins, creoles and trade languages has resulted in a valued succession of volumes; Don Laycock's linguistic interests have ranged wide, and have resulted in PL publications on Tok Pisin, on semantics, as well as on the languages of the Sepik area. Malcolm Ross's work on the Austronesian languages of Western Melanesia adds substantially to the departmental repertoire.

7.1 Contributors

Much, too, has come from the PhD scholars: Ray Johnston's work on Nakanai, Susanne Holzknecht's on an Adzera dialect, Jakelin Troy's book on Australian pidgins of an early era, Seiler's Imonda, Baxter's Kristang, the Healeys' Telefol, Jourdan's Pijin, McElhanon's Selepet, Mühlhäusler's Tok Pisin, Nekitel's Abu', Graham Scott's Fore, Nguyễn Đăng Liêm's Vietnamese, Caughley's Chepang, to mention just some. As well, various visiting scholars have published with Pacific Linguistics, such as Isidore Dyen, Arthur Capell, Luise Hercus, Anton Moeliono, Andrew Pawley, Shigeru Tsuchida, E.M. Uhlenbeck, J.W.M. Verhaar, David Walsh, and R.A. Blust.

7.2 Wurm as writer and editor

What must never be overlooked is Wurm's own contribution to Pacific Linguistics as author and editor. He has published continually in PL, from brief papers serving to tie together a series of related articles from a diversity of authors, to contributory papers of the kind found in the Tok Pisin handbook, to major papers on subjects dear to his heart at the time, to editorial participation, be it as an advisory editor to the conference proceedings volumes, or as editor on a grand scale, as to the *NGALLS* series, or the atlas projects. His contribution in this way to Pacific Linguistics may be assessed in terms of his overall production from his personal bibliography (see pp.15-33).



1976: Stephen Wurm with well-known author Vincent Eri, at that time High Commissioner for Papua New Guinea, and Sir John Crawford, at the book launching for C-39, the Austronesian languages volume of the trilogy

8. SOME SUCCESSES

What, otherwise, have been the more conspicuous publishing successes? That is hard to evaluate, as each PL user will tend to think of works in his own field. The *Materials in languages of Indonesia* subseries, already mentioned, has been one. So, too, have the substantial works edited by Byron Bender (C-80) and by Thurgood, Matisoff and Bradley (C-87). David Bradley and before him Nguyễn Đăng Liêm were responsible for various studies in the languages of South-East Asia which are well regarded. Wurm's concept of 'service volumes', which includes the atlases, the PLindexes, the archival material, the fish identification handbook, etc, has been a good one. Undoubtedly, the two books edited by Michael Clyne (D-23, C-92), the compendious *Australian linguistic studies* (C-54), and important works in Australian linguistics by Jeffrey Heath, Alan Rumsey and Francesca Merlan, Nils Holmer, Arthur Capell, Luise Hercus, Michael Walsh and more, have all made their mark.

There have been Festschrifts, and volumes dedicated to linguists (such as Betty McLachlin), which have presented valuable miscellanea. Volumes and sets of conference proceedings, from ASANAL IV through three succeeding ICAL conferences to a Pacific Science Congress have also made significant contributions to the linguistic scene. Reports on language surveys, such as the Kings' on Sabah, the Grimes' on South Sulawesi, complement the volumes on language classification such as Tryon's on Melanesia.

8.1 The field of good relations

Thesis publication, over and above the works of scholars in Wurm's own Department, has introduced in book form many fine theses to the linguistic public; examples are Moeliono's on language planning, Teresa Chen on Nataoran-Amis, Terry Crowley on Paamese, Nababan on Toba-Batak, Tampubolon on semantics in Indonesian, Feldman on Awtuw, and others, including a fair proportion of theses produced in the 'sister' Department of Linguistics, The Faculties, Australian National University, and papers written by anthropologists, prehistorians, and linguists from specialist language departments at the Australian National University. Wurm has ever maintained excellent relationships with these and with internal services such as printeries, technical equipment and photographic units, the libraries within and without the universities, all of which have afforded quite remarkable cooperation to Pacific Linguistics.

9. AN INIMITABLE ACHIEVEMENT

Near the beginning, attention was drawn to the end pages of *Linguistic bibliography* for 1959. A quarter of a century on, there is a very different picture. We may note that in *Linguistic bibliography* for 1984, the sections on Austronesian, Papuan, Australian, and creolised languages sparkle with Pacific Linguistics publications. Granted, there was a backlog from the previous year, but nonetheless the importance of Pacific Linguistics as a publisher in those fields cannot be gainsaid. If Stephen Wurm is remembered, as the century closes and a new one begins, for nothing else, Pacific Linguistics will stand — drab-green and gold-lettered blue, straight and tall on the shelves of the world's linguists — as his most magnificent monument.

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PERSONAL MEMOIRS

Karl J. Franklin:

Stephen A. Wurm: linguist and friend

The linguistic interests and research of the Summer Institute of Linguistics and Stephen A. Wurm are inextricably linked. Both began linguistic research in Papua New Guinea about the same time and both have contributed significantly to language research and development within the country.[1]

In this brief memoir I will comment on my interaction with SAW on both a personal and professional level, in the informal field setting as well as the more formal academic context. I hope that my personal admiration for SAW's linguistic contributions are evident.

Fieldwork. I first met SAW in 1959 when he was on a research trip into the Highlands. He visited the SIL headquarters at Ukarumpa both at the beginning and the conclusion of his fieldwork. It was at Ukarumpa village, where the Gadsup language is spoken, that SAW demonstrated his ability to quickly grasp the essentials of a difficult language. Later, at the conclusion of his Highlands fieldwork, he shared his general observations freely with SIL workers. I believe it is fair to say that SAW first examined in detail the intricacies of the so-called 'sentence-medial forms' in several Highland languages.[2] SAW (1961a, 1961b) and Capell (1962) reported in some detail on the surveys and fieldwork. The extent of SAW's fieldwork, which continued intermittently over the next two decades, can be seen in Wurm 1982.

Linguistics recruiter. Most SIL people in Papua New Guinea who studied at The Australian National University (ANU) would not have done so without the encouragement and support of SAW. His first SIL students were Alan and Phyllis Healey, fieldworkers par excellence, who completed their studies on the Telefol language in 1964 and 1965 respectively. Their excellent contributions undoubtedly made it easier for a number of SIL people from Papua New Guinea to begin studies at the ANU: myself in 1967 on Kewa, McElhanon in 1968 on Selepet, Beaumont on Tigak in 1970, Scott on Fore in 1974, Bruce in Alamblak in 1976, Olson on Barai in 1975, Johnston in 1975 on Nakanai, and Ezard on Tawala in 1979. Other SIL members have studied and published on languages of Australia, Nepal and Indonesia as well, both at the ANU linguistics department at the Research School of Pacific Studies and at the School of General Studies.[3] Not only SIL fieldworkers have been assisted at the ANU; missionaries, teachers, and university professors have all found SAW a recruiter for the University.

I recall my own first visit to ANU. SAW was away at the time, to Greenland or somewhere, as were the rest of the staff at that time (Drs Laycock and Voorhoeve). Nevertheless, the capable departmental secretaries had been given instructions

on where I was to work. It was a new experience for me: several months of solid library research, interdisciplinary forums, coffee chats, and so on, stimulated me a great deal more than many of the linguistics courses I had taken elsewhere, although I could hardly have coped without their background.

SAW's encouragement, however, went beyond recruitment and teaching: he made sure that his students received the full benefits of their scholarship, to assist them with moving and living expenses.

Linguist. One of the most stressful times SAW had was when his contribution to classifying Australian languages was questioned (Dixon 1976). The implication was that SAW and some of his students had done little of real, that is theoretical value as linguists. This was because SAW personally had not published theoretical articles but had confined his studies to the classification and indexing of the languages of Australia (or PNG). Despite his initial shock and displeasure I believe he eventually worked out his differences with Dixon, surely one of the most gifted linguists in Australia, and one whom SAW needed as a friend and colleague.

SAW's contribution in both Australian and Papuan linguistics has been on a broader and more utilitarian basis than many linguists. He has had an interest in practical concerns, such as literacy, the use of trade languages, translation, and many other topics. Coupled with this he has an incredible memory from which to recall verbal forms, language names, and other linguistic information. His first-hand speaking knowledge of major languages of the world is, as far as I can tell, without equal. He probably epitomises what most laypersons think of as a linguist — a person who speaks many languages.

Publisher and author. With the founding of Pacific Linguistics (then Publications of the Linguistic Circle of Canberra) in 1963, SAW encouraged SIL fieldworkers to publish their results. For many languages, were it not for SAW, there would be no materials readily available. Published materials have included surveys, phonological descriptions, grammars, dictionaries, and anthropological linguistic studies. Examining a range of such publications one would find numerous references to and acknowledgments of the works of SAW.

His own writings are prodigious, and cover a wide area of interests and topics. But he went far beyond his own research and incorporated the findings of his students in his surveys, sometimes before our pens were even cool.

One such article (Wurm 1971) included so many notes and late notes that the classification plot of some language groups read like a mystery novel. In each case SAW laboriously, one might almost say embarrassingly, gave credit to the original researchers. It would be difficult to find anyone, with the possible exception of K.L. Pike, who has been so generous in acknowledging the research of others.

Administrator. I have been involved in administration of various sorts in SIL for a number of years, so I am very aware of how difficult it is sometimes to accomplish specific stated goals. Often an administrator's biggest hurdle is finding money for his budget and program. Any would-be administrator could learn how to acquire funds by serving as an apprentice of SAW. He would see that money was directed toward scholarships and research, and that the results eventually justified the funds expended.

In my own case SAW supported my field research, including a loan for a motorcycle and other items of equipment. Without this backing it would have been very difficult to accomplish my fieldwork. I am sure that other linguistic scholars at ANU have had the same experience.

Appreciation. In concluding this note I wish to express my personal thanks to SAW. Not only did he initially show an interest in our research in Kewa through correspondence, but he personally encouraged me to study at ANU with a supporting scholarship. Following my completion of studies in 1969 (Franklin 1968, 1971) he assisted me in a post-doctoral fellowship which resulted in a study of the linguistic situation in the Gulf Province (Franklin, ed 1973). My own interest in Papuan linguistics as a whole has been stimulated by my early studies, and courses that I have taught subsequently have built on my own research and that of others directed by SAW.

This expression of gratitude should be considered both personal and also on behalf of SIL, reflecting on my tenure as Associate Field Director for Language Affairs in Papua New Guinea (two years) and Director (six years). Correspondence and associations with SAW on behalf of SIL were always courteous, friendly, professional, and often social. I trust that this will continue to be the case for some time to come.

Notes

[1]I shall refer to Professor Wurm with the shorthand initials of SAW. Actually his work on Kiwai (SAW 1951) predates the work of SIL by several years, but field research of the two began about the same time. My comments come not only from my personal and professional relationships, but also as a representative of SIL. I would like to thank Bruce Hooley, a former director in Papua New Guinea, for his comments as well.

[2]Pilhofer (1933) first used the term in describing Kâte, spoken in the Huon Peninsula.

[3]See, for example, studies by Joy Kinslow Harris (1969), C. Kilham (1977), W. Glover (1974), R. Caugley (1980), Jenny Lee (1983), and P. Silzer (1983).

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Johann Knobloch:

Verehrter Jubilar, lieber Herr Kollege Wurm!

Sie haben sicher auch schon oft in den Akten des 13 Internationalen Linguistenkongresses, der uns in Tokio zusammengeführt hat, geblättert und vielleicht auch schon im Anhang das Bildchen entdeckt, das uns beide, nebeneinanderschreitend, zeigt. Es ist mir eine schöne Erinnerung nicht nur an gemeinsame Stunden auf diesem wiederum so bedeutsamen Treffen der Sprachforscher aus aller Welt, sondern es weist mir — so will es mir scheinen — auf jene gemeinsame Zeit in Wien züruck, wo wir im Orientalischen Institut der Universität Wien beisammen waren und dort bei trefflichen Lehrern unsere Ausbildung erhielten. Sie widmeten sich der Turkologie bei Herbert Jansky, ich selbst ließ mich bei Viktor Christian in die Welt der Keilschriftkulturen einführen. Man hörte die Vorlesungen und studierte, oft mit knurrendem Magen, denn die Lebensmittelrationen waren knapper geworden — es war mitten im Krieg. Ihr immer fröhliches Wesen wirkte ansteckend und ließ mich manche Not und Mühsal vergessen.

Mein Plan, bei meinen zigeunerischen Freunden im Burgenland auf Feldforschung zu gehen (ich hatte die ersten Kontakte mit ihnen schon im Sommer 1939 anlässlich meines Erntedienstes in Krensdorf), fand beim Vorstand des Instituts Verständnis und Förderung. Sie selbst hatten schon Verbindung zu sowjetischen Kriegsgefangenen, die in Wiener Lazaretten behandelt wurden. Eines Tages behelligten wir den Vorstand mit einem Plan, die Kriegsgefangenenlager in der weiteren Umgebung

von Wien aufzusuchen, um dort systematische Feldforschung zu betreiben. Gesagt — getan. Unser wissenschaftliches Interesse fand überall Verständnis und so waren wir einmal bei Krems, mehrfach auch im Erdölgebiet um Zistersdorf, bis wir schließlich Kaisersteinbruch nächst Bruck an der Leitha als das geeignetste Lager zum ständigen Ziel von Wochenendreisen ausersahen. Hier trennten sich natürlich unsere Wege, denn Ihre Informanten waren Gefangene aus Usbekistan und Tadschikistan und eine mustergültige Untersuchung des özbekischen Dialekts von Andidžan wurde Ihre Dissertation, die dann auch der Akademie der Wissenschaften durch Viktor Christian vorgelegt und dort auch veröffentlicht wurde.

Bei dieser Art von Feldforschung erwies es sich als vorteilhaft, dass wir als Nichtraucher die auf Raucherkarte eingekauften Zigaretten voll in den Dienst der guten Sache stellen konnten: solche Gaben spornten den Eifer unserer Informanten an und stellten die erforderlichen guten menschlichen Kontakte her.

Leider gab es öfter Störungen anderer Art. Bei Fliegeralarm waren wir gehalten, das Lager zu verlassen (obwohl es ja dort viel sicherer war als in den Splittergräben, die wir aufsuchen mussten.)

Bald auch gehörten die täglichen Alarme in der Wienerstadt selbst zu den unangenehmen Dingen des Alltags, mit denen man sich abfinden musste. Wenn Sie der Alarm einmal nicht im Institut erreichte, dann riefen Sie regelmäßig nach der Entwarnung an — so besorgt waren Sie, ob die Quelle zur Stillung unseres Wissensdurstes noch unbeschädigt war. Doch einmal traf es uns aus nächster Nähe. Wir saßen im Luftschutzkeller, das Licht war bereits ausgegangen, das Krachen und Splittern kam immer näher. Plötzlich war der Raum nach einem atemberaubenden Aufheulen einer Bombe, die in das Nachbarhaus eine große Lücke gerissen hat, mit Staub erfüllt und wir wurden durch den Luftdruck alle zu Boden geschleudert. Doch kamen wir mit dem bloßen — und keinem geringen — Schrecken davon.

Einige Zeit später feierten wir den Geburtstag des Institutsvorstandes. Die Fenster hatten schon lange die Scheiben eingebüßt, waren dann repariert worden und durch den letzten Angriff wieder öd und leer geworden. Hinter dem Rednerpult im großen Hörsaal war die Ziegelwand recht uneben geworden und zeugte von der unmittelbaren Nähe des Unheils. Der Kanzler der Universität hielt die Ansprache, er versäumte es nicht, auf den ramponnierten Zustand des Instituts hinzuweisen. Als Letzter durfte ich dem Jubilar danken, im Namen einer Arbeitsgemeinschaft, die ihm erst es verdanke, daß sie überhaupt so arbeiten könne. Wenige der Anwesenden wussten, daß damit unsere sprachlichen Forschungen unter sowjetischen Gefangenen gemeint waren.

Nach dem Krieg trennten sich unsere Wege. Die engen, stacheldrahtumzäunten Räume unserer ersten Feldforschung vertauschten Sie mit der großen, weiten, herrlichen Welt und drangen — stets auf der Suche nach dem Wunder der menschlichen Sprache — weit vor in bisher unerschlossene Gegenden. Fleiß und Forscherglück paarten sich bei Ihnen und führten Sie, gemeinsam mit Ihrer lieben Gattin, den steilen Weg zum Erfolg hinan. Australien wurde Ihnen zur zweiten, nein zur dritten Heimat, denn den ersten Platz nahm doch Ungarn ein: wie strahlten Sie, wenn Sie am Telefon in unserem Institut (ich war oft Zeuge davon) mit Ihrer lieben Mutter Ungarisch sprechen konnten: Pista, meldeten Sie sich immer, das weitere blieb mir (leider) unverständlich, denn für die schöne ungarische Sprache im Herzen Europas, für deren klangvolle Präzision der Aussprache hatte ich immer eine besondere Vorliebe.

Vergangene Zeiten. Wie wohl tut der Rückblick, auch wenn er durch die Ereignisse, die wir erleben und erleiden mussten, getrübe ist... Schreiten Sie weiter, froh, tatendurstig und erfolgreich, wie bisher! Isten éltesse sokáig!
Ihr Johann Knobloch.

Linguistic Society of Papua New Guinea:

The Linguistic Society of Papua New Guinea, recognising the extensive contribution made by Professor Stephen A. Wurm, wishes to extend its congratulations and best wishes upon the occasion of his retirement.

Few linguists, if any, working in Papua New Guinea can avoid referring to, and, in some ways, depending of Professor Wurm's work. This is a testimonial to the breadth and depth of his knowledge of, and contribution to, the linguistic situation in this country.

There is a great number of linguists and researchers who have a very real sense of appreciation to him for his contribution and assistance right across the South Pacific.

We trust his retirement will be enjoyable and relaxing, but also productive, so that we may continue to have the benefit of his expertise.

Kenneth L. Pike

Professor Wurm, in my opinion, has been one of the most important persons in the development of linguistics in the South Pacific. Some people would have known him through his teaching, or through extensive personal contact. This is not my privilege — although I enjoyed him as a friend whom I met at meetings.

But I am particularly grateful for his development of publication outlets for articles discussing linguistics in the South Pacific. This, it seems to me, has been very important indeed to the world of scholarship.

Linda Simons

As a new member of the Summer Institute of Linguistics headed for work in the South Pacific, I soon began learning about Stephen Wurm. Usually his name was in the context of Pacific Linguistics, but not always. During our first extended stay in a Papua New Guinea village on the Rai Coast we shopped at the village trade store. While there one day we met an Australian tobacco merchant picking up a load of tobacco leaves from the village. We struck up a conversation with him and when he learned of our desire to learn a Pacific language, he said, 'Have you ever met Stephen Wurm? I met him once and he can speak over a thousand languages.' When I finally had the privilege of meeting Dr Wurm several years later I was too awed to ask if it were really true.

O.H.K. Spate

My extremely limited linguistic capacities give me little excuse for contributing to a Festschrift for Steve Wurm; in fact, my only entitlement, I trust a sufficient one, is a strong desire to express, however modestly, my very sincere admiration and affection for him as a scholar of the first order and as a most genial colleague.

As Director of the Research School of Pacific Studies in ANU, I was godfather to the Department of Linguistics — there was certainly never any doubt as to Steve's paternity; or rather perhaps I acted as midwife for its birth after a long gestation (with its near twin Prehistory) in the womb of Anthropology. The meeting of the Faculty Board which as it were legitimised the delivery was not without its humour. Steve was normally anything but too assertive; but so spirited and eloquent was his Declaration of Independence that he seemed in some danger of asserting, irrefutably, a case for the completely autonomous status of Linguistics. The argument and the atmosphere were getting a bit technical and rarefied for the rest of us, but a gentle hint from the Chair sufficed to check Steve's wild career, which threatened to take him not only out of Anthropology but out of the School. However, he saw the point at once, and nothing could be more admirably adroit than the way in which he presented all sorts of social contents in what had seemed till then to be a somewhat abstract and rarefied discipline. It was a delightful tour de force; decidedly one of the more memorable meetings of the Board.

The promise of this start was more than amply fulfilled. Steve did not elbow himself into an assertive prominence; in fact, his own room was not of respectable Professorial size, but a sort of magician's cave, jammed to overflowing with an extraordinary deposit of monographs, fascicules, pamphlets, books, brochures. Yet he seemed never to lose the key to its complicated stratigraphy, and the stores of recondite erudition amassed — and created — by himself and his Department were always open to the enquirer.

In the years following the establishment of the Department of Linguistics, there was much discussion in the Research School on the desirability, and the desirable nature and content, of planned programs which should systematically cover, for individual disciplines, large sectors of our vast parish, which extended from China and Indonesia to Easter Island, inclusive. It came as a distinct, but very pleasant, shock to realise that while most of us had been talking, Steve had been doing. Quite without fuss or panache, he and his team had engaged in the systematic study of the extraordinary linguistic mosaic, made up of hundreds of languages in bewildering mixtures rather than patterns, in the islands north of Australia, and of the broader textures, still sufficiently difficult to unravel and still disputable, of the Austronesian languages which as it were wrap around the nearer islands. It would be impossible, and ill-becoming, of me to dive into the intricacies of glottochronology and lexicostatistics; but it takes no special skill to recognise a mighty intellectual effort and achievement when one sees it displayed before one in the Atlas which is the crown of the Department's achievement.

And not only had Steve's leadership and the hearty cooperation of his Department produced the many individual studies which led up to these triumphs: they had *published* them. In the nature of things, Linguistics was not so much in the public eye as some more 'practical' disciplines — though its contribution to the important practical problems of literacy and lingue franche should not be underrated. The work of Wurm's Department was of course widely known and warmly

applauded in linguistic circles all round the world; but locally it hardly 'went public' until the production of the great *Language Atlas of the Pacific*, in two parts together covering Japan, South-east Asia, New Guinea, Australia and Oceania.

Linguistics is not a static science; of what branch of human learning could it be said that its work was ever finished, or like to be? Yet this masterpiece of art and science must surely rank as a high point in the development of the discipline, a peak from all later surveys in these regions must take their bearings. The great work could of course have been accomplished only with assistance, in learning and finance and cartographic skills, from many quarters; but that it was basically given being and form in the Department of Linguistics reflects great credit on the Research School, and is in itself a splendid tribute to Professor Wurm and the people he has led so well.

And all this with modesty and the utmost good humour. Steve Wurm seems to possess as many tongues as Argus had eyes; but he is a man of few words — few, yet pleasant and cogent.

Jakelin Troy

My first memory of Professor Wurm is of sitting in his office, being interviewed by a man who was the nearest thing to Clark Kent (as played by Christopher Reeve) that I have ever encountered. I'm not sure whether he really is Superman or just has the Philosophers' Stone tucked up his sleeve, but during that interview he managed to converse on the phone with overseas connections in more languages than I believed existed. He habled Espanol, sprechened Deutsch, toked Pisin, dekimashted Nihongo, parled Français, and huad Putonghua. After dismaying me with his command of great languages of the world he proceeded to enthral me with a series of recent adventures in his life that made Crocodile Dundee look like a prawn fisherman. It is said that first impressions are lasting and after that interview I knew I wanted to be a linguist just like Professor Wurm. His effect on me was and still is profound, with that in mind I am writing this short memoir as a tribute to Professor Wurm from one of his current students.

In 1982, I was awarded a Summer Vacation Fellowship in the Department of Linguistics, Research School of Pacific Studies. I was there for four months and during that time became well acquainted with Professor Wurm and the Fellows in the department. From our first meeting forward the Professor encouraged me to feel like a full member of the department, a genuine academic, and a friend of them all. I was asked to call everyone by their first names as they were accustomed to treating each other as equals. After that I always called him Stephen. However, I will always think of him as 'the Professor' because it is a 'larger than life' title appropriate for a man of his academic and physical stature.

That summer vacation was a wonderful time, because I was able to indulge my desire to do uninterrupted research surrounded by 'walking encyclopedias' for my ready reference at any time. I was sure that it wouldn't be long before I too would be living the life of a linguistic anthropologist — being ambushed by guerillas, falling over precipices, riding motor bikes up mountains and drinking such delicacies as yak milk tea.

Three years later I was accepted as a PhD candidate in Stephen's department. Postgraduate work is not all adventure and excitement and it can be a long, lonely road. Fortunately, Stephen has always encouraged me to consult him on any matter academic or personal and I have gratefully done so. He has given me some of the best advice I have ever received on handling the stresses of research and fieldwork. On the very real problems of becoming too emotionally involved in issues that present themselves while doing research he has suggested that you simply do what you can with what you have, and never put demands on yourself that you cannot fulfil. Culture shock experienced during and after fieldwork can be alleviated by being certain about your own personality and cultural background; as long as you are true to yourself you will not be shocked by your own reactions. Discussing major problems with an experienced person is the best way to deal with them. Stephen has given me the benefit of his relating to me some of his own life experiences in order that I might deal more easily with difficult situations I have and will encounter. This ability to be genuinely in touch with the needs of his students is one of the most admirable qualities any Professor can have. Stephen combines a very hectic schedule of worldwide commitments with that essential personal time which is necessary to spend with all the members of his department. He always manages to stay in touch with us through postcards from exotic places — usually blessed with terrible weather.

I will be forever grateful that I have had the opportunity to do research in Stephen's department. Academically he has been a most creative mentor and on a personal level a kind and interested advisor. Perhaps best of all he has related to me some of the most adventurous life stories I have ever heard and whenever I find my studies a little too quiet for my liking I can think about what experiences might be in store if only I have the imagination to seek them out. Stephen will remain in my mind as a man of great imaginative scope who generates ideas that lead to research into almost every aspect of human communication. To have an 'ideas man' as a Professor is every student's ideal.

C.F. and F.M. Voegelin

Stephen Wurm, a man of great charm in any language, has undoubtedly had experience with as great a variety of languages as any person we know of and a far greater variety than most linguists. Wurm's energetic enthusiasm for languages, both as a language learner and as a linguist, is certainly unexcelled.

Part of this enthusiasm is no doubt related to the fact that Wurm is what we call a 'rapid language learner' — one who obtains fluency in a previously unknown language in a matter of weeks, rather than the months or years that most adults require. On the basis of the very few rapid language learners known to us, we theorise that the ability may stem from learning multiple languages as a child, that is, that the language acquisition 'device' simply doesn't get shut down if it has been more than normally stimulated and continues to be stimulated at the time it might expectably be slowing down. And Stephen's multiple language learning certainly began in childhood, for example, when we asked him how he happened to learn Chinese, he reported that that was simple: when he was a child, there had been a Chinese family living next door; so, he had learned Chinese from playing with their child, as though such things were automatic.

We've encountered Stephen in a number of different linguistic contexts over the years. We'd first heard of him in the context of Australian Aboriginal languages, when Geoff O'Grady, then a student at Indiana University, was trying to explain to us how the Australian language he was writing his dissertation on was related to other Australian languages. And both Geoff and Ken Hale told us about the tremendous amount of fieldwork Stephen was doing on Australian languages.

We first met Stephen at a reception to which we'd been invited to meet the participants in an Altaic Conference, which he was attending as a Mongolian specialist.

We became better acquainted with Stephen when he spent several weeks one summer at the Research Center at the Museum of Northern Arizona in Flagstaff, where we had our summer field station. Though we usually encountered Stephen several times a day, three things particularly stand out in our memories of that period. One is Stephen's accompanying us once on a trip to the Hopi Mesas, where we'd expected that after a few minutes of listening to one of us transcribing texts with a Hopi, which we would expect to be rather dull for anyone who was neither primarily a phonetician nor knew anything about the language being transcribed, he'd be ready to join the others for a tour of the Mesas. Much to our surprise, he happily sat transcribing Hopi for the full session.

Most days at the Research Center Stephen concentrated on research of his own that he'd brought along, but his evenings were devoted to studying Danish because he was going from Arizona to a conference in Denmark and, naturally for Stephen, wanted to learn to speak Danish in the few weeks before then. Our evenings were devoted to working on Hopi materials, and since our bedroom window faced in the direction of Stephen's cabin, it became a kind of nightly contest to see who could work longer — whose light was on later. Those late nights attest to the fact that, as more than one of them has explained to us, even rapid language learners do have to work at language learning.

It happened that several of the students and former students at our field station that summer knew languages other than English, and a couple of them, including Ken Hale, decided to test Stephen's fluency in a variety of languages and rounded up for our usual Saturday night picnic their fellow students and speakers of any other languages they could find around the Museum. They came up with nearly a score of languages, in all of which Stephen conversed fluently. The testers only regretted being unable to go further since there were no available natives of Australia, New Guinea or other such exotic places.

Later, and over a period of several years, Stephen generously spent a great deal of time, both in correspondence and in person, especially when we were both visitors at the University of Hawaii, explaining to us the languages of Australia and New Guinea in terms of the history of linguistic work in the areas, as well as in terms of his own and others' work going on at the time, expecially in determining the language limits of particular languages and their relationships to each other in the course of establishing his classification of them.

Though we have not had the opportunity to see Stephen for a number of years, we are sure that his apparent joy in language will not diminish in his retirement.

Robert A. Young

There are a great number of people in The Summer Institute of Linguistics (Papua New Guinea branch), who remember Professor Stephen Wurm's early visits to Ukarumpa in the sixties.

On his very first visit, he met with a handful of our linguists of which I was one, in the living room of a private house here. We all felt very uninitiated as to the types and characteristics of the languages of the country and for most, we were groping to understand the linguistic situation in Papua New Guinea generally.

It was at that first meeting that we were introduced to the term 'sentence medial verbs' as coined by Stephen and one which was as astonishing as it was novel in concept. But I have very vivid memories of how that triggered our interest and attention thereafter when we had eventually allocated in specific language areas and were coming to grips with some of the exotic features as found in the Highlands. So peculiar were the structures of the verb phrases that we wondered if we would ever be able to unravel their complexities in features like anticipated change of subject between chains of verbs within the sentence (at discourse level); and we noted the extreme transformations the verbs underwent when occurring within the sentence as opposed to the typical sentence final forms.

But it was Stephen's insights that gave the clue when the breakthrough was made. And none of us will forget his tremendous energy and enthusiasm for the study of languages in Papua New Guinea; and for all the help he made available, which resulted in all the friendships he established in the course of his consulting and lecturing.

He always projected a freshness and dynamic in those early days which inspired us to greater effort in research, and to achieve the goals before us.

SPORTULE

SUBORDINATE VERB MORPHOLOGY IN WESTERN QUEENSLAND

Barry J. Blake

INTRODUCTION

This paper deals with the immediate origin of certain formatives marking subordinate verbs in four Pama-Nyungan languages of western Queensland: Kalkatungu (Blake 1979a), Yalarnnga (Blake and Breen field notes), Pitta-Pitta (Blake 1979b) and Lhanima (field notes; some information in Blake and Breen 1971 and Blake 1979b). These languages, all now without any remaining fluent speakers, were more or less contiguous. Kalkatungu was spoken in the Mt Isa-Cloncurry area, Yalarnnga immediately to the south in the Djarra area, and Pitta-Pitta immediately to the south again in the Boulia area. Lhanima was spoken to the south-west of Pitta-Pitta in the Bedourie area. Kalkatungu and Yalarnnga share structural similarities and vocabulary relative to other Pama-Nyungan languages. Pitta-Pitta and Lhanima are quite different from these particularly in the forms of lexical and functional morphemes, but they are structurally very similar to one another and share 63% of vocabulary (Blake 1979b:185).

All the forms discussed below are displayed in Table 1.

Table 1: Comparative table of all forms considered

	Kalkatungu	Yalarnnga	Pitta-Pitta	Lhanima
purposive	-nʸtʸaaya	-nʸtʸaṭa	-liŋa	-liŋa
habitual/nom.	-nʸtʸir	-nʸtʸiri	-li(maru)	-li(ʈa)
participial	-nʸin	-nʸana	-ka(maru)	-nʸa(ʈa)
time (when)	-nʸinta		-kaina	-nʸana
	-miṭi			
	-n̂aʈ̂i			
(until)			-kainu	
(after)			-kainʸa	

PURPOSIVE

All the purposive forms in Table 1 can be decomposed into two formatives: -nʸtʸa-aya, -nʸtʸa-ṭa, -li-ŋa.

In Kalkatungu the formative -nʸtʸa can be isolated on the basis of its occurrence in several other verb suffixes and -aya can be identified with the

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Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 61-68. *Pacific Linguistics*, C-100, 1987.

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allomorph of the dative used with vowel stems. The following are the suffixes containing -nʸtʸa

-(nʸ)tʸaaya	purposive
-(nʸ)tʸir	habitual/nominalising
-(nʸ)tʸaŋu	habitual
-(nʸ)tʸaani	continuing action
-(nʸ)tʸama	used to register the presence of a direct object with the function of goal as opposed to patient (Blake 1979a:89-91)
-nʸin ∿ -tʸin	participial

-nʸtʸa is obviously present in the first five forms cited. It has a dissimilated variant -tʸa used after stems containing a nasal stop cluster. The participial form may contain -nʸtʸa, but the alternation is different in that the unmarked allomorph begins with -nʸ- though the form used after stems containing nasal-stop clusters begins with -tʸ-. The form -nʸtʸa is presumably to be identified with the -nʸtʸa that appears in various dialects of the Western Desert language and in other western Pama-Nyungan languages like Walbiri where there is a form that could be described as purposive, namely -nʸtʸaku (Hale 1976a:84), consisting of -nʸtʸa plus -ku. The second element is identifiable with the Walbiri dative -ku, the compound suffix being directly comparable with Kalkatungu -nʸtʸaaya. In Kalkatungu the dative has two allomorphs, -ku with consonant stems and V with vowel stems, V matching the stem-final vowel, e.g. matʸumpa *kangaroo*, matʸumpaa *for the kangaroo*. There are long forms of these suffixes, namely -kuwa and -Vya. These are normally optional, but are obligatory if another suffix follows. The -aya of -nʸtʸaaya then can be identified with the long form of the dative appropriate for an -a stem. Semantically there is of course a close connection between dative and purposive. The dative is used to express purpose as in (1) which invites comparison with the purposive in (2).

(1) matʸumpa-a(ya) ŋata iŋka
kangaroo-DAT *we* *go*
We are going for kangaroo.

(2) iŋka ŋata matʸumpa-a(ya) l̥a-yi-nʸtʸaaya
go *we* *kangaroo*-DAT *kill*-AP-PURP
We are going to kill kangaroo.

In (2) the verb l̥a *to hit, to kill* has been detransitivised since the underlying transitive subject is coreferential with the absolutive (in particular the intransitive subject) of the main clause. This detransitivisation is registered on the verb by the form -yi, glossed as AP (antipassive). The understood nominative subject is omitted and the complement is in the dative.

The purposive can also appear as the verb of a main clause as in (3).

(3) ŋata-yi l̥a-nʸtʸaaya matʸumpa
we-ERG *kill*-PURP *kangaroo*
We are going to kill kangaroos.

In Yalarnnga the corresponding form is -nʸtʸaṭa. The form -ṭa appears as a case marker with nouns. Yalarnnga also has a case marker -wu. The two forms mark separate cases and it is not easy to label them since there is a good deal of overlap in function. The functions involved are purpose, beneficiary,

possessor and complement of a detransitivised verb (as in (2)). Such a degree of overlap is unusual and probably reflects some confusion on the part of the last speakers of the language who provided the data. I will call the -ṭa case the purpose case and the -wu case the dative. The form -wu is almost certainly a lenited reflex of the widely distributed Australian dative form -ku, which form is usually taken to be the proto-form (Blake 1979c:343, 385; Dixon 1980: 311ff). The form -ṭa may be a reflex of the widespread Australian locative -la ∿ -ŋka ∿ -Ta but I do not know why there should be a retroflex ṭ. The usual conditioning involves -la with vowel stems, -ŋka often with disyllabic vowel stems, and -t̪/-t/-ṭ/-tʸ assimilating with consonant-final stems. Sometimes a hard alternant is generalised with vowel stems (all noun stems in Yalarnnga end in a vowel), but this is usually -ta.

It is not uncommon for forms of the set -la ∿ -ŋka ∿ -Ta to appear with dative-like functions even though they are generally taken to reflect a proto-Australian locative (probably *-la) contrasting with a proto-Australian dative *-ku (Hale 1976b, Blake 1979c:343, Dixon 1980:311ff).

The purposive in Pitta-Pitta is -liŋa. There are two formatives here, -li and -ŋa. The form -ŋa also occurs as a case marker indicating purpose, beneficiary and possessor. I will refer to this case as *purpose*. The form -ku also occurs marking the complement of semitransitive or middle verbs, the complement of detransitivised verbs and the complement of verbs in the future tense. I will call this case *dative*. There is no difficulty identifying -ŋa as a reflex of *-ŋka, an allomorph of the widespread Australian locative referred to above. The confirmation comes from the form -ŋu used to mark the subject of future verbs. The ergative case (marking transitive subject and often instrument) in Australian languages tends to have the same forms as the locative except that the vowel is -u rather than -a, i.e. the ergative is commonly represented by -lu, -ŋku or -Tu. Presumably -ŋu reflects *-ŋku and parallels -ŋa reflecting -ŋka. Of course we must allow for a shift in function with -ŋu since it marks the subject of future verbs rather than transitive subjects (-lu marks the transitive subject of non-future verbs).

The presence of the form -li requires a different kind of explanation. -li occurs in Pitta-Pitta as a marker of detransitivised verbs. (4) illustrates a transitive clause and (5) the corresponding detransitivised version (Blake 1979b:207).

(4) piṯi-ya ŋa-t̪u ina(in-ŋa)
hit-PRES *I*-ERG *you:*ACC
I hit you.

(5) piṯi-li-ya ŋanʸtʸa in-ku
hit-AP-PRES *I* *you*-DAT
I feel like hitting you.

Now in Kalkatungu and Yalarnnga this detransitivised construction is obligatory in purpose clauses if the underlying transitive subject of a subordinate purposive verb is coreferential with the absolutive of the main clause. This was illustrated from Kalkatungu in (2) above. On the evidence available from Roth 1897 and from the data collected by Gavan Breen and myself from the last fluent speakers, it seems that all purpose clauses in Pitta-Pitta require -li, i.e. they are all marked by -liŋa. Now in a language like Kalkatungu where detransitivised purpose clauses are used for absolutive-ergative coreference, it works out that detransitivisation occurs in most purpose clauses since in the nature

of things clauses like *I am going to see you* (intransitive subject coreferential with transitive subject) are far more common than clauses like *I am going for you to see me* (intransitive subject coreferential with direct object). Moreover what I am calling a purpose clause is also used to express indirect commands as in *I told him to chop the wood* where the direct object is coreferential with the transitive subject, and this sentence pattern is extremely common. I would like to suggest that Pitta-Pitta once used detransitivised purpose clauses in the same way as Kalkatungu and Yalarnnga did and that the system was reinterpreted; more specifically, that the naturally high frequency of the detransitive marker -li led to its being reinterpreted as an obligatory feature of purpose clauses. We could speculate about whether this was a development in the natural course of the language that remained undetected by Roth since he never heard or elicited the unusual coreference pattern or whether the reinterpretation occurred in the somewhat restricted grammar of the last generation of speakers.

HABITUAL/NOMINALISING SUFFIXES

The forms shown as *habitual* in Table 1, -nʸtʸir in Kalkatungu and -nʸtʸiri in Yalarnnga are nominalising suffixes that may be followed by case suffixes. In both languages there are also inflectional suffixes indicating habitual action, -nʸtʸaŋu in Kalkatungu and -nʸaŋu in Yalarnnga.

Both -nʸtʸir and -nʸtʸiri have some claims to being considered subordinating forms since they mark the verbs of what could be considered relative clauses indicating habitual action. However, they typically function more like the English nominalising suffix -er as in the following examples from Kalkatungu.

(6)a. ati-nʸtʸi l̂a-yi-nʸtʸir
meat-DAT *kill*-AP-er
butcher (one who kills meat)

(6)b. l̂a-manti-nʸtʸir
kill-INSTR-er
instrument used for killing (e.g. a gun)

Nominalisations in Kalkatungu are based on the absolutive (this is probably true of Yalarnnga too, but there are gaps in the data). The nominalisation in (6a) is based on the intransitive subject of the detransitivised version of l̂a *to kill* and in (6b) the nominalisation is based on the direct object of the derived transitive verb l̂amanti. The function of -manti is to mark the derivation of a verb with a location or, as here, an instrument expressed as a direct object, the patient being expressed in the dative (Blake 1979a:87-89).

In Pitta-Pitta and Lhanima the detransitivised construction is used to express characteristic or habitual activity, this being one of the semantic effects of detransitivisation not only in these two languages but in a number of other Australian languages including Kalkatungu and Yalarnnga. One also finds examples where the verb is suffixed by -li, but where the normal ergative construction is used with the ergative case for the transitive subject and the accusative for the direct object, and others again where both arguments of the verb are in the nominative. There are also examples where -li is suffixed to intransitive verbs as in the following example from Pitta-Pitta.

(7) ṯunʸtʸi-li ŋanʸtʸa
cry-er? *I*
I cry a lot (I'm a cry-baby)

The common thread running through these examples is the use of -li to indicate habitual activity. I would suggest that -li has taken on a new function. Where once it had the function of marking detransitivised verbs which served among other things to indicate habitual activity it has come to mark habitual activity independently of detransitivisation.

In Pitta-Pitta the suffix -maru used with nominals to indicate *having* as in tʸira-maru *having a boomerang* is often used with the -li form of the verb when -li is expressing habitual activity (8), and in Lhanima the corresponding form -ṯa is used in parallel fashion (9).

(8) wama piṯi-li-maru ŋanʸtʸa
snake kill-HAB-*having I*
I kill snakes.

(9) ṯanapara kaṇa wanka-li-ṯa
they man sing-HAB-*having*
They are always singing.

The occurrence of these 'having' suffixes used in this capacity throws some light on the break up of the Kalkatungu form -nʸtʸir and the Yalarnnga form -nʸtʸiri. These appear to reflect an earlier *-nʸtʸa-ri since there is independent support for truncation of final vowels in Kalkatungu and for regressive assimilation in both languages. Truncation in Kalkatungu is evidenced in the comparison between Kalkatungu utʸan *fire* and Yalarnnga watʸani *fire*, and between Kalkatungu pipinʸ *type of fruit* and Yalarnnga pipinʸu. Regressive assimilation can be seen in Kalkatungu nʸun-ku (*you*-dative) from *nʸin-ku (nʸin- is the stem for the other cases).

If we accept *-nʸtʸari as ancestral to the attested habitual forms in Kalkatungu and Yalarnnga, we can equate -nʸtʸa with the -nʸtʸa of the other forms listed above and we are then left with -ri. Since the 'having' suffix in Yalarnnga is -ri we can assume that the second formative in -nʸtʸari is to be identified with this on the basis of the analogous use of the 'having' suffixes -maru and -ṯa in Pitta-Pitta and Lhanima respectively.

PARTICIPIAL FORMS

In Pitta-Pitta the participle -ka is homophonous with the past tense marker -ka and since there is a parallel homophony in Lhanima involving a different form, namely -nʸa, we can assume the homophony is not accidental. (10) illustrates the past tense and the participle in Pitta-Pitta and (11) illustrates the corresponding forms in Lhanima. Note that the participle in both sentences takes the accusative suffix. I interpret this as marking agreement with the direct object of the main clause and in (11) I interpret the accusative on wani as marking the direct object of the subordinate clause.

(10) ŋatʸi-ka ŋa-ṯu walka-ŋa miṇṭi-ka-ŋa
see-PAST *I*-ERG *kid*-ACC *play*-PART-ACC
I saw the kids playing.

(11) ŋa-ʈu paŋka-nʸa ʈana-ɳa-para wani-ɳa waŋka-nʸa-ɳa
I-ERG *hear*-PAST *they*-ACC-*here song*-ACC *sing*-PART-ACC
I heard them singing a song.

In Pitta-Pitta the participle can be suffixed by allative, locative or ablative to indicate *until, when* and *after* respectively. This may be true of Lhanima too, but the data available is meagre and only locative examples have been encountered. The following examples are from Pitta-Pitta (Blake 1979b:218-219).

(12) ɳaŋka-na ŋuʈa-ka-inu ŋanʸu
stop-IMP *return*-PART-*all I*:FUT:SUBJ
Stop here till I return.

(13) ɳatʸi-ɳa i-ɳa-ka kaʈi-ɳa, kaɳʈa-ka-ina ŋanʸtʸa
see-IMP *it*-ACC-*here meat*-ACC *go*-PART-LOC *I*
Watch the meat while I'm gone.

(14) ʈatʸi-ka-inʸa, mutʸi-ka ɳari ŋanʸtʸa
eat-PART-ABL *sleep*-PAST *now I*
After (I) ate, I had a sleep.

One often finds in Pitta-Pitta and Lhanima that the verb of a participial clause used to qualify the intransitive subject of a non-future verb is marked by the 'having' suffix rather than by zero as we would expect by analogy with the use of the accusative in sentences like (10) and (11). Perhaps this is to avoid confusion between the participle and the homophonous past. (15) is from Pitta-Pitta (Blake 1979b:217).

(15) panʸtʸi-ya ŋanʸtʸa ŋapu-ɳa maɳa-ɳa ʈima-ka-maru
ail-PRES *I* *water*-ACC *bad*-ACC *drink*-PART-*having*
I'm sick having drunk bad water.

The relationship between the Kalkatungu participle -nʸin ∿ -tʸin and the Yalarnnga participle -nʸana presents a problem. With the purposive and habitual/nominalising suffixes both languages exhibited -nʸtʸ but here we have a different correspondence. Table 2 lists all the relevant correspondences involving any nʸtʸ sequence in the two languages. The +NS columns give the allomorph occurring with stems containing a nasal-stop cluster and -NS indicates the unmarked allomorph.

Table 2: nʸtʸ sequences

	Kalkatungu		Yalarnnga	
	-NS	+NS	-NS	+NS
purposive	-nʸtʸaaya	-tʸaaya	-nʸtʸaʈa	-yaʈa
habitual/nom.	-nʸtʸir	-tʸir	-nʸtʸiri	
habitual	-nʸtʸaŋu	-tʸaŋu	-nʸaŋu	-yaŋu
participial	-nʸin	-tʸin	-nʸana	-nʸana
'goal' object	-nʸtʸama	-tʸama	-	-
reflexive/reciprocal	-ti	-ti	-nʸama	-yama
continuing	-nʸtʸaani	-tʸaani	-	-

Assuming that -nʸtʸiri in Yalarnnga dissimilates to -yiri (there are no relevant examples available), there are three patterns of correspondence among the forms in Table 2. The habitual forms probably reflect a proto-form - *nʸtʸa-ŋu where -ŋu may be a locative allomorph that occurs in both languages. The different treatment of *-nʸtʸa in the Yalarnnga habitual as opposed to the Yalarnnga purposive does not seem to be phonologically conditioned so we have to invoke borrowing as an explanation. The allomorphy of the Yalarnnga habitual also appears in the reflexive/reciprocal. This latter form may be cognate with the Kalkatungu form registering the presence of an object with the semantic role of goal, in which case there is an extra example of the correspondence found with the habitual. The Kalkatungu -nʸtʸama seems to consist of -nʸtʸa plus a causative -ma that appears in, for instance, rumpima *to frighten* from rumpi *to fear*. I base this on the observation that valency changing suffixes are very often to be identified with causatives in languages generally, in fact Kalkatungu -nti and Pitta-Pitta -la both perform this pair of functions (Blake 1979a:87-89, 1979b:204-205). The Yalarnnga reflexive-reciprocal may reflect *nʸtʸa (in light of the allomorphy) plus -ma, a formative that also appears in the Pitta-Pitta reflexive-reciprocal -mali (-ma plus the detransitivising -li discussed above).

The participial forms unfortunately exhibit a third correspondence and neither the Kalkatungu allomorphs nor the Yalarnnga ones exhibit a pattern of allomorphy independently attested with a putative reflex involving *-nʸtʸ. If the forms are cognate, there is the further difficulty of accounting for the difference in the first vowel by other than ad hoc means. I will assume for the time being that the participial forms are not cognate and I will not advance any specific suggestions about their respective origins. The reader will note homophony between the Yalarnnga participial marker -nʸana and the Lhanima past/participial plus locative. The Lhanima forms are also to be found in related dialects (e.g. Wangka-Yutjuru) to the north and some of these would have been contiguous with Yalarnnga (Breen: notes on Wangka-Yutjuru; see map in Blake 1979b:182 and list of forms ibid:224-225).

When it comes to the Kalkatungu form -nʸinta used to mark the verb of 'time when' clauses, we are back on firm ground. -ta is an allomorph of the locative, a non-productive allomorph otherwise confined to a few common (high frequency) nouns such as utʸan *fire* (locative utʸanta) (Blake 1979:30, 60).

(16) maa-tʸi ŋai aṛi-li-nʸin-ta, unuŋkaṭi yaun ṯuna
food-DAT *I* *eat* *wind* *big* *blow*
While I was eating, there was a big wind blowing.

The other forms shown in Table 1 for 'time when' in Kalkatungu show the productive locative allomorph for vowel stems, -ṯi, added to forms homophonous with the future -mi and past -n̰a. This homophony cannot be accidental since it involves two separate tense forms and the distribution of -mi and -n̰a parallels the distribution of the past tense forms in Pitta-Pitta and Yalarnnga. The forms -ṯ̰i and -n̰a do not appear to retain their respective future and past senses as evidenced by the following example (ŋu(wa) marks subordinate clauses corresponding partly to English relative clauses and partly to English adverbial clauses of time):

(17) ŋa-ṯ̰u waterbag kuu-ŋku puṭamaanti ŋuwa iŋka-mi-ṯ̰i
I-ERG *waterbag water*-ERG *fill* RELATIVE/TIME *go*-?-LOC
I filled the waterbag with water before I left.

SUMMARY

Some of the formatives used to mark subordinate verbs in the languages discussed also appear with different functions.

(a) The second element of the purposive verb suffix in the four languages is homophonous with the case suffix used to express purpose.

(b) The second element of the habitual aspect/noun-forming suffix is homophonous with a 'having' suffix in the four languages. Only in Kalkatungu is the correspondence indirect in that the putative second element *-ṛi is cognate with Yalarnnga -ṛi *having*.

(c) Three of the four languages illustrate homophony between tense suffixes and participial-type nominalising suffixes.

(d) Three of the four languages exhibit local case marking used with verbs to indicate time.

(e) Two languages, Pitta-Pitta and Lhanima, seem to have reinterpreted the detransitivising suffix -ḷi as a nominalising one.

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RENNELL-BELLONA /l/ AND THE "HITI" SUBSTRATUM

Robert Blust

Contrary to the belief of many phonologists, some sound changes appear to be purely conventional - that is, to lack any conceivable phonetic motivation. A particularly striking illustration is provided by the Polynesian (PN) Outlier language of the small, isolated island of Rennell in the southern Solomon Islands, where Proto-Nuclear Polynesian *l (from PPN *l, *r) has become [ŋg] (written /g/). A further development altered this segment to [ŋ] in the dialect of the even smaller and more remote neighbouring island of Bellona. Because this change was unconditioned it affected all directly inherited instances of PNP *l (following Elbert 1975 Rennellese forms are cited first, with Bellonese forms added in parentheses), e.g.:

PNP	REN	ENG
*lano	gano (ŋano)	*lake*
*lele	gege (ŋeŋe)	*jump, fly, leap*
*lima	gima (ŋima)	*hand, arm; five*
*lofa	goha (ŋoha)	*fathom*
*lua	gua (ŋua)	*two*
*ala	aga (aŋa)	*path, trail*
*fale	hage (haŋe)	*house*
*ʔaliki	ʔagiki (ʔaŋiki)	*chief*
*lalo	gago (ŋaŋo)	*below, under*
*tolu	togu (toŋu)	*three*

While PNP *l and *ŋ merged as Bellona /ŋ/, Rennell /g/ in directly inherited words has only one known source, PNP *l. Both modern dialects nonetheless have an /l/, which Elbert (1962:26) describes as "a voiced palatalized dental /l/ that has allophones that suggest d, and th in then". It is not my purpose to consider possible motivations for the change *l > /g/, a subject which has recently been taken up by Grace (1985). Rather, I wish to return to a question first raised by Elbert (1962), but never given a fully satisfactory answer: "What is the source of Rennell-Bellona /l/?"

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Table 1: Proto-Polynesian and Proto-Nuclear Polynesian consonant reflexes in Rennell-Bellona (adapted from Elbert 1975)[1]

PPN	p	t	k	ʔ	f	s	h	w	m	n	ŋ	l, r
PNP	p	t	k	ʔ	f	s	Ø	w	m	n	ŋ	l
REN	p	t	k	ʔ	h	s	Ø	b	m	n	ŋ, g	
BEL	p	t	k	ʔ	h	s	Ø	b	m	n	ŋ	

Elbert (1962:28-29) draws attention to Rennellese traditions of the "Hiti", dark-skinned autochthons who were annihilated by the Polynesian settlers of the island, and hypothesises that /l/ (and /gh/, which does not directly concern us here) could have entered Rennell-Bellona through a Hiti substratum:

> Are there, indeed, two strata in the language ... one Polynesian, and the other non-Polynesian and perhaps an acquisition, or substratum, or the legacy of the *hiti*? ... In earlier days students were rather quick to posit strata in Polynesia; then followed a conservative reaction. Even a cautious student of the history of Rennell, however, might suggest such a hypothesis here.

In support of this view, Elbert points out that Rennell-Bellona words which contain /l/ rarely if ever contain /t/, /s/, /ʔ/ or /h/, deviate from typical canonical shapes, conform only marginally to some otherwise productive derivational patterns, and are concentrated in certain lexical domains, including names for many flora, fauna and items of material culture which are not found in Polynesia proper. As additional evidence for the adventitious character of /l/ we might add the phonetic peculiarity of the liquid itself - a phonation type not otherwise reported in Polynesia (Biggs 1978).

Although the theory of a Hiti substratum provides an attractive explanation for the occurrence of Rennell-Bellona /l/, Elbert (1962:29) notes a difficulty with it that was brought to his attention by Arthur Capell:

> The words with /l/ must have come into Rennellese *after* the shift of the common Polynesian /l/ to /g/ in Rennellese. Rennellese /l/ and /g/ are never confused and occur in many of the same words. This makes it hard to accept a *hiti* /l/ unless (1) the Rennellese had already made the /l/ and /g/ shift before reaching Rennell, or (2) the present phoneme pronounced /l/ was in *hiti* time pronounced so differently as not to be identified with the Polynesian /l/.

This passage implies that the proposed explanations are mutually exclusive: either (1) is true or (2) (but not both). But if Rennellese /g/ has only one source, and if /l/ and /g/ "occur in many of the same words" (2) or its functional equivalent must be true irrespective of (1). Recognition of this fact, however, does not require us to conclude that "the present phoneme pronounced /l/ was in *hiti* time pronounced so differently as not to be identified with the Polynesian /l/". To explain why the Hiti liquid and the pre-Rennellese reflex of PNP *l did not merge in Rennellese we need assume only that the two sounds were sufficiently different phonetically to be distinguished phonemically, an assumption that is functionally equivalent to (2). The pre-Rennellese reflex of PNP *l could very well have been /r/, and the Hiti liquid similar if not

identical to modern Rennellese /l/.[2] On close inspection, then, the objections raised by Capell against the Hiti theory of Rennell-Bellona /l/ disappear. Although he does not mention any of the problems of analysis discussed in this paragraph, Elbert adopts a substratum theory at the conclusion of his paper, but not before somewhat confusing the issue with certain comparative observations.

In the great majority of cases Rennellese forms with /l/ have no known etymology. Two possible exceptions were noted by Elbert: /luba/ *fish poison: Derris heterophylla* (Willd.) (Proto-Austronesian *tuba, suggested by Ann Chowning), and /mamala/ *dry* (Fijian mamaca, suggested by Bruce Biggs). With regard to the first of these Elbert comments (1962:29) that *tuba "might suggest Rennellese luba, especially if the initial sound were once a d-". With regard to the second he observes that "Fijian /c/ is pronounced about like th in 'there' .... Rennellese mamala may be a later borrowing from Fijian or other language, and constitutes additional evidence for later entry of an l-word in Rennellese, perhaps as th or d." Since the Fijian reflex of *tuba is /duva/ [nduva], one is left with the impression that where an etymology for an /l/-word was known or supposed, Elbert assigned high priority to Fijian as a possible source. Yet considerations of parsimony would favour the view that the Hiti of Rennellese tradition - if they had a historical existence at all - spoke a South-east Solomonic language.

In a later publication Elbert (1965:435ff) drew attention to a number of apparent cognates of Rennell-Bellona /l/-words in "Guadalcanal" - a cover term for various unnamed languages spoken on that island - thus suggesting a possible source of /l/ within the South-east Solomons.[3]

Finally, in referring to Rennell-Bellona words that contain /gh/ and /l/ Elbert (1975:xiii) maintains that all such words are non-PN, but adds that "No assumptions are made as to whether these words are chance resemblances, loan words, or from a substratum".

My own contribution to this discussion will be to draw attention to a number of previously overlooked Rennell-Bellona /l/-words that have an identifiable etymology. In most cases these are etymological doublets of words that do not contain /l/. Somewhat surprisingly, the source of /l/ in these forms is typically *t or *s, implying a phonological development that is otherwise unknown in any language of the Solomons. Before presenting the evidence a few more general remarks about non-PN loanwords in Rennell-Bellona are in order.

The non-PN languages of the South-east Solomons as a whole (exclusive of Savo, which is not Austronesian) are generally assigned to a subgroup which Pawley (1972) calls "South-east Solomonic".[4] As Tryon and Hackman (1983) have noted, all South-east Solomonic languages regularly reflect Proto-Oceanic *R as a liquid, /l/ or /r/, a development which distinguishes them from Proto-Polynesian, in which POC *R disappeared. The South-east Solomonic group in turn includes two major divisions: Guadalcanal-Nggelic and Cristobal-Malaitan. The Cristobal-Malaitan languages further exhibit the accretion of /s/ or /r/ (ultimately from *y) before words that originally began with *(q)a-, the loss of *t, and the shift of *s to /t/ before non-high vowels, all of which distinguish them from Proto-Polynesian, in which POC *q and *t were retained, consonant accretion did not occur, and POC *s/ns were reflected as *s/h/t.[5] It follows that Rennell-Bellona /sau/ < POC *qatun *bonito* must be a loan from a Cristobal-Malaitan language, as both the accretion of /s/- and the loss of *t are diagnostic for this group (cp. Lau, Sa'a, Arosi /sau/ *bonito*). Moreover, Rennell-Bellona has a directly inherited reflex of *qatun: /ʔatu/ 'probably

bonito, but usually called sau'. Cristobal-Malaitan loans in Rennell-Bellona that can be detected through such diagnostic reflexes, however, are rare.

Certain other words are loans which could not have been borrowed from a Cristobal-Malaitan language, but which could derive from any of various languages of Guadalcanal, as with /tagili/ ∿ /taŋili/ *the large wahoo or jack mackerel, Acanthocybium solandri* (Cuvier) < POC *taŋiRi *a fish: the Spanish mackerel.*[6]

Still other words clearly are loans, but could be from almost any extant Southeast Solomonic language, as with Rennell-Bellona /kilakila/ *type of hatchet brought from Queensland* < POC *kiRam *axe, hatchet*, and Rennell-Bellona /bago/ *general name for vines* < POC *waRos *vine.*[7]

Remarkably, the etymologies of a number of Proto-Oceanic reflexes that contain /l/ in Rennell-Bellona have until now been entirely overlooked. In his original publication on the subject Elbert (1962:29) noted that both /luba/ *Derris root* and /mamala/ *dry* may turn out to belong to widespread cognate sets. However, he appeared to have difficulty believing that Dempwolff's *tuba (POC *tupa) could have produced /luba/ without passing through a stage in which *t had been voiced. Since he found no languages that exhibit the change *t > /d/ in the Solomons he was forced to consider geographically more distant languages as possible sources, hence his oblique references to Fiji. Because of the inherent improbability of borrowing over such distances (the nearest landfall in Fiji is some 1,200 miles to the south-east of Rennell), Elbert finally abandoned any firm commitment to a hypothesis of borrowing or substratum, and accepted the possibility that the resemblances of Rennell-Bellona /luba/ and /mamala/ to similar words in other Oceanic languages could be due to chance.

As a result of further comparative work it is now clear that the etymologies suggested for Rennell-Bellona /luba/ and /mamala/ are valid. The following is an alphabetical listing of Rennell-Bellona words in which /l/ appears to derive from earlier *t or *s. D = directly inherited, I = indirectly inherited (non-PN):

(1) POC *(ma)masa *evaporate, dry up; low tide*
PPN *(ma)maha *dry up, shallow*
R-B (D): masa *be empty or nearly empty of liquid; be shallow or low, as the tide*, haka-masa *to dry, as tears*
R-B (I): maamala[8] *to dry or be dry*

(2) POC *patu *stone, coral*
PPN *fatu *stone, coral*
R-B (D): hatu *stone, rock, coral, any hard metal*
R-B (I): balu- *stone.* Occurs only as a fossilised element in 1. balughagho (baluŋagho) *kind of smooth, hard, light-coloured coral found inland*, 2. balukogo (balukoŋo) *reddish pumice that drifts to Rennell-Bellona* and 3. balumata *kind of smooth coral rock ashore on R/B, used in ovens because it breaks easily but does not explode* (pisi) *soon* (= hatu gegeu)

(3) POC *puso *foam, froth, bubbles.*
PPN *fiho[9] *foam, froth*
R-B (D): -
R-B (I): bulo *be turbulent, as water*

(4) POC *saRi *to husk coconuts, tear*[10]
PPN -
R-B (D): -
R-B (I): lagi (laŋi) *to tear (by humans)*, ma-lagi (ma-laŋi) *be torn accidentally*

(5) POC *saRum *needle (typically made from the wing bone of a flying fox)*
PPN *hau *needle*
R-B (D): au *tattooing needle, with a point made of ibis* (taghoa) *or chicken bone*
R-B (I): lagu (laŋu) *wing bone of flying fox, (sewing) needle*

(6) POC *siko *kingfisher sp.*
PPN *tiko *kingfisher sp.*
R-B (D): -
R-B (I): ligho *white-collared kingfisher: Halcyon chloris amoena* Mayr, ligho tai *sacred kingfisher: Halcyon sancta sancta*

(7) POC *sinaR *to shine*
PPN *sina *grey-haired, white-haired*
R-B (D): sina *be grey- or white-haired; grey or white hairs*, sinasina *whitish, as the tip of unopened boils*, sina tiha *flashing white*
R-B (I): lina *to fish with torches*, linalina *be shiny white, bright*

(8) POC *tido *look at, gaze*
PPN *tiro *look at, watch closely*
R-B (D): tigo (tiŋo) *see*, tigotigo (tiŋotiŋo) *look, see*
R-B (I): ligo (liŋo) *look for or at, inspect, examine, observe, select, vote*

(9) POC *tokon *punting pole; staff, cane*
PPN *toko *punting pole; staff, cane*
R-B (D): toko *pole, as for a canoe; to pole, as a canoe; to use as a pole or support*, tokotoko *cane, walking stick, crutches, staff; to use a cane or staff*
R-B (I): loghon-i[11] *supporting stick, support; to lean or press against; to support*

(10) POC *toRas *heart wood; hardwood tree used for canoe hulls: Intsia bijuga (?)*
PPN *toa *ironwood: Intsia bijuga (?); used for canoe hulls*
R-B (D): toa *ironwood* (none on Be, and on Re only on cliffs)
R-B (I): loga (loŋa) *hard core of wood; be hard, as wood, or as the core of wood, or as baked taro*

(11) POC *tunu *to warm, cook, warm up food, burn*
PPN *tunu *cook on an open fire*
R-B (D): tunu *to cook, roast on hot coals*
R-B (I): lunu *to burn the small last part of a garden after the large trees have been burned*, lu-lunu *be seared, as pinfeathers; be burned, as a garden*, haka-lu-lunu *to sear, singe, burn*, ma-lunu *be seared, burned*

(12) POC *tupa *root pounded and mixed with water to stupefy fish: Derris elliptica*
PPN -
R-B (D): -
R-B (I): luba *Derris heterophylla* (Willd.) *Bakh, a vine; its green stems are pounded* (tuki), *bound at the end of sticks, and inserted in crevices, thus poisoning fish*

(13) POC *tupuq *grow, spring up*
PPN *tupu *grow, spring up*
R-B (D): tupu *sprout, as of yams, panna, coconuts; life principle and growth, of children; to sprout, grow; to rise, as a boil, cooked rice, or a tidal wave; to sprout forth*
R-B (I): ma-lubu *to grow, sprout*

(14) POC *tupuR *freshwater spring along the beach*
PPN *tufu *freshwater spring along the beach*
R-B (D): tuhu, tuhu-u *natural salt-water ponds connected underground with the sea*
R-B (I): lubu *small deep spring, as in limestone caves*

In addition to these 14 items two words that belong to geographically more restricted cognate sets also exhibit the change of *t or *s to Rennell-Bellona /l/:

(15) *sa(ŋ)ka *flower*
Talise (Guadalcanal) saŋga-na, To'ambaita (Malaita) taŋga-na, Sa'a (Malaita) ta-taka-na, Bauro (San Cristobal) taka-na, Rennell-Bellona laka, laka-a *flower*

(16) *tila *fire plow*
'Are'are ire[12] *make fire by rubbing a piece of soft wood over a piece of hard wood*, Rennell-Bellona liga (liŋa) *fire plow*

As seen in Table 1, PPN *t and *s normally remain unchanged in Rennell-Bellona. According to Elbert (1975:xv) /t/ is a voiceless dental stop pronounced in most environments "about as in English, but with less aspiration". It is slightly palatalised before front vowels, especially on Bellona. /s/ is a voiceless alveolar fricative "about as in English". Given these phonemes with their stated phonetic norms there would appear to be no structural reason why [t] or [s] in loanwords would not be borrowed as Rennell-Bellona /t/, /s/. How, then, did Rennell-Bellona get /l/ from *t and *s?

One scenario, which will be rejected, takes the following form. At some time prior to borrowing extensively from the Hiti, pre-Rennell-Bellona speakers changed *l/r to /g/. The phonological system was then temporarily without any liquids - a bizarre situation for a PN language. As a result there was a tendency for liquids to be introduced through sporadic change.[13] Apart from the general undesirability of assuming sporadic change whenever such an assumption can be avoided, there are three serious problems with this explanation.

First, the indirect ("Hiti") reflex of POC *R fell together with the direct reflex of POC *l and *d (PPN *l and *r) as Rennell-Bellona /g/.[14] If the change of pre-Rennell-Bellona *l/r occurred *before* most Hiti loans had entered the language this merger cannot easily be explained. Second, since POC *t and *s are reflected as /l/ in the Hiti stratum of the Rennell-Bellona vocabulary, pre-Rennell-Bellona must have had *two* contrastive liquids at the time that /g/ was innovated. It is simplest to assume that these were *l (< POC *t, *s) and *r (< POC *R, *l, *d). Pre-Rennell-Bellona *l was found only in Hiti loans, whereas *r occurred both in Hiti loans (where it derived from POC *R), and in native Polynesian words (where it derived from POC *l and *d).[15] When pre-Rennell-Bellona *r changed to /g/ it introduced a new phoneme into the language, most instances appearing in words inherited from Proto-Polynesian, but some occurring in Hiti loans (as in nos. 4, 5, 8 and 10). Third, and perhaps most importantly, 10 of the 14 Rennell-Bellona /l/-words with a Proto-Oceanic

etymology are doublets of forms with /t/ or /s/. Both phonological and semantic considerations favour the hypothesis that the latter variants are directly inherited, and that those with /l/ are loans. An attempt to derive Rennell-Bellona /l/ from earlier *t or *s in forms inherited from Proto-Polynesian would fail to account either for the phenomenon of doubleting itself, or for non-zero reflexes of *R in etymologies such as *saRi > /lagi/ *to tear*, *saRum > /lagu/ *needle*, or *toRas > /loga/ *heart wood*.

The evidence of doubleting, then, points rather clearly to borrowing as the origin of Rennell-Bellona /l/. We have noted already that a few comparisons indicate borrowing from Cristobal-Malaitan languages, and that others indicate borrowing from languages that could not belong to this group. But could *any* extant language of the Solomons be the source of the Rennell-Bellona /l/-words (1)-(16)?[16] Tryon and Hackman (1983) is a comprehensive linguistic survey of the Solomon Islands which contains a comparative vocabulary of 324 words for 104 non-PN speech communities, together with tables of phonological reflexes. Although intervocalic *t is reflected sporadically as /r/ in the Mono-Alu group of the Shortland and Treasury Islands off the southern coast of Bougainville (in two recorded forms), and as /l/ before POC *a in Vano of northern Vanikoro in the Santa Cruz Islands, no language of the Solomon Islands reflects *t or *nt, *s or *ns unconditionally as a liquid. Moreover, both conditioned and sporadic reflexes appear to be rare, as are other phonological developments (*t, *s > z, *s > c) which could offer some hope of accounting for Rennell-Bellona /l/ through borrowing. In short, no language presently spoken in the Solomons (nor any other reported Oceanic language) is a likely source for the indirectly inherited reflexes of POC *t and *s in Rennell-Bellona.

The Rennellese traditions of the Hiti are vivid and detailed, and the unequal relationship between the two communities is reflected unequivocally in the modern language.[17] It is unlikely that both the traditional history and the linguistic constructions that refer to the Hiti are products of a myth-making imagination. Rennell-Bellona acquired its /l/ through borrowing, and no surviving language of the Solomons is a plausible source. It is simplest, then, to treat /l/ as a feature of "Hiti" substratum.

Borrowing is a powerful explanatory device for irregularities in phonological development, and for this reason it is methodologically difficult to control. A hypothesis of borrowing must normally be constrained by the condition that a proposed source language be identified with an actual language that meets the linguistic, geographical and social conditions necessary to qualify it for its theoretical role. Where borrowing is attributed to substratum (viz. to a language which left no descendants) this constraint cannot be maintained, hence the precarious status of many substratum hypotheses. Etymological doublets, however, do require an explanation, and where the phonological characteristics of the indirectly inherited forms cannot be reconciled with those of extant languages we must search elsewhere for a source.

What can we say about the language of the Hiti, from its traces in modern Rennell-Bellona? Some clues are provided by the dissociative tendencies noted by Elbert (1962:27). First, /h/ never occurs in words that contain /gh/ or /l/. Second, in the data sample used for Elbert's table /t/ and /s/ never occur in words that contain /l/ (in fact, as will be seen, these phonemes do sometimes co-occur in the same word). Third, /ŋ/ never occurs in words that contain /gh/. Fourth, /ʔ/ only rarely occurs in words that contain either /gh/ or /l/.

Since the great majority of Oceanic languages, including those in the Solomons, reflect POC *q (the source of Rennell-Bellona /ʔ/) as zero, the dissociative

tendencies of the glottal stop will be of little use to us. Likewise, /ŋ/ appears to occur quite frequently with /l/, and so will not be considered further here. The dissociative tendencies of Rennell-Bellona /h/, /t/ and /s/ with /l/, however, are highly significant. These four phonemes reflect POC *p, *t/s, *s and *t/s respectively, but only the first three are directly inherited. In diagnostic substratum words (those that contain /gh/ or /l/) POC *p invariably is reflected as /b/ - hence the dissociative relationship of /gh/ and /l/ with /h/. Similarly, since POC *t and *s are the *sources* of /l/ in the Hiti substratum, the regular Rennell-Bellona reflexes of these proto-phonemes do not normally co-occur with /l/. All words in which /t/ or /s/ do co-occur with /l/ appear to be English loans (lata *ladder*, talake *truck*, losi *rose*, seli *cherry*), or historical compounds made up of elements of differing strata: balumata *kind of smooth coral rock ... used in ovens because it breaks easily but does not explode* (pisi) *soon* (with the Hiti reflex of POC *patu *stone*, plus a Rennell-Bellona form of unknown provenance), hatu ligaliga *soft stone resembling chalk*, hatu ligho *anchor* (with the Rennell-Bellona reflex of POC *patu *stone*, plus Hiti forms ligaliga and ligho of unknown provenance). These observations indicate that Rennell-Bellona and the language of the Hiti were distinguished phonologically by the following reflexes:

	1	2	3	4	5	6
POC	p	t	s	k	q	R
R-B	h	t	s	k	ʔ	Ø
Hiti	b	l	l	gh	Ø	r

Hiti reflex (1) (a voiced bilabial fricative) or its labio-dental equivalent is typical of the Guadalcanal-Nggelic languages, of some languages of the New Georgia group, and of areas outside the Solomons, but is not found in any Cristobal-Malaitan language. Hiti reflex (4) is, again, typical of the Guadalcanal-Nggelic languages, but also appears in the languages of San Cristobal. Reflexes (5) and (6) are characteristic of all South-east Solomonic languages, and reflexes (2) and (3) are unique. From these observations it seems safe to say that the language of the Hiti was not a descendant of Proto-Cristobal-Malaitan. While it could have been descended from Proto-Guadalcanal-Nggelic, it would have been distinguished from all other languages in this group by its reflexes of POC *t and *s. Considering this fact and the relative geographical separation of Rennell and Bellona from other islands in the southern Solomons, the language of the Hiti could equally well have constituted a primary branch of South-east Solomonic.

In conclusion, a distinctive South-east Solomonic language in which POC *t and *s had merged as a liquid (probably /l/) was spoken on Rennell and Bellona when the ancestors of the present population arrived. This language apparently was not a member of the Cristobal-Malaitan group, but its positive connections remain unclear. Its speakers (the "Hiti" of Rennellese tradition) were ultimately exterminated by the invading Polynesians, but not before leaving a lasting impression on the language of their conquerors and successors.

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NOTES

[1]Elbert gives only the PPN reconstructions. He lists /p/ and /b/ as additional reflexes of PPN *f, and /h/ as an additional reflex of PPN *s, but I am unable to find convincing evidence for any of these proposed developments.

[2]According to Elbert (1962:28) the Rennellese speak of arriving in their present location - after many stops - from "an island called ʔUbea". Pawley (1967: 290ff) noted a handful of probable lexical innovations that appear to be shared exclusively by Rennell-Bellona and West Uvea, in some cases including Pileni of the Santa Cruz archipelago. Tentatively he concluded (p.290) that these proposed innovations "suggest some contact with these places". As seen in Biggs (1978:709) the West Uvean reflex of PPN *l is /l/ ∿ /r/. Elbert's (1967) linguistic assessment of the Rennell-Bellona oral traditions points to East Futuna (/l/) or perhaps Tikopia (/r/) as the Rennell-Bellona homeland.

[3]Among these is Rennellese /laghi/ *buttress at base of tree*, apparently an error for /lagi/ idem, as given in Elbert 1975. Since this form almost certainly derives from POC *dalis *buttress root*, it is evidence that some instances of Rennell-Bellona /l/ can be traced to *d (probably through *r) in loanwords. As will be seen, however, this is not the most common source of /l/ in words with a determinable etymology.

[4]For a somewhat different view cf. Blust 1984.

[5]For the "third palatal reflex" in PPN cf. Blust 1976.

[6]The Rennell-Bellona evidence indicates *taliRi, not *taŋiRi. Rennellese /g/ in this form may be a back formation from earlier *ŋ, a sporadic change that could be expected in words borrowed through the Bellonese.

[7]As argued in Blust 1978, Proto-Oceanic probably preserved a distinct reflex of PAN *j. However, at some time shortly after the break-up of Proto-Oceanic *j and *s evidently merged. For present purposes only I write both as *s.

[8]Written mamala in Elbert 1962.

[9]With unexplained change *u > /i/. For a similar sporadic change in other forms cf. Blust 1970.

[10]Proto-Oceanic appears to have had phonologically and semantically similar terms *saRe *to tear* and *sa(dR)i *to husk coconuts*. The former is reflected as Rennell-Bellona /sae/ *to tear; to strip, as bark; to split, as a torch*. The latter, which retains its original sense in, e.g. Motu /dari-a/ *husk a coconut with the teeth*, Mussau /sali-i/ *husk a coconut* evidently developed the more general meaning *to tear, to split* in Proto-South-east Solomonic: cp. Nggela /sali-a/ *to tear downwards*, 'Are'are /tari-a/ *to split*, Sa'a /tali/ *split down, tear down the stem of the betel pepper, preparatory to eating, split a vine or a bamboo, strip the skin of* wale *cane*, Arosi /tari/ *strip off*.

[11]Reflexes of a suffixed stem also appear in Micronesia: Ponapean sokon *cane, walk with a cane*, Marshallese jokoŋ *cane, crutches; staff, walking stick*, Woleaian sogoli (/sogoli-i/) *have it as one's spear, have it as one's stick*. Tongan tokoni-ʔi *to help, assist, support* probably is connected.

[12]For a similar vocalism cf. POC *kiRam > 'Are'are ire *stone axe*.

[13]Clark (1976) has noted the sporadic shift PPN *t > Samoan /l/ in *te > /le/ 'definite article' and *taʔe > /lee/ 'particle of negation', a change which might be seen as a parallel of the Rennell-Bellona development, though it lacks structural motivation.

[14]As seen in examples (4), (5) and (10). Also cp. Proto-Malayo-Polynesian *Runut *plant fibres, coconut husk* > Rennell-Bellona /gunu/ *coconut fibre ... used especially for straining* tuba *(coconut toddy) and other liquids.*

[15]In accordance with the general pattern of phonological mergers in South-east Solomonic languages, and with the development in comparison (8) (POC *tido > Rennell-Bellona /ligo/), it appears likely that the Hiti *r also derived from POC *l and *d. Most Hiti words that contain a reflex of POC *l or *d, however, would be phonologically indistinguishable from the directly inherited vocabulary.

[16]In the interest of brevity I will speak of "extant languages" as potential sources of Rennell-Bellona /l/, when it is clear that the reference is to an anterior stage of these languages.

[17]cf. hiti *original inhabitants of Rennell and Bellona; certain large stones on trails leading to the sea; large coral blocks just outside the reef exposed at low tide; wretch, no-good (as in insults); to die out, as a clan; to end, as a trail*, haka-hiti *to annihilate, exterminate; to express fear of death; to have a premonition, usually bad; to complain, as of sickness or discomfort*, taa hiti *kill everyone*, hiti-ʔaki *to end, be the last.* The archaeological record presently available for Rennell-Bellona appears to be inadequate to resolve the issue of possible cultural replacement on either island (cf. Kirch 1984). For a sample of the oral traditions see Elbert and Monberg 1965.

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LANGUAGE PLANNING FOR CHINA'S MINORITIES: THE YI BRANCH[1]

David Bradley

1. INTRODUCTION

Since 1950, Chinese linguists have done a great deal of linguistic work, mostly applied to practical issues such as dialect identification and classification, preparation or revision of orthographies, publication of teaching materials, traditional literature, and translations of political works, and minority teacher training. As with most things in China, this research proceeds in stages related to political events. The years 1950-1960 saw a period of intense work: dialect surveys, selection of 'standard' dialects, and orthography design, followed by publication of primers and literacy materials for members of national minorities. From 1960, this activity decreased, and more effort went into the translation of political works into minority languages. During the Cultural Revolution, little was achieved; in fact, some minority orthographies went out of use, and others were left in educational and publishing abeyance. Since 1972, and more intensively since 1978, language work has been taken up again, with some major new initiatives: revised or new orthographies, extensive publishing, and academic research.

The two main bodies involved in minority language work are the Ministry of Education, through the ten (an eleventh is planned) *Minzuxueyuan*;[2] and the Chinese Academy of Social Sciences, through its various *Minzuyanjiusuo*. Publishing is now the responsibility of various *Minzuchubanshe*, though in some provinces the *Renminchubanshe* also or instead provides these services. Connected with these publishing houses are various provincial language planning committees for specific languages, as well as radio broadcasting services. A general brief for maintenance of minority culture is held by the *Minzugong* and *Wenhuaguan* at various levels, from national down to province, prefecture and county levels. Naturally the distribution of these bodies and their level of activity differs from place to place, but their language work is limited. Teaching of and in minority languages is supposed to occur in the first few years of primary school; special Middle Schools are provided in certain prefectures, in addition to the Middle Schools attached to most of the *Minzuxueyuan*; but these Middle Schools teach only in Chinese.

This paper considers the activities which relate to the Yi Branch of Tibeto-Burman, known outside China as the Loloish subgroup of Burmese-Lolo or Lolo-Burmese. There are seven national minorities whose languages are officially classified in the Yi Branch; in descending order of population, Yi, Bai, Hani, Lisu, Lahu, Naxi and Jinuo. However, as Bradley (1975), (1979a) show, the inclusion of Bai and Naxi is doubtful. Bai has undergone such extensive Chinese influence, over such a long period, that it is very difficult to establish its

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historical linguistic position; Naxi is closely related to the Burmese-Lolo group, but not part of it. Thus only the five core Yi Branch languages are discussed.

2. YI

The Yi minority is widely distributed in Yunnan, southern Sichuan and western Guizhou, with a few in western Guangxi. The former name for this minority was Lolo, but this term has been replaced. There is a Yi traditional orthography, a pictographic syllabic script independent from Chinese, but this was known mainly to religious practitioners prior to 1950; it differed extensively from place to place, in the direction of writing (vertical, left-to-right, or right-to-left), the pronunciation of the characters, and in the characters used.

In the early period, various missionaries such as Liétard, Vial and others studied Yi. Linguistic research was given an impetus by the relocation of various universities to the south-west during the Second World War. Scholars such as Fu Maoji, Gao Huanian, Wen Yu and Ma Xueliang studied different varieties of Yi, among other languages. Their results were published during and after the war, and formed the basis for initial classification and educational efforts in the early 1950s.

Yi is now officially classified into six *fangyan*,[3] which are quite distinct. These include the Northern *fangyan* of Sichuan and parts of Yunnan; the Eastern *fangyan* of Guizhou and parts of Yunnan; and the Western *fangyan*, Central *fangyan*, Southern *fangyan* and South-eastern *fangyan*, all in Yunnan. The Yi in Guangxi are Eastern and South-eastern *fangyan*. The details of the historical linguistic relationships between the *fangyan* remain to be worked out, but it appears that the Northern and Eastern *fangyan* are genetically quite close, while the South-eastern and Southern *fangyan* are quite distinct from the rest. Vial, Liétard, and Ma worked on *tuyu* within the South-eastern *fangyan*: Axi and Sani. Fu's research was on the Northern *fangyan*. The Yi numbered nearly 5.5 million in the 1982 census, but only 4.2 million were reported to speak Yi. Evidence concerning mutual intelligibility is difficult to come by, but it appears that the *fangyan* are not mutually intelligible, and in some cases *tuyu* in the same *fangyan* are not mutually intelligible; especially in areas where the *fangyan* is not taught in schools.

The first efforts in Yi were confined to the Northern *fangyan*; a romanisation was devised, and books began to appear in 1951: literacy materials, primary school texts, and magazines. This romanisation was revised in 1956 by Chen Shilin and others, but ceased to be used fairly soon thereafter. The Central *Minzuxueyuan* gave courses in Northern Yi beginning in 1951; the students of the first few years, mostly Han, are now the Yi language researchers in most institutions in China. However, the teaching of Northern Yi at the tertiary level has been shifted to the South-west *Minzuxueyuan* in Chengdu, with an occasional class at the Yunnan *Minzuxueyuan* in Kunming. This teaching is now designed to prepare primary teachers rather than researchers.

The major research effort of the 1950s was the 1956-1958 dialect surveys of minority languages, supervised by what has since become the *Minzuyanjiusuo* of the Chinese Academy of Social Sciences.[4] These surveys were carried out for all minority languages in China; teams led by established scholars and including some of the 1951 and 1952 classes of the Central *Minzuxueyuan* went to thousands of locations and collected a standard vocabulary and sentences in phonetic

transcription. Some of the transcribers were middle-school graduates who were given a short course, so the data collected were of uneven quality; for Yi, the analysis was carried out by Chen Shilin, and an official classification (for Yi, into six *fangyan*, various *cifangyan, tuyu,* and *cituyu*) arrived at and promulgated. In each case a particular location was selected and designated as the standard; for example, Xide was chosen as the standard point for Northern Yi.

According to projections of these dialect surveys onto the 1982 census, there are now about 1.8 million Northern Yi, 1.2 million Southern Yi, 800,000 Eastern Yi, 750,000 Western Yi, 750,000 South-eastern Yi, and 200,000 Central Yi. Of the Northern Yi, 1.47 million live in Sichuan and the rest in Yunnan; there are three *tuyu* in Sichuan and a further two in Yunnan. The Eastern Yi number 560,000 in Guizhou with most of the rest in Yunnan and a few in Guangxi; they are classed into three *cifangyan*; one in Yunnan, one in Guizhou, and one in both. There is a total of eleven *tuyu* and a further six *cituyu*. For the South-eastern Yi, nearly all in Yunnan, there are four *tuyu*; later studies indicate a total of eleven *cituyu* within three of these. The other three *fangyan*, all in Yunnan, are much less well studied. Southern Yi is said to have three *tuyu*, two of which each have two *cituyu*. Western Yi has two *tuyu*, one with three *cituyu* and the other with two. Central Yi has two *tuyu*, Lipo and Luoluopo; the latter has three *cituyu*.

As the introduction notes, minority language work virtually ceased during the Cultural Revolution. In fact manuscripts of dictionaries, grammars and dialect surveys were sometimes destroyed by Red Guards, and the entire Chinese Academy of Social Sciences was sent to the country for manual labour for several years. Study in the *Minzuxueyuan* was similarly disrupted from 1966 to 1972. While translations of political works in some minority languages continued to appear, the Northern Yi romanisation disappeared. In Yunnan and Guizhou little had been done before 1966, other than scholarly work such as Ma (1951), Gao (1958), and articles in journals such as *Zhongguo Yuwen*.

In 1974, a new orthography was devised for Northern Yi, and introduced in 1975. This is essentially a syllabary, using 820 of the traditional characters phonetically, written left-to-right; there is also a new romanisation associated with the syllabary. Very numerous teaching materials, political, traditional, and practical literature have been published in this syllabary, including several linguistic studies. It is claimed that very high rates of literacy, up to 100 per cent in some counties, have been achieved in very short times. As noted, this is the medium of education in Sichuan and parts of Yunnan, and teachers of Yi nationality are trained in both provinces. Northern Yi is regularly used on the radio in Sichuan, in the standard *shengza* or 'middle trousers' *tuyu*. Publishing in Northern Yi is carried out by the Sichuan *Minzuchubanshe*.

In Yunnan a committee of Yi scholars has been working to devise a common Yi orthography for the five other *fangyan* of this province, in conjunction with Chen Shilin and others of the *Minzuyanjiusuo*. While educational materials have not yet been prepared, a Sani-Chinese dictionary has recently appeared; this uses the traditional Yi orthography and phonetic transcription. Work on the Eastern *fangyan* is being carried out in Guizhou, where various Yi linguists have prepared a dictionary and primers which are being tested with a view to introduction in the near future. At the Central *Minzuxueyuan* Ma Xueliang and his colleagues have recently completed teaching a course in Yi Writing, and this group of scholars is also planning to publish a definitive edition of the Yi Inscriptions, *Cuanwen Congke*. Currently, field research for the Language Atlas of China is being carried out by Chen Kang of the *Minzuyanjiusuo*, especially on the less well-documented *fangyan* and *tuyu* of Yunnan. In summary,

research is proceeding at several levels to develop descriptive and teaching materials for *fangyan* other than Northern Yi, but this has not been followed by educational or practical applications yet.

3. HANI

The Hani national minority, with 1.06 million people in 1982, is found in southern and south-western Yunnan. Based on early dialect surveys, it has been classified into three *fangyan*: Ha-Ya, Hao-Bai and Bi-Ka. The first includes the Yani or Aini *cifangyan*, with two *tuyu*, and the Hani *cifangyan*, with five *tuyu*. The Hao-Bai *fangyan* includes two *tuyu*, Haoni and Baihong; the Bi-Ka *fangyan* includes Biyue, Kaduo, and Woniu *tuyu*. The Yani or Aini *cifangyan* is also known as Akha outside China; speakers are very numerous in Burma, with substantial numbers also in Laos and Thailand. With about 150,000 speakers in China, it is probably spoken by well over 300,000 people. In China it is found along the south-western border, in Xishuangbanna Prefecture and adjacent areas. Hani has about 450,000 speakers in China; most of them are in the Honghe Prefecture, where the dialect differences are very great. There are also about 10,000 Hani in adjacent areas of Vietnam. Haoni is spoken by about 80,000 persons in Mojiang and adjacent counties, while Baihong has somewhat fewer speakers in the same area. Haoni is also known as Budu, and Baihong was known as Mahei. Biyue is spoken by somewhat fewer people in Jiangcheng and surrounding areas, and also in northern Laos. Woniu or Ximoluo is spoken in Mojiang county by some 60,000 or more people. There are other Hani groups which appear in the linguistic or anthropological literature, such as the Sanda, Luope and so on.

The former names of the Hani, now replaced, included Woni and Heni. This group has appeared in Chinese history for many centuries, but linguistic research was first carried out by French and English explorers in the late 19th century; this work is of very poor quality. Excellent studies of Akha have been done outside China recently; most notably the work of Lewis. Inside China, initial studies were carried out by Dai Qingsha of the Central *Minzuxueyuan*; these included a long wordlist, other practical books, and a joint article, Hu and Dai (1964), outlining the dialects. More recently Li Yongsui of the *Minzuyanjiusuo* has produced several articles, for example Li (1979), as has Wang Ersong, himself a Haoni, of the Central *Minzuxueyuan*; see Wang (1981). Li and Wang are reported to have written a sketch grammar of Hani, including the six main varieties, but this has yet to be published. For a detailed study of Haoni, see Bradley (forthcoming); for a general discussion of Hani *fangyan*, see Bradley (1977).

The first Hani orthography was devised in 1957, and some literacy, teaching, and political works were published. This orthography contained considerable redundancy from the point of view of the 'standard' Luchun *tuyu* of Hani, as well as for most other varieties of Ha-Ya *fangyan*, in distinguishing aspirated and unaspirated voiceless stops. Publication in this orthography seems to have stopped by the early 1960s, and the Hani are sometimes reported to have 'chosen Chinese as their written language'. However I saw pictures of literacy contests for Aini in the orthography in Jinghong in 1984. A literacy campaign using a revised orthography is underway, with a Hani *Xinwenban* opened in Honghe Prefecture in 1984 to train teachers, and plans to introduce it to the schools in the near future.

Hani is now used for radio broadcasts at Honghe and Xishuangbanna Prefectures; the latter broadcast is in Aini. At present some publications in New Hani

are on sale, with various others in preparation. Many of the younger, educated Hani that I have met do not speak Hani, or have only a limited command of it; this may be due to its absence from the schools for over twenty years. There is no knowledge of the Akha orthography devised by Lewis and used to some extent in Burma and Thailand.

4. LISU

According to the 1982 census, there are about 480,000 Lisu in China; about 12,000 of them live in southern Sichuan, and speak the Eastern *fangyan*. Nearly all the rest live in Yunnan, in the Nu River Lisu Autonomous Prefecture and in three other prefectures and five counties along the western border of the province; all the Yunnan Lisu are said to speak the same Western *fangyan*; reports by missionaries and others suggest substantial internal differences with this *fangyan*. Lisu also live in large numbers in Burma and Thailand, while a smaller number live in India. The total Lisu population is probably well over 700,000.

As reported with details in Bradley and Kane (1981), Lisu has had many different orthographies. The first was a Pollard script used in north-eastern Yunnan; the second was the Fraser script still used in Burma and Thailand, and reintroduced by Lisu request in China over the last five years. Both were devised by missionaries, and used mainly by converts. The Fraser script uses upper case roman letters, upright and inverted, for segments; punctuation marks are used to indicate tones. An indigenous script developed about 1925 by a Lisu, Wang Renpo, is not now used. The new romanisation devised by Chinese linguists and promulgated in 1957 used several Cyrillic letters; a 1959 revision replaced these with digraphs, but represented Chinese loanwords in their pinyin forms. Finally, the 1960 revision gives Chinese words in assimilated Lisu form. This last is the orthography most extensively used in Yunnan now; Lisu is not currently taught in Sichuan.

One result of the dialect studies of the *Minzuyanjiusuo* was a grammar of Lisu written by Xu Lin and Ou Yizhi published in 1959. Other studies, notably by Gai Xingzhi of the Yunnan *Minzuxueyuan*, are forthcoming; these include a sketch grammar and a dictionary. There are also a couple of articles in scholarly journals. Lisu is now used in radio broadcasts from Kunming as well as being taught in primary schools in Lisu areas, and classes of Lisu teachers have been held at the Yunnan *Minzuxueyuan*. Lisu publishing workers at the Yunnan *Minzuchubanshe* edit volumes in the new, post-1960 orthography as well as the revived Fraser orthography. The Fraser orthography is known as 'old Lisu' in China.

The policy in China is to respond to the wishes of the minorities; this must be the reason for the reintroduction of the Fraser orthography since 1981. However the new orthography has more books published, including political works as well as literature. Also, the editions of educational materials are larger and more frequent; for example, the new Lisu primer was printed in an edition of 25,150 in 1979, with a revised edition of 30,200 in 1983. Conversely, the Fraser Lisu edition of 4,000, released in 1982, is still in print. Presumably it is a prefecture or county decision which Lisu orthography to use. Lisu teachers are prepared by occasional language classes at the Yunnan *Minzuxueyuan*.

5. LAHU

The 1982 census counted over 304,000 Lahu in China, almost all in Yunnan. They live in five counties in south-western Yunnan, including the Lancang Lahu Autonomous County and the Menglian Dai, Lahu and Wa Autonomous County. Two *fangyan* are recognised: Black Lahu and Yellow Lahu. Both have extensive internal differences, as documented in Bradley (1979b). Many other Lahu live in Burma, with some also in Thailand and Laos; the total Lahu population exceeds 500,000. Also found in China and Vietnam, but considerably to the east of the main Lahu concentration, are the Kucong or Cosung. This group calls itself Lahu, and is divided into three subgroups: White, Yellow and Black. Their request for status as a separate minority in China has been rejected, and their speech is very close to Lahu - closer than the *fangyan* of Yi or Hani are to each other. In Vietnam the Cosung are recognised as a minority; it seems that there are some 20,000 of them, mostly in Xishuangbanna and Honghe Prefectures of southern Yunnan, with several thousand in the North-west Autonomous Region of Vietnam.

Bradley (1982) provides details of the Lahu orthography now used in China; this is a considerably revised version of the missionary-devised orthography still used by Lahu in Burma and Thailand. It is sufficiently different that intelligent, educated Lahus cannot read materials in the other orthography. Devised about 1957, it uses roman letters and digraphs; it lacks some phonemic vowel and tone contrasts, but native speakers find it perfectly adequate. Unlike several other Yi Branch languages, Lahu has had little other than primary language and arithmetic laterials published in it. Lahu publishing is done by the Yunnan *Minzuchubanshe* with editorial assistance from a group of Lahus; as elsewhere, Black Lahu has been chosen as the 'standard' dialect. Radio broadcasting from Kunming is in very stilted Lahu; prepared scripts full of Chinese loanwords are read in a hesitant style. Printing runs of Lahu books are considerably smaller: only 5,200 for the introductory arithmetic texts published in 1983.

Research on Lahu in China has been limited. The Han head of the minority language department of the Yunnan *Minzuxueyuan*, Chang Hong-en, is the most senior researcher, but his materials were destroyed during the Cultural Revolution. Xiao Shuyi of the Central *Minzuxueyuan* has studied and taught Lahu, but is herself Hui. Some other researchers have recently published articles on aspects of Lahu, but there have been no grammar, no dictionaries, and no materials for non-Lahu to learn Lahu, unlike Yi and Hani. Fortunately these gaps are largely filled by the work of Matisoff, though these are in English and not widely available in China. The Yunnan *Minzuxueyuan* teaches very occasional classes of Lahu language students; before it was established, similar classes were held at the Central *Minzuxueyuan*.

6. JINUO

The Jinuo nationality, living on Jinuoshan in Xishuangbanna Prefecture in south-western Yunnan, numbered about 12,000 in 1982. This group was recognised as a separate national minority in 1979, the most recent such addition to China's inventory of 55 national minorities. It has no written language of its own; most of the better-educated Jinuo whom I have met in Beijing, Kunming and Jinghong do not speak the language, and education in the Jinuo area is entirely in Chinese.

Research on Jinuo has been conducted only by Gai Xingzhi of the Yunnan *Minzuxueyuan*, as an addition to his Lisu responsibilities. The language has a rather complex phonological system, outlined in Gai (1981), and a sketch grammar is forthcoming. Bradley (1983) analyses the data in Gai (1981) to classify Jinuo within the Yi Branch. Much more work remains to be done on this small but significant language.

7. CONCLUSION

China has put considerable effort into providing orthographies, printed materials, radio, primary teaching, and special secondary and tertiary institutions for national minorities. Research effort has had a practical, descriptive orientation, but has also generated data which can be used for theoretical linguistic purposes. One drawback is the concentration on 'standard' dialects to the exclusion of others. Another is the province-by-province (or even prefecture or county level) difference in policy concerning minority language education and use. Related to both is the tendency for ascribed linguistic boundaries to correspond to administrative ones. With further research, perhaps these difficulties will be alleviated.

The most recent research initiative is the Language Atlas of China, organised by Professor S.A. Wurm and carried out by three Australian editors in cooperation with the *Minzuyanjiusuo* and *Yuyanyanjiusuo* of the Chinese Academy of Social Sciences. This should appear at about the same time as this volume.

NOTES

[1]The assistance of the *Minzuyanjiusuo*, Chinese Academy of Social Sciences, and of the Australia-China Exchange Scheme of the Australian Academies of Humanities and Social Sciences with the Chinese Academy of Social Sciences is gratefully acknowledged; much of the information herein was obtained in China during 1984, as a part of the Language Atlas of China project coordinated by Professor S.A. Wurm.

[2]*Minzuyanjiusuo:* Research Institute of Nationalities, doing only research.
Minzuxueyuan: Institute of Nationalities, providing training to members of nationalities.
Minzuchubanshe: Nationalities Publishing House, national and provincial.
Renminchubanshe: People's Publishing House.
Minzugong: Nationalities' Cultural Palace, Beijing.
Wenhuaguan: Cultural Centre.
Yuyanyanjiusuo: Research Institute of Linguistics.

[3]The usage of Chinese terms for language varieties does not correspond to Western linguistic usage of the usual translations of these terms:

yuyan	*language*
fangyan	*dialect*
tuyu	*vernacular*

The term *yuyan* refers to the language spoken by one of the 56 nationalities of China, including the Han language. The term *fangyan* refers to the next lower subdivision within a *yuyan*; so the Han language (Chinese) includes Wu, Yue (Cantonese) and other *fangyan* along with Mandarin. Western scholars often

suggest that these *fangyan* are separate languages, since they are not mutually intelligible though they share an orthography. In the case of smaller nationalities in China, the degree of difference between *fangyan* is sometimes as great, but sometimes considerably less. This three-stage classification can be extended to five by adding *ci-* 'sub-' to *fangyan* and *tuyu*; all five terms are used in the classification of Yi.

[4]At the time of the surveys, the *Yuyanyanjiusuo* of the Chinese Academy of Sciences; later, the Chinese dialect scholars were separated from the minority language scholars, to form the current *Yuyanyanjiusuo* for Chinese dialects and the *Minzuyanjiusuo* for minority research; and the Chinese Academy of Social Sciences was separated from the Chinese Academy of Sciences.

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AN ALPHABET FOR ÄŶIWO

Patrick Bwakolo

The Reef Islands language (now called) Äŷiwo is one of the languages been tried to be translated by church missionaries who arrived on our islands long ago. During my childhood Anglican church missionaries visited our islands, speaking the Mota language from the New Hebrides. The first missionaries landed on our islands and found the Äŷiwo language quite hard to understand for translation. So they went on to the New Hebrides and studied Mota. The Anglican missionaries went back to Norfolk Island in New Zealand and studied it carefully. Eventually they published Common Prayer books and the Bible in Mota. They took some islanders to Norfolk Islands on board the *Southern Cross* to teach them how to read and write it, then they came back to the Solomons to their villages to teach people to become Christians. During the 1900s the Mota language became our general language to communicate with. They spread God's message to the heathen and converted them to Christianity. Even when our own people came back to work in their own villages they would pray in Mota, which is not our language. The missionaries tried their very best to translate to the people when preaching to them. Still islanders found it hard to cope with what the missionaries said.

That was the time Reef Islanders thought of translating prayers and Bibles into Äŷiwo. But there were not enough educated people to do this, so the idea failed. Around 1950 a committee was formed to look into it, but couldn't do anything about it. It needed well educated people, said some elders, and they just gave up. By the 1960s there were many educated people in our islands. The idea of having Äŷiwo translation became stronger. In 1969 another committee was formed consisting of priests, teachers, and catechists. They tried their very best to compile prayer books and hymns. That was a good move but it died out and no one really knew where to go for further help. I became very interested in it when I obtained some copies of what they translated. Father Robinson Suia was the priest at that time, and he helped me a bit on how to read it. In 1975 I was selected to go for further study at the Solomon Islands Teacher's College. I felt sure that translations could not progress unless we had a Standardised Orthography.

In late 1975 one of our lecturers, Mr Levi Laka, asked me to do some work on what Professor Stephen Wurm sent him. How glad I was that the Lord led me through stages till I met the right person for the job, that was Professor Stephen. I was called by Mr Levi Laka to his office and we looked at what Professor Stephen Wurm had sent him. These were dictionary photocopy cards. He asked if I could do it. I was interested to do this so I took up the job straight away. I felt that the Lord would lead Professor Stephen to visit me sometime in the Solomons, and it was so. In 1976 Professor Stephen Wurm paid a

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visit to the Solomons. He met me at the Solomon Islands Teachers College in Honiara, the capital of the Solomons. I was very proud of this and felt sure that Professor Stephen would be the right person to help on ÄÿiwO problems. So many times we had cried out, requesting of our missionaries a person who could do much better than us to give us directives that I felt sure that it was God's plan to direct Professor Stephen to visit the Solomons at that time in 1976. That was the time I got more confidence and trust in Professor Wurm that he would settle all the problems of the ÄÿiwO language in the Reef Islands. Professor Stephen Wurm has done a tremendous and very excellent job in the ÄÿiwO language (Reefs language). My first job from Professor Wurm was to make comments on the Reef Island dictionary cards he sent to me and Mr Levi Laka. I was very surprised when I first saw the way he laid out Reef Islands words to make comments on. I thought that Professor Wurm might have taken those words from the Reef Islanders who had travelled on board the *Southern Cross II* to Sydney harbour in the 1950s. I thought this because the words were old words. How lucky that I had good background in ÄÿiwO! I took up the job happily and made comments on the photocopies and sent them back to him. This was in 1976. He then sent me a long list of words in English to be translated into ÄÿiwO. This needed very old people, so I went round the villages asking older people what some words meant. I also recruited some teachers to work with me on this project, but many dropped out when they lost interest. I managed to continue up to now, and only Father Martin Moyiya, Mr John Mwaamuli and Mr John Temowa are still carrying on this work. (I recruited Mr John Temowa in 1984 and Professor approved. He is very keen to do the job and likes it very much.)

Professor Stephen Wurm was so helpful that he arranged a course for me in Australia for further study. The course was run by the Summer Institute of Linguistics in Sydney in late 1979 and early 1980. The Australian Government met the expenses, mainly the Australian Cultural Affairs. Professor arranged all my travel arrangements. When I was in Sydney during the course he advised me by letter. I found that the course was helpful and gave me encouragement to carry on the project. I and all the ÄÿiwO people really thanked him for his great help. After I finished the course in Sydney I went and stayed with him in Canberra for the last two weeks of February 1980. The main purpose was to revise the first version of the ÄÿiwO dictionary and also to look through the proposed alphabet (now called ÄÿiwO Nyinaawäpela). We corrected these very much before I returned to the Solomon Islands. It was really a great challenge to correct all the misprinted words. After a few years the first dictionary printout was distributed to Reef Islands teachers to see what the *Tepulotwa ÄÿiwO* (Reefs Dictionary) looked like. We all praised Professor Wurm for producing this and it stands as a memorial of him. The following year (1981) the first printout of ÄÿiwO Nyinaawäpela was printed and sent out for comments. I had to run through the whole book paragraph by paragraph. This took me almost one year to do it as my time for it was limited. However, it pleased God to direct Professor Stephen for his faithfulness and to overcome the problems. So today the ÄÿiwO alphabet is used by teachers and Reefs officers to write with. Professor Stephen has given me tremendous help and directives on this, which resulted in many new learners. Without him our language would still not have any written works published.

When I was in Canberra he took me round the city to see many places there. He took me to the main dam which supplies water to the whole city in Canberra. I thanked him a lot for his arrangements for a nice trip round the capital. Students in our school sometimes ask questions about Australia. In order to answer questions perfectly I have to have seen the real situation. When I came

back to the Solomons I used to teach Reef islanders during my free time, to let people and students know how important our language is. People realised that what Professor Wurm is doing will be for the good of the Reef islanders. Students also see the importance of languages. Students should first know their own mother tongue before any other languages. This is because it helps learners translate into their own language with understanding. I found that Professor Wurm contributes some excellent points in language which assist with studying English as our second language. Those who have a good background in their own language find English much easier. So people who have been to school keep asking for the dictionary copies and the Äŷiwo Alphabet. They said it will give their children attending school directions on how our language can be translated into English. Teachers too do the same: the dictionary helps them find words they don't know in our language. You can see that Professor Wurm has really educated Reef Islands people by these published books.

In boarding schools like ours teachers are very busy day and night. There is no time to stop working because the students are under our care. Because of this I took up this job to help Professor Wurm as a part-time job. I can only do the work when there is free time in the afternoon or at night. Also I don't have enough weekends, but weekends are there for me to judge what time is available to do this job. Because of this the *Tepulotwa Äŷiwo* (Reef Dictionary) seemed slow, and took several years before the printout version came out. Even though we were slow in producing these, we felt sure that we had won a victory over this very hard language. Now that the orthography is standardised, we expect many books to be published in the years to come. At the moment the lesson plans to accompany the Äŷiwo Nyinaawäpela is on the way to a final version. This work consists of examples of the rules of the Reef Islands alphabet. The idea of this book published is that teachers in all primary schools will be asked to put the teaching of Reef language into the program. Teachers will find it easier to teach it because the lessons are planned there already; they just pick up the book, study it, and teach it. To start such teaching in the early stages is much better, and easier for learners. At present only the dictionary has been sent out to primary teachers in the Reefs. Some may find it a bit hard unless they already know the Äŷiwo Nyinaawäpela. What surprises the Äŷiwo speakers is the way Professor Wurm has arranged the formation of words. Many people said that Professor Wurm must have been in the Reef Islands before to study the Äŷiwo language, after seeing that he laid out dictionary words in a very wonderful way. As the man who did the whole correspondence for this project, I too praise him a lot for the very excellent job he is doing for the sake of Reefians. Everyone thanked him a lot for this tremendous job, and the dictionary, when published, will be remembered in his memory. Copies will be sent to the Solomon Islands National Museum in Honiara, the capital of the Solomons. The lesson plans booklet contains photographs of Professor, Father Martin Moyiya, and myself. This shows that we are the people who had a hand in producing the books in Äŷiwo language.

I would like to express my views on the important matter of cultural background. In every developing country life changes. This is one thing that no one can control; it is an endless change in life. Languages especially change rapidly; our people, going from island to island, often communicate in English or Pidgin English. English has become a national language in the whole world and is used everywhere in the world. This can spoil the mother tongue when people don't bother about it, and mix English words with language phrases when speaking to each other. When the young people hear such words they think they are language words, not English words. This is common in the Solomon Islands; for example,

an orange is called in our language vätinesi, but this word comes from the word 'orange'. This is one disadvantage that is growing widely all over the Solomons. I'm not saying that it's wrong to speak English; when speaking to a foreman or white man it is good that we use English. What I'm trying to say is that native people mix the mother tongue and English as though it's our own mother tongue. I notice this when I'm translating some words from the dictionary in progress. Sometimes we don't have the word in our language, so we have to take over English words into our language, or else create a new word on the basis of what it looks like, or other description. I feel that this project teaches me a lot, specially about terms not used today. We are starting to lose our very important terms. We have plenty of very good and respectable terms used by our older people. When I went round the villages in the Reefs working on this, I found that we were not too late in collecting old words and preserving them in the dictionary. I have learnt a lot from this project. Without Professor Wurm we would be lost; through him we bring back old words into the dictionary. We praise God for putting Professor Wurm to work on this. Our older educated people have not realised the importance of our work on the Äŷiwo language. It is good that someone knowledgeable outside person can direct us in considering changes. Development brings changes in almost all spheres. Such language changes can lead to a misleading education of children, when parents do not care sufficiently. As English is our national language, it is put into the school program at an early stage. Students get used to some English words and wrongly believe them to be part of our native language. Our most educated people today do not have a good background in our mother tongue, and when they speak English phrases are mixed up with language words. Sometimes people start sentences in language and end with English phrases or words. But when I introduce Professor Wurm's work to Reef islanders they see the importance of our native language. Teachers and parents should be the first people to think seriously of this and correct any mistakes on the part of the children. That is the beginning of education. In this way we will build up a good background in our native language. Professor Stephen Wurm is contributing very important work towards small booklets for primary schools. I have already translated small booklets for lower classes. Professor has printed them in Canberra and sent them back to me to be given to primary teachers. I have talked with our education office on this idea and he said it is better for us to produce more so that they can be used in primary schools. The books contain English and language translations. I have also recorded many custom stories to be copies and published story books in both English and language.

The Äŷiwo Nyinaawäpela (Reef Islands) Alphabet published by Professor is now known and used by Reef Islands people. The Bible and Prayer translations group under Mr Rick Buchan and Father Martin Moyiya are using it. Without him the problems involving proper writing in our language would not yet be settled. People from the Reef Islands thank Professor Wurm very much indeed for overcoming the major problem of the Äŷiwo language. We will use what he has done in providing an alphabet that is believed to be the right one. He will be remembered by Reef islanders from generation to generation because of his very important work.

PEOPLE AND LANGUAGE IN TIME AND SPACE

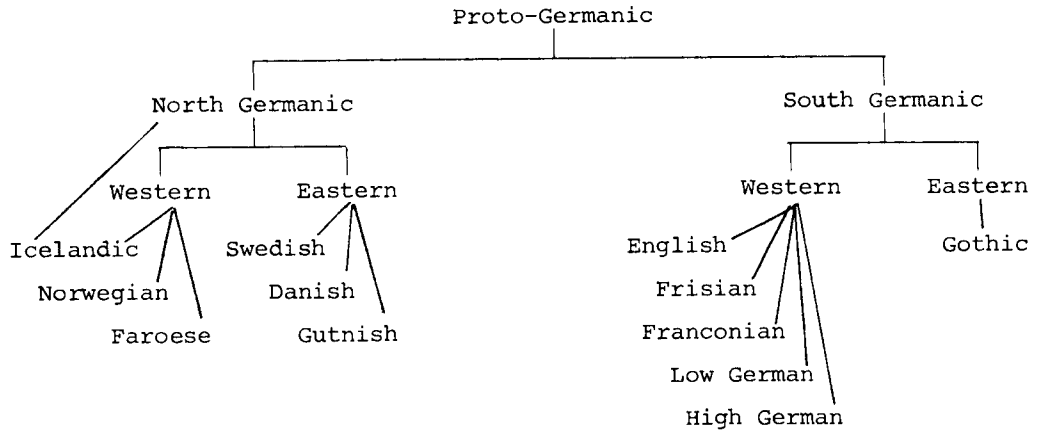
A. Capell

A study of the mutual interactions of the four variables - land, people, time and space - might be made against many backgrounds. I have chosen in the present instance to make it against the background of the Germanic languages.

There is one aspect of the study of Germanic, intense though this has been, that appears to me to have received less attention than it deserves, and this is the field of comparative syntax. Comparative and historical grammars treat exhaustively - to the point of treating exhaustingly - the phonetic changes that have taken place down the centuries in the different languages; they contain detailed accounts of morphological changes and developments, based on the reconstructed morphology of PIE. Yet syntax is mentioned as a rule in only the barest outline. One may look at grammars of Old English, Old High German, Gothic and other languages and see no mention of syntax at all in the Table of Contents. Comparative philologists have become so used to atomic and even subatomic research that they frequently cannot see the entire structure, especially the way in which the molecules combine in the substance. If one may use Bodmer's apt definition of syntax as "the traffic laws of language" and morphology as "the table manners of language", one might risk saying that the classic scholars in these languages have studied thoroughly the etiquette of the table even what the foods are made of, but have hardly ever ventured out of the house and learned to drive!

All linguistic works devoted to Germanic philology give elaborate diagrams of the interrelationships of the languages. For our present purpose there is a single dichotomy of them: those north of Danish (and including it) and those south of Danish. English is included in the northern group for our present purposes, although historically it is classed among the Western Germanic languages, a branch of the southern section. A diagram oriented towards this particular feature of the languages would therefore appear as follows:

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 95-104. *Pacific Linguistics*, C-100, 1987.
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It is the process of syntactic differentiation that concerns us. The main contrast between north and south - using the present-day locations of the languages - lies in the field of syntax, although there are other contrasts as well that work along remarkably similar lines.

In this field of syntax, north and south have parted company. When and why is what we are interested in determining if we can. The south has quite complicated rules of syntactic arrangement which provide difficulties for English learners of a southern Teutonic language - German, and to a lesser degree, Dutch (as a rule). Frisian agrees with German in the matter. The north has practically the English sentence patterning all through, with only minor differences - most of which were earlier present in English also. The earliest types of sentence found in the Runic inscriptions - proto-Norse, if the term can be rightly used - present a word order in the clause which is practically that of Latin, especially in the occurrence of the verb in final position in the simple sentence. There does not seem to be much material available on these syntactic contrasts, and nothing at all on any extralinguistic factors that may have led to them. We may therefore profitably pay attention to them for a time.

In the syntactic patterns of the south, there are two types of sentence to be considered: (1) the simple sentence, or the main cluase in a complex sentence, and (2) subordinate clauses.

In the simple sentence, and the main clause in all the languages at the present day, and for a long time past, the arrangement is SVO. In the early Runic inscriptions, however, the order is SOV, as in Latin and the other IE languages whose records go back farthest. It would thus seem that the order SOV could be original in the IE languages, and that there has been change in many of them. In some cases a subgroup of IE languages seems, so to speak, a little uncertain as to what order is to be preferred. While Russian and most of the Slavonic languages have normally the order SVO, Czech frequently uses another order in main clauses, especially the placing of the verb first. In the Baltic languages, word-order can be quite a complicated matter. In the Germanic languages, word-order tends to be rather exactly regulated, allowing for variations used to express emphasis of various kinds.

In modern German the simple sentence takes the form SVO, and this order holds good in all the languages, including not only Modern but also Old English, and has done so for the lengthy period of time. However, it was not always so. The oldest type of Germanic language attested is that found in the Runic

inscriptions scattered throughout Scandinavia, some of which go back to the earliest Christian centuries. Not all are satisfactorily translated, but enough is clear to serve the present purpose. Those most accurately translated are nearly all of them very short, but as such they do exhibit the structure of the simple sentence in Proto-Nordic very clearly. The point of interest is that the standard order of words in the simple sentence at that time was SOV, the same order that was normal in classical Latin, Greek and Sanskrit, although of course, exceptions appear in three. An example is provided by the so-called golden horn inscription found in southern Jutland (dating from about 400 A.D.):

Ek HlewagastiR holtijaR horna tawido
I Legjast of-Holt horn made
I, Legjast, of Holt (or *son of Holt?*) *made the horn.*

And on the Einang (Norway) stone, about the same time:

ðaʒaR þaR rune faihiðo
Dag these runes made
Dag made these runes.

In Gothic, however, the sole extant representative of *eastern* Germanic, this order does not hold, and the general pattern is SVO. Seeing that the translations which have come down to us were done chiefly from Greek, and the sentence patterns do not conform to those of the Greek originals, it is hardly likely that they have presented a false picture. One finds, for example, in Wulfila's translations: þanuh atbêrun du imma usliþan *then they bring to him a paralytic.* Gothic preserves in general an order which is closely akin to modern German. At the same time, it is not unusual to find the predicate before the subject in a simple sentence: namuh þan þans hlâibans Iêsus *then Jesus took the loaves.* This usage appears in other Germanic languages even to the present day, but it is then usually determined by the presence of an introducer such as *then, as,* etc.

Even at the period of the 3rd and 4th centuries, therefore, it would seem that East Germanic had lost or changed an original word order, apparently that of proto-Indo-European, which is still retained in North Germanic as represented by the Runic inscriptions. Not long after, however, a change appears in these as well. The Tune stone, dating from about 450 A.D., reads in one place:

ek Wiwar after Woduride witadahalaiban worahto r(unoR)
I Viv after Wodurid the-house-slave made runes

where a transitional order seems to be present. The Eggjum inscription from Sogdal, Norway, however, dating from about 700, has still an order that almost can be called 'classical', e.g.

ni s solu sot uk ni sA'kse stAin skoren
not is by-sun reached not by-knife stone carved

This language approaches Old Norse fairly closely although the writing is runic; certainly the grammar is archaic.

The syntactic differences of the two groups of modern Germanic are found chiefly in subordinate clause structure. Here the southern group retains the order SOV, even though they have abandoned it in the principal clause, e.g. German:

Wo ist der Knabe, den ich gestern gesehen habe?
Das is alles, was sie gesagt haben.
Man sagt, dass der Dampfer bald ankommen soll.

In English such perturbation of tagmemic order in non-principal clauses passed out of use with the end of the OE period. In Icelandic, however, it appears as late as 1200, e.g.

þa vas mællt i logom at aller menn soyllde cristne vesa.
Then was said in (the) laws that all men should christians become.

German syntax still demands that at the end of a subordinate clause the infinitive and modals should follow the past participle in a compound tense: sag ich nicht, dass du es nicht getan haben solle?

In OE this postponement and inversion was never so rigid as on the continent. One writer describes the OE use as "a tendency to verb final", especially in subordinate clauses, but there should not be too long a separation between subject and verb. The auxiliary or main verb came first, the dependent infinitive at the end: gif hie meahton þone here ānwǣr utane betræppan *if they might trap the fleet somewhere from the sea.* The best that can be said for OE is that the verb 'very often' stands at the end of the clause, but almost equally often it occupies the same place as in the NE sentence.

Another differentiating feature between English and continental Germanic is the almost free possibility of constructing a long series of descriptives, whether adjectives or adjectival clauses, before a noun, especially in German. The opening sentence of the introduction to a certain German work on language is enough to put the average English reader off the rest of the book! It says:

> Ein durch Wilhelm von Humboldt in die sprachtheoretische Literatur eingeführter und seither immer wieder auftauchender, längst vieldeutig gewordener Fachausdruck ....

Instances of this principle of preceding qualification are found in the Scandinavian languages also, but never on the scale of German. It is found on a mild scale in some modern Russian works also.

Another perturbation occurs commonly in Germanic after most introducers: German also hat er es getan, as contrasted with English 'so he did it'. Here English has departed from a practice that is still the norm in all the Scandinavian as well as the German group of languages, e.g. Swedish: då skedde olycken *then the mishap occurred*, or Norwegian: på flere punkter hadde reformen i 1907 bare delvis tatt skrittet over over til norsk talemål *in several regards the 1907 reform had only partly carried spelling over into the Norwegian spoken language.* In this connection it is perhaps well to recall that French, which in its Norman form had a deciding influence on the course of English history and language alike, does not permit this inversion. The importance of this line of influence from the south will appear again later.

It would be necessary, if this were a full study of the subdivisions of the Germanic languages, to deal with the differences on the phrase level as well as on the clause and sentence levels. In a limited time this is not possible, and moreover it is the one and only contribution that most of the textbooks make to comparative syntax at all. There would seem, on the higher level, to be two classes of introducers: conjunctions that affect clause arrangement and those that do not, in all the Germanic languaegs except English. In German the latter include aber, denn, oder, und, and some others. The Nordic languages make the

inversions where they would be made in German, but English does not. In the days of the Authorised Version of the Bible, however, English also made the inversions, but this is not now done, nor in fact did it survive the beginning of the 17th century for long, even if it was not an archaism then.

One other deviation from original Germanic practice does need to be mentioned. This is the omission of the relative pronoun as an object and in some cases when governed by a preposition - not when subject. It is quite allowable to say even in literary English, *This is the man I saw yesterday.* The same phenomenon occurs in Scandinavia, e.g. Norwegian: denne er mannen eg såg i går, as well as denne er mannen som eg såg i går. In German, however, such an omission would be unthinkable. Here English and Nordic have followed the same course.

A further point that may just be mentioned is the loss in Northern Germanic and English of the separation of auxiliary and participle in a subordinate clause. *He said that a mishap had delayed him,* would be in German er sagte, dass ein Unfall ihn verzörgert hätte, or by a construction that is peculiar to German, er sagte, ein Unfall hätte ihn verzörgert. In each case the auxiliary and the participle are separated in a subordinate clause. This does not happen in modern English, and does not happen in modern Scandinavian. The German-type construction was preferred in OE; in Old Norse an accusative and infinitive construction like that of Latin often followed a verb of saying, as in Skírnir lézk ganga mundu *Skirner said he would go.* The latter remains in English in some situations only. It is possible to see French influence in the change as far as English is concerned, but this cannot be the case in Scandinavia - the change must be put down to a process of internal development. Later it will be necessary to think why such a change included English but not German. It is one of those that supports a basic division of north and south Germanic as prior to east and west.

The suggestion made earlier was that the SOV word-order represented by the very earliest runes was the basic Germanic word-order in the utterance. Certainly the earliest runic inscriptions present the oldest connected specimens of a Germanic language, but does it really follow that the SOV order is in the last analysis basic to the family? There is just the possibility that it may not be, and that such an assumption is wrong. In itself it may represent a change from a different original, and that Gothic, the next oldest, and better documented Germanic language, may really present an older pattern. In this language there is a strong tendency to begin an utterance with the verb.

This suggestion is supported by the factor that Priebsch and Collinder in *The German language* say in their chapter on syntax, by way of summary:

> The fact that of the Germanic languages German and Dutch alone treat the finite verb in a radically different way in the main and subordinate clauses respectively, makes it hard to trace this distinction back to Indoeuropean differences of stress. It seems more likely that the fixation and regularisation of end-position in the subordinate clauses are due to a large extent to the influence of teachers and writers following certain Latin models.

The force of this suggestion appears quickly when a few of the older German writers are examined. A few samples from Jakob Böhme, for instance, suggest that even in the early 17th century the order was not so rigid, e.g. "Der Mensch aber ist Gottes Kind, den er aus den besten Kern der Natur gemacht hat, zu herrschen in den Guten und zu überwinden das Böse", or "dazu hat Gott seinen

Heiligen Geist gegeben, dass er sie je under allerwege hat weise, heilige und verständige Menschen geboren"; or again, "... die Altväder in der ersten Welt, die waren auch nur geringe, verachtete Leute". These examples are taken almost at random from two or three pages in a book of selections. Priebsch, in his article on German language in the 1958 *Encyclopaedia Britannica*, quotes Berthold von Regensburg (c.1250): "... daz ir immer erlost murget werden"; "... daz sie ir muoter ie getuoc an diese werlt"; and Luther, "... den Got selbst hat erkoren"; "... dass wir uns yhe fursehen mit grossen ernst"; and he adds that even Goethe and Schiller, amongst others, reproduce this style, still current on the colloquial level.

Here it is clear that one of the basically non-linguistic influences on the language is at work: stylistic idealism, introduced from outside the area in which German was spoken. Latin was the learned language of the medieval world; it ranked as the language *par excellence* of the polite world. What wonder, then, that it should be imported into the vernacular? Latin verse, originally stress controlled, like English verse today, gave way to the quantitative verse of the Greeks, who remained masters and teachers in the field of art, whatever Rome might accomplish in war and government. Priebsch says that the long domination of Latin in the humanistic schools had certainly its influence on the execrable 'Schachtel' sentences. Here is one of the mutual influences of peoples and languages in time and space. Social, political and other influences play a part in the history of languages as well as purely linguistic factors. Language and its vehicle - society - are inseparable.

The sentence in Priebsch's *Britannica* article immediately following the one first quoted is worth adding to the quotation, because it raises a problem. He says: "But the predilection for periodic style corresponds to certain features of the national character." This opens a tremendous problem which is anthropological, literary, and several other things at once, phrased differently in different circles. The neo-Humboldtian school of Weisgerber are fond of talking about "die innere Form der Sprache"; others speak of "Sprachgefühl", and the idea behind the expression "Sprachbund" links up with it also. Russian linguists speak of "the inner laws of development of languages". It is obviously impossible to discuss this theme in the present connection, but the very mention of it is a reminder that there is such a thing not only as style (in the artistic sense), but also fashion, in linguistic uses. The previously mentioned preferred order in Gothic is interesting, although no statistics are available concerning the percentage occurrence of the different sentence types in a given amount of text.

The preceding pages have produced many points in which English has departed from all the Germanic languages wherever they may be found. The ways in which these departures have been made on the syntactic level, in addition to the many differences that have appeared at lower levels (and not mentioned here) may be summarised in three points:

(1) loss of final verb position, whether in principal or subordinate clauses;

(2) loss of all inversions, except occasionally for stylistic purposes;

(3) more rigid enforcement of the initial position of the subject, again except for stylistic reasons.

The obvious question is the one that has been postponed until now: "Why?" What forces have led to these changes? There are really two questions which are mutually dependent:

(1) how did the change of the basic SOV to SVO come about?

(2) how did the specific features of English develop?

These causes, whatever they may prove to be, if they can be found at all, are never entirely linguistic matters. Phonetic events do as a rule remain intralinguistic, even though analogy may take a hand at times, and physical factors such as energy-saving may (if Zipf is right) play a part. Phonetic events largely affect morphology in turn, and these changes are intralinguistic. But on other levels of language - syntactic and semantic - social and historical factors are deeply involved. What happens to a people in time and space is inevitably reflected in their language. There may be more than one cause producing the same result.

In the midst of this pattern of syntactic arrangement, English seems to hold a rather peculiar position. It belongs, according to the generally accepted taxonomy, to the 'Low German' section of the West Germanic languages. These all have the typically Germanic syntax, as has already been shown, and this holds good for Frisian, to which it bears the closest kinship; and OE has a very similar pattern, enjoying the liberties of arrangement which are possible for highly inflected languages - though in actuality not all of them have it. In OE even the object can begin the utterance: Glædne giefende lufað God. It uses as a rule the inversion of subject and verb when there is an introducer: geweorðen nu leoht *let there now be light*; it inverts the main and the auxiliary verb in subordinate clauses: þæt hie todælan maegen dæg fram niht *that they may separate day from night* - yet without throwing the verb to the end of the clause, as often West Germanic languages would do. In all these points, as shown above, OE agrees with the West Germanic pattern, which here is East Germanic also and to a large degree proto-Germanic. Yet when modern English is considered, all these signs of relationship have disappeared!

What reasons can be assigned for the radical differences shown in modern English syntax as compared with OE? How has English come not only to be in the North Germanic camp, but to go even farther? For the Scandinavian languages still retain inversion after the introducers that produce it in the South Germanic group.

This is where the historical setting becomes of importance in people and language in time. It will appear also that the social setting must be included in the survey - people and language in time and space. It is known that the North Germanic people played a large part in early English history. Invasion began in 787, and permanent settlement began about 850. Thus North Germanic forms of speech became current in parts of England in the OE period, though as Wrenn remarks (p.62): "their effects only became visible in ME to any marked extent". Norse was the language of the Hebrides and the western Scottish region and as far south as the Isle of Man till mid 13th century. All this is true, but it would not account for the particular character of modern English. There is another strain of influence to be taken into account.

This strain is French: 1066 and all that cannot be overlooked. While Norse influence was considerable, especially in vocabulary, OE literature shows that this influence did not radically disturb the syntactic pattern. When William the Conqueror won the battle of Hastings, he did much more than change a dynasty. He brought in a new language, which did lead to these radical changes. It was not a mass migration that swamped the former language, as English in Australia is swamping the Aboriginal languages by sheer force of numbers. French became a language of prestige, of law and of literature. Anyone who pretended to education at all would be able to speak French, even if not to read and write in Latin also.

The French that influenced English between the 11th and the 13th centuries was not the French of Paris, the official language of the Kingdom of France. It was a dialectal French - Norman French from Normandy, and Norman means Northman. It was the language of a North Germanic people who had come into north-eastern France a century earlier and settled there, giving up their own language and adopting French. As always when a people adopts a new language, they carried over basic features of their old tongue. Such, for instance was the use of [w] where normal French had [g], so that English now says [wɔ:] *war*, where French says [gɛ:r]. Thus, Norman French was a French modified by North Germanic speech habits on the phonetic level and in other ways. This is a particularly interesting case: a Romance language, adopted - and adapted - by Germanic speakers, comes into a West Germanic language area and modifies the language in the direction of the Romance pattern. Here is convergence very clearly marked: English, under the influence of a Romanicised North Germanic invasion, takes on linguistic features found in North Germanic languages - *but not from them!*

There is space to think only of a few resulting changes, produced by Norman French in later OE and in ME. Take as example the English idiom *he was given a book*. There is nothing quite like this in other Germanic languages, north or south. In OE it was possible to say him wæs bōc giefen. To begin thus with an object was impossible in French and unintelligible to a Frenchman. The sentence begins with a subject; therefore *he* is required, not *him*; and so the peculiar *he was given a book* developed. Grammatical subject and focus now began to be distinguished.

It was not only in grammar and syntax that Norman French influenced English. While we are on the sociological as well as the historical theme in terms of our title, it may be instructive to look at one of these other types of influence - kinship terminology. Kinship terminology is always tremendously important. The anthropologist spends a large part of his time studying it among primitive peoples. The study of kinship in European communities does not get as much attention as it deserves. Some have claimed that there was a general Germanic kinship system with associated terminology, but this was actually not the case once the proto-Germanic group broke up. OE kinship terminology is shown in the subjoined table, and it may be contrasted with modern English terminology and compared with those of continental Germanic peoples.

The table shows considerable variation between the Germanic systems represented, and there is no reason to think that there was less at an earlier period. The differences between modern English and Old English are striking, and may be summarised as follows:

Some terms have been lost entirely without change of method in classifying the kindred. These include terms for 'third' and 'elder' parents, i.e. third and second generations ascending; descriptive terms for members of the first generation ascending. These have drawn closer to the modern Norwegian, but, once again, seem to have come from a different source. In one's own generation in some cases OE already had terms based on descriptives; in some cases French terms replaced English, e.g. the word 'cousin' came in. Only the very nearest kindred kept their former titles - brother, sister, mother, father, son, daughter, nephew and niece. Some were lost, leaving no trace. Here again we see non-linguistic factors changing the form of language, and thus we see the necessity for the linguist to have understanding of anthropological facts - kinship systems, rank systems, and terms for many special customs amongst his people.

Some Germanic kinship terms

ENGLISH	OLD ENGLISH	GERMAN	NORWEGIAN
grandfather	ealda fæder	Grossvater	farfar morfar
grandmother	eald modor	Grossmutter	farmor mormor
father	fæder	Vater	fader, far
mother	modor	Mutter	moder, mor
uncle (pat.) *(mat.)*	fæder, faða eam	Onkel, Oheim	farbror morbror
father's sister	fædera sweostar	Tante	faster
mother's sister	modrige sweostar	Tante	moster
brother	broðor	Bruder	bror
sister	sweostar	Schwester	syster
son	sunu	Sohn	søn
daughter	dohtor	Tochter	dotter
nephew	swor	Neffe	brorsor systerson
niece		Nichte	brordotter systerdotter
grandson	(ge)nefa, sunusunu	Enkel	soneson dotterson
granddaughter	nefena	Enkelin	sonesdotter dotterdotter
husband		Gatte, Mann	ektemake, mann
wife	wif	Gattin	kone
mother-in-law	swegar	Schwiegermutter	vermor
father-in-law	sweor	Schwiegervater	verfar
brother-in-law	(ge)nefa	Schwagor	verbror
sister-in-law	nifena, nift	Schwëgerin	versyster
son-in-law		Schwiegersohn	verson
daughter-in-law	swor	Schwiegertochter	verdotter

In English The Norman-French settlement led to:
(1) spread of the descriptive system;
(2) introduction of Romance terms;
(3) new systems of reckoning, especially of affinals.

In the above examples we have seen how the intermixing of peoples in time and space has reacted on the language. This external influence is always important, and if the actual history of a people is not known, it is frequently impossible to get at it. Sometimes missing history may be revealed in language. Sometimes, however, the changes take place within the language itself, in the process of historical development. One interesting example of this is the development of the phrases in English where temporal prepositions are combined with present participles. In English expressions such as *after coming*, *while speaking*, and so forth are common. These are peculiar to English. No other Germanic language has them. German must say nachdem or während followed by a clause; French cannot in this case explain the usage, because in French one says après que with a clause, or après with a perfect infinitive for *after*, and pendant que with a clause. Whence, then, did the peculiar English use of a present participle come? Especially *after* with a *present* participle! Here we seem to have

a case of internal change, leading to the identification of two forms which were previously separate, or rather the loss of one, its duties being taken over by another.

In OE there was a present participle ending in -inde, -ande. This is in line with the normal Germanic form. There was also a verbal noun ending in -ung or -ing. This could, as a noun, be preceded by a preposition, the other naturally could not. In later OE south of the Thames the distinction began to be lost, and singinde to be replaced by singinge. The final -e was further lost, and singinge and singing were then confused. By 1257 the distinction was completely lost. In OE the ending -ung, -ing was not productive, i.e. it was limited to certain words. Later the usage spread, and when the true present participle was lost, -ing(e) began to be used as a general, productive suffix, and ultimately *after singing* became acceptable. This is a case of purely internal development of a special characteristic, and at the same time an excellent example of convergence, not through foreign influence, as in the previous example involving word-order, but through forces acting within the language.

These examples of changes in English both under foreign influences - the movements of peoples in time and space - have been based on known historical facts. But what about the basic change of word-order from SOV in Runic Nordic to SVO in later Germanic, with or without limited retention of the old forms? Here there is no known history that can provide a proper measure of guidance. An answer may be possible, but is beyond our scope at the present moment. Håkon Melberg, in his *Origin of the Scandinavian nations and languages*, has shown fairly clearly that North Germanic is really the outcome of widespread movements of peoples from Denmark, which took place between the 2nd and 6th centuries A.D. These peoples moved north from the region of the present Denmark, and occupied the Scandinavian Peninsula and parts of Finland. From them developed a little later the Viking Movements which carried the northern Germanic forms still farther north and west. From these movements northern Germanic took its origin. We cannot stop to discuss these processes in detail. Somewhere amongst them was apparently the change from SOV to SVO order, and this had begun before the movements themselves. Perhaps the strong tendency to SVO was built into the Germanic languages as a branch of PIE - in fact there is no proof that Latin word-order is part of PIE. There hardly could be, because there are no monuments of PIE and it cannot therefore be restored on the syntactic level. More work is needed on the whole subject; these thoughts and suggestions are given here simply as instances of the movements and cross-influences of peoples and languages in time and space, illustrated from one particular area, which happens to be especially interesting to speakers of English because their people and their language forms part of it.

LA NUMERATION AU SUD-MALAKULA (VANUATU)

J.M. Charpentier

1. INTRODUCTION

La numération des dix-neuf langues ou dialectes du Sud-Malakula n'a fait l'objet jusqu'à ce jour d'aucune étude spécifique. La première tentative de classification fut faite par D.T. Tryon en 1974. Dans son intervention à la première conférence de linguistique austronésienne comparée, ce chercheur utilisait simplement la numération pour classer les langues des Nouvelles-Hébrides d'alors. Il groupa fort justement celles de cette région sous la rubrique 'décimales imparfaites'. Leurs caractéristiques ne s'arrêtent pas là, et, si dans notre atlas linguistique des langues du Sud-Malakula (1982) nous avons pu présenter les divers systèmes numériques, il n'était pas possible dans une telle étude de montrer toute la complexité de ces systèmes, leur logique, leurs exceptions. Grâce à une étude comparée nous avons pu décomposer en morphèmes la plupart des composés, des énoncés et retrouver leurs sens aujourd'hui figés, ignorés. Certaines langues étant décimales, d'autres à base vingt, l'une privilégiant le nombre cinquante, d'autres présentant un signe spécifique pour cent, nous avons préféré nous en tenir dans la progression de cette étude à l'ordre de numération décimale, aujourd'hui le plus familier à tout lecteur potentiel.

2. LES CINQ PREMIERS CHIFFRES

Dans toutes ces langues, les cinq premiers chiffres sont généralement composés d'un radical précédé d'un préfixe marque de la troisième personne du singulier; seul le chiffre 'un' dans plusieurs de ces langues n'est précédé d'aucune marque personnelle.

En aulua et mbwenelaŋ: ᵐboxol, en banam bay: soxa, en port sandwich: čika, etc. En paŋgumu, aucune marque de la troisième personne du singulier n'est associée au radical verbal, dans la numération à l'exception de soxo *un*, les chiffres suivants prennent le préfixe xe- *arbre*.

3. LES CHIFFRES DE 6 A 9 INCLUS

Toutes ces langues à ce niveau présentent un système décimal imparfait selon l'appellation aujourd'hui traditionnelle de Codrington (1885:223).

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 105-118. *Pacific Linguistics*, C-100, 1987.
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3.1 Regles générales et exceptions propres au chiffre 6

Dans toutes ces langues, les signes correspondant aux quatre premiers chiffres sont repris pour la numération entre 5 et 10 sauf:

En uliveu, 6 est mə-lep-tes (actualisateur-prendre-tes), alors que 1 est sua. En banam bay, rop-tes *six*, sua *un*. En mbwenelaŋ, lov-tes *six*, ^{m}boxol *un*. En paŋgumu, rov-tes *six*, soxo *un*.

Dans ces quatre langues on retrouve le même radical -tes, il s'agit là probablement d'une numération ancienne subsistant encore en na-'ahaj sous la forme -te', *un* dans cette langue.

3.2 Les chiffres 6,7,8,9 ou la notation decimale imparfaite

Ces chiffres sont souvent exprimés par d'anciens énoncés complets, aujourd'hui amalgamés qu'aucun locuteur natif (sauf s'il était linguiste) ne songe plus à décomposer.

En repan^{m}bitip:

i-lav-sua *il-prendre-un 'six'*, i-lav-rua *il-prend-deux 'sept'*,
i-lav-u-təl *il-prend- -trois 'huit'*, i-lavas *il-prend-quatre 'neuf'*

On trouve exactement ce même type de numération en a-jiaule-ián$_{a}$, en mbotkót$_{e}$, en na-taŋgan.

En na-sar-ián$_{a}$, ces numéraux sont exprimés par les énoncés: i-sau-s *six*, i-sau-rua *sept*, i-sau-təl *huit*, i-sau-vas *neuf*. Personne ne connaît plus le sens de la racine -sau.

En nahava, le même type d'énoncé est employé dans la numération: i-sau-si' *six*.

En ninde, contrairement à *six* qui est tu-mo-soj *poser-act.-un*, 7, 8 et 9 sont exprimés par le seul radical nominal ma- suivi du suffixe possessif -ne *à lui*, lui même suivi des numéraux xuo *deux*, təl *trois*, ves *quatre*.

En navwien, *sept* est exprimé par l'énoncé i-ndrax-ru *il- -deux* sur le même schéma que *six* i-ndrax-saxal *il- -un*. Sur place, c'est en vain que nous avons demandé le sens de -ndrax-.

Cependant, tous ces affixes qui précèdent les radicaux correspondant à *un*, *deux*, *trois* et *quatre* semblent être d'anciennes flexions verbales, phonétiquement plus ou moins modifiées. Il s'agirait d'anciennes marques du duel ou du pluriel qui se sont figées comme les rapprochements qui suivent tendraient à le montrer. Dans la première colonne, les préfixes sont les flexions verbales, marques de la troisième personne du singulier.

En axamb:

a-čəkaj	*un*	rə-čəkaj	**ils duel-un*	*'six'*
a-ru	*deux*	ra-ru	**ils-duel-deux*	*'sept'*
a-rür	*trois*	ra-rür	**ils duel-trois*	*'huit'*
a-vač	*quatre*	rar-vač	**ils duel-quatre*	*'neuf'*

En avokh:

čəkaj	*un*	axu-čukaj	**ils duel-un*	*'six'*
o-ru	*il-deux 'deux'*	axu-ru	**ils duel-deux*	*'sept'*
o-rər	*trois*	axu-rər	**ils duel-trois*	*'huit'*
o-vač	*quatre*	axu-vač	**ils duel-quatre*	*'neuf'*

En vetmbao:

ŋa-cəkaj	*il-un 'un'*	ru-čəkaj	**ils duel-un*	*'six'*
ŋa-ru	*deux*	rax-ru	**ils pl.-deux*	*'sept'*
ŋa-rəl	*trois*	rax-rəl	**ils pl.-trois*	*'huit'*
ŋa-vač	*quatre*	rax-pač	**ils pl.-quatre*	*'neuf'*

En aulua:

ᵐboxol	*un*	ndrov-oxol	**ils pl.-un*	*'six'*
i-ndrua	*il-deux 'deux'*	ndrox-u-rua	**ils pl.-deux*	*'sept'*
i-ndil	*trois*	ndrox-til	**ils pl.-trois*	*'huit'*
i-mbos	*quatre*	ndrox-ves	**ils pl.-quatre*	*'neuf'*

En port sandwich, un énoncé complet est nécessaire (flexion personnelle + aspect actualisateur + radical du numéral)

e-mo-čukaj (čika *un*) *six*, e-mo-xü (e-ü *il-deux*) *sept*. Dans les signes correspondant à *huit* et *neuf* entre l'énoncé signifiant *sept*: e-moxu-röj *il-sept?-trois* (e-röj *trois*), *huit*: e-moxu-pač (e-vač *quatre*).

En uliveu, l'énoncé est presque complet, seule la flexion verbale a disparu. Ces numéraux revêtent la forme préfix actualisateur + prendre + numéral.

e-ru	*il-deux 'deux'*	mə-lev-ru	*sept*	(lav-i *prendre q.q.c.*)
i-tər	*trois*	mə-lev-tər	*huit*	
i-vat	*quatre*	mə-la-pat	*neuf*	

En paŋgumu, la même concaténation apparaît.

xe-ru	*arbre-deux 'deux'*	ma-rov-ru	*act.-*prendre-deux 'sept'*
xe-ter	*trois*	ma-rov-tor	*huit*
xe-več	*quatre*	ma-ro-pe	*neuf*

En banam bay, le schéma précédent n'est que partiellement repris, le préfixe actualisateur pourtant très employé dans cette langue disparaît de la numération.

e-ru	*il-deux 'deux'*	rov-ru	**prendre-deux 'sept'*	(rav-i *prendre*)
e-ter	*trois*	rov-ter	*huit*	
e-vet	*quatre*	ro-pe	*neuf*	

En mbwenelaŋ, même type de numération décimale imparfaite:

i-ndru	*il-deux 'deux'*	lov-ru	*sept*
i-ndil	*trois*	lov-təl	*huit*
i-mbeč	*quatre*	lo-pe	*neuf*

En faraun, la terminologie diffère de toutes les précédentes, le chiffre *cinq* i-ləm est à chaque fois rappelé, précisant ainsi que l'ancienne numération probablement quinaire, le reste encore partiellement aujourd'hui.

i-ləm rə-čəkaj	*il-cinq marque personnelle-un 'six'*
i-ləm mə-rax-ru	*il-cinq actualisateur-marque personnelle-deux 'sept'*
i-ləm mə-rax-rəl	*il-cinq act.-m. pers.-trois 'huit'*
i-ləm mə-rax-pač	*il-cinq act.-m. pers.-quatre 'neuf'*

4. DIX: MEME RADICAL DANS TOUTES CES LANGUES

i-laŋavəl en na-sar-iáŋ$_a$, repan^{m}bitip, a-jiaule-iáŋ$_a$, mbotkɔ́t$_e$, nə-taŋgan

laŋal en ninde

(i)-laŋavül en na-vwien, na-ˊahaj, nahava

seŋavür ou seŋgavür en axamb, faraun, uliveu, avokh, vetmbao, banam bay

e-saŋeav en port sandwich

saŋavül en mbwenelaŋ

saŋavul en aulua

saŋavur en paŋgumu

5. LES NOMBRES DE ONZE A DIX-NEUF (INCLUS)

Ces nombres sont exprimés suivants différents schémas.

5.1 Par des énoncés complets

En na-sar-iáŋ$_a$, le verbe mona-k *poser quelque chose* est précédé d'une flexion verbale traduisant la première personne du pluriel à l'inclusif.

andə-mɔ́n$_a$ i-sakawa **nous pl. incl.-poser-un 'onze'*
andə-mɔ́n$_a$ i-rua *douze*

5.2 Dix + coordonnant + chiffre (de un à quatre)

Dans plusieurs langues de cette région existent des préfixes verbaux exprimant la coordination entre deux actions découlant l'une de l'autre.

En repan^{m}bitip:

i-laŋavəl ia-sua *il-dix et-un 'onze'*
i-laŋavəl ia-ndrua *il-dix et-deux 'douze'*

C'est la même construction qui prévaut jusqu'à *dix-neuf*, sauf *quatorze* qui est: i-laŋavəl na-unt i-sua ie-mbas *il-dix le-lieu il-un et-quatre*.

En mbotkɔ́t$_e$, de *onze* à *dix-neuf*, les locuteurs usent d'un système similaire à celui de repan^{m}bitip.

i-laŋavəl ie-ndəl *il-dix et-trois 'treize'*
i-laŋavəl ie-mbas *il-dix et-quatre 'quatorze'*

En na-taŋgan, le coordonnant disparaît après *quinze*.

i-laŋavəl i-lav-sua *il-dix il-prendre-un (il-six) 'seize'*
i-laŋavəl i-lav-rua *dix-sept*

En faraun, *onze* est exprimé sans coordonnant i-saŋgavür čəkaj, de *douze* à *dix-neuf* inclus la numération suit le schéma décrit en 5.2.

i-saŋgavür ndra-ru *il-dix-et-deux 'douze'*
i-saŋgavür ndra-ləm mə-rax-ru *il-dix et-cinq act.-ils-deux 'dix-sept'*

En vetmbao:

saŋavür ndrə-rəl *dix et-trois 'treize'*
saŋavür ndrə-rax-rəl *dix et-ils-trois 'dix-huit'*

5.3 Dix + chiffre

En axamb:

saŋavür čakaj *onze*
saŋavü-ru *douze*

En faraun et en vetmbao, seul le nombre *onze* est exprimé selon ce schéma.

i-saŋgavür čəkaj en faraun
saŋavür čəkaj en vetmbao

5.4 Dix + flexion personnelle-mettre + nom-possessif + chiffre

En ninde, ane est un possessif troisième personne du singulier.

na-laŋal sej ni-ndu ma-ne sej *le-dix un il-mettre ?-à lui un 'onze'*
na-laŋal sej ni-ndu ma-ne oxuo *douze*

En na-'ahaj:

i-laŋvül ⁿdu ma-n i-tül *il-dix mettre ?-à lui il-trois 'treize'*
i-laŋvül ⁿdu ma-n i-vas *quatorze*

En nahava, à ce niveau la numération est la réplique exacte de celle du na-'ahaj.

i-laŋavül ni-ndu mwe-n i-lim *il-dix il-mettre ?-à lui il-cinq 'quinze'*
i-laŋavül ni-ndu mwe-n i-seusi' *il-dix il-mettre ?-à lui il-six 'seize'*

5.5 Dix + un + nom-possessif non humain + chiffre

Dans les langues qui vont suivre, un nom auquel est affixé un possessif non humain est intercalé entre l'expression des dizaines et les chiffres. Ces noms affixés, bien qu'employés par tous ont perdu tout autre sens que celui de servir dans la numération. En port sandwich seulement, un de nos informateurs Damien nous a fourni une explication plausible. Dans cette langue le nom ndromuxer inséré entre dizaine(s) et unité(s) serait un ancien composé. En port sandwich, ndro- est le noeud du bambou, le suffixe -xer indique le possessif non humain. Le bambou est na-mbu, on aurait donc affaire à un ancien composé *ndro + na-mbu + xer *noeud le-bambou à lui*. Dizaines et unités seraient liées comme les parties du bambou par un noeud.

En banam bay, le nom correspondant est très proche structurellement et phonétiquement: ndro-mo-xte (en aulua: ni-nd-mu-xte, en mbwenelaŋ: ndo-mo-xte).

En banam bay:

saŋavür soxa ndro-mo-xte e-vet *dix un ndro-mo-xte il-quatre 'quatorze'*
saŋavür soxa ndro-mo-xte ma-rov-ru *dix-sept*

En aulua:

ŋavul ᵐboxol ni-nd-mu-xte i-ndil *dix un ni-nd-mu-xte il-trois 'treize'*
ŋavul ᵐboxol ni-nd-mu-xte ndrox-ves *dix-neuf*

En mbwenelaŋ:

ŋavul ^{m}boxol ^{n}du-mu-xte i-ndru *dix un ^{n}du-mu-xte il-deux 'douze'*
ŋavul ^{m}boxol ^{n}du-mu-xte ma-lov-tes *seize*

5.6 Systèmes spécifiques

Deux dialectes très proches peuvent présenter des systèmes numériques très différents, c'est le cas de a-jiaule-ián$_a$ par rapport au mbotkŏt$_e$.

En a-jiaule-ián$_a$, la première dizaine est exprimée simplement par le terme entəmwi, en dehors de ce rôle dans la numération, aucun locuteur n'est aujourd'hui en mesure de donner un autre sens à ce terme.

entəmwi i-sua *onze*
entəmwi i-təl *treize*

En navwien, la numération diffère beaucoup des dialectes nahava et na-'ahaj avec lesquels cet idiome présente beaucoup d'affinités par ailleurs.

i-laŋavül a-saxal *il-dix coord.-un 'onze'*

Pour les nombres de *douze* à *quinze* inclus, le terme aj est inséré entre les dizaines et les chiffres qui suivent, il peut s'agir là d'une abréviation de xaj *arbre* ou *il* (le concept d'arbre est déjà apparu dans la numération en paŋgumu, voir paragraphe 2.).

i-laŋavül aj a-ndru *il-dix arbre coord.-deux 'douze'*

De *seize* à *dix-neuf* inclus, ce terme aj disparaît.

i-laŋavül ndrax-ru *il-dix sept 'dix-sept'*

En uliveu et en avokh, le verbe lav *prendre* est placé entre la dizaine et le chiffre qui suit.

uliveu: saŋavür lav sua *dix prendre un 'onze'*
avokh: saŋavür lav o-ru *dix prendre il-deux 'douze'*

6. LE NOMBRE VINGT

Plusieurs systèmes sont en usage dans cette aire géographique, et parfois, deux systèmes différents coexistent dans la même langue.

6.1 Dix (x) deux ou système décimal

En na-sar-ián$_a$:

i-laŋavəl i-rua *il-dix il-deux 'vingt'*

En repan^{m}bitip:

i-laŋavül na-ut$_e$ i-rua *il-dix le-lieu il-deux 'vingt'*

En a-jiaule-ián$_a$:

i-laŋavül i-rua *il-dix il-deux 'vingt'*

En ninde:

na-laŋal oxuo *le-dix deux 'vingt'*

En banam bay:

saŋavür e-ru *dix il-deux 'vingt'*

En mbwenelaŋ:

ŋavul i-ndru *dix il-deux 'vingt'*

En uliveu:

səŋavür vaxa-ru *dix fois-deux 'vingt'*

En avokh:

səŋavür vaxa-ru *dix fois-deux 'vingt'*

En vetmbao:

səŋavür vaxa-ru *dix fois-deux 'vingt'*

6.2 Homme + il-un ou système vingésimal

En mbotkŏt$_e$:

na-mukut i-sua *le-homme il-un 'vingt'*

En nətaŋgan:

nə-maɣət i-sua *le-homme il-un 'vingt'*

En repan^{m}bitip, deux systèmes cohabitent, un système décimal décrit plus haut et un système vingésimal.

na-mukət i-sua *le-homme il-un 'vingt'*

En na-vwien:

nə-maxat i-saxal *le-homme il-un 'vingt'*

En na-'ahaj:

na-mar-a-tin i-te' *le-homme-a-mettre il-un 'vingt'*

En nahava:

ni-mor-la'la' i-si', ni-morot *l'homme, la'la' silencieux, le-homme-silencieux il-un 'vingt'*

En faraun:

na-məxar i-čiki-tu *le-homme il-un-seulement 'vingt'*

En axamb:

seŋavür ren-xavoj a-čeke-nene *dix homme-vrai il-un-seulement 'vingt'*

6.3 Dix + arbre-deux

En paŋgumu:

ŋavür xe-ru *dix arbre-deux 'vingt'*

6.4 Préfixe-il-deux

En port sandwich:

mbal-e-ü *préfixe des dizaines-il-deux 'vingt'*

7. DIZAINES ET UNITES DE VINGT ET UN A QUATRE VINGT DIX-NEUF

Pour ces nombres, deux systèmes régissent la numération dans les langues du Sud-Malakula: il existe des numérations décimales et vingésimales. Dans toutes les langues présentant un système décimal, le chiffre de la dizaine suit le terme exprimant *dix*. Ce dernier terme est alors associé à la même flexion personnelle (lorsqu'il y en a une) que celle employée dans la langue considérée pour le nombre *vingt*. Dans la numération de *onze à dix-neuf*, la dizaine et le chiffre des unités étaient reliées par un nom, un énoncé ou un affixe; on retrouve ces mêmes éléments dans la numération de *vingt et un* à *quatre vingt dix-neuf*.

7.1 Système décimal

En na-sar-iáŋ$_a$:

31: i-laŋavəl i-təl andə-móŋ$_a$ i-sakawa *il-dix il-trois nous-mettre il-un*

En a-jiaule-iáŋ$_a$:

41: i-laŋavəl i-vas entə-mwi i-sua *il-dix il-quatre il-un*

En ninde:

55: na-laŋal seləmə ni-ndu ma-ne seləmə *le-dix cinq flex. pers.-mettre -poss. cinq*

En banam bay:

68: saŋavür ma-roptes ndromo-xte ma-rovter *dix asp.-six -poss. asp.-huit*

En aulua:

43: ŋavul i-mbes ni-ndmu-xte i-ndil *dix il-quatre le- -poss. il-trois*

En mbwenelaŋ:

système identique à celui d'aulua.

En uliveu:

Comme pour *vingt*, pour les autres dizaines, le préfixe vaxa- qui signifie *fois* est utilisé. Le radical verbal lav *prendre* est intercalé entre *vingt* et les unités, pour les autres dizaines le verbe pisan *prendre un grand nombre* remplace lav.

22: səŋavür vaxa-ru lav e-ru *dix fois-deux prendre il-deux*
55: səŋavür vaxa-rim pisan e-rim *dix fois-cinq prendre beaucoup de il-cinq*

En avokh:

Le système numérique est en tous points similaire à celui d'uliveu. Lorsque le chiffre qui suit les dizaines est *un*, on emploie le verbe iv *diriger vers*,

lorsque le chiffre est *deux* et au-delà, c'est le verbe pe *compter* qui est introduit à la suite des dizaines.

21: səŋavur vaxa-ru a iv čəkaj *dix fois-deux joncteur vers un*
32: səŋavur vaxa-rər ŋo-pe o-ru *dix fois-trois il-compter il-deux*

En vetmbao:

Le système numérique de cette langue est des plus original, décimal imparfait pour les dix premiers chiffres, puisque seuls les cinq premiers sont entièrement différents. Il est fait appel au préfixe vaxa- *fois* pour les dizaines comme en uliveu et en avokh et au coordonnant ndrə- pour les unités comme en repan^{m}bitip, mbotkŏt$_{e}$, nə-taŋgan, langues avec lesquelles le vetmbao ne partage pourtant que peu de ressemblances.

22: saŋavür vaxa-ru ŋaji ndrə-ru *dix fois-deux il coord.-deux*

ŋaji est le pronom personnel troisième personne du singulier.

40 est donc saŋavür vaxa-vač *dix fois-quatre*, 50 est encore saŋavür vaxa-ləm *dix fois-cinq* mais c'est aussi ŋa-vi ren-xavo *il-vers homme-véritable*. Après *soixante*, les deux systèmes sont en usage.

55: ŋa-vi ren-xavo ŋaji ndrə-ləm *il-vers homme-vrai il coord.-cinq*
saŋavür vaxa-ləm ŋaji ndrə-ləm *dix fois-cinq il et-cinq*

70: saŋavür vaxa-ləm rax-ru *dix fois-cinq ils-deux (sept)*
ŋa-vi ren-xavo a-čəkaj ŋaji ndrə-ru *il-vers homme-vrai il-un il coord.-deux*

En port sandwich:

Le système est très cohérent, toutes les dizaines prennent le préfixe ^{m}bal, le nom ndromu-xer s'intercalant entre dizaines et unités.

75: ^{m}bal e-mo-xü ndromu-xer e-rim *dizaine-il-asp.-deux -poss. il-cinq*

En paŋgumu:

c'est le terme romon qui relie dizaine et unités, son sens est aujourd'hui ignoré.

95: ŋavur ma-rope romon xe-rim *dix act.-neuf arbre-cinq*

7.2 Système vingésimal ou à base vingt

En mbotkŏt$_{e}$:

c'est le verbe mbuluŋg *compter* précédé du coordonnant ie- qui relie vingtaines et unités.

34: na-mukut i-sua ie-mbuluŋg i-laŋavəl ie-vas *le-homme il-un coord.-compter il-dix coord.-quatre*

En repan^{m}bitip:

un des deux systèmes de cette langue est identique à celui du mbotkŏt$_{e}$.

En na-taŋgan:

système également presque semblable à celui du mbotkŏt$_{e}$, il n'y a emploi que d'un coordonnant.

43: nə-mayət i-rua ie-mbuluŋ i-təl *le-homme il-deux et-compter il-trois*

En na-vwien:

entre les vingtaines et les chiffres qui suivent est inséré le nom no-xor *barrière faite de bambous entassés* ou *de pierres sèches.* L'emploi du nom xaj *bois* semble aujourd'hui facultatif entre les dizaines et les unités; il se maintient sous forme de préfixe coordonnant a-.

32: nə-maxat i-saxal no-xor nan i-laŋavül a-ndru *le-homme il-un la-tas à lui il-dix coord.-deux*

56: nə-maxat i-ndru no-xor nan i-laŋvül xaj a-ndrax-saxal *le-homme il-deux le-tas à lui il-dix arbre coord.-ils un (six)*

En na-'ahaj:

système semblable à celui du na-vwien.

31: na-mar-a-tin i-te' no-oro-n i-laŋavül ^{n}du ma-n i-te' *le-homme-a-mettre il-un la-clôture-poss. il-dix mettre -poss. il-un*

En nahava:

43: ni-mor-la'la' i-ru no-oro-n i-tül *le-homme-caché il-deux la-barrière-à lui il-trois*

En faraun:

dans cette langue, le même préfixe de coordination ndra- relie les vingtaines aux dizaines et les dizaines aux unités.

96: na-məxar i-vač ndra-saŋavür ndra-ləm-rəčəkaj *le-homme il-quatre coord.-dix coord.cinq-un (six)*

En axamb:

la numération de *vingt et un* à *quatre vingt dix-neuf* ne fait appel à aucun joncteur.

75: ren-xavoj a-rür saŋavü-rəm *homme-vrai il-trois dix-cinq*

8. LE NOMBRE CENT

8.1 Langues à système décimal avec terme spécifique pour cent

Ce sont les langues décrites précédemment dans le paragraphe 7.1; ce radical spécifique pour *cent* est toujours -ŋat ou -ŋot.

En paŋgumu, les concepts *beaucoup de, en grande quantité* sont exprimés par le terme mi-ŋot (mi- est probablement un ancien préfixe actualisateur).

100: miŋot vax-soxo *beaucoup de fois-une*

En banam bay: mo-ŋot vax-soxa *asp.-*beaucoup de fois-une*

En aulua: i-ŋot ^{m}bax-voxol *il-*beaucoup de fois-une*

En a-jiaule-ián$_a$: a-ŋat i-sua *il-*beaucoup de il-un*

En na-sar-ián$_a$: na-ŋat i-sakawa *le-*beaucoup de il-un*

Autrefois, les anciens locuteurs de cette langue précisaient na-mekət i-sakawa i-tər$_{ə}$ mesmas *le-homme il-un il-rester caché*. Nous retrouvons le même concept que celui employé pour les vingtaines en nahava. Selon notre informateur Francis, l'usage de na-ŋat date du début de ce siècle.

8.2 Langues à système purement décimal (dix x dix)

En ninde: na-laŋal laŋal *le-dix dix 'cent'*

En uliveu: səŋavür vaxa-səŋavür *dix fois-dix*

En avokh: səŋavür vaxa-səŋavür *dix fois-dix*

En port sandwich: ^{m}bal-e-saŋeav *préfixe des dizaines-il-dix*

En vetmbao: ŋa-təx na-xmau (tax *'attacher'*) *il-attacher le-autre* (déjà cité, *cinquante* étant un *homme* dans cette langue).

8.3 'Cent' dans les langues à base vingt

Dans toutes les langues de ce type vues en 7.2, *cent* est exprimé par *le-homme il-cinq* soit 20 x 5.

9. LES NOMBRES AU-DELA DE CENT

Etant donné le faible nombre de locuteurs dans certains parlers et l'acculturation européenne ancienne dans d'autres, il était déjà impossible dans les années 1970 de trouver dans ces langues des natifs pouvant compter au-delà de *cent*. Pour tout ce qui n'est pas strictement rituel, l'usage de la numération décimale du pidgin bislama était généralisé. Même si deux langues semblent suivre la même logique jusqu'à *cent*, il n'est pas possible de calquer le système appauvri de l'une sur celui d'une autre mieux conservée comme le montre le système vingésimal du na-taŋgan.

9.1 Langues à numération à base vingt

En na-taŋgan, *cent* est nə-mayət i-ləma *le-homme il-cinq, cent vingt* devrait être 20 x 6 soit *nə-mayət i-lav-sua or ce nombre est exprimé par: nə-mayət i-ləme ie-mbuluŋ nə-mayət i-sua *le-homme il-cinq et-compter le-homme il-un* soit 20 x 5 + 20.

Jusqu'au nombre 200, les locuteurs maintiennent l'expression de la centaine nə-mayət i-ləme (20 x 5) marquant ainsi une préférence ancienne pour le système quinaire.

140: nə-mayət i-ləme ie-mbuluŋ nə-mayət i-ndrua *le-homme il-cinq coord.-compter le-homme il-deux* (en faraun également jusqu'à 200, on conserve la formule 'quinaire' 20 x 5 + dizaines + unités)

356: nə-mayət i-laŋgavəl i-lavrua ie-mbuluŋg i-laŋgavəl i-lavsua
le-homme il-dix il-sept coord.-compter il-dix il-six
20 (x) 17 (+) 16

Ce dernier exemple de 'pure' numération à base vingt se retrouve en:

En na-vwien:

467: nə-maxat nan nə-maxat i-saxal no-xor nan i-ndül aj i-ndraxru
le-homme à le-homme il-un la-barrière à il-trois bois il-sept
20 (x) 23 (+) 17

En mbotkŏt$_e$:

228: na-mukut i-laŋavəl ie-mbuluŋg na-mukut i-sua ie-lav-u-təl
le-homme il-dix coord.-compter le-homme il-un coord.-prendre-trois
soit: 20 x 10 + 20 + 8

9.2 Langues à numération décimale

Parmi les quatre langues à système décimal 'pur', c'est-à-dire dans lesquelles 100 est 10 x 10, seul le ninde et le port sandwich conservent une numération au-delà de *cent*.

En ninde:

347: na-laŋal laŋal koxo ve-təl na-laŋal ves ni-ndu ma-ne ma-ne xuo
le-dix dix en travers fois-trois le-dix quatre il-mettre -poss.-poss. deux soit: 10 x 10 x 3 + 10 x 4 + 7

En port sandwich:

276: ^{m}bal-e-saŋeav vaxa-ü ^{m}bal-e-mo-röj ndro-mu-xer e-mo-čukaj
dizaine-il-dix fois-deux dizaine-il-asp.-trois noeud-bambou-à lui il-asp.-un 10 x 10 x 2 + 10 x 7 + 6

9.3 Langues ayant un terme spécifique pour le nombre cent

Dans toutes ces langues, les multiples de *cent* sont exprimés par: 100 (fois) chiffre des centaines.

En na-sar-iáñ$_a$:

453: na-ŋat i-vas a-laŋavəl i-saləmə andə-mŏn$_a$ i-təl
le-cent il-quatre coord.-dix il-cinq nous-mettre il-trois

En vetmbao:

258: ŋa-təx na-xmau vaxa-ru ŋaji ndrə-vi ren-xavo ŋaji ndrə-ləm rax-rəl
il-attacher le-autre fois-deux il coord.-vers homme-véritable il coord.-cinq ils-trois
100 x 2 + 50 + 8

En banam bay:

548: mo-ŋot vaxa-rim ŋavür e-vet ndro-mo-xte ma-ropter
*asp.-cent fois-cinq dix il-quatre *noeud-bambou-à lui asp.-huit*
100 x 5 (+) 10 x 4 + 8

En paŋgumu:

264: mi-ŋot vaxa-ru ŋavur ma-rovtes romon xe-več
**asp.-cent fois-deux dix act.-six bois-quatre*
100 x 2 10 (x) 6 (+) 4

10. LE NOMBRE 1000 ET AU-DELA

Dans quelques langues de cette région les locuteurs peuvent exprimer ces grands nombres, il convient de remarquer qu'il s'agit là de langues à système décimal ou de langues présentant un terme spécifique pour *cent*, ce qui bien sûr simplifie beaucoup la numération.

En ninde:

1000: na-laŋal laŋal koxoxo va-laŋal *le-dix dix en travers travers fois-dix.* Le post-verbe koxo qui signifie *en travers* est partiellement redoublé koxoxo, alors que lorsqu'il est employé pour les centaines il est simple (voir 9.2).

En na-sar-ián$_a$:

1000: na-ŋat i-laŋavəl *le-cent il-dix.* C'est cette forme 100 (x) 10 qui est en usage en a-jiaule-ián$_a$: a-ŋat i-laŋavəl.

En vetmbao:

1000: ŋa-təx na-xmau vaxa-saŋavür *il-attacher le-autre fois-dix*
100 x 10

En banam bay:

1000: mo-ŋot sar *asp.-cent harponner*

2000: mo-ŋot sar vaxa-ru *asp.-cent harponner fois-deux*

Notre informateur Bong Meme nous a affirmé que de tels nombres ne peuvent être atteints qu'à la pêche à la crevette de rivière, ce crustacé est attrapé à l'aide de flèches d'où l'emploi du verbe sar.

En paŋgumu:

1000: ŋotŋot-čar vax-soxo **cent cent-vouloir fois-une*

En port sandwich:

1000: ᵐbal-e-saŋeav vaxa-saŋeav *dizaine-il-dix fois-dix*

11. CONCLUSION

Si intrinséquement chacune des dix-neuf langues du Sud-Malakula présente bien des types de numération déjà connus dans l'aire océanienne, par contre leur comparaison amène à regrouper des langues qui ne le seraient pas, tant d'un point de vue phonologique que syntaxique et surtout lexical. Certaines langues des plus originales au niveau de la numération, apparaissent, dans d'autres domaines, très proches de dialectes voisins avec lesquels elles partagent de toute évidence une parenté relativement récente. L'exiguïté de ces communautés (toutes ont moins de mille locuteurs) rend les bilinguismes et les multilinguismes obligatoires, sur des systèmes numériques anciens vinrent et viennent s'en greffer d'autres. Pour un temps ils cohabitent, s'influencent plus ou moins réciproquement, ce qui a pour résultat de rendre chaque système 'imparfait' (au sens de Codrington), rendant à chaque fois plus ardue l'élaboration d'un éventuel proto-système.

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THE SUPPOSED AUSTRONESIAN CONTENT OF THE TRANS-NEW GUINEA PHYLUM

Ann Chowning

In the years that have passed since McElhanon and Voorhoeve first proposed that the languages of the Trans-New Guinea Phylum (TNGP) contain a number of Austronesian loanwords, the validity of the suggestion seems to have been taken increasingly for granted. Although Wurm has recently spoken of 'the Austronesian influence apparently present in the Trans-New Guinea Phylum' (1982:230), other, and earlier, statements are not so qualified. In a general discussion of the prehistory of Papuan (non-Austronesian or NAN) languages, it is simply noted that 'McElhanon and Voorhoeve (1970) unravelled the presence of a number of Austronesian loanwords, some of them recognisably of Eastern Oceanic type, far in the interior of the New Guinea mainland... such words are present over a wider area than originally assumed by McElhanon and Voorhoeve' (Wurm, Laycock, Voorhoeve, and Dutton 1975:937).

To the best of my knowledge, the only Austronesian specialist to have examined this claim is Lynch. He acknowledges that 'the supposed similarities between PAN/POC forms and TNGP forms are just that — supposed similarities', particularly because so little has been done to establish sound correspondences within the TNGP or on reconstructing proto-forms. Surprisingly, however, he concludes that 'without a clear set of sound correspondences... the apparent similarity between a PAN or POC reconstruction and some member(s) of a TPNG cognate set seems... no less secure than the similarity which purportedly exists between all the members of that cognate set' (1981a:174-5). (I should have expected Lynch to note that the similarity is no *more* secure.) Lynch is consequently willing to suggest that the ties with Austronesian may be much closer than the other linguists had thought; of the items that McElhanon and Voorhoeve proposed as showing probable interphylic cognates, he concludes from inspection that: 'in twenty-two of the fifty-three items, there appeared to be a distinct resemblance between the members of at least one interphylic series of cognates and at least one PAN or POC reconstructed form'. Furthermore, he also suggests that of the cognate sets established by Franklin for Proto-Engan, a branch of the TNGP, which contained six forms already thought to 'show POC connections', the sets in fact showed many more: 'as many as twenty-one additional cognate sets bear at least a superficial resemblance to a POC reconstructed form with a similar meaning' (Lynch 1981a:172). In a later paper, the tentativeness of the conclusions just advanced has disappeared, and Lynch speaks without qualification of 'the considerable movement of Austronesian lexical items into (Papuan) languages of the Trans-New Guinea Phylum' (1981b:110), citing only his previous paper as evidence.

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Wurm and his collaborators had already drawn conclusions from the 'Austronesian' terms that they had identified in TNGP languages as regarded prehistoric contacts between populations and also migrations within New Guinea, assuming particularly that probably contact originally took place in the Markham Valley between Austronesian languages and some TNGP ones before speakers of the latter moved into other parts of New Guinea. They do not deal with the problem of having identified some of the 'loanwords' as being 'of the Eastern Oceanic type' (Wurm, Laycock, Voorhoeve, and Dutton 1975:947). Lynch too ignores that problem apart from saying that Eastern Oceanic is probably a 'lower-order subgroup of some northwestern first-order subgroup' of Oceanic (1981b:121). As will be seen, this hypothesis does not dispose of the difficulties arising from the presumed existence of EO loanwords in New Guinea, but Lynch is concerned with a more important question, that of the implications of 'the sheer size of the apparent PAN/POC content of the TNGP basic vocabulary'. He suggests that the possible explanations are either that 'far greater contact between AN- and TNGP-speakers occured in the New Guinea area... than has hitherto been imagined' or that 'AN and TNGP languages are ultimately related'. He also considers a third possibility: 'that the apparent connections between PAN/POC forms and TPNG forms are merely figments of my imagination' but goes on to conclude that the 'exceedingly large number of apparent similarities... suggest that any misinterpretation must be one of degree, and not of fact' (1981a:175).

Given the consequences of accepting the theories of Lynch and of Wurm and his colleagues as regards our interpretation of the history and nature of both AN and non-Austronesian (Papuan) languages in the New Guinea area, it seems important to re-examine some of the evidence in the light of certain principles that should govern our handling of both linguistic and more general cross-cultural data. I should begin by making it clear that I am not opposed to the idea that any language may have borrowed items of vocabulary, 'basic' or not, from any other language. Many years ago, when Greenberg showed me the lexical evidence for his proposed Indo-Pacific language family, I said that a considerable number of the apparent resemblances seemed to reflect the influence of Austronesian languages on these others. In the case of the TNGP, however, much of the evidence strikes me as weaker than those citing it often acknowledge.

All of the linguists postulating a PAN/POC-TNGP connection admit that they have not worked out systematic sound correspondences between the languages involved. There should be no need to labour the point that resemblances identified by inspection alone are not trustworthy, as the classic example of the lack of cognacy between English 'day' and Latin 'dies' illustrates (Bloomfield 1933: 347). Nevertheless, the degree of confidence that seems to be felt in this method justifies repeating the warning. McElhanon says (1975:528) that in 'the recognition of cognates' he followed the 'inspection method' advocated by Gudschinsky (1956), which contains a number of safeguards to reduce the possibility of error,[1] but there is no indication that the others were usually so careful. In the discussions of the supposed cognates, however, the most striking gap has to do with the possibility of chance resemblance. Any two languages are likely to contain a few words that are similar in both pronunciation and meaning.[2] The fundamental tenet of comparative linguistics is that the resemblances between two languages must be stronger than would be expected by chance if a connection is to be postulated. Not surprisingly, comparative linguists do not agree on where the line should be drawn between accidental resemblance and probable connection,[3] but some have attempted to work out procedures for dealing with the problem. An important consideration, pertinent to the situation in much of New Guinea, has to do with the fact that if the phonemic systems of two languages are similar, the number of accidental

resemblances is likely to rise (see discussion in Greenberg 1957:37). Greenberg also notes: 'Qualitatively, not all sound-meaning similarities are of equal value as evidence for a historical connection. For example, the longer a form, the less likely does it become that chance is an explanation' (1957:37). Monosyllables are consequently to be regarded with suspicion. Judging from the examples cited by Lynch in particular, little if any attention has been paid to this criterion; cognates are suggested in which the only resemblance is that one syllable of one word is like a syllable located in another part of another word (as, for example, in the suggestion that words such as koma are related to POC *mate *die*), and in others the only resemblance is a single phoneme (as with suggestions that words such as pu are related to POC *pano *go* or words such as magu to *mutaq *vomit* — Lynch 1981a:172-173). Perhaps it is Lynch's experience in identifying POC forms heavily disguised by phonological change in certain languages of Vanuatu (Lynch 1978) that makes him willing to accept cognacy so weakly supported, but it is ironical that much of his evidence looks no stronger than that which persuaded Macdonald (1907) that the Austronesian languages, exemplified by Efate of Vanuatu, were related to Semitic.

In addition to the tenets of comparative linguistics it is necessary to consider those used by anthropologists trying to decide whether, if similar traits are found in two societies, the reason is common origin of the groups concerned (retention), diffusion (borrowing), or independent invention (chance). (For a detailed discussion, see Sapir 1916 and also Kroeber 1948:344-385, 538-571.) Usually diffusion is assumed only when there is other evidence to indicate that the trait could reasonably have spread from one society to the other — if, for example, it is found in intervening areas, or there is other evidence, including that derived from archaeology, oral history, and of course linguistics, or connections between the societies. Where no such evidence exists, and particularly where the two societies are greatly separated in time or space, the occurrence is usually attributed to independent invention.[4] It is a hallmark of the 'extreme diffusionists' that they often fail to accept such a possibility, and invoke lengthy migrations or remote common ancestry to account for similar traits wherever they may be found.[5] It is precisely this point that should have made the cases in which the supposed AN forms are attested only for Eastern Oceanic or even just Polynesian be considered much more doubtful than when the particular forms are found in AN languages nearer New Guinea. That is, because *kulii *dog* is reconstructed only for PPN, the chance that uuri *dog* in Kamoro of south-eastern Irian Jaya reflects borrowing from AN is automatically much less likely than that Kamoro pura *moon* is related to POC *pula(n), PAN *bulan (see Wurm, Voorhoeve, McElhanon 1975:318-319).

In fact, the whole question of AN influence on TNGP languages is complicated by the fact that in some cases the recent history of an area leaves no reason to doubt that, by the usual criteria, borrowing has occurred, but the lumping together of these with much more doubtful cases distorts the body of evidence. One example of highly probable borrowing concerns the word boromo for *pig* in Kiwai of the Fly Delta. Dutton has pointed out (1982:65) that 'the word for 'pig' ...in the languages west of the Gulf of Papua... suggest contact with the Motu'.[6] Indeed it does, and the reason is that *pig* is boroma in Motu and its immediate neighbours, whereas in other Austronesian languages it lacks this final syllable (see Ray 1907:496). The distinctiveness of the local form is obscured by the fact that in papers dealing with the TNGP, the POC word is presented as *mpoRo $\underline{+}$ m (see Wurm, Voorhoeve, McElhanon 1975:318); however, I know of no evidence for this /m/ outside the Motu region. The form is polysyllabic as well as distinctive; the first two syllables surely derive from POC

*mpoRo; and Kiwai is not far from the region recently linked with the Motu region by trade. (Furthermore, the Motu word for 'pig' was used in the trade language; see Dutton and Brown 1977:762.) By contrast, even if some of the words for 'pig' in other TNGP languages are derived from POC — and a substantial number of them are monosyllables — there is no reason to assume that they, all lacking this final syllable, were acquired by the same route as the Kiwai form.

Another case in which borrowing seems certain is Kovai lau *leaf* (POC *ndau(n)). McElhanon has pointed out that 'due to apparent influence by the surrounding Austronesian languages [spoken, like Kovai, on Umboi Island] only a few probable cognates have been identified' between Kovai and other TNGP languages (McElhanon 1975:529). Indeed, rau is the word for *leaf* in one of the AN langauges of Umboi (Hooley 1971:143). The existence of this cognate does not, however, strengthen the possibility that such forms as ron and iŋoŋ in other TNGP languages are 'probable Austronesian loans' (McElhanon and Voorhoeve 1970:80; see Lynch 1981a: 170). Each case needs to be examined separately; *pace* Lynch (1981a:175), numerous forms in TNGP languages that show slight similarities to Austronesian forms are no more convincing than a few would be, especially when the former are found scattered across a number of different languages. As examples mentioned above indicate, it is not likely that borrowing between AN and TNGP languages took place in only one particular region at one particular period. In the interests of separating out recent borrowings, a careful mapping of the location of supposedly borrowed words, together with the form taken by words with the same meaning in nearby AN languages, would be useful.

As regards the material added by Lynch, one point needs to be noted. In several cases he gives a somewhat misleading picture of the definitions in Grace 1969, his source for POC, or has chosen a less common meaning for the form — an important point, because Lynch stresses the number of putative borrowings into, and presumably from, basic vocabulary. For example, reflexes of POC *kuku usually mean *finger, claw*, not *hand* (which is usually a reflex of *lima); the reflexes of *puqu(n) usually mean *base; trunk of tree; stump*, rather than *root* (POC *waka); the reflexes of *kara refer to a kind of stone, the generic term being derived from *patu. Two of Grace's definitions are altered, where Lynch gives *man* for *laki (Grace: *male, adult, marry, great;* cf. *man*: *ŋmane, *taŋmata, *tamole, *tau) and *stink* for *mpo- (Grace: *to smell*). In one case, he has made a major change, giving the meaning of *nsapa as *who?* rather than *what?* as in Grace (cf. *nsai *who?*). Overall, his list of suggestions for 22 additional cognate sets (Lynch 1981a:172-173) does not seem to me greatly to strengthen the list in Wurm, Voorhoeve, and McElhanon 1975:318-320.[7]

If borrowing from AN did take place early in the history of the TNGP, obviously there are likely to be many difficulties in identifying the source or sources. Presumably the AN languages which supplied the forms have themselves undergone phonological and lexical changes, while their speakers may have moved or even become extinct. Since it is suggested that the original borrowing took place in the Markham Valley, however, at least a start could be made by comparing the proposed cognates found in the Austronesian languages of that region.[8] Although a certain amount of information can be put together from maps and wordlists published over the years, most of them in *Pacific Linguistics*, a co-ordinated effort to correlate material from the present AN languages of New Guinea and from those which have been assigned to the TNGP can only be done by those who carried out the regional surveys or have access to that material. Most of the linguists involved are past or present members of Wurm's department, well placed for such co-operation. Obviously all conclusions would remain tentative until much more comparative work has been done within the TNGP itself, but even with

the present limited data, some hypotheses can be made more persuasive than others. As it stands, the list of proposed cognates look little more convincing than the sort of material that might persuade a non-linguist that English and Oceanic languages were once in contact, given the existence of such forms as POC *koti *cut* and PPN *kapu *cup-like*.[9]

Lynch wrote of his attempt to reinterpret 'Oceanic linguistic prehistory' that he would 'stick my own neck out and allow others to try to chop it off' (1981b: 119). Wurm and his associates in Canberra have also been more than willing to stick their necks out in an attempt to bring order to the seemingly vast confusion of New Guinea languages. In writing this paper I intended not to carry out a hatchet job but to induce necks to be drawn in temporarily. We cannot be sure that there was any substantial early borrowing of AN forms by languages of the TNGP, and consequently it is premature to draw conclusions about the implications of such borrowing. If the results of the tedious but essential work that remains to be done are convincing, reinterpretations of New Guinea prehistory and the connections between AN and Papuan languages can proceed on a firmer basis. If, after due consideration is given to the possibility of accidental resemblance, it is later demonstrated beyond reasonable doubt that specific TNGP languages now found far from any AN sources do indeed contain a number of AN loanwords, we can then proceed to try to explain their presence. The extremely interesting theories about sequences of settlement, contact, and migration proposed by Wurm, Laycock, Voorhoeve, and Dutton suggest one explanation (1975:947); Lynch (1981a:175) has proposed more dramatic ones; and other possibilities remain to be considered. Despite the enormous efforts of Wurm and his colleagues in recent years, the magnitude of the task they undertook ensured that as yet little can be stated with certainty. For the present, the tentative nature of suggestions about the influence of AN languages on the TNGP should continue to be stressed.

NOTES

1. Like other linguists who use wordlists as a basis for subgrouping, I too have often had to depend on some variant of the inspection method, but I have also had to revise conclusions based on it.
2. For examples, see Greenberg 1957:36.
3. For an example of particularly strict standards, see Greenberg 1957:37: 'Where the percentage of resemblance between languages is very high, say 20 per cent or more, some historic factor, whether borrowing or genetic relationship, must be assumed'.
4. Evidence of local development of the traits may also be used, comparable to the evidence derived in linguistics from historical reconstruction, as in Bloomfield's demonstration (1933:297) that Modern Greek mati and Malay mata *eye* are unrelated.
5. In Oceania, art historians have been particularly reluctant to accept the possibility of independent invention, but so have some anthropologists, especially those trained in the German culture-historical school. One of many examples is Barrow's insistence that Maori art is related to that of 'northern Melanesia' (1962:205-206), despite the lack of any evidence of contact between the two regions.

6. Interestingly, in discussing resemblances between words in languages linked by the hiri, Dutton does conclude that some resemblances are the result of chance; in one such case, involving the words for 'bad', I should be more inclined than he to assume borrowing. See Dutton 1982:81, 83.

7. Lynch accepts without comment one of the modified POC forms on that list, *maŋa ± t, though there is no justification for the final consonant in the POC reconstructions known to me and though, like the word for 'dog', maŋa *mouth* is only attested for EO.

8. Hooley points out (1971:84) that in Morobe, Papuan languages 'show apparent cognate percentages with the noncontinguous Austronesian languages of 0-3 [but] this is within the range which might be attributed to chance'.

9. I have been assured by a distinguished anthropologist working on the Gazelle that Tolai pap *dog* derives from English 'pup', and have also heard Europeans living in Polynesia state that puaka *pig* derives from English 'porker'.

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THE INTERACTION OF NATIONAL IDENTITY, CLASS AND PLURIGLOSSIA IN A PLURICENTRIC LANGUAGE

Michael Clyne

Through his publications and policy recommendations on the role of pidgins in a number of developing nations of the Pacific (e.g. Wurm 1966a, 1966b, 1973, 1977, 1982, Mühlhäusler, Wurm and Dutton 1979), Stephen Wurm has contributed substantially not only to language planning in those countries but also to the study of language and national identity and its implications in the Third World. In this paper, I shall turn to the continent of Wurm's birth and to German, one of his native languages and the language of his education. Having defined some of my terms, I shall discuss the status relationships between the national varieties of Standard German and the reasons for them, and then look at the sociolinguistic situation in three German-language countries. Finally I shall draw some comparison between the situations and briefly study the implications.

1. SOME DEFINITIONS

German is an example of what Kloss (1978:66-67) terms a *pluricentric* standard language, i.e. one with several standard varieties. Other examples of pluricentric languages are Arabic, Chinese, Dutch, English, French and Spanish, all of which have official status across national boundaries. Wurm (1977) pointed to the possibility of a standardised form of New Guinea Pidgin eventually becoming a pluricentric language covering the Solomon Islands and Vanuatu as well as Papua New Guinea.

Diglossia (Ferguson 1959, Fishman 1967) has become a very basic term in sociolinguistics to designate a language situation in which two different languages or varieties are functionally complementary, one (H, the 'high' variety) being used for written and more formal spoken purposes, the other (L, the 'low' variety) for ordinary interaction. In some societies, the functional specialisation involves three or more languages and is termed triglossia (e.g. Hoffmann 1979) or polyglossia (Platt and Weber 1980) accordingly. I am using 'pluriglossia' here to cover di-, tri- and polyglossia, since at least two of these occur in the societies I am describing. In so doing I am following the example of Nelde (e.g. in his series *Plurilingual*) who employs 'plurilingualism' as a collective term for bi-, tri- and multilingualism (cf. Kloss 1978:66) and apologise to any purists who might object to the combination of morphemes from two classic languages.

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Pauwels (1986) has distinguished between intralingual diglossia (between two varieties of the same language) and interlingual diglossia (between two different languages).

2. (STANDARD) GERMAN AS A PLURICENTRIC LANGUAGE

German is the mother tongue of over 94 million people divided among a number of countries and has de jure or de facto official status in six — the Federal Republic of Germany, the German Democratic Republic, Austria, Switzerland, Luxembourg, and Liechtenstein.[1] In each of these countries, it appears in a different form and with different functions, and in each of them, language is related to some aspect of nationhood, ethnicity, or identity conflict. After Russian, German is the language with the largest number of native speakers in Europe (Nelde 1984). Unlike English-, French- and Spanish-speaking nations, the six countries mentioned are adjacent. German is the only European language with official status in both east and west bloc nations.

The problem of whether German in the Federal Republic and in the GDR constitute two different national varieties is subject to ongoing controversy. It is closely linked with the debate on whether there are now two German nations, and the arguments have varied over time, according to the national allegiance of the author, and according to the linguistic criteria chosen (phonological/syntactic vs. lexicosemantic/pragmatic). (For summaries, see Hellmann 1978, Clyne 1984: 26-42). I will not enter into this discussion in the present article but restrict myself to Standard German in Austria, Switzerland, and Luxembourg and their status relationship to Standard German in the Germanies, taking into account the formal and functional relations between standard and non-standard varieties and the use of other languages.[2]

2.1 Linguistic markers of the national varieties

Each of the national varieties we shall be discussing is marked at the phonological, lexicosemantic, grammatical and pragmatic levels. Space does not permit me to list the distinctive features, but I refer the reader to Reiffenstein (1983, Austrian), Rupp (1983, Swiss) and Clyne (1984:10-14, Austrian; 1984:16-18, Swiss; 1984:21-23, Luxembourgian; and the references cited there).

2.2 The status of pluricentricity in the German-language countries

The pluricentricity of English is now more widely recognised than that of German. This is due largely to the 'emancipation' of American English through the economic and political power of the nation using it. However, much of the acceptance is a consequence of the devolution of the British Commonwealth and the growing importance of the 'New Englishes' (Strevens 1981, Kachru 1982, Pride 1982). Bostock (1986) has shown how the francophone nations — including those of Africa, the Middle East, the Pacific and the Caribbean — have formed supranational co-ordination organisations, some of which are concerned with language planning. However, there have been problems with the central role of France in the French language (Gordon 1978).

There are a number of reasons for the predominance of 'German-German'. These include the economic and political power of the two Germanies in east and west, and the population concentration in the Federal Republic (more than two-thirds

that of the total of the German-language countries). Most publishers, both central German language research institutes, and the two international institutes for teaching German as a second or foreign language are based in the Germanies. There is also potential for confusion insofar as many forms (grammatical, lexical, phonological) are common to Austria and/or Switzerland and to southern Germany. They are regional in the Federal Republic but standard in Austria and/or Switzerland, being used in radio and TV news, in newspapers, and in official documents. However, as they are non-standard in the Federal Republic, West Germans assume that this situation obtains also in the other countries. Up to recently, descriptions of German were strongly North- and Central German-biased. This applies both to dictionaries and normative handbooks (such as Duden and Siebs) and to treatises on 'special features of German in 'other' countries'. They regarded Standard German in Austria, Switzerland and Luxembourg as something 'exotic' and 'non-standard' from a 'German' viewpoint in much the same way as the German language in the U.S., Australia or Latin America (e.g. the *Duden-Beiträge* series). The term 'binnendeutsch' is widely employed to stress the centrality of 'German-German' in the German-language area (cf. Clyne 1984:4). This is the basis of a cultural cringe as well as of cultural imperialism.

Perhaps the most important concession towards the 'other' German-language countries has been the slow progress of spelling reform. The Wiesbadener Empfehlungen (1958) advocating, among other things, moderate minisculisation of nouns was accepted by the West and East German orthographical commission but initially rejected by the Swiss, while the Austrian commission deadlocked. Since then, attitudes towards spelling reform have fluctuated, but generally improved in Austria and Switzerland. As the class structures vary in the German-language countries, different pressure groups control decisions, and no consensus in favour of change will be achieved (Augst 1974, 1980, Nerius and Scharnhorst 1977, Mentrup 1984).

There have been some differences between East and West German scholars in their attitudes on national varieties. To emphasise the 'separateness' of the German language in the GDR, many scholars there tend to accept that there are four *nationalsprachliche Varianten* of the German language — those of the GDR, the Federal Republic, Austria, and Switzerland (e.g. Lerchner 1974 and various books in the *Sprache und Gesellschaft* series published in East Berlin). The Leipzig edition of the Deden records more Austrian standard items than the Mannheim edition (cf. Fenske 1973). However, few East German linguists have turned to Austrian or Swiss Standard German in their research.

In 1979 appeared the 35th edition of the official Austrian dictionary *(Österreichisches Wörterbuch)*. Unlike its 34 postwar predecessors, this edition had an aggressively 'Austrian look'. It departed from the earlier practice of recording 'the common German language', and incorporated many items of specifically Austrian vocabulary hitherto excluded from the dictionary, also asterisking 120 items felt to be German rather than Austrian. Dressler and Wodak (1982) summarise the objectives of the 35th edition of the *Österreichisches Wörterbuch* as separatist, solidarising, and standardising. The dictionary was strongly attacked in Austria on three main counts. There was criticism of the loss of the prescriptive function of the dictionary, a mixing of varieties or stylistic levels, and a covert policy of educational egalitarianism. Both progressive and conservative critics lament the threat to 'the common German language'. Finally the Vienna-centricity of the dictionary is seen as militating against the actual heterogeneity of Austrian German (for details, see Clyne 1985).

While both conservatism and a continuing (or revived) cultural cringe seem to characterise Austrian attitudes (Clyne 1985), a newly emerging tolerance in the Federal Republic is to be seen in the publication of a series of lectures held at the University of Marburg on four 'national varieties' of German under the title of *Tendenzen, Formen und Strukturen der deutschen Standardsprache nach 1945* (Reiffenstein, Rupp, Polenz and Korlén 1983).

2.3 Reasons for pluricentricity

The pluricentricity of Standard German is a product of the separate socio-cultural and political development of the German-language countries for part of European history. In the case of Austria, the most important factors have been the creation of an absolutist, highly bureaucratised state in the second half of the 18th century and the dissolution of the old Empire in 1806. While the codification of Standard German in Prussian-dominated post-1871 Germany was predominantly north-oriented, the multilingual, multicultural Austro-Hungarian Empire saw the usage in and around Vienna as normal. This feeling was strengthened by the creation of a highly mobile separate class of German-speaking bureaucrats and military officers. Following the German annexation of Austria (1938) and Austria's temporary postwar division among the allied powers, autonomous development was able to continue within the modern independent state, promulgated in 1955. Independence of direction reached its climax during a period of unparallelled economic prosperity and 'active neutrality' in international relations under Bruno Kreisky as Bundeskanzler (1970-83). This has been succeeded by a more conservative tendency.

The Swiss Confederation, established in the late 13th century, had become completely independent of any other German-speaking territory by 1648. With the later addition of non-German-speaking cantons, it became a multilingual nation based on the territorial principle of language distribution. Switzerland has consistently pursued a policy of political neutrality.

Luxembourg has, for centuries, enjoyed an intermediate position between the French and German spheres of influence in Western Europe. With the removal of its French-speaking territory in 1839, Luxembourg became a purely German-(actually Letzebuergesch-) speaking state (cf. below 3.3). Its efforts to differentiate itself from Germany were intensified as a result of German invasions in the two world wars and a reaction against the Germanisation policy of the Nazis. Luxembourg now has a strong attachment to the notion of Western European unity and to the European Community, acting as host to its parliament and several of its agencies.

3. ON THE SOCIOLINGUISTIC SITUATION IN EACH OF THE NATIONS

3.1 Austria

Austria is marked by a pronounced class structure and a clearcut urbal-rural differentiation, both of which are reflected in the distribution of standard and non-standard varieties. However, as in the Germanies and other European countries, there has been a decline in local dialects and an increased use of regional dialects that are closer to the standard language (cf. Reiffenstein 1977, 1983:20, Tatzreiter 1978, Hutterer 1978). There is no clearcut functional specialisation (Reiffenstein 1977) but rather code-switching between several varieties, especially in the lower middle class and in 'upwardly mobile'

speakers, and the young urban middle class have broken their elders' taboo on dialect speaking (Wodak-Leodolter and Dressler 1978). It should be stressed that this latter group are bidialectals, speaking both Standard and dialect. In common with other European countries, Austria had undergone a resurgence of regionalism and dialect use (Hoffmann 1981). There is a strong dialect literature, including drama (e.g. Bauer and Turrini) also utilised in concrete poetry (e.g. Jandl, Achleitner, Artmann, Rühm). Dialect is now used widely in political campaigns and in pop songs.

In Austria, the top of the continuum from non-standard to standard German is that variety that is closest to German Standard German. This resembles the relationship between Australian and British English. On the other hand, some of the most marked national forms of Austrian Standard German are also marked as regional (e.g. Viennese, Eastern Austrian) within Austria. Herein lie some of the problems which led to criticism of the 35th edition of the *Österreichisches Wörterbuch*. The most 'Austrian' forms are the ones that may be rejected by conservative members of the upper middle class as class-marked or non-standard, so that class-based conservativism may be instrumental in propagating a cultural cringe. During his period as chancellor, Kreisky developed a characteristically Austrian style of Socialism and Nationalism, which is reflected in the dictionary. Most Austrian writers publish in the Federal Republic, unashamedly using Austrian forms.[3] The concept of national identity is based on Vienna, the political and cultural centre, whose variety influences educated speech in the provincial cities of Graz, Linz, Salzburg, Innsbruck and Eisenstadt. This militates against regional identity in the more outlying constituent states and especially in Alemannic-speaking Vorarlberg, which is making bids for increased autonomy. Looking at language change in Burgenland from a social psychological viewpoint, Muhr (1981) found certain occupations (e.g. peasants, people in service industries) to be more prepared to move towards Standard German than others (e.g. factory workers, skilled tradesmen, white collar workers).

Apart from the lexicon, German in Austria is codified only through parenthetic markers in grammars and handbooks in one of the Germanies. West German economic domination of Austria, and especially West German tourism, are leading to an increase in the use of Germanisms in Austria (Wiesinger 1980) at the same time as nationalistic language planning in the dictionary and rising bidialectism among Standard speakers.

3.2 Switzerland

Standard German in Switzerland is basically a written code, hence the Swiss term *Schriftdeutsch*. The German-speaking part of Switzerland (covering 74% of Swiss citizens) is characterised by diglossia. Dialects are not class markers; they are regionally marked and used by the entire local population. Swiss-German dialects *(Schwyzertütsch)* exists only in the form of local and regional varieties, with urban varieties expanding in influence and a tendency towards bi- or polydialectism in rural areas (Ris 1979). Due to geographical mobility and the media, some levelling has occurred in the direction of Standard (Wolfsberger 1967), especially among the young and in interregional communication. Local dialects are tending to gravitate towards one of the three focal points, Zürich, Basel and Bern. Apart from some recommendations on spelling (Dieth 1938), no codification of dialect has taken place, grammars and textbooks being in a specific regional variety. Switzerland being a confederation of cantons, Swiss national identity is expressed in the first instance through local or regional identity, and this is reflected in language.

While dialect is the sole language of informal discourse of all classes, it is competence in Swiss Standard German that identifies people socially (Ris 1979: 48, 57). In 1957, a group of Swiss academics (Boesch et al 1957) devised norms for Swiss Standard German phonology aimed at a 'correct' German that sounds Swiss, but this statement of Swiss norms is out of print, and to my knowledge, has not been reprinted. There is also a Swiss *Schülerduden* for late primary and junior secondary classes which follows the norms of written Swiss Standard German (Schläpfer 1979). The German-speaking Swiss generally experience a feeling of inferiority as to their proficiency in Standard German (Boesch 1968: 226) although their Standard norms are better defined and more consciously observed than those in dialects (Keller 1973:144). The diglossic situation of German in Switzerland has led to French, the language of far fewer native speakers, generally becoming the prestige language and medium of communication between Swiss-French and Swiss-German speakers. An important feature of Swiss Standard German is the large component of lexical transfers from French, perhaps a reflection of the fact that German was never a language of cultural imperialism in Switzerland.

Standard German is employed as the main variety in the National Parliament, along with French and Italian, in classes of secondary and tertiary institutions, radio and TV, church services, the press, fiction literature for international consumption, and non-fiction literature. However, dialect is making inroads into *informal* speech spheres in *formal* domains, and even into *formal* speech. It is now used in: parliament, early primary education, some fiction literature, and increasingly in radio and TV (for some news broadcasts, women's and children's sessions, interviews and discussions, as well as regional radio programs, in which it was previously employed), weddings and informal evening church services, secondary and tertiary education (colloquia, working groups, practical classes, non-academic subjects, as well as general interaction and explanations), the armed forces (less formal situations), advertising, and formal speeches (Schwarzenbach 1969, Ris 1979, Rupp 1983). The increasing use of dialect in the past decade is, of course, not Swiss-specific, but it will be interesting to see if a diminution of the functions of Swiss Standard German will lead to an increase or a decline in its role as a marker of national identity.

3.3 Luxembourg

The mother tongue and language of everyday interactions of the entire population — apart from migrants — is Letzebuergesch, which is manifested in a collection of Middle Franconian dialects and a supraregional Letzebuergesch koine which is now the L1 of some sections of the upper and middle classes. The codification of, and development of functions for Letzebuergesch started in the 19th century, and it is far more standardised than Schwyzertütsch, with both a dictionary and a grammar of the 'national dialect'.

In addition to Letzebuergesch, the population acquires, through schooling, Standard German and French, which are assigned H functions. Although certain dialects of Letzebuergesch, e.g. Nordöstling, may be stigmatised according to the status of most of the speakers (Hoffmann 1981:15), all sections of the population in a particular area speak the same variety as a means of communication. The Koine is not given any superior status (Newton 1979:62).

The class structure is expressed through the selection of the H language in functions with language choices. The upper and middle classes, and especially

the intellectuals, prefer to use French and lower classes German for functions shared by the two languages. This is partly because German is the main language of primary education and partly because of its similarity to Letzebuergesch. This is no doubt the reason why the newspapers published in Luxembourg are predominantly in German. The group most likely to *write* Letzebuergesch are the intellectuals.

While there are clearcut *functions* of Letzebuergesch, Standard German, and French, few *domains* are now reserved for one language only. The street signs are in French, and the language of local non-fiction literature is German. The church languages are Letzebuergesch and German. Letzebuergesch and French are the languages of Parliament. Most of the debates take place in Letzebuergesch, but the authoritative wording of the laws passed is in French, while the proceedings of Parliament are consequently published bilingually. In the law courts, evidence is given in Letzebuergesch, the counsels speak French, and the language of the written verdict is Standard German (Hoffmann 1979). Leaving aside the Luxembourg editions of foreign French-language newspapers, the press is principally German, but with reports from some press agencies, especially of news from French-speaking countries, in French. Even the *Kurznachrichten* of the *Luxemburger Wort*, the country's largest daily newspaper, include items in French. The cultural section is mainly in French. Personal announcements from Luxembourg are in either Letzebuergesch or French, and advertisements in all three languages. There are now separate TV stations transmitting in French and German, while Radio Luxemburg broadcasts in all three (and some other) languages, for local and foreign consumption.

The medium of preschool is Letzebuergesch, that of primary education German, while secondary education is conducted in French. But in all classes, Letzebuergesch is used sometimes (Hoffmann 1979:43-49), and it is the language of interaction outside formal interaction. All three languages are taught as first languages at primary and secondary school, and it is school that makes trilinguals out of a basically monolingual, Letzebuergesch-speaking population (Hoffmann 1979). The conservatorium, teachers' college and 1st year university courses are conducted in French. There being no full university in Luxembourg, second and later year students study at the nearby University of Trier (Federal Republic) or at other German- or French-speaking foreign universities. There are three Luxembourgian literatures, one in each language (Hoffmann 1979: 65-107).

Private correspondence tends to be conducted in Standard German, except among those intellectuals who write in Letzebuergesch. French is the general language of local business and official correspondence, but members of the working class are more likely to use German when writing to government departments (Hoffmann 1979:55-65). The printed part of a business account is usually in French and the written part in Standard German.

The balance between Standard German and French is determined by social distance (degree of intimacy) and class (Hoffmann 1979). However, a movement called *Action letzebuergesch* has been campaigning for increased functions and use of Letzebuergesch, with some positive results in signs and correspondence. As can be seen from the above analysis, the L language has penetrated into H domains even more than in Switzerland. This, together with the sharing of the remaining H functions between French and Standard German, means that the latter is felt to be even more 'foreign' than in Switzerland, to the point where new Letzebuergesch words are transferred from French rather than from Standard German. Resentment against Germany has led to a taboo on the use of Standard

German for anything relating to either personal or national identification, such as birth, marriage or death notices, tombstone inscriptions, letterhead or street signs (Hoffmann 1979:59).

The question can then be asked whether Standard German as used in Luxembourg plays *any* part in national identity. Certainly it is Letzebuergesch through which Luxemburgers express their national identity. But it is their trilingualism (and the antithesis between French and German) that gives them their psychological guarantee of national independence and their strong European identification. While Letzebuergesch has been the object of language planning, Luxembourgian Standard German — which is mainly a written language, except in communication with Germans — has not been codified. But national identity is already expressed by 'not speaking the language like Germans', for the grammatical, lexical and phonological markers of Luxembourgian Standard German are due to either Letzebuergesch or French influence. Despite their high level of proficiency in both German and French, Luxemburgers tend to feel inferior about their ability to use these languages (Hoffmann 1979:46-48). Through their polyglossia (Letzebuergesch dialect, Letzebuergesch koine, Standard German, French), Luxemburgers can all express their regional (or local), national and European identity and distance themselves from their German neighbours. Of course, the complex language situation has been shaped by historical developments and economic necessity.

4. SOME COMPARISONS

A number of common themes have developed in this discussion of German as a pluricentric language. At the socioeconomic and social psychological levels, they are class, national identity and regional identity, and at the socio-linguistic level pluriglossia versus the standard-non-standard continuum.

4.1 National identity, class, and language variety

As we have seen, Austrian Standard German is codified in the lexicon in a controversial way and at other levels of language only to a limited extent. Upper and middle class is marked by a high level of Standard German, that variety closest to, but not identical with German Standard German.

Swiss Standard German is codified to some extent. While its degree of mastery is class-determined, its delineation from German Standard is a Swiss characteristic. The language situation in 'German-speaking Switzerland' is marked by diglossia and therefore a discontinuum between standard and non-standard, though functional specialisation according to *domains* is not completely rigid and stable. Dialect use is geographically and not socially marked.

Luxembourgian Standard German is not codified. Class is expressed through proficiency in, and preference for French rather than Standard German for certain H functions and, to a lesser extent, through the use of Koine as a home language and of written Letzebuergesch. National identity is characterised by Letzebuergesch in the first instance, trilingualism and triglossia in the second, and only in the third instance by Luxembourgian features in Standard German. Delineation from 'German German' in these three ways is crucial to the expression of national independence.

Thus, a conflict between national and class marking will occur only in Austria, due to the clash between status and ingroup solidarity (cf. Ryan and Giles 1982).

4.2 National identity, regionalism and language variety

While Austria has one important centre, Vienna, there are also a number of smaller ones and, in the absence of interregional language planning of a national variety, not only rural areas but also provincial capitals are affected by centrifugal developments. On the other hand, it is at the regional level that the most marked Austrian (i.e. non-German German) forms are to be found. They, being low on the standard-non-standard continuum, will be identified as 'lower class', especially by the older generation.

As Swiss national identity is embodied partly in local identities, dialect is of paramount importance to the nation, but Swiss Standard German is required as a marker of national identity to distinguish German-speaking Swiss from Germans, in the absence of a national dialect. The development of a national dialect is rendered unlikely by the existence of three equally important centres, Basel, Bern, and Zürich. With the emerging predominance of urban dialects over rural ones, there is a growing tendency towards polyglossia among country people.

Luxembourg has only one main centre, the capital. While some sections of the population there use the koine as their home variety, they have intralinguistic diglossia within the vernacular. Letzebuergesch is manifested in local and regional dialects with the koine as a general medium of communication. Luxembourgian Standard German is an additional instrument of divergence from German German.

It appears then that the only country with some conflict between regional and national identity is Austria, this being related to problems of regionalism and class on the one hand, and Viennacentricity on the other. However, it could be said that the concept of the Austrian nation has less unanimous support than the concepts of the Swiss and Luxembourgian nations. After all, Austria was part of Germany within living memory, and whatever may be the current official Austrian version of the Anschluss, the Austrian population at that time was not lacking in acclamation of this event. 'Being different to the Germans' is a widespread but not universal desire in Austria.

5. CLOSING REMARKS

The cultural cringe vis-a-vis Standard German is most prevalent in Austria, an officially monolingual nation, where there is no diglossia and where the overlap with German Standard German is greatest. It is least prevalent in Luxembourg, where the functions of Standard German are most limited due to triglossia and the planned development of Letzebuergesch. While the two Germanies, especially the Federal Republic, have pursued a policy of cultural imperialism, they are also less conservative in relation to regionalism and the incorporation of non-standard forms into standard and near-standard varieties. Due to pluri-glossia and the interaction of class, national variety and regionalism, the problems confronting the German national varieties of less powerful nations are different to those of their English-language counterparts.

Since Wurm's (1977) remarks on a possible inter-Pacific use of a standardised form of New Guinea Pidgin, the independent state of Vanuatu has developed its own variety of Pidgin into an official language. Wurm (1982:31) describes the more remotely related Solomon Islands Pidgin as 'the unofficial national language' of that country. On the other hand, no standardised form of New Guinea Pidgin has developed. But if a pluricentric Pacific pidgin were to be

developed as a 'link language' (lingua franca expressing regional supranational identity) it would require a great deal of collaborative planning, as Wurm (1977:354) foreshadows,[4] between the nations involved, to avoid the problems of cultural imperialism and cultural cringe, as we can attest from the example of the German language, different as the sociogeographical and sociolinguistic context may be.

NOTES

[1]German also has regional official status in Belgium and, at the time of writing, was one of the languages with official recognition in some domains (state schools, correspondence with bureaucracy) in Namibia.

[2]I will not include Liechtenstein in this survey. There has been little research on the sociolinguistic situation in the tiny principality (see Clyne 1984:18-19).

[3]The contemporary writer, Michael Scharang, told me that he uses the auxiliary sein with liegen, sitzen and stehen in his writings (as in Austrian) because haben (as in German) 'is wrong'.

[4]A similar plea comes from Alisjahbana (1976:124-125) for Indonesian/Malaysian.

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PHONETIC FEATURES OF THE MONGOLIAN SPOKEN BY THE MINOR BEIS TRIBE IN QINGHAI PROVINCE

Dob and Chaganhada
(Translated by: Mei W. Lee)

In the summer of 1983, the authors went to the Henan Mongolian Autonomous County in the south-eastern part of Qinghai province to collect data for the map of the Mongolian Dialects.[1] It is a place rarely visited by Chinese and other scholars of the Mongolian language. Very little is known to the world about the Mongolian people and their languages of this area. We believe this short article will be of interest to scholars of the Mongolian languages.

Henan Mongolian Autonomous County is under the jurisdiction of the Huangnan Tibetan Autonomous Prefecture. It is one of the major Mongolian settlements in Qinghai province. Geographically, the Henan Mongolian Autonomous county is surrounded by counties inhabited by Tibetans: Zêkog county to the north, Tongde county to the west, Luqu county of Gansu province to the east, and Maqu county of Gansu province to the south. As a result, most of the Henan Mongolian people have given up their native tongue and have become Tibetan speakers. The few exceptions can only speak the Mongolian language, but can no longer read the script. Tibetan is used throughout the county. Primary and secondary teaching is also carried out in Tibetan. The county has a population of 20,583 (1982 census), 18,076 are of Mongolian nationality, that is 87.82%.[2] The Mongolians who have retained their autochthonous language live mainly on the north bank of the Yellow River in the south-eastern part of the county, with most of them living in Xingsagoinba. These are nomadic people who wear Tibetan costumes but still live in Mongolian yurts. They number approximately 1,500 and belong to four brigades of the Koido commune (Machin, Chagan Us, Gyamkar and Koisu). They are the descendants of the former Minor Beis tribe (Qinghai Khoshut Section, Left Wing League of the Extreme Forward Banner, also known as the Henan Prince's Banner). In addition, the brigades of Gakê and Gaqên in the neighbouring commune of Sêrlung have about 350 Mongolian people who can speak their autochthonous language. These people are the descendants of the former Darmtsan Banner (Qinghai Khoshut section, Left Wing League of the Southern Left Middle Banner).

The history of the Mongolians in the Henan Mongolian Autonomous County can be traced back to the 17th century, up to which time these people grazed in the Urumqi region in Xinjiang province. In 1637, one of the four Oirats, the

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Khoshut chief, Thoripeihur, led his people into the great grassland in the vicinity of Qinghai Lake. In the mid-17th century, Thoripeihur's grandson Boshugtu Jinung also led his people southwards. After 20 years, they reached the area of today's Henan Mongolian Autonomous County. In 1725, the Qing dynasty implemented the League/Banner system among the Mongolians of Qinghai, grouping them into 29 banners of which 25 were to the north of the Yellow River, and four to its south. In 1823, the 29 banners were grouped into Left Wing and Right Wing Leagues; the four Henan banners belong to the Left Wing League. In 1929, at the time of the establishment of the Qinghai province, the four Henan banners became provincially-administered regions. In 1944, they became counties. In 1957, the Henan Mongolian Autonomous County was established. After the accession in 1850 of Prince Chunjin (the Seventh Generation Prince), the process of Tibetanisation was accelerated. However, Mongolian remained the official language until the early part of this century; for example, the 1903 population statistics reports were written in the Mongolian script.

Our linguistic data indicates that the Mongolian spoken by the Minor Beis tribe of the Henan Mongolian Autonomous County has the general characteristics of the Oirat dialect of the Mongolian language but possesses a few unique features. These unique features probably developed gradually after the Minor Beis tribe was separated from the main body of the Mongolian nationality and became surrounded by the Tibetans.

In what follows, we give a brief description of several of the peculiarities of Minor Beis Mongolian.

Table 1: The consonants of Minor Beis Mongolian

	d			g	
	t			k	
m	n			ŋ	
	l				
	r				
	s	ʃ	ɕ		χ
β			j		ʁ
	dz	dʒ			
	ts	tʃ			

Minor Beis Mongolian has 20 consonants. Among all the Mongolian dialects, the fricatives [β, ɕ, ʁ] are unique to the Minor Beis consonant system. A bilabial stop [b] occurs in all other Mongolian dialects, including Classical Mongolian; however, in Minor Beis Mongolian, there occurs only the voiced bilabial fricative [β], corresponding to [b] in other dialects and Classical Mongolian.

Table 2 shows some sound correspondences between Minor Beis Mongolian and the Torgut Vernacular of the Oirat Dialect, the Plain Blue Banner speech of the Chahar Vernacular of the Inner Mongolian Dialect, and Classical Mongolian.

Table 2

MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
βar	bar	bar	bars	*tiger*
βer	ber	bər	beri	*daughter-in-law*
βøs	bøs	bus	bös	*cloth*
βuχa	buχ	bɷx	buqa	*stud bull*
βʉgs	bøgs	boxs	bögse	*rump*
βɛr-	bær-	bɛr-	bari-	*to catch*
βaas	baasn	baas	bayasu	*turd*
βees	bees	biis	beyise	*prince of the fourth rank*
βoo-	boo-	bɔɔ-	boγo	*to bundle up*
βøør	bøør	boor	bögere	*kidney*
βuu	buu	bɷɷ	buu ∿ puu	*to snatch*
βɛɛ-	bææ-	bɛɛ-	bayi-	*to have*

Note that in Minor Beis Mongolian, [β] is never followed by the vowel i; words that begin with bi- in the Inner Mongolian Dialect or Classical Mongolian begin (with some exceptions) with βu- in Minor Beis Mongolian and with by- in Torgut.

Table 3

MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
βutʃ-	bytʃ-	bitʃ-	bičі-	*to write*
βutʃig	bytʃyg	bitʃig	bičig	*letter*
βulii	bylyy	biluu	bilegü	*whetstone*
βurii	byryy	birɷɷ	birayu	*yearling (bull)*
βoo	bii	bii	bi	*I* (nominative)

In other Mongolian dialects, medial and final [b] are often lenited to [β], as an allomorph of [b]. The weakened [b] has the same sound as in Minor Beis [β], but is written as [b]. The following table shows some examples with phonemic and phonetic transcriptions:

Table 4

MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
øβs	øbsn [øβsn]	obs [oβs]	ebesü	*grass*
teβer-	teber- [t'eβer]	təbər- [t'əβər]	teberi-	*to embrace*
xuβaa-	χubaa- [χuβa:]	xubaa- [xɷβa:]	qubiya-	*to distribute*

Table 4 continued ...

Table 4 continued ...

MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
taβ	tabun [t'aβun]	tab [t'aβ]	tabu	*five*
araβ	arban [arβan]	arab [araβ]	arba	*ten*
sɛraβtʃ	sarabtʃ [saraβtʃ']	sarabtʃ [saraβtʃ']	sarabči	*eaves*

In Classical Mongolian [ɣ] occurs only before back vowels, and [g] only before front vowels. However, in Minor Beis Mongolian, it is the voiced uvular fricative [ʁ] that corresponds to [ɣ] in Classical Mongolian, while other dialects have [g] or [ɢ]. For example:

Table 5

MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
ʁal	ɢal	gal	ɣal	*fire*
ʁadzar	ɢazar	gadʒir	ɣaǰar	*ground*
ʁots	ɢosn	gɷtal	ɣutul	*boots*
ʁol	ɢol	gɔl	ɣool	*river*
ʁural	ɢujir	gɷral	ɣuril	*flour*
ʁuj	ɢuj	gɷj	ɣuya	*leg*

The following are some examples of medial and final [ʁ] with phonetic and phonemic transcription and the correspondences in other dialects:

Table 6

MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
noʁoon	noɢaan [noʁa:n]	nɔgɔɔn [nɔɣɔ:n]	noɣoɣan	*green*
jaβʁan	jobɢun [joβʁun]	jabgan [jaβɣan]	yabaɣan	*to walk*
χutʃlaʁ	χutʃlaɢ [χutʃ'laʁ]	gɷtʃlag [gɷtʃ'laɣ]	qučilɣa	*a cover*
χuraʁ	χurɢun [χurʁun]	xɷrag [xɷraɣ]	quraɣa	*lamb*
tolʁoo	tolɢææ [t'olʁæ:]	tɔlgœœ [t'ɔlɣœ:]	toloɣai	*head*
daaʁ	daaɢn [da:ʁn]	daag [da:ɣ]	daɣa	*yearling (horse)*

Voiceless palatal fricative [ʃ], written as s(i) or š in Classical Mongolian, has, in Minor Beis Mongolian, become [ç] in initial position. For example:

Table 7

MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
çaβar	ʃabar	ʃabar	sibar	*mud*
çata-	ʃat-	ʃat-	sita-	*burning*
çar	ʃar	ʃar	sira	*yellow*
çɛnaʁ	ʃanɢa	ʃanag	sinaɣa	*spoon*
çin	ʃin	ʃin	sine	*new*
çiβʉg	ʃøbgø	ʃobog	sibüge	*awl*
çoroo	ʃorææ	ʃɔrɔɔ	siroi	*earth*
çʉd	ʃydn	ʃud	sidü	*tooth*
çʉrβʉs	ʃyrybsn	ʃorbos	sirbüsü	*tendon*
çees	ʃeesn	ʃəəs	sigesü	*urine*
çuu	ʃobuun	ʃobɔɔ	sibaɣu	*bird*
çyys	ʃyysyn	ʃuus	sigüsü	*juice*
çar	tsar	ʃar	šar	*bullock*
çaadzaŋ	ʃaazaŋ	ʃaadʒiŋ	šaɣaǰang	*porcelain bowl*

In other positions, [ʃ] remains in Minor Beis Mongolian. For example:

Table 8

MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
doχʃin	dogʃin	dɔxʃĩ	doɣsin	*formidable*
køgʃin	køgʃin	goxʃĩ	kögsin	*old man*
muʃiʁ-	moʃgi-	mɔʃig-	musqi-	*to pinch*
tʉʃ-	tyʃ-	duʃ-	tüsi-	*to support (prop up)*
geʃig-	iʃgi-	gəʃig-	giski-	*to trample*
umʃ-	umʃ-	ɔnʃ-	ungsi-	*to read*

Long and short vowels form a contrastive feature in Minor Beis Mongolian, as in other Mongolian dialects. There are eight each of the long and short vowels, and no diphthongs. The eight short vowels are as follows:

Unrounded: i, e, ɛ, a Rounded: ʉ, ø, u, o

The mid-vowel [ʉ] is rather unusual in the Mongolian language. It corresponds to [u] in the Chahar vernacular of the Inner Mongolian Dialect (represented by the Plain Blue Banner speech). The Plain Blue Banner [u] lies between [u] and [ʉ] and can be symbolised as [u^{+}]. The Minor Beis [ʉ] corresponds to [ü] in Classical Mongolian and [y] in Torgut of the Oirat Dialect. Moreover, the Minor Beis [ʉ] is pronounced with lax and slightly rounded lips, or rather, lips not very obviously rounded. The following are some examples:

Table 9				
MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
ʉs	ysyn	us	üsü	*hair*
βʉdii	bødyyn	buduũ	büdügün	*thick*
dʉlee	dylææ	dulii	dülei	*deaf*
tʉlee	tylæən	tuɭəə	tülege	*firewood*
nʉk	nykyn	nux	nüke	*cave*
sʉk	syk	sux	süke	*axe*
dzʉrk	zyrkyn	dʒurx	ǰirüke	*heart*
çʉls	ʃylsn	ʃuls	šilüsü	*saliva*
gʉdzee	gyzæən	gudʒəə	güjege	*rumen*
kʉdzii	kyzyyn	xudʒuu	küǰügüü	*neck*

The eight long vowels are:

Unrounded: ii, ee, ɛɛ, aa Rounded: yy, øø, uu, oo

The long vowel [yy] corresponds to the short vowel [ʉ], with the long vowel a bit more fronted. The following table shows the correspondences between the Minor Beis long vowel [yy] and the long vowels or diphthongs of other dialects and Classical Mongolian.

Table 10				
MINOR BEIS	TORGUT	PLAIN BLUE BANNER	CLASSICAL MONGOLIAN	
dʉr-	dyr-	dur-	dürü-	*to dip*
dyyr-	dyyr-	duur-	dügür-	*full*
sʉk	syk	sux	süke	*axe*
syyk	siik	syix	süike	*ear lobe*

Summary

The phonetic features of Minor Beis Mongolian can be summed up as follows:

1. Stops [b] and [g] have weakened to voiced fricatives [β] and [ʁ].

2. Initial [ʃ] has become [ç].

3. Long front vowel [yy] corresponds to short mid-vowel [ʉ] though [yy] is more fronted.

NOTES

[1]The Map of the Mongolian Dialects is one of the maps in the Language Atlas of China — a joint project of the Chinese Academy of Social Sciences and the Australian Academy of Humanities. Professor Wurm is the Australian editor general of the Atlas, and we have the honour of co-operating with him. We offer this article to commemorate his retirement.

[2]The total area of this county is 9,000km^2. At 3,000-3,600m above sea level, this mountainous region is sparsely populated 2.2 persons per km^2).

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GETTING THINGS TAPED IN WESTERN NEW SOUTH WALES

Tamsin Donaldson

In 1961 a research conference was held which led to the founding of the Australian Institute of Aboriginal Studies. W.E.H. Stanner ended his introduction to its published proceedings with the words:

> ...only a few years remain in which to bring together,
> as best we can, our new respect for the native Australians
> and the preservation for posterity — theirs and ours —
> of a true and competent record of their way of life
> (Stanner and Shiels 1963:xviii).

In the same volume, Stephen Wurm addressed the 'question of the prospects of filling the great gaps in our knowledge of the Australian languages', concentrating on showing how 'the elapsing of time darkens these prospects at an alarming rate' (Stanner and Shiels 1963:136-7). A table assesses linguistic research accomplished in New South Wales in terms of (the mostly scant) information secured about the structure and vocabulary of particular languages. The table has a column listing recordings, from which we may learn that by 1961, fifteen minutes of Ngeumba, Waljwan and Wiradjuri had been preserved on tape.

These recordings include some collected by Stephen Wurm himself in 1955, which are the earliest for this language group held in the sound archive of the A.I.A.S. (LA 2895). (A wax cylinder recording of a 'Nge:mba crow song' collected by Norman Tindale in Brewarrina in 1933, and listed in Moyle (1966:25) has not survived.) Made in the early, expensive days of tape-recording technology, they consist of sets of closely related elicited sentences designed to salvage, as first priority, comparative information on basic structural matters. Wurm's economical method was first to transcribe forms elicited from the speaker he was working with; then to note (in shorthand) the speaker's own back-translations of the forms; and finally to use (a selection of) the speaker's translations to elicit the material he recorded, switching off the recorder between each item so as not to record the stimulus sentences. At this stage he also made occasional adjustments to this earlier transcriptions and added occasional marginal comments in shorthand. In the early seventies I was given a freshly taped version of the shorthand translations and comments, along with a copy of the field notes. As a linguistics student in the School of General Studies at A.N.U., I had been awarded an A.I.A.S. grant, to learn the 'detailed information' which, Wurm had argued a decade earlier, might 'still be obtained... if linguists were given the time and opportunity to undertake the necessary lengthy fieldwork' (Stanner and Shiels 1963:138).

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The language I studied with the last generation who grew up speaking it as their mother tongue is the Wangaaypuwan variety of Ngiyampaa, not the Wayilwan variety recorded by Wurm as both Ngeumba and Waljwan (Donaldson 1980)[1]. In the now more than 30 years since Stephen Wurm travelled in central and western New South Wales with his tape-recorder, Aboriginal people in the area have indeed made a dramatic shift to English. As predicted by the founders of the A.I.A.S., posterity *will* have to rely on records for an understanding of how their ancestral languages used to be. But something less easy to envisage then was how cheap and commonplace domestic tape-recording equipment was to become, and how the last generation of speakers would exploit it to creat 'true and competent' records of their own, in the light of their own priorities.

What follows is an excerpt from a cassette lent to me in 1986 so that a copy could be placed for safe-keeping in the A.I.A.S. sound archive (LA 9732). It was made a couple of years earlier by two Wangaaypuwan speakers of Ngiyampaa, the late Eva Longmore, and Mamie King, an approximate contemporary of Stephen Wurm, who grew up with both Ngiyampaa and English. A great-niece without knowledge of the language, Cheryl Pope, is operating the recorder. Their aim is to record themselves 'talking up' in Ngiyampaa, without switching to English. So they take themselves on an imaginary hunting trip, along with a few relatives. They dig for rabbits, track porcupine, get hungry, make a dinner camp and so on, all the time talking animatedly to enact the scene, except when pausing for inspiration or a laugh. This episode comes soon after M.K. has asked the recorder operator 'Nearly finish?' and got the reply 'Na, that lil tiny bit there, see, that much there'. The translations are mine, and do not necessarily reflect their style of English accurately.

E.L. kalaay=lii yana-y-aali-y-aka
again=1NOM+DU *go*-CM-*AGAIN*-CM-IRR
We might go (out) again.

parrima-puwan=lii yana-kirri
gun-COMIT=1NOM+DU *go*-PURP
Let's go with guns.

M.K. [yɛ] parrima=ntu-kal kaa-wa-y-aka
yeah *gun*=2NOM-PL *carry-MOVING*-CM-IRR
Yeah, you'll carry the gun along.

[ən] thuutimpa-ra-kilaalay=ntu kirrpatya, ngurruy [ɔ] yurraapat
and *shoot*-PRES-*MAYBE*=2NOM *grey kangaroo* *emu* *or* *rabbit*
And you shoot a kangaroo maybe, an emu or a rabbit.

E.L. ngina-laa Mamie
this+ABS-EST
This one here, Mamie!

kurrukun-paa wakapa-ra
cow/bull-ASSERT *run*-PRES
The bull is on the run.

M.K. wityu-waa=lii ma-l-aka
how-EXCLAM=1NOM+DU *do*-CM-IRR
What'll we do?

thaayng-kila-kaa=ni wakapa-ra
this way-HYPOTH-IGNOR=3ABS+VIS *run*-PRES
Perhaps he's running this way!

kupa-l-aka=ngiyanikii=yu
chase-CM-IRR=*we*+PL+OBL=3ERG
He might chase us!

E.L. mirri=yu kupa-ra
dog=3ERG *chase*-PRES
He's chasing the dog!

M.K. Ngathu ngityi kukurr-i walka-kirri
I+NOM *this*+CIRC *tree*-CIRC *climb*-PURP
I'm going to climb into this tree.

E.L. ngintu walka-tha, ngathu ngini-laa wara-pi-y-aka
you+NOM *climb*-IMP *I*+NOM *here*+LOC-EST *stand-BEHIND*-CM-IRR
You climb, I'll stop back (down) here.

wakapa-ra=thu [raʊn ən raʊn]
run-PRES=1NOM *round and round*
I'm running, round and round.

When the cassette is turned over onto the second side, E.L. comments, 'We was goin good there!' The remark has a resonance beyond its immediate purpose.

NOTES

1. Except when following sources, I use the practical orthography devised for the community's Ngiyampaa Alphabet (Johnson et al 1982), which avoids the phonetic symbols used in Donaldson (1980). For the conventions followed in marking enclitic and other morpheme boundaries in text and analytic glossing, and for the upper case glosses, see Donaldson (1980:xxii-xxvi).

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"SUCCESSFUL INTERCOURSE WAS HAD WITH THE NATIVES": ASPECTS OF EUROPEAN CONTACT METHODS IN THE PACIFIC

Tom Dutton

1. INTRODUCTION[1]

When Europeans began expanding their interests into the Pacific they did not know that they were entering one of the linguistically most complex areas of the world[2] where it would not be possible to use languages that they were already familiar with to obtain information from the people they came in contact with or to explain to them the purpose of their coming. Instead they were forced to rely on non-verbal means of communication (just as they had been forced to in other parts of the world) until they could learn some local language or until some lingua franca, such as a pidginised form of their own language, developed to serve this purpose.[3] Although few details are ever given of just what was involved in the exercise of making contact with islanders and others in the Pacific for the first time (for example, what techniques they used to indicate friendly intentions and what set of signs or gestures they used to effect communication with anyone they met) the general impression given by those Europeans involved is that their contacts were always successful, or, as they put it, they always had "successful intercourse with the natives". Because this claim and the methods used to achieve it are relevant to a number of fields of inquiry (e.g. the history of race relations in the Pacific, the origin and development of pidgin languages, human ethology) and have not been examined before,[4] I should like to take this opportunity to look briefly and somewhat impressionistically, for want of better data, at them. In doing so I shall focus on the set of strategies, methods and conventions that I believe were part of the collective European frontier wisdom that was continually being added to as European travellers and explorers spread out across the globe. Although these strategies, methods and conventions did not exist as any kind of handy guidebook-like set, I believe they were none the less real. In short they existed as pieces of advice and practical suggestions about what to do and not to do in different contact situations, about the meaning of common signs and gestures used by 'natives', and about the racial characteristics of different groups of people and similar things, in the descriptions of experiences in books and oral stories by those who had been through them. As such they incorporated general attitudes and opinions about the nature of Man and the place of Europeans in the world at the time, overlaid with personal prejudices. They were, moreover, passed on from one traveller and explorer to another not only in books and other written materials, but also orally amongst ships' companies and around waterfronts and campfires of every frontier settlement.

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Even so each frontiersperson was an individual and each contact situation was to some extent novel, so that the use made of any set of principles, however formally or informally they may have been transmitted, must naturally have varied according to the circumstances, the individual's sensitivity, his experience, and the conditions operating at the time. For these reasons also the use of these principles did not necessarily guarantee peaceful contact. Nor did they apply everywhere equally at all times. Rather they applied mainly only on first contact, where Europeans were essentially forced by their own drives to survive and to find out what they could about the peoples and area being contacted, for whatever future gain they might have in mind. After this initial contact had been made, however, new elements and considerations entered the picture as contactor and contacted began to find out more about each other. Then undeclared war was usually the result as the European began to dispossess to contacted of land and other resources.[5] On the other hand it does not necessarily exclude the kind of contact which ended in kidnapping, for to kidnap a person one generally had to entice him (or her) near enough to capture.[6]

It is the purpose of this paper to set down what appear to me to be the most important of those strategies, methods and conventions that were part of the collective European wisdom of frontier living so far as these are revealed in the literature that has been looked at to this point. The account is therefore selective and to some extent generalised in that it does not claim to include all evidence. This is to be regretted but because it stems mainly from observations made incidentally while pursuing research into the history of pidgin English and other languages of the south-west Pacific, and not from any conscious effort to research the topic systematically it cannot be avoided. It is, moreover, unfortunate that the description is based solely on one side of the contact picture - the European side. Any further investigation should seek to overcome these biases wherever possible.

2. METHODS AND CONVENTIONS

In any given contact situation making the right kind of first contact was crucial if subsequent contact was not to be inhibited or prejudiced in any way. The ideal was to make contact in such a way that subsequent ones could trade on the goodwill generated, as well as on the spread of information about that event amongst related, or nearby communities, and on the willingness of those contacted to act as guides and contact persons in the future. It is logical therefore to begin with the first contact situation before proceeding to subsequent ones.

2.1 Initial contact

The set of methods and conventions used in this situation can be divided into a number of subsets corresponding to the several stages in the contacting process: those required, or useful, at some distance; those required at close quarters; and those required for breaking-off contact, for departing and getting away again. Taking these in turn:

2.1.1 Contact at a distance

The main problem for Europeans approaching indigenous residents of the Pacific (as elsewhere) for the first time was to try to establish as soon as possible, and preferably at a safe distance, how they were likely to be received at close quarters. The normal human reaction to approaching strangers is to be apprehensive and, as a result, to either take up aggressive poses or to run away; and Europeans knew that if those they were approaching ran away it would generally be difficult to persuade them to come back. On the other hand, if they stood their ground, however aggressively, the task was to reassure them sufficiently to get into closer contact with them. At this point then one would be looking for a number of signs that indicated friendly intentions.

One of the most widespread of these was the use of 'green branches' (that is, ones with leaves on).[7] But this signal alone was not usually sufficient to entice one into closer contact, for one did not know if this method of signalling was being used merely to decoy one into a trap or ambush. Thus Jukes (1847) (referred to in Goode 1977:144) notes, for example, that at Goaribari Island in the Gulf of Papua the islanders switched from open attack to cunning after sailors on HMS *Fly* had fired on them and probably killed several of them, by waving green branches as a sign of peace and displaying shell ornaments which they hoped would tempt the British sailors ashore. This sort of situation is also graphically illustrated in the drawing from Wawn 1893:258, reproduced as Plate 1 below.

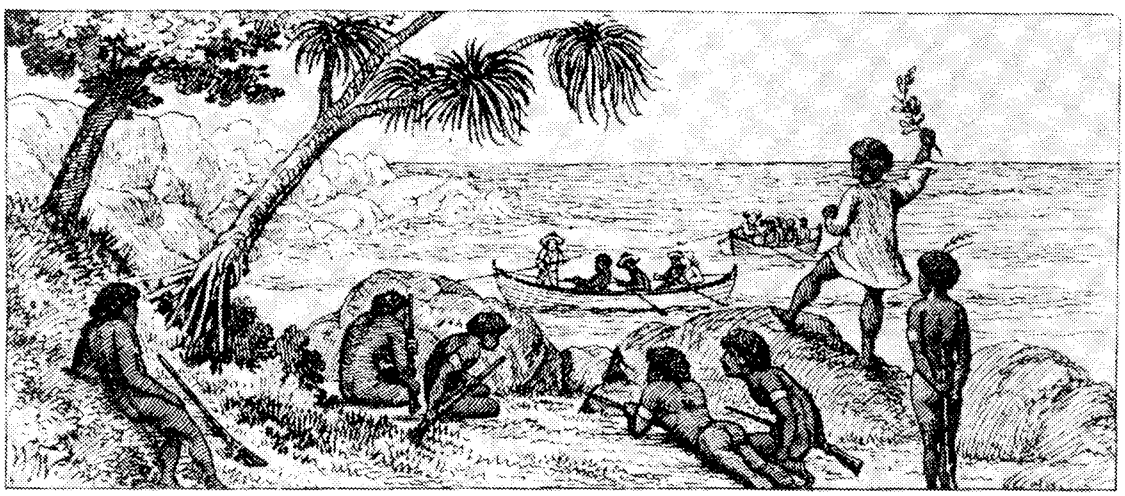


Plate 1: European recruiters being lured into an ambush by Islanders waving a green branch

Consequently one usually looked for other signs of the real intentions of the wavers of the branches. And here one of the best indicators of peace and trust was the presence of women and children.[8] Conversely, the absence of women and children was a bad sign, indicating uncertainty, fear, and perhaps (though not necessarily) antagonism. Where women and children were not present, spears and other offensive weapons were usually prominently displayed and held in more or

less aggressive ways to indicate wariness, aggression, rejection and/or unfriendliness. Chalmers (1887:117) claimed, for example, that "the sharp ends down means peace and friendship, if pointed outwards it means fight". Spears and arrows were also often stuck in the ground in obvious locations as warning signs to unwanted visitors. Thus Hope (1979:117), for example, notes that "on the north side [of the river] they found an arrow sticking point out of the bank, said to be a defiant sign from Foi-i". On the other hand broken weapons were sometimes used to indicate peaceful intentions. For example, Hope (1979:70) refers to a ceremonial house in the Gulf of Papua in the early days of Government contact being closed at both ends by a framework on which rested broken arrows and bows, and an assortment of the heads of birds, pigs, and other animals. It was said to be a message saying that the Erimuri had done nothing against the Government.

2.1.2 Contact at close quarters

Once, as D'Albertis (1880:245) noted,[9] mutual curiosity had been satisfied and the parties had approached to within reasonable talking distance the next step was to "endeavour to make friends with them through the medium of small presents, and then ... to explain by signs the object of coming".[10] Normally those being contacted could not be coaxed near enough for presents to be handed directly to them, so that various devices were resorted to to achieve this end. Presents[11] were either left conspicuously in a certain place and the givers withdrew to a reasonable distance to allow them to be collected without fear, or they were floated down to the recipients, attached to sticks or floats of some kind.[12] That these presents were to be accepted as presents was presumably indicated by appropriate gestures or by using green leaves to wrap them in (Hope 1979:123). Sometimes a native could be induced to accompany the strangers back to their boat or base and there, as McFarlane, the first London Missionary Society missionary in the Torres Straits, admits: "not knowing the way to his heart through his ear, we took the familiar road through his stomach by giving him a good dinner, then made him a few small presents, and sent him away rejoicing" (1888:32).

During the present-giving stage it was also important to try to identify a 'chief', or someone else who, by his bearing or some other feature, looked to the European intruder as if he carried some authority and who would therefore be useful in 'smoothing the way' for him by spreading news about him and getting others to treat him as a friend.[13] Although this plainly made good diplomatic sense and was based on experience in Africa and Polynesia, it was more difficult to practice and less certain in effect in the south-west Pacific, for many of the societies there do not have all-powerful chiefs. Instead, authority is usually vested in a number of persons, normally the older male members, who have proven abilities in certain areas of endeavour, such as warfare, gardening, and ritual for example. Moreover, this authority is not inherited and does not extend beyond the local residence group. Nevertheless once a certain trust had been achieved by the present-giving performance this initial success needed to be capitalised on quickly. To do this there were a number of other general principles to bring into play.

One of these was to go straight up to the apparent 'chief' or person picked out as being in authority and hold out one's hand in a handshake manner for the 'chief' to accept it. Alternatively that person was forcibly taken by the hand and his hand shaken or he was either gently embraced or his cheeks were rubbed

gently as a sign of peaceful intentions. But one had to be careful in the performance of these acts not to appear violent or to pose any kind of physical threat to the 'chief's' person, for tension was still high at this stage, and any sudden movement might be interpreted as a threat and bring a violent reaction from those assembled. The essential principle was to be "bold yet gentle" (Bruce 1894:7). By the same token one had to be prepared for challenges guaranteed to make the faint-hearted shrink. Jukes (1847), for example, describes how while at Goaribari Island in the Gulf of Papua in 1845 (where the famous London Missionary Society missionary James Chalmers was later killed by the islanders (Langmore 1974)) he was "talking very earnestly to one canoe, one of its crew presented his bow [at him] and drew the arrow to the head" and when Jukes stooped to reach for his gun the man burst into a laugh as if mocking him for shrinking (quoted in Goode 1974:144). Miklouchо-Maclay, the Russian scientist who was the first to contact the peoples in the Astrolabe Bay area of Papua New Guinea reports a similar experience in the early days of his residence amongst the peoples of that area in 1871 (Miklouchо-Maclay 1975:32), except that two arrows were fired past him in quick succession.[14] The illustration in Plate 2, which also first appeard in Wawn 1893:92, shows the sort of situation one could easily find oneself in:

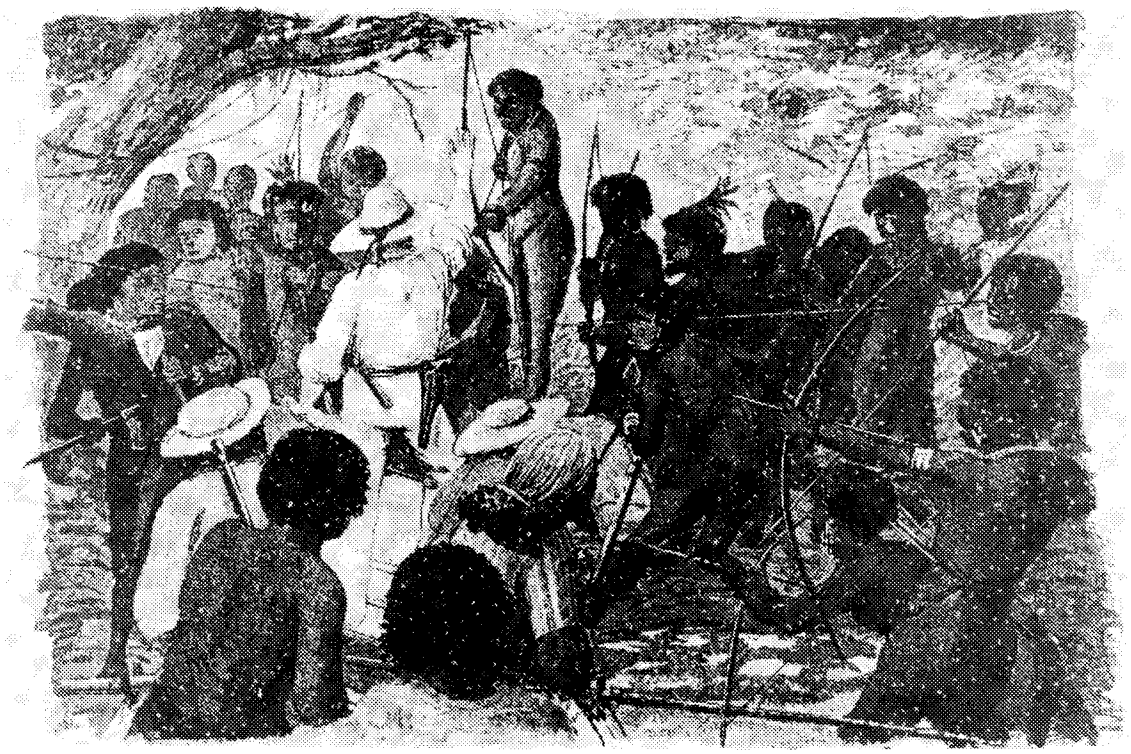


Plate 2: An unnerving experience

Other general principles to observe in the actual physical contact stage were "not to hold too intimate intercourse with the natives" (Goldie 1886:no page number), not to inspect them too carefully (Miklouchо-Maclay 1975:38), "not to speak much to one another and on no account make signs [to one another in one's

own party] of any kind" as "a laugh, a word, a sign, may be looked upon by the natives as unfriendly" (Chalmers 1887:118), not to spend too much time with them on the first occasion[15] and "above all ... keep their women at a distance" (Goldie:op.cit.).[16] It was also imperative that one should never let those being contacted for the first time get behind one for as the London Missionary Society missionary McFarlane (1888:34) explained, "the temptation [to hit one or kill one] to a savage who is walking behind you with a club or tomahawk on his shoulder is often very great".[17] And if one were making contact on land from a ship (which was generally the case in initial contact in the Pacific) one should "never leave the ship and go ashore if there were no natives around the ship trading". However, if one did go ashore one kept a weather eye on the activity around the ship and "departed as soon as this ceased" (Chalmers and Wyatt-Gill 1885:58). At the same time it was important to have a boat at the ready for a quick get-away and it was common practice amongst so-called 'black-birders' or labour recruiters involved in the Labour Trade to Queensland and other plantation areas in the 19th century to back their boats into the beach and have men covering those on shore with a gun and to be ready to pull away at a moment's notice (Scarr 1973:240-241).

Meanwhile the important and central task of the whole contact exercise was, as indicated above, to try to explain by means of signs or gestures one's needs and the reason for one's coming. One of the very few descriptions of how this was done is given by Captain Wallis who discovered Tahiti in 1767 (Carrington 1948:137):

> They seemed all very peaceable for some time, and we made signs to them, to bring of Hogs, Fowls, and fruit and showd them coarse cloath Knives, sheers Beeds Ribons etc, and made them understand that we was willing to barter with them, the method we took to make them Understand what we wanted was this, some of the men Grunted and Cryd lyke a Hogg then pointed to the shore - oythers crowd Lyke cocks to make them understand that we wanted fowls, this the natives of the country understood and Grunted and Crowd the same as our people, and pointed to the shore and made signs that they would bring off some - We then made signs for them to go into their canoes and to bring us off what things we wanted - they observed what we meant and some went in their canoes ....

In theory the number of signs used was only restricted by the inventiveness of those using them and the ability of those being addressed with them to understand them. In practice, however, the number of such signs must have been restricted to a small set of easily made relatively unambiguous ones such as those used to refer to the chief participants and their basic needs, activities and the like. The following were probably the most common:[18]

(a) hunger and thirst; food and water; eating and drinking. This was usually indicated by pointing to the mouth or moving the hand towards the mouth with thumb and fingers collected together as if holding something, and by rubbing the belly. Drinking was indicated by making scooping actions with the hand towards the mouth and swallowing as if one were dipping water from a stream and drinking it.

(b) coming and going. This was indicated by large arm movements beginning with the self and moving away or vice versa. The command 'come here' was indicated by using beckoning motions with the hand either turned up or down. The command

'go away' was made with a vigorous movement of the arm away from the body with elbow held high and appropriate facial grimace.

(c) transport. This was indicated by pointing or acting out walking or other movements.

(d) accommodation. This was indicated by acting out sitting and lying down.

(e) locations (here, there, a long way away). This was indicated by pointing.

(f) persons (I, you, we (you and I), he, she, it). This was indicated by pointing or touching.

(g) wood for fuel or timber. This was indicated by chopping action made with the hand.

(h) counting. This was indicated by using fingers (which in the Pacific are generally turned down, rather than stood up, as in English).

(i) sexual relations. This was indicated by moving the outstretched index finger of one hand back and forth inside a circle made by the index finger and thumb of the other hand.

(j) power. This was usually demonstrated by firing a gun at some object (usually a shield) to show the power of penetration of the projectile and its range of effectiveness. As a result the word for *gun* or *to fire a gun* in many south-west Pacific island languages is some form of pou *(= bang)*.

(k) agreement or disagreement. This was indicated by moving the head up and down (as in English) and smiling, or shaking it from side to side respectively.

Presumably also these movements were made with accompanying language and this was presumably how Pidgin English in its various forms began in the south-west Pacific. It is interesting to speculate about what sort of an effect these gestures may have had on the form of those pidgins and hence on their basic similarities and differences. Le Page raised this interesting question some years ago in a general way when he pointed out:

> Gestural language is normally employed to complement verbal syntax in a contact situation, and behind the gestural language there may be some kind of generally recognized linear sequences, e.g. of subject-predicate, subject-predicate-complement. It may therefore be a universal of behaviour in a contact situation that the syntax of signs exercises pressure on the syntax of the emergent pidgin.
>
> (Le Page 1977:229)

2.1.3 Breaking off contact

If peaceful contact had been achieved there was apparently usually no problem about breaking off contact and getting away again. At least this aspect of contact is hardly ever mentioned in the literature. As a result there is no particular set of guidelines or conventions to cover this case except that it seems that the hand was waved in the usual European manner as a parting gesture once close quarters contact had been broken. The only time getting away is mentioned is when something goes wrong and the indigenous inhabitants have to be frightened off or intimidated to allow the European to escape. Here the use of a variety of noise creating and/or potentially destructive and lethal devices was resorted to.

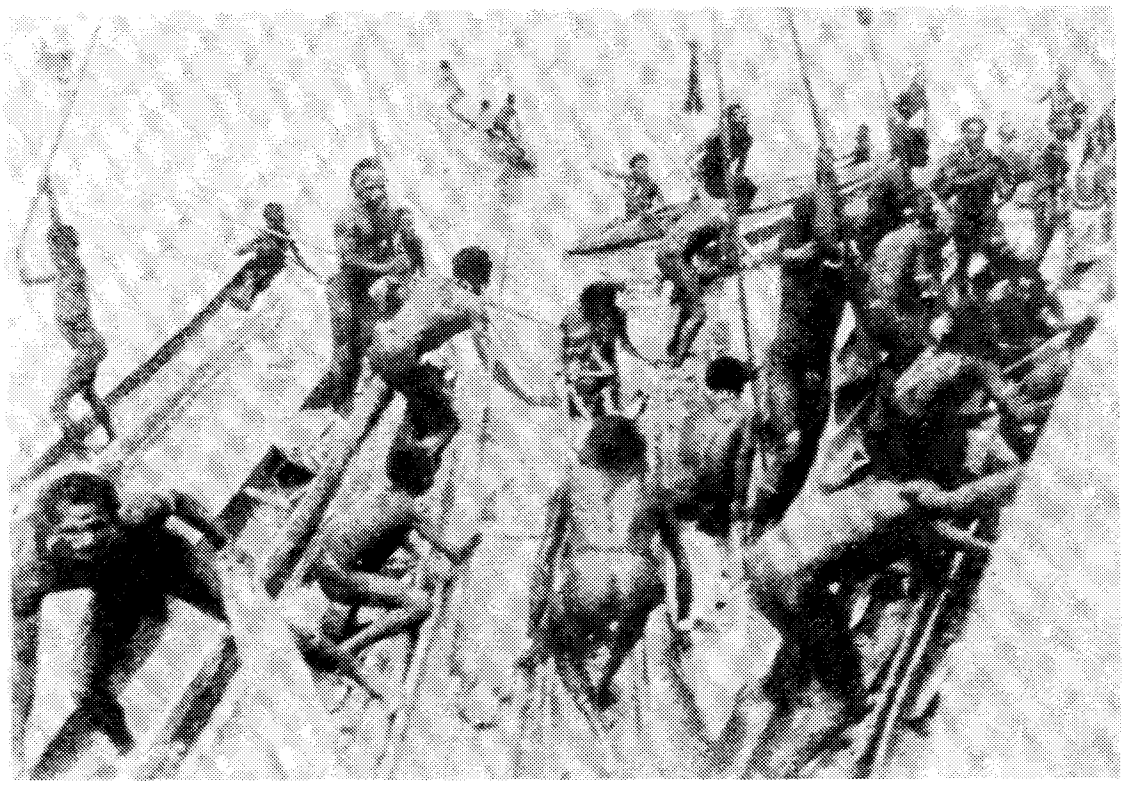


Plate 3: Europeans often used steam whistles and other devices to frighten 'natives' in contact situations

Particularly effective, readily available and yet non-harmful was the steam whistle (as graphically shown in Plate 3, taken from Behrmann 1922:36; see also Wirz 1928:306-307,309,311; Bruce 1894:7; Hope 1979:6,7). More violent, dangerous and devastating were fireworks, firearms and dynamite, the latter of which could be made into mines to protect an established position (Goode 1977:75,148; Miklouchо-Mackay 1975:24) or thrown or floated downstream as lethal bombs (Goode 1977:151). Normally, and unless lives were at stake, shots fired from rifles and/or ships guns were generally sufficient to frighten off offending 'natives' (Carrington, ed. 1948:137,138; Goode 1977:75 and passim; Hope 1979:1; Romilly 1887:235-236). In extreme cases, or through panic, lives were lost. On other occasions sleights of hand (Peron 1908:218) or seemingly magic substances or materials like alcohol, matches, electricity, false teeth, gloves, and boots, were employed to instil awe and a certain amount of fear into audiences. But as Romilly (1887:236) rightly observed, this often served "to frighten the people, and make them distrustful, or even hostile" and that was not in the best interests of the intruding European in the long run.[19] Even so, one thing one did not do was carry off so-called 'curiosities', or wantonly destroy personal possessions or other goods; for, as Governor MacGregor pointed out, these were "to their native owners neither more nor less than the family jewels and heirlooms" (MacGregor 1889:243). If something was taken for some purpose it was imperative to leave some compensation in the form of trade goods behind.

2.2 Subsequent contact

Once contact had been made successfully in one area it was generally easier to make contact in neighbouring ones. It was especially easier if news of the first successful contact had spread and/or if it was possible to take someone from the first contact area along as guide, envoy and interpreter even if he/she could not communicate with anyone in his/her own or some other language. However, the usual practice for those who knew they would be coming back to an area was to kidnap a man or boy and take him away for a period of residence and 'education' in the white man's society. He could then be used as an envoy and 'interpreter' on the return visit. In other cases persons who more or less attached themselves to their new white 'friends' (Abel n.d.:115) were encouraged to accompany the 'master' back to his headquarters. Thus, for example, kidnapping was the normal method of recruitment in the early days of the Labour Trade to Queensland when few Pacific Islanders knew any contact language (Corris 1973). Subsequently, some of the labourers could be, and were, then used as interpreters for recruiting. Kidnapping of a kind was also used for obtaining Government interpreters later in British New Guinea in the early years of colonisation there.[20] The missionaries Murray and McFarlane apparently also resorted to this method in an attempt to establish first contact with the coastal peoples of Redscar Bay west of Port Moresby (Murray and McFarlane 1871:86). Elsewhere the normal practice was to take someone who claimed to know the people and/or area proposed to be visited, or someone, who, because of his cultural background, was expected to be of use. So, for example, in the Torres Straits Warrior Islanders were used by Macleay to contact linguistically related Papuans on the mainland of Papua New Guinea (Granger 1978:73), and Chalmers took Motu traders with him on his travels east and west of Port Moresby (Bruce 1894:6; Abel n.d.: 155; Stone 1880:126). But in the south-west Pacific this method was not generally practical because of the fragmented linguistic situation, unless one happened, by accident, to have established a base amongst peoples who had extensive trading contacts with others in the area and/or whose languages were more or less closely related. The London Missionary Society was particularly lucky in this regard in their early expansion in British New Guinea when they happened to establish their first mission amongst the Motu, who, because of their trading connections were known along several hundred kilometres of coast west, and to a lesser extent east, of their location around what is now Port Moresby. Chalmers, as already noted, the London Missionary Society missionary who became famous for his exploratory work in British New Guinea, successfully used this system to extend the mission's influence around the Gulf of Papua (Abel n.d.:155-160; Chalmers 1880:1; Langmore 1974). D'Albertis likewise used the wife of a London Missionary Society missionary to make his plans of exploring part of the Roro area known to the people:

> The wife of the LMS teacher, who knows the language at Port Moresby, succeeded in making herself partly understood by the natives, and was of service to me by acquainting them that it was my intention to visit the villages of the mainland, and above all, to ascend the river which runs into the bay. (D'Albertis 1880:165)

But if things did not work out so favourably, because it was not possible to find the right people to act as guides and interpreters, it was a case of making do with whatever was available and hoping for the best. For example, when Flinders went to explore Moreton Bay in Queensland in 1799 he took an Aboriginal named Bongaree from Broken Bay north of Sydney with him as an envoy and possible interpreter. But although Bongaree was unable to communicate with his

compatriots he was undoubtedly better able to "deal with them in a manner which few if any white man could do" as Murray and McFarlane (1871:40-41) noted of their own attempts to do something similar later on in British New Guinea waters.[21] This was so because of his skin colour and general cultural similarity. And this ability to deal successfully with those of a similar background proved to be the case generally, although it did not guarantee safety.[22] In addition, one could modify one's behaviour in accordance with those cultural aspects learned from the first contact.

2.3 The question of 'successful intercourse with the natives'

No account of the contact methods and conventions discussed herein can be complete without some evaluation of the claims of success or otherwise achieved in the application of them to peaceful contact. From one point of view any contact in which Europeans actually met Pacific Islanders or Australian Aborigines was successful in European eyes provided the person (or persons) involved was able to escape with his life, irrespective of whether those contacted may have suffered injuries and/or loss of life in the process. As implied by the above account there were many factors that determined whether a given contact would be successful or not in these terms. Not the least of these was the kind of persons involved and the purpose and timing of the contact.[23] Methods and conventions are only as good as the manner in which they are employed and it was commonplace in the south-west Pacific for others to suffer as a result of some earlier person infringing these in some way. Thus, for example, Murray (1925: 36) points out that when Sir William MacGregor visited the Bamu River area of western British New Guinea in the late 1880s the people there were still "hostile and disinclined to make peace" because of the way in which they had been treated by Mr Jukes, the naturalist on HMS *Fly*, some 45 years earlier.

But from another point of view, notably that of explaining to those contacted who had never seen a white man before and possibly never ever heard of him, what he was and what he wanted, few contacts could be regarded as successful despite the claims of most participants. This is evident from the statements of those who were on the receiving end of European attempts to make themselves understood. Thus, for example, labourers who were interviewed before the Royal Commission into their kidnapping from what is now the Milne Bay Province of Papua New Guinea in 1883 show that they did not understand at all what the white recruiter meant when he asked them to go to work in Queensland for three years, even though in some cases interpreters of sorts were available.[24] Elsewhere in the south-west Pacific the situation was worse. Holthouse (1969:22), for example, describes the situation in these terms:

> Lacking interpreters for the countless native languages of Melanesia, the recruiters resorted to pantomime, often of the sketchiest kind. To indicate to the kanakas that they were being engaged to work for three years, the expression 'three yam' was used - supposed to be the time taken to grow three crops of yams. Reduced to pantomime it often came down to showing the native a yam and holding up three fingers. The agreement - if there was one - was signed by the native with a thumb print.

This lack of communication is also evident in the spate of land claims that developed in Papua New Guinea, for example, after the Second World War, when descendants of those who originally 'sold' land to the first European settlers

claimed that the land had not been legally acquired, despite the fact that their own language (which was a far superior channel of communication than the system of gestures and signs being discussed here) had been used for the transaction.[25]

The basic reason why the set of gestures used in early contact could not possibly serve the many and varied functions required of them was, of course, that they were too limited in expressive power. Being but substitutes for language they could at best only convey very elementary meanings and ideas and at worst lead to confusion: if it had been otherwise there would not have been any need for Europeans to learn local languages or for pidgin languages to develop to bridge the communication gap. The complex concepts underlying Christian religion, land ownership, labouring on distant plantations, transportation and the like, which lay behind the Europeans' reasons for venturing into the south-west Pacific, are difficult enough to explain in any normal language, let alone in a set of severely restricted physical gestures. That is not to say, however, that the gestures used did not serve admirably for explaining elementary needs, intentions, etc. as they obviously did, as Hewes (1974) has pointed out. But of course these 'descriptions' are a far cry from the main reasons for European expansion into the Pacific, and the white man was clearly hoodwinking himself if he claimed he had "successful intercourse with the natives" at this level.

3. CONCLUSION

The best that can probably be said is that the methods and conventions used by Europeans in making first contact with people of the south-west Pacific were a useful if crude substitute for a real human language. But in the circumstances there was nothing else that could be done, and the fact that any communication took place at all is remarkable, and says a lot for human adaptability and ingenuity. But to claim that this system allowed them to have "successful intercourse with the natives", and buy land and do other things involving complex European concepts, is overstating the case, and can at best be read as no more than that they were able to introduce themselves and make their presence known without losing their lives. The proper examination of their real purpose in coming to disturb the life of their new 'friends' had to wait until they had some better system of communication available, and even then it was not always successful.

As a set of principles for survival on the frontiers of contact, however, they could not be bettered, as they had grown up out of the (sometimes bitter) experiences of those who came back to tell the tale. Unfortunately, however, they inevitably encapsulated certain prevalent ideas about Pacific Islanders and others as being treacherous, timid, child-like, inferior, etc. which, doubly unfortunately, remained to become associated with the pidgin Englishes that developed to supersede them, and whose general structure may owe much more to them than is commonly realised.

NOTES

[1]This is a revised version of a paper presented to a departmental seminar in the Department of Linguistics, Research School of Pacific Studies, The Australian National University in 1982. I should like to thank Dr A. Kendon particularly for his helpful comments on that paper and for drawing my attention to Hewes'

1974 paper, as well as to a number of other useful works. I alone am responsible for the present form and content of this paper, however.

[2]This area includes about a thousand languages altogether. These belong to three main unrelated types - Australian Aboriginal, Austronesian and non-Austronesian (Wurm and Hattori, eds 1982 and references therein).

[3]Pidgin languages may develop very quickly - within a few days or even hours if the circumstances are right - but unless there is some reinforcement through continued contact or new contacts in which the same language is used they may die just as quickly.

[4]This is really only a half-truth, for Hewes (1974) covers somewhat the same ground as the present paper does. However, his focus is on a different aspect, the human ethology side of first contact or the underlying universality of greeting gestures. Thus he examines a large number of accounts given by early European explorers and travellers of their contact experiences in the New World, Africa and the Pacific. As a result he concludes that despite some misunderstandings, exaggerated claims, and differences in cultural backgrounds human beings from widely separated parts of the globe were able to "regularly transcend the limitations of their particular cultural backgrounds and language systems and exchange information with each other by means of gestural signs" (p.1). The present paper is not meant to challenge Hewes' conclusions (although, as will be indicated later, I am skeptical of European claims of "successful intercourse"), but rather seeks to draw attention to other factors, especially ever-increasing frontier knowledge, as also important in helping Europeans make whatever friendly contacts they did make. Presumably such knowledge gradually came to include that of the sorts of gestures and signals used by those contacted for friendly greeting within their own cultures, most of which, as we now know (Eibl-Eibesfeldt 1977), are near universal, e.g. head tosses, eyebrow-flashes, hand shaking.

[5]For some idea of the nature of this war in Australia see Skinner 1975, Laurie 1959, Evans and Walker 1977, and Loos 1982 for example, and in some of the south-west Pacific islands Holthouse 1979 and Corris 1974.

[6]Sometimes Pacific Islanders and Australian Aborigines were chased and caught if they could not be coaxed into contact (Corris 1974:26-27).

[7]This method of signalling friendly intentions seems to have been extremely widespread in the Pacific, being reported in different parts of Australia by Bennett (1927:60,63), Evans (1975:71), Evans and Walker (1977:42), Peron (1908:72), and Reynolds (1978:13), Papua New Guinea by Bevan (1890:191), Chalmers 1887:117), Goode (1977:144), Hope (1979:123), MacGregor (1890:273), and other parts of the Pacific by Carrington, ed. (1948:139) and Shineberg (1971:33) for example. The reason why green branches were so widely used for this purpose presumably derives from the fact that they were not only, as Firth (1973:322) points out, extensions of the arm, but also the most naturally occurring and readily available means of extending the arm to magnify the size of a greeting wave. Not only that but they were, because of their suppleness and leafiness, the very antithesis of spears and other weapons which, because of their shape and function, symbolise aggression, rejection and unfriendliness. Note, however, that green branches were used in Pacific cultures, and still are, in other ways to signal other intentions, e.g. when laid across a path or in and around gardens or other objects they represent taboo signs (Hope 1979:17).

[8]This is implied or stated directly in Moresby 1876:152, D'Albertis 1880:252, and Grimshaw 1911:232 for example.

[9]D'Albertis himself is not to be held up as a shining example of peaceful European penetration of the Pacific (Goode 1977; Granger 1978; D'Albertis 1880). The results of his high-handed actions and those of others at first contact were visited on later comers (Murray 1925:36).

[10]The explanation was not, presumably, carried out in silence but was accompanied by talking even though this was not understood. This combination provided the input from one side for the development of a pidgin language replacement, however.

[11]The presents normally included one or more of the following: red-coloured calico usually called "turkey red", coloured beads, mirrors, tomahawks, hoop iron, fishhooks and tobacco. This is not to say, however, that these presents were seen as such by the contacted. It is an interesting theoretical question as to what makes present-giving under first contact situations recognisable as such, or indeed, if it is recognised as such.

[12]See Bevan 1890:191, Chalmers and Wyatt-Gill 1885:58, and Hope 1979:5 for example.

[13]Romilly (1887:235) makes a good point when he points out that some Europeans "do not see the use of making presents and getting nothing in return, quite losing sight of the fact that it is permission to travel quietly through the country which is bought".

[14]Miklоucho-Maclay eventually disarmed the people around him on that occasion simply by going to sleep amongst them (1975:33). He had the advantage, however, of having been in the area for ten days and, although he had not previously been in that village, his presence in the area was known.

[15]The reasoning behind this principle was explained by Chalmers to Abel in 1894 in the following way:

> We must get aboard as quickly as we can. Ten minutes of this strain is as much as these people can stand. My plan for a first visit ... is to arrive, make friends and get away before the people realize what has happened .... After we are gone they can think calmly about us; and next time we shall come amongst friends. (Abel n.d.:160)

[16]This latter was particularly wise advice because many Europeans (but especially traders) antagonised their new 'friends' and lost their lives as a result of molesting and/or taking away women by one means or another.

[17]On one of his exploratory trips along the coast of British New Guinea the missionary Chalmers describes how he was worried on one occasion by someone walking behind him with a club and he was forced to snatch it off the owner during a temporary diversion (Chalmers and Wyatt-Gill 1885:60). Prophetically Chalmers was later clubbed to death on Goaribari Island (Langmore 1974:111) where the inhabitants had been fired on (some are thought to have been killed) by sailors of HMS *Fly* in 1845,as already noted.

[18]This list is based on comments made in Chalmers 1887, Goldie 1886, Goode 1977, Haddon 1910, and Miklоucho-Maclay 1975 and by my own observations in Papua New Guinea in the 1950s.

[19]Andrew Goldie, one of the first Europeans in what later became Port Moresby, and an experienced frontiersman, emphasised this also in a press statement made for intending visitors to what was then British New Guinea. This statement also included some of the principles being described in this paper (Goldie 1886:no page number).

[20]For example, Morton (1896:70), the Resident Magistrate for the Eastern Division reports bringing "a small boy" back from Collingwood Bay to his station "so that when he returned home he would be able to act as an interpreter". Other references to this are to be found in Barton 1903, Grimshaw 1911:47, and Humphries 1934:160 for example. This practice was also common in Australia (Bennett 1927:57-58).

[21]Murray and McFarlane took an islander named Iae whose qualifications and background they described as follows (1871:40-41):

> He gives his full name as Joseph John but he goes by the name of Iae. He is a native of Nukualofa, an island of the Tongan group - the Friendly Island of Cook. He has been away from his native land for thirty years or more and during that time he has made an extensive acquaintance with both the civilized and the heathen world. At the time of the Crimean War he was in an English Man-of-War, and for nearly four years he was connected with the British Navy. He resided in London for a time, and he has been to Sydney again and again. He has a very extensive island experience especially well is he acquainted with the islands of Torres Straits and the Papuan Gulph and his acquaintance extends moreover to many parts of the coast of the mainland of New Guinea.

[22]Thus, for example, Flinders was attacked on Bribie Island (Collins 1792), and Chalmers of the London Missionary Society was killed on Goaribari Island, even though he had a 'chief' and native teachers with him from the linguistically distantly related area of Kiwai (Langmore 1974:105-106).

[23]Another factor that may have also been important was the religious beliefs and practices of those being contacted. Many European explorers and travellers claim to have been received on first contact as ancestors or gods, and in one famous case the participant lost his life because, for religious reasons, his reception on first arrival was in complete and inexplicable (to him) contrast with his subsequent one. This was Captain Cook.

By coincidence Cook first landed in Hawaii in 1778 just as the carnival season of *Mahiki* was beginning. This was the season of the God Lono "in which there was no war or sacrifice ... no taboos that if broken would bring death" (Dening 1974). Cook was hailed as Lono and treated with due friendliness and deference. This treatment continued until he came to leave, which, by coincidence again, was on the very day that the carnival season of *Mahiki* came to an end. Ten days later Cook was forced to return unexpectedly to make repairs to his ship. Unbeknown to him this was now the season of *Ku*, the season of earthly beings, of life and death, of power struggles, competition and violence, and Cook was surprised to find that the mood of the islanders had changed dramatically in the intervening short period. They were no longer warm and indulgent, but decidedly unfriendly and hostile, and Cook and his sailors soon became involved in clashes with them. One incident led to another until Cook was finally murdered on the beach, together with five of his seamen, without apparently being able to understand the reasons for the seemingly contradictory behaviour on the part of the islanders.

Clearly Hawaiian religious beliefs and practices were very important in this case. How often they were just as important in other cases is not known as there are few relevant records, but it is engaging to ponder.

[24]The proceedings of this commission appear as "Royal Commission on Recruiting Polynesian Labourers in New Guinea and Adjacent Islands" in *The Queensland Parliamentary Papers: Journal of the Legislative Council*, vol.35, part 1, 1885.

[25]Oram (1976:175-177) refers to some of these disputes, although he does not discuss the language used. However, this can be established on other evidence which need not be gone into here.

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LMS = London Missionary Society
Mf = Microfilm

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PROTO-AUSTRONESIAN D_5?

Isidore Dyen and Shigeru Tsuchida

The number of Proto-Austronesian phonemes associated with a voiced apical articulation is quite surprising. It is perhaps even more surprising to find another such phoneme. The evidence, though highly limited, appears nevertheless to present a good prima facie case. However rather than proceed immediately to the installation of another phonemic term, we have assigned the new phoneme the designation *D_5. The reason for hesitating to assign a new term is that there remains an outside chance that *D_5 is the same as the *N that has already been reconstructed. In some instances of correspondences otherwise assignable to *N, all dialects of Sediq exhibit l, and in others all or some dialects present d. We will assign the latter correspondence to D_5. [For the correspondences assigned to D_1 through D_4, see Tsuchida 1976.] The following are examples of such correspondences for which Sediq exhibits only l, the correspondence being assigned to *N:

PAN paNa[sθ], Aty, Sed malah *to warm, roast*, Mal panas *warm, hot*, To ma-fana *warmth*.

PAN paNiD, AtySqSkMx pali?, Sed palic, Sai palir, Paz pa-palit, Bun pani?, Itb panid, Sng panide?, Bipi (Admiralty Is.) pani- *wing*.

PAN CaNeq, AtySq slaq, AtySkMx claq, SedTd cəlaq, SedTr səla?, SedIn səlaq (all preceding Aty and Sed have M:*e-a/a-e), AtyMs sala? (M: e-a/a-e and A: a/e or less probably only A: a/e) *mud*, Mal tanah *earth*.

PHN [tT]aNam, AtySqMsSk t-m-alam, AtyMx t-um-alam, AtyPl t-um-alaŋ, Sed t-m-alaŋ, Kan ku-a-tanáme?, Sar m-aku-a-talame?, Tso oo-thomɨ, Bun tanam-un, Ami mi-tanam (A: n/l); Paz mu-talam, Sai šan-talam, Kvl talam (Dissimilation: l/n before m), Itb taxam (Dissimilation: x from l/n before m) *to taste*.

The following are a number of appealing etymologies in which Sediq presents an intervocalic d in correspondences otherwise the same as those taken to reflect *N, and here assigned to D_5:

PHN Q_2aD_5up, AtySqMs q-m-alup, AtySk ?-m-alup, AtyMxw q-um-alup, Sed m-aduk (in some dialects with affix dup-i, dup-un), Kan -?anúpu?, Sar -a?alupu?, RukBd -álupu, RukMg -lúpu, RukTo -alúpu, RukMn alupu, Pai -qalup, Puy -Halup, Ami -qalup, Ilk -qanup *to hunt*.

PAN Q_2aD_5i?, AtySq qali-yan, Sed (not SedPr) di-an, SedPr ?di-an, Bun qani?-an *day, daytime*, Puy kara-Ha-Hali? *lunch*, kar-Hali-yan *lunchtime, noon*; and *[dZ]a-Q_2aD_5i?, RukMg k-dali, RukMn ku-dali *lunch*, RukMn

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ta-ʔini-ku-dali-dali-e, Tso co-hz-ona *noon*, Kan caʔáni-aʔ *daytime*, Paz daaliʔ *day*, daali-an *daytime, noon*, Chm haʔani *day, daytime*, Roro rani, Nala lani *day*.

PAN [sθ]iD$_5$aR, Sed hidaw *sun*, Tag si:nag *ray (of light)*, Mal sinar *light, ray*, Saa sinel-i *illuminate, shine on*.

PFN S$_2$uReD$_5$aʔ, Aty hla-qiy, Sed hudaʔ, Pai sula, Puy ʔurelaʔ, RukMn uʔula, ʔula (A: u/e), Kan eréna ʔ (A: e/u), Sar urulaʔ (A: u/e), Tso ruho (A: u/e), Tha ʔulðaʔ, Kvl surnaʔ, Sai hä-holäʔ *snow, ice*. [AmiS suʔlaʔ, Paz ha-helaʔ *snow, ice* offer difficulties that do not affect the discussion here.]

PAtc CeqeD$_5$iq, AtySq squliq, AtyMx cuquliq, Sed sediq, (dialectal) sʔediq *person*.

On the basis of the preceding comparisons it appears attractive to attribute a correspondence containing Aty l and Sed d to *D$_5$ and to conclude that the Atayal l is an innovated articulation, whereas the articulation of Sed d could be ultimately either a retention or an innovation, but is presumably a retention at least within Atayalic.

There are instances however in which some Sediq dialects exhibit l rather than d where other Sediq dialects exhibit d, as in the following:

PHN qeD$_5$eb, AtySqSk q-m-luʔ, AtyMs ʔ-am-aluʔ, AtyMx q-um-luʔ, AtyPl ʔ-un-luʔ, SedTn m-eluk (leb-i), SedTrIn m-əduk, Pai -qelev, Puy Helev, RukTa -elébe, RukBd -elebe, RukMg ɨlf̀bɨ, RukTo -elébe, RukMn eleve, Kan pi-ʔéneveʔ, Sar paaŋ-eleveʔ, Ami mi-qlev, Itb qa-qnev-an *to close, shut*.

Since Sediq and Atayal are very closely related and in fact may even still constitute a chain of dialects, it is conceivable that dialectal borrowing occurred at some time in the past when forms with l rather than d could be borrowed easily into Sediq territory. Thus SedTr m-eluk (leb-i) *to close, shut* and other Sediq words with the l-reflex would represent the spread of a word with the l-reflex into Sediq territory from the Atayal dialectal area at a time before final *b became Aty ʔ and Sed k. Similar examples of such a spread can be found in the following:

PHN [tT]aD$_5$iuD$_{24}$, AtySq tliuʔ, AtySqSk tluiʔ (M: ui/iu), SedTn tdiyuc, SedTrIn kliyuc (partial Dissimilation: k/t), Puy taliyuz, TukTaBd taliúDu, Kan tanícucuʔ, Sar taliusuʔ, Tso tahzucu, Itb tañud *mulberry*. SedTd tliyuq *mulberry* suggests an l-dialect source in which final *D$_{24}$ became q.

PHN baD$_5$aR, AtyMx balag, SedBuHu balaw, SedSkSoSw b-balaw, SedTnGl badaw, SedPr b-badaw, Pai vala, RukMg bláa, Kan vanáreʔ, Sar valareʔ, Tso fkorɨ, Bun banal *a thorny vine, Smilax china*, Ilk banag *Smilax bracteata*, Tgb banag *Smilax leucophylla*. The last vowel of RukMn valau *Smilax china* offers difficulties to being associated with the preceding.

The fact that the distribution of the l-reflex and the d-reflex do not coincide in the two etymologies above agrees with the hypothesis that we are dealing with differences of dialectal spread, i.e. dialectal borrowing.

As a consequence it becomes attractive to interpret such instances as the following as indicating a spread of a word with the l-reflex into Sediq territory even in the absence of a specifiable Atayal source: such an interpretation would be based on the supplementary hypothesis that the source word appeared in

an unrecorded l-dialect or had disappeared from a recorded l-dialect after it spread into Sediq territory. Instances of this type follow:

SedBu tŋlaq (Dissimilative loss: Ø/l), SedSw lŋdaq, SedHu tlŋdaq *mountain leech.*

SedTn ladiŋ, SedGlPr laliŋ *fishhook.*

On the other hand there is no difficulty with interpreting such instances as the following for which no instance of an l-reflex is reported from a Sediq dialect:

*maD$_5$at, SedTn s-madac, SedGlPr sl-madac *sword*, Sai malat *knife.*

*buD$_5$uq, AtyMx tu-buluq, AtySq m-buluq, SedBuHuTnGl m-budu?, SedPr budu? *blind.*

*muD$_5$u?, SedHuTnGlPr mudu? *orange*, Kvl mulu? *pomelo.*

Thus far only one instance has appeared of an initial correspondence like the medial one attributed to *D_5. It is the following:

PHN D$_5$a, Aty la, Sed da, Tag na *already.*

This comparison is however not without some apparent difficulties. The difficulties do not include the appearance of Png la *already*, for Aty la clearly must first be taken with the Sed da because of the closer relationship of Atayal and Sediq. The same can be said of considering the association of Klg, Ibl, Msk, TbwK da *already*, for here similarly the Atayalic relationship takes precedence.

There are three instances of Aty l in initial correspondence with Sediq d in all reported dialects in cognate sets restricted to Atayalic:

*D$_5$a?us, AtyInoue laus-an, AtyNgungupa laus-ay, SedGl p-daus, SedPr p-da?us *dragonfly.*

*D$_5$udug, AtySq ll-iw, AtyMxw rulug (M: r-l/l-r), SedBuSkSoPr dudux, SedSkRaSoSwHuTnGl ludux *treetop, bamboo-top.* (The doublets (dudux, ludux) in SedSk and SedSo strengthen the hypothesis of dialect borrowing.)

*D$_5$uLas/D$_5$-aR-uLas, AtyMxSq lu-hiy, AtyMihuman luyas, SedBuSkSoSwHu dauras *cliff.*

In two other instances there are indications of l-dialect penetrations into Sediq dialects, where no proper l-dialect forms can be cited:

SedSkRaSoPr lutuc, SedSw dutuc *relatives.*

SedSw dhŋay, SedBKHu lhŋay *maize.*

In spite of the evidence above associating the initial correspondence of Aty l and Sed d with n in extra-Formosan cognates one can hardly escape considering instances in which other extra-Formosan reflexes appear. We shall associate these reflexes with *D_5 nevertheless. The single instance follows; in it l appears in all languages with the exception of West Seram Coast:

PHN D$_5$esuŋ, Aty luhuŋ, Sed duhuŋ, Sai lohoŋ, Paz luzuŋ, Puy lusuŋ, RukTaBd luuŋu?, Tso suhŋu (M: s-h/h-s), Bun nusuŋ, Tag lusoŋ (all preceding languages

have A: u/e), Mal ləsoŋ, Ttm ləsuŋ, West Seram Coast desuŋ, Kvl insuŋ (from *qa-lsuŋ), Ilk qa-lsuŋ *mortar*.

The identification of this correspondence as $*D_5$ explains the uniform appearance of d in all Sediq dialects and l in Atayal dialects. However the appearance of initial l in the extra-Formosan languages instead of the otherwise anticipated n could be explained in two ways: (1) l is the regular initial reflex of $*D_5$ in those languages as is d in West Seram Coast; (2) l appears instead of n from $*D_5$ as a result of dissimilation against the final *ŋ in the extra-Formosan languages other than West Seram Coast where d is the regular reflex.

The reconstruction of $*D_5$esuŋ with l-reflexes in both Formosan extra-Formosan languages permits the continued assignment of initial *N to the following despite the absence of a Sediq cognate:

PHN Na[tT]aD, RukTa latáde, RukBd látaDe, RukMn latade, Sai latar *outside*, Bik na:tad *front space*.

PHN NaCeŋ, Kan natéŋe?, Sar lateŋe?, RukBd láceŋe, RukMg lcáŋə, RukTo lacéŋe, Pai laceŋ, Ami lateŋ, Ilk, Itb nateŋ *vegetables*, RukMn laceŋe, Ivt nateŋ *Solanum nigrum*, Bik natuŋ *taro, taro-leaves*.

PAN Nuka?, Kan nuúka?, Tso h?o-h?o, RukMg ma-lku-lkáa, Bun nuka? *tumor*, Ami luka?, Itb nuka *wound*, Paz luka? *scab*, BM nuka *skin eruption, scabies*, Pau nua *itch, scabies*, To ma-nuka *killed (of chief, sovereign)*, Sam ma-nu?a *wounded*. Mal luka *wounded*, TBt luha, ma-luha *lightly wounded, split apart, perforated* are taken to have l by dissimilation against the nasal of the prefix which appears in Toba-Batak, but is presumed to have occurred also in the history of the Malay word: i.e. Mal luka is by back-formation from a *ma-luka.

In only one instance thus far does a Sediq dialect present an initial l for a correspondence assignable to PAN l:

PHN libu?, Aty, SedTrIn libu? *den, nest*, Kan niívu?, Sar livu?u?, RukBd líbu, RukMg libúu, RukTo libú, RukMn livu, Pai livu, Sai libu? *wild pig's grass-lined den*, Biak niw *pig's lair*.

Although there is enough evidence here to infer an initial *l, SedTnTd tibu? *den, nest* suggest that this initial l should perhaps be regarded as having been in alternation with *t and that our reconstruction presents the alternant with *l whereas SedTnTd tibu? present the alternant with *t. If that be so, it would not be surprising if the l in reflexes assigned to $*D_5$esuŋ likewise represented an *l alternant, and it would then follow that the basis for inferring an initial $*D_5$ in this case would be the fact that Sediq d in correspondence with Aty l can be regarded as unambiguous for $*D_5$.

The case for such an alternation is somewhat strengthened by the fact that it could also explain the following comparisons, which would be taken to result from an alternation between *C and something that yielded l in Atayalic:

*Cabu?, AtySq s-m-abu?, AtySk c-m-abu?, AtyMxPl c-um-abu?, Sed l-m-abu?, Pai -cavu *to wrap*.

PAN $CumaS_2$, AtySq sum-iq, AtyMs sumi?, AtySkMx lum-iq, AtyPl lum-i?, SedTnTd cum-iq, SedTr sum-i?, SedIn sum-iq, Sai sumäh *body louse*, Itb tumah *a kind of tick or flea*, Mal tuma *clothes louse*, To tuma *louse*.

The hypothesis of such an alternation in PAN or PHN would not find the n reflex in Tag na *already*, an obstacle in view of the fact that the word involved is a particle and most likely an enclitic so that its initial could reasonably be attributed to an intervocalic position within a phrase where n would be expected. The chief difficulty with the posited alternation is that, judging by the alternants in extra-Formosan languages, we would have expected reflexes associated with *N rather than *l in the alternant of *tibu?, where dissimilation is not available as an explanation as it is in the case of *D_5esuŋ. But perhaps some other solution will ultimately be found in this instance.

The consequence is that a strong argument can be made for attributing a *D_5 to Proto-Austronesian on the basis of intervocalic reflexes involving the correspondence of Aty l, Sed d, and extra-Formosan n, despite the fact that the number of instances is quite small. At the same time Sediq words with an apparent l reflex have been found dialectally beside others with d; the words with l can be explained as indicating a spread from the l-area (Atayal) into the d-area (Sediq).

The distinction between *D_5 and *N rests on the appearance of a Sediq d corresponding to Aty l. Wherever all reported Sediq dialects agree on l, we reconstruct *N. However it is not impossible that some of the latter instances represent a complete penetration of words with l into the d-area thus wiping out the basis for the distinction between *N and *D_5.

In morpheme-initial position only one unimpeachable instance of *D_5 has been found, but since it involves the probably enclitic particle *D_5a *already*, the extra-Formosan n (e.g. Tag na *already*) could be attributed to its occurrences in intervocalic position within a phrase. This leaves the way open to regard the extra-Formosan reflex of *D_5 in initial position as perhaps d with l appearing as a reflex of an alternant, possibly better identified as coming from *N (to fit with extra-Formosan alternants involving nasal substitution or addition), but affected in some instances by dissimilation.

ABBREVIATIONS

A: Assimilation
AmiS: Southern Ami
Aty: Atayal
AtyMs: Maspazi? Atayal
AtyMx: Mayrinax Atayal
AtyMxw: Mayrinax Atayal (women's speech)
AtyPl: Palngawan Atayal
AtySk: Skikun Atayal
AtySq: Squliq Atayal
Bik: Bikol
BM: Bolaang Mongondow
Bun: Bunun
Chm: Chamorro
Ibl: Ibaloy
Ilk: Ilokano
Itb: Itbayat
Ivt: Ivatan
Kan: Kanakanabu
Klg: Kalagan
Kvl: Kavalan
M: Metathesis
Mal: Malay
Msk: Mansaka
Pai: Paiwan
PAN: Proto-Austronesian
Pau: Paulohi
Paz: Pazeh
PHN: Proto-Hesperionesian
Png: Pangasinan
Puy: Puyuma
RukBd: Budai Rukai
RukMg: Maga Rukai
RukMn: Mantauran Rukai
RukTa: Tanan Rukai
RukTo: Tona Rukai
Sai: Saisiyat
Sam: Samoa
Sar: Saaroa
Sed: Sediq
SedBK: Babo-Kaykay Sediq
SedBu: Buarun Sediq
SedGl: Gluban Sediq

SedHu: Hungu Sediq
SedIn: Inago Sediq
SedPr: Pribaw Sediq
SedRa: Ra?us Sediq
SedSk: Skadang Sediq
SedSo: Soasal Sediq
SedSw: Swasal Sediq
SedTd: Toda Sediq
SedTn: Tongan Sediq
SedTr: Truwan Sediq

Sng: Sangirese
Tag: Tagalog
TBt: Toba Batak
TbwK: Kalamian Tagbanwa
Tbg: Tagabili
Tha: Thao
To: Tonga
Tso: Tsou
Ttm: Tontemboan

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OUTSIDE INFLUENCES ON THE LANGUAGE OF RENNELL AND BELLONA

Samuel H. Elbert

CONTACTS WITH THE OUTSIDE WORLD

The Polynesian Outlier islands of Rennell and Bellona in the Solomons were extremely isolated until after World War II. Melanesian islands, considered dangerous by the Rennellese and Bellonese, lie in every direction except south. Nevertheless, physically and linguistically Rennell and Bellona have affinities with Melanesia. An assessment of the linguistic affinities is the purpose of this article, which honours a scholar so closely associated with Melanesia.

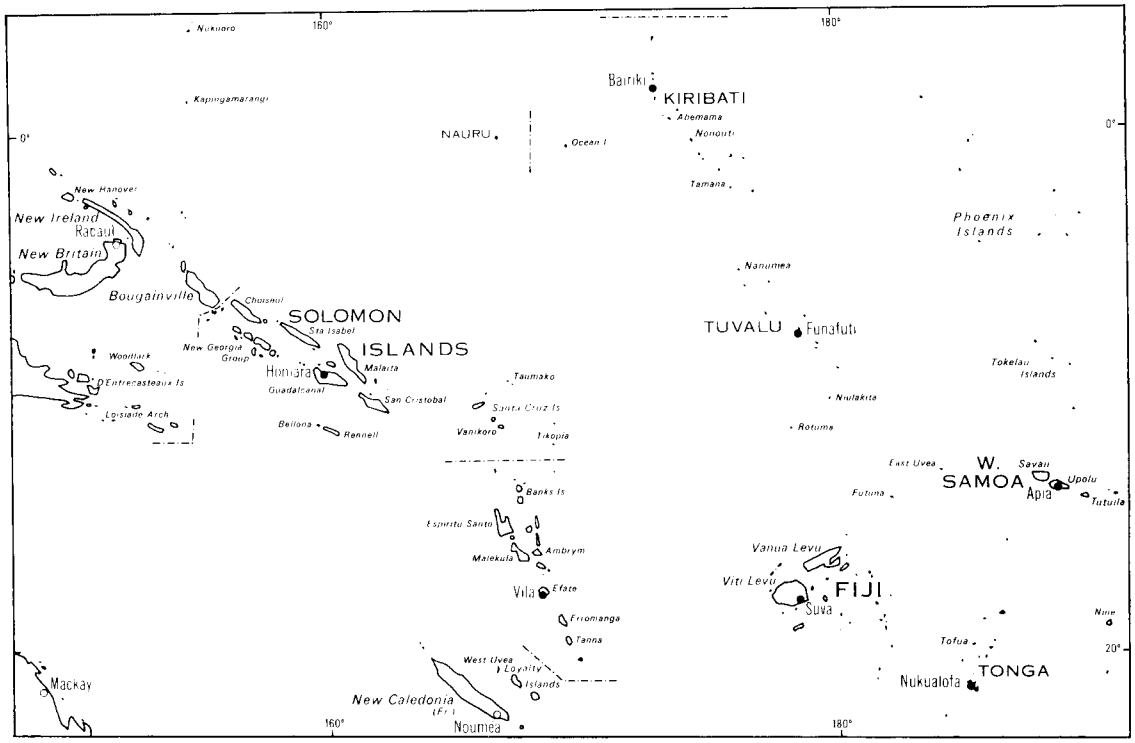
While collecting traditions on Rennell and Bellona from 1957 to 1959, Torben Monberg and I questioned our informants closely about all contacts with the outside world. Their reports are included in *From the two canoes*, in the native language and in English translation.

The first archaeologist to work on Bellona was Jens Poulsen, who among other sites studied seven burial mounds and concluded that six of them date back to 1060±100 B.P., and the seventh to 2070±80 B.P. M. Chikamori (1975) and a team of archaeologists from Keio University, Japan, excavated numerous sites on Rennell, the earliest being 2090±105 B.P. The traditional genealogies, however, go back only six or seven hundred years before 1960. This late date may be due to a lack of details in the *Canoes* volume before the seventh generation, and almost nothing at all about the first few generations (Elbert 1967:283), so that a number of generations may have been forgotten.

To study outside influences on the language of Rennell and Bellona we need first of all to know about contacts with the outside world.[1] A summary follows, based on *Canoes*. Generation counts begin with the putative settlement in Generation 0, 23 generations before 1960. Texts in *Canoes* are abbreviated T.

Generation 0: Taupongi and others sail from "'Ubea Gago" *lower 'Ubea* (possibly West Uvea in the Loyalty Islands, about 1250 kilometres south-eastward of Bellona — see Map 1, page 182) to "'Ubea Matangi" *east 'Ubea* (perhaps East Uvea or Wallis Islands, 2650 kilometres eastward and in the Polynesian Triangle). They meet Kaitu'u here and they all leave and after many wanderings arrive at Rennell and then Bellona, which they settle, and where they encounter a people called Hiti (T66-T72).

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 181-193. *Pacific Linguistics*, C-100, 1987.
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Map 1: Southwest Pacific Islands

Generation 8: a Bellonese father and son sail or drift westward to "Mungua" and return with yams, bananas, and the name "Ghongau" 'given' to the son by the Mungua chief's daughter. The son transfers this name to his settlement on Bellona (T227A, B). "Mungua" is probably Murua or Woodlark Island, 796 kilometres to the west north-west. Mu-rua might be translated *second Mu*, contrasting with Mu-gaba *Big Mu*, the common name for Rennell, and Mu-giki *Small Mu* for Bellona. (The Rennellese and Bellonese do not accept these translations.)

Generation 12: a drifted canoe (baka tahea) arrives from "Taumako". The visitors chant a prayer for a safe return home; they set forth, are lost, and return to Rennell; they chant correctly this time and leave forever (T215, T216). "Taumako" is probably a Polynesian Outlier of the same name in the Duff Islands, 796 kilometres to the east north-east; it is strongly influenced by Melanesia.

Generation 14: drifted canoes from "Gotuma" with a hundred fighters; the Rennellese kill 50 of them. A surviving "Gotuma" strongman kills many Rennellese and then commits suicide rather than face capture. "Gotuma" is probably Rotuma Island, 1892 kilometres to the east. Rotumans have Polynesian physical characteristics and a non-Polynesian language.

Generation 19: more visitors from "Gotuma", stay only briefly (T224). Two castaways from "Tikopia" are treated kindly; the government returns them (T225 and R. Firth 1931). Tikopia is a Polynesian Outlier, 963 kilometres to the east. A recruiting ship comes to Bellona in 1881 with a Rennellese called Tome aboard. He had been working ten years in Queensland and wanted to return. Four men and a woman and later three other men are taken to Queensland. Of the

eight, only three returned (Kuschel and Monberg 1977:85-95). In the same generation Rennellese and Bellonese visit "Makila", "Kega" and "Paugo" (T227 through T230). Makila is in eastern San Cristobal, 191 kilometres to the east north-east. "Kega" is probably Nggela in the Florida Islands, a short distance north of Guadalcanal. "Paugo" is Bauro, a district in central San Cristobal. These islands have Melanesian populations.

Contacts of Europeans and Japanese fishermen are recent and just as sparse. Sofus Christiansen, a Danish geographer, places (1975:12-13) the European 'discovery' of Bellona in 1793 by Captain M. Boyd of the East Indiaman *Bellona*. Boyd did not go ashore, but named the island for his ship. The first white men to land, probably on Rennell in 1856, were Bishop Selwyn and the Reverend Patteson (later Bishop) of the Melanesian Mission. Whalers probably came before that, according to Christiansen (1975:13) and Queensland labour recruiters in the 1880s and 1890s, although an account in *Canoes* (T232) says that a recruiting ship from Noumea in New Caledonia arrived on Bellona in about 1908 and gave the people tobacco and matches, which they did not know how to light. They also brought an axe, two knives, and some calico, all of which were immediately appreciated.

In 1910 the South Seas Evangelical Mission ship called at Rennell, and after a short visit left three Melanesian teachers on the island. The mission ship returned several days later and learned that the teachers had been killed. In T234 is a song honouring the killers. In 1938 several Rennellese were taken to the more northern Solomons and indoctrinated in Christianity. They returned and the story of the stormy acceptance of Christianity is told in T235A and B, and by Monberg (1962).

Other Euro-American visitors included anthropologist Ian Hogbin (1927) and S.M. Lambert, M.D., in 1930 and 1933. Lambert, a romanticist, recommended that all outsiders (especially missionaries) be barred; 'Spiritually they have a gentle religion in which there is no scepticism and no cruelty' (Lambert 1941: 354). As a result, visits were generally barred until long after my first visit in 1957. Anthropologist Gordon Macgregor was there in 1933 and described rituals that he saw (Macgregor 1943). More changes were probably brought to the islands by the Melanesian missionaries who beginning in 1947 were stationed there. They communicated in Melanesian pidgin and did not try to learn the local language.

When the informants were asked for dates, they referred to the killing of the teachers (1910), to Hogbin (whom they said they were planning to kill, but he left too soon), Lambert, Macgregor, the acceptance of Christianity (1938), and World War II.

Although the Rennellese and Bellonese could not possibly have remembered *all* contacts with the outside world, and that in Kirch's terminology (1984:238) '... island societies had no discrete barriers to the potential for interaction with others beyond their shores. Simple models ... are out of place ...' we believe that Rennell and Bellona, lying to the south of the island-studded Melanesian sea, may have been at least relatively untouched by drifters. Yet physically, the islanders seem to lay eyes to be less heavy and tall than the Triangle Polynesians.

LINGUISTIC INFLUENCES

Somehow the usual Polynesian l was changed to a prenasalised g (written g) on Rennell, and to a velar nasal (written ng) on Bellona. Could the first change have been influenced by the prevailing prenasalisation of stops on other islands? Also, b is prenasalised at times, especially in English loan words, as in 'timber' and 'member'. It is also heard in native words, as kingatou mboo for kingatou boo *they go*. In T113 I recorded i na mba'e *on the feet* for i na ba'e.

The usual Polynesian v or w was a bilabial fricative, although a v allophone is sometimes heard on East Rennell today, and in the first Rennellese gospels v was used for this phoneme. Rennellese b is sometimes v on Guadalcanal.

After the ancestral l was replaced by a prenasalised velar stop (later written g) and on Bellona by a velar nasal (later written ng), a voiced velar fricative (later written gh) and a quite different l with d and ɗ allophones were added. These new phonemes do not occur today in words of Polynesian origin. As I pointed out in 1962, the /l/- and /gh/-words are almost never used in poetry, ceremonial language, or rituals. Also, very few ancient personal names contain these new sounds. The /l/- never and the /gh/-words rarely, occur with /t/ or /s/; this is believed highly significant (see Blust's article in this volume).

In ways not common in Triangle Polynesian, the Bellonese in particular shortened their rapid-fire speech, losing many interconsonantal and final vowels, as in hakatpapa for slow hakataupapa *ship*, and sansop for sanisopu *soursop*, and partial reduplications came forth with initial double consonants, as bbange for babange *to play* and kkata for kakata *to laugh*. Whether these can be attributed to Melanesian influence is another matter that may some day be investigated by Melanesianists. And the Melanesian pidgin custom of saying go, go, go, go, go for *a very long trip* is echoed by Rennellese and Bellonese boo, boo, boo, boo, boo (this is not a form of reduplication because of the medial juncture and the great number of repeated words).

The most obvious linguistic introductions are loan words. The earliest are from Melanesian pidgin English; their pronunciation and spelling are standardised, but many have uncertain etyma. Here are some common ones:

gahumanu *government, governor*
hoka *to hawk, peddle*
kalapusi *prison, imprisoned*
kaone *to borrow, lend*
(English 'account')
longokui *long trousers*
masta *white male*
palasi$_1$ *long knife*
(probably English 'brush')
palasi$_2$ *flashy* as a fancy dresser
poati *bottle*
saalemu *sell 'em*
saki *to sack, dismiss*
Sikosi *South Seas Evangelical Mission*
(English 'Scotch'?)
sitibeti *sheet*
(English 'sheet bed')
solaghi *flag*
sumeko *smoke stack, as on a ship*
toko palasi *to talk boastfully*
(pidgin 'talk flash')
uatimani *white man*
uatipala *white fellow*

Other early terms, probably of later introduction than the above:

Golekana *Guadalcanal*
kunini *medicine*
(English 'quinine')
melu *copra drier*
(English 'mill')
paalapu *to dry copra*
(probably English 'fire up')
pamolo *tractor*
(English 'farmall')
sikola *outboard motor*
(English 'sea gull', a brand name)
sili *chili pepper*

Beginning with World War II, contact with the outside world was frequent, and many of the loan words taken in then are easily recognised, as numbers, days of the week, the months, many Christian names, such common terms as 'Bible', 'British', 'censure' (used by one of the missions on the islands for transgressors who sing traditional songs, dance, or fornicate), 'punish' (used by the other mission), 'school' (also meaning 'Christianisation'), 'society', 'sorry', 'truck' (any motor vehicle). In *Canoes*, the dictionaries, and the grammar, traditional spelling is used for such words. This pleases the people, who believe it helps them with English and is more prestigious.

The last part of this essay concerns words of probably Solomonic origin for which possible cognates with Rennellese and Bellonese terms have been found. 'Solomonic' here refers to Solomon Island languages north of Rennell and Bellona. Many of these probable cognates were collected on a two-day trip in 1966 to western Guadalcanal, arranged by geologist Brian Hackman, from speakers of nine languages, including Rennellese. Most of the participants were from the Geological Survey and from inland areas, and were knowledgeable about plant names. This was of particular interest because the Solomons flora is richer than that of Triangle Polynesia, and, as will be seen, many of the loans are of plant names not found there.

Many possible cognates have been published in Elbert (1962, 1965, 1967 and 1975), and are from Father Wall of the Catholic Mission, a long-time resident versed in the languages of Guadalcanal. Others were taken from D.T. Tryon and B.D. Hackman (1983). These are starred in the list that is to follow. Hackman, who was of great help with Solomonic words, later turned over his extensive lists to linguist Tryon, who checked them and added a few more terms. They listed 56 Austronesian languages in the Solomons and seven Papuan languages. Numbers of speakers varied from 13500 for North Malaitan and 12500 for Kwara'ae, also on Malaita, and five each for Laghu (Santa Isabel), and Vano and Tamema on Vanikoro. Rennell and Bellona may have about 3000 speakers. Tryon and Hackman listed seven languages and 16 dialects on Guadalcanal. To distinguish arbitrarily between language and dialect, they compared the number of shared cognates in Swadesh's 200 'basic' words, modified slightly for Melanesia: if two speech communities were mutually intelligible and shared more than 80 per cent of the basic list they were considered dialects of one language. Tryon and Hackman had a second list of 324 words, many of them in the first list. In all, they claim to have studied some 500 items in 63 languages, or about 31500 items.

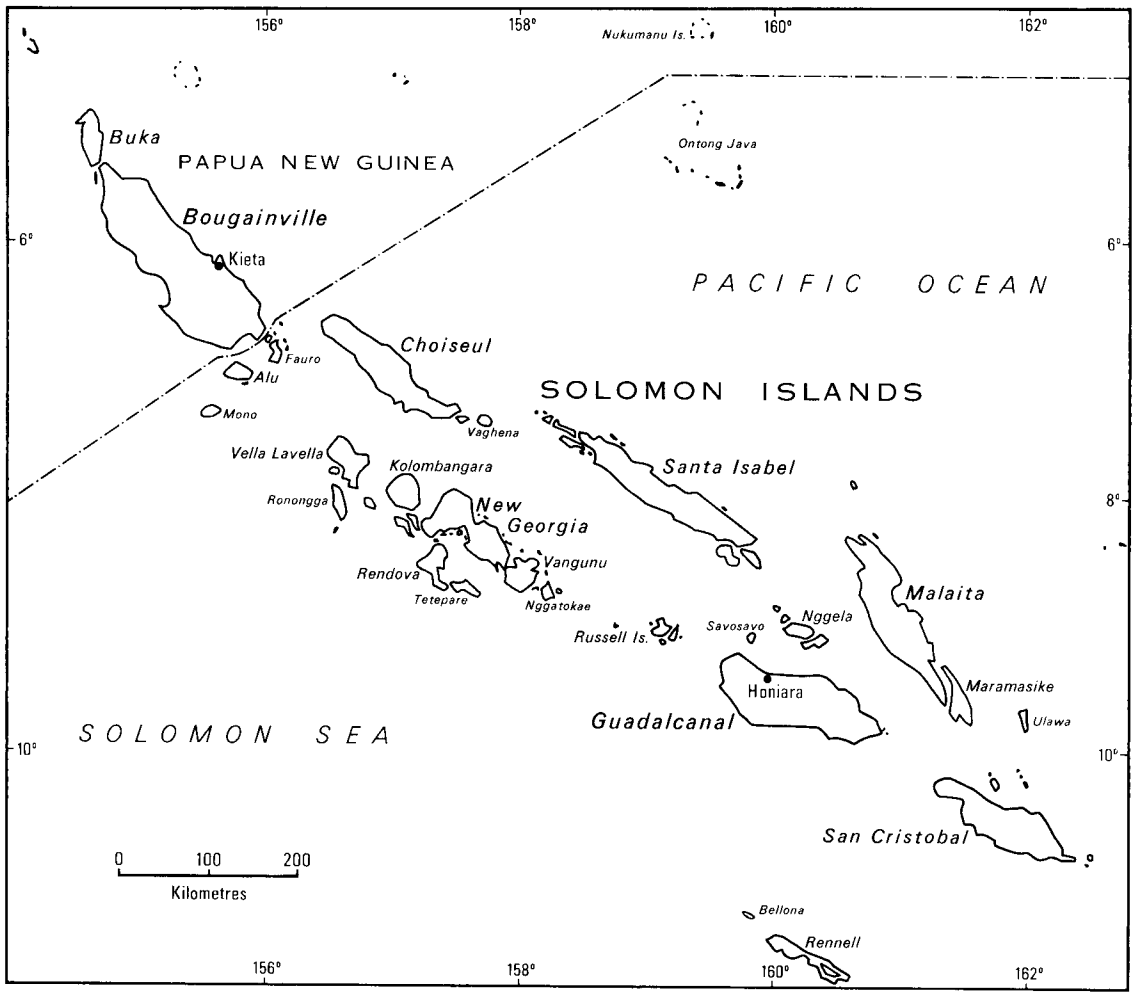
A few Rennellese words have cognates in both Polynesia and Melanesia, but a Polynesian origin seems more probable. Examples are Rennellese tinana *mother*, Samoan tinaa, and Nggela tina; and Rennellese popono *to close*, Kapingamarangi pono *to obstruct*, and Nggela pono *to cover over*. Words for *fish* (ika and igha) have come from both sources.

Meanings are given of Solomonic cognates only if they are slightly different from the Rennellese meanings, as langi *rain* for Rennellese langi *overcast*.

In the list the voiced velar fricative, the prenasalised g, and the velar nasal are written gh, g, and ng, as in Rennellese. Otherwise the more or less established Solomonic orthography is used.

Only a few of the 340 /gh/- and /l/-words printed in Elbert (1962) were found to have Solomonic cognates.

For Kwara'ae plant names, Whitmore (1964) was helpful, as was Fox's Nggela Dictionary. Not all words on the list were found in these sources. San Cristobal is written SC and Santa Isabel SI. Bellonese variants other than ng for g follow the Rennellese entries in parentheses. See Map 2 (below) for location of these islands.



Map 2: Bougainville and the Solomon Islands

Rennellese and Bellonese words of probable Solomonic origin

RENNELLESE	GUADALCANAL	NGGELA	MALAITA	OTHER
abingi *to carry under armpits*	ambingi	alingi		
abubu *potato yam*				SC abubu
ahato *longicorn beetle*	vato	vato		
alaghoba *k.o. large tree*	hai loba			
apagogo *banyan sp.*	tamabalolo	tambalolo	abalobo	
baghu *screw pine*	vaghu			
bugho *net*	bugho	vugho		
gaegae *k.o. large tree*			laelae	
gami *eggs in crab belly*	lami	lami		
gangia *Ficus sp. tree*			alangia	
gapa *tree buttress*			rapa	
guani *servant*				SI ruani *to assist*
ghaaghi (ghaangi) *to bite*	ghania, ghaghaghati			
ghabe *k.o. crab*	ghabe			
ghabingangi *k.o. shade tree*	ghavigha *rose apple*			
ghabo *to crack*		ghavo		
ghagha *to hold in mouth*	ghaghaghagha			
ghaghapuli *k.o. tree*			alabusi	
ghai *mango*				SC ghai*
ghai- *tree*	ghai, hai	ghai	ai, hai	SC ghai*, 'ai
ghaimabulu *k.o. tree*			aibulu	
ghaimega *k.o. tree*	ghaimela		aimela	
ghali *fast*	ghalia		nalinali, aliali	SC gharighari
ghape *k.o. edible vine*			ambe	
ghasigho *k.o. vine*	hantsigho			SC hanjiho

RENNELLESE	GUADALCANAL	NGGELA	MALAITA	OTHER
ghatogha = ghasigho *fishhook*	gatsogha	ghangogha	andoa	
ghau *busy*	ghau			
ghaulia *murky*	kauli	kauli		
ghebu *hatchet*	lavu*	ghavu		
ghinama *to puff*				SC hirama
ghobu *Ficus sp.*		lovu		
ghoghe *intestines*	ghoghoghe?, hohoghe			
ghoghughoghu (ngoghungoghu) *spider*			loghuloghu	
ghomiti *bittern*	komitsi			
ghou *to blow*	ghou			
ghubi *to squeak*	ghurighuri	ghuri		
ghuughii *to speak*	ghuu *to shout*			
hegeu	leu	leu		
	to speak angrily	*to speak a foreign language*		
igha- *k.o. fish*	igha	igha*	i'a*	SC aigha*
ighaamega *squirrel fish*	ighamega			SI igha *
ighabogha *tusk fish*	ighabogha	ighamola		
kala *palm sp.*			tara	
kati *ant*	ghandi		kada	
kaui *fish*	kaui			
Kega *place name*		Nggela		
kilakila *adze*	ghila, kilakila			
labu *to catch*	lambu	lambu		
lagi *tree buttress*	lali	lali		
laka *flower*	daga ni ghai			
langi *overcast*	langi *rain*			SC rangi *rain*

RENNELLESE	GUADALCANAL	NGGELA	MALAITA	OTHER
ligho *kingfisher*	ligho *parrot*			
loka *arrowroot*	loka			
lologi *weak*	ngoli*			
luba *Derris sp.*		tuva		
lui *to escape*	luia			
lugu *k.o. fish*	lugu *carpet snake*			
maamala *dry*	mamatsa			
mabuli *Ficus sp.*	buli			
magagi *smooth*	mandali			
ota *ivory nut*	ato	ato		SC ao*
paghabu *fresh-water goby*	baghoou *a fresh-water fish*			
paghoanikagi *shark*				Gilbertese bakoa
paipai *tree fern*			mbaimbai	
palugha *dull*	paru			SC panguu
Paugo *place name*				SC Bauro
pua *betel*	mbua	mbua		
pugha *whitish, hazy*				SC pupura
Sanibaghi *place name*	Baghi			
sau *bonito*			sau	
suasuanighai *sandpiper*	suasuanighai *bush sprite*			
toghi *to cut*	toghia			
ue *rattan*	hue	ghue		
upo *eel*	mauvo			
usu *to push*	usua		usua	SC usua*
TOTALS:	53	22	18	SC 13 SI 2

Some extremely common Rennellese and Bellonese words without /gh/ and /l/ do not, as far as we know, have Polynesian etyma, and might possibly be of Solomonic origin:

'aabaki	*to help, participate*	langa	*to stroll*
baaisaisa	*disgusted*	magepe	*to lament*
boboi	*to connect*	ma'ine	*to love*
boga	*to clear, as brush*	mi'i-	*small*
geemugi	*k.o. tree (an all-important tree*	noko	*buttocks*
		'oti'oti	*to go*
		pake	*to deceive, trick*
hailobo	*to try*	pegea	*person*
hu'ai-	*big*	pugo	*to turn, as a crank*
kiba	*knife*	sehu	*to walk*
koli	*rust*	sogi	*to pray*
kunga	*place*		

Whether these words or some of them were introduced by the Hiti is being explored by Robert Blust (see below). Archaeologist Poulsen (1972) excavated burial mounds on Bellona and believed that the findings in the mounds attributed by the Bellonese to the Hiti, were similar to those made by the Bellonese. (Could these mounds have been mistakenly identified? We had found that the Rennellese and Bellonese were extremely accurate; their genealogies collected over many years on Bellona and at various places on Rennell including the east end, coincided remarkably, and for 23 generations prior to 1960!)

The Rennellese and Bellonese have many stories about the Hiti. They had neat homes and gardens (T88) and taught the newcomers many important things, as how to prepare the extremely useful geemugi (probably *Haplolobus floribundus*) and how to tap trees for longicorn beetles. One Hiti showed Kaitu'u where to find water; he was killed, probably to revenge the Hiti who had killed Kaitu'u's stingy uncle, who out of 300 doves he had netted, gave the Hiti only three.

In other ways the Hiti seem folkloristic. Like Mormon missionaries they nearly always came in pairs, sometimes man and wife, or one was fat and the other thin, or one from the north side of Rennell and the other from the south. They created lagoons, or, more frequently, disappeared. They were often seen after their liquidation (how long this took is not recorded), the last sighting being in about Generation 20 (T86).

More words of probable outside origins will be found in the essay in this volume by Robert Blust, a specialist in Austronesian. Blust's defense of a Hiti substratum to account for the /l/-words is supported by accounts in this article, largely based on *Canoes*, of few contacts of the two islands with the outside world, and perhaps centuries of contacts with the close-at-hand Hiti. Words with cognates as shown by the table may have been taken directly from the Hiti; the Hiti language, as Blust surmises, may have been 'a primary branch of Southeast Solomonic'.

Additional evidence for a Hiti substratum is provided by computerised simulation of drift voyages, as developed by Levison, Ward, and Webb (1973), who conclude that probabilities of contact from Ellis Islands have 0.1 per cent chances of reaching Rennell and Bellona, while simulated voyages from Wallis/Futuna, Samoa, and Tonga have 0.0 chance. They conclude (p.59): 'It is virtually impossible to

drift directly to Rennell or Bellona from our Polynesian starting points, and we doubt that drifting to them is possible from the other Outliers, except Tikopia from which there is a very low contact probability.'

CONCLUSION

A project with Oceanic specialists in anthropological linguistics, ethnobotany, and archaeology, would most probably uncover more Solomonic cognates, particularly in the Lengo and Talise languages on Guadalcanal. They could test Blust's hypothesis about the Hiti substratum. Honiara, where speakers of so many languages are available, might be a good place to start their studies.

NOTE

[1]After this article was written, I received portions of Rolf Kuschel's forthcoming *Vengeance is the reply*, which contains a much more detailed listing of outside contacts with Bellona.

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'BETWEEN SAVU AND ROTI': THE TRANSFORMATION OF SOCIAL CATEGORIES ON THE ISLAND OF NDAO

James J. Fox

In the course of a long and productive scholarly career, Professor Stephen Wurm has addressed fundamental questions of how speech communities in contact with one another draw upon each other's resources to create radically altered linguistic systems. Similar questions have been addressed in a tradition of anthropology that begins with Franz Boas and extends to the current and varied work of Claude Lévi-Strauss.

In anthropology, 'kinship' is a prime area for a consideration of these questions and it is within this area that I would like to examine a critical case of systematic transformation between contact communities.

The case in question concerns the population of Ndao, a community of approximately 2,500 persons, who live on a tiny island some 12 kilometres from the western tip of the island of Roti in eastern Indonesia.

Ndao as a linguistic community

As a linguistic community, the Ndaonese are closely related to the population of Savu (Sawu/Hawu), an island approximately 90 kilometres to the west of Ndao. J.C.G. Jonker, who was the first linguist to study Ndaonese, classified the language as a 'Sawunese dialect' (1903:85). A.T. Walker, however, who devotes a chapter of his *Grammar of Sawu* to a comparison of Savunese and Ndaonese concludes that 'despite a large area of common ground in the lexicon and phonology, grammatical differences between the two are sufficient to indicate that Ndaonese is a separate language' (1982:63).

Whether one wishes to classify Ndaonese as a dialect of Savunese or as a separate language, the relationship of Ndaonese to Savunese is indisputably close. The Ndaonese insist that they find Savunese intelligible and, when they are on Savu or among Savunese, they regard it as a relatively simple matter to adjust their speech to conform to Savunese patterns.

In their legends of origin, the Ndaonese recount the coming of their first ancestor from Savu, who upon his arrival encountered an ancestral pair of autochthonous origin. By means of the claims in these legends, the Ndaonese thereby distinguish between a majority of their clans whose origin is from Savu

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and a minority of clans whose origin is locally derived. Precedence in rituals of the earth was accorded to the locally derived clans whereas political control and all rights to rituals of power were vested in the leading clans of outside origin.

Whatever historical information is embodied in these Ndaonese legends of origin, their structure follows a recognisable Austronesian pattern — that of the wondrous outsider who gains rule over a local population.[1] Other than in ritual prerogatives, no trace of separate origins is evident. The entire population of Ndao speaks a single language and shares a common culture.

Historically, there is no way to date the first settlement of Ndao by emigrants from Savu but certainly a process of Savunese immigration must have been under way for several hundred years. European archival records, as well as Rotinese historical traditions, point to a distinct Ndaonese population prior to the beginning of the eighteenth century. By 1756, Ndao was recognised by Dutch East Indian Company treaty as an autonomous domain with its own Lord and secondary Lord or fetor. For the Dutch, however, this domain was defined as a self-ruling 'state' of the island of Roti.

Cultural and linguistic influences from Roti

Although the Ndaonese derive their language and much of their basic culture from Savu, they have increasingly been subjected to cultural influences from their near neighbouring island, Roti.[2] Reasons for these influences are more than simply a matter of proximity.

Ndao is a very small island with a total habitable area of less than nine square kilometres. Water is scarce; rainfall erratic and confined to a period of a few months — December through March — during the west monsoon; and the land, which is mainly of porous limestone, offers only limited areas for cultivation.

As a consequence, the Ndaonese have developed a unique economic specialisation. All adult men of Ndao work as travelling gold- and silversmiths. They leave their island at the beginning of the dry season and generally return only at the outset of the rainy season. They travel through the eastern islands of the Lesser Sundas — Sumba, Savu, Roti and Timor — working gold and silver coins to the particular forms of jewellery desired in different areas. They also sell or exchange ikat-cloths, or formerly, would take orders on a commission basis for cloths to be completed by the next dry season. In addition, they would sell high quality pandanus mats, a further product of women's labour (Fox 1972a, 1978).

According to historical tradition, the initial seasonal departure from Ndao was to Roti. By rights established in the eighteenth century, the Lord of Ndao was granted a small area for settlement at Namo Dale in the domain of Termanu on the central north coast of Roti. This settlement at Namo Dale was the seasonal location from which Ndaonese spread out through the island of Roti or from Roti to other islands of the Timor area and where they gathered again for their return to Ndao.[3]

In time, most of the domains of Roti have acquired local Ndaonese populations, who were often identified as separate clans. Most members of these clans were gradually assimilated to Rotinese ways, although the clan as a whole would continue to accommodate new Ndaonese on a seasonal or relatively settled basis.

Because of their migratory occupation, all Ndaonese men are multilingual. Besides Indonesian, all Ndaonese men can be counted on to know Savunese, Rotinese, and at least some form of Timorese. Indeed many Ndaonese are fluent in various distinct dialects of Rotinese and several are recognised on Roti as capable chanters of Rotinese ritual language. As the Ndaonese explain, their language possesses no tradition of parallel composition equivalent to that found in Rotinese. Hence they have adopted many Rotinese songs in parallel verse and utilise Rotinese ritual language as a means of preserving some of their most valued traditions.[4]

Ndaonese women have always had less direct contact with the outside world than Ndaonese men. They would rarely accompany men on their seasonal wanderings and would only leave the island to join brothers or husbands who had chosen to settle elsewhere, particularly on Roti. Whereas in Rotinese oral traditions Ndaonese men are often presented as wandering lovers, Ndao itself is seen as a source of women for Rotinese men.[5] In recent years, the use of Indonesian in school and church and a great deal more freedom to travel has tended to erode women's isolation.

Changes in traditional costume provide something of an index of these differential influences. In basic structure, Ndaonese textiles follow a Savunese format (Fox 1977). Until recently, Ndaonese women's sarongs closely resembled Savunese women's sarongs. By contrast, however, by the early part of this century, Ndaonese men's cloths had begun to follow, or at least share, patterns with Roti — patterns unlike those to be found on Savu.[6] Similarly Ndaonese men have, for a long time, adopted the broad lontar-leaf hat of the Rotinese as part of their regular daily costume.

In short, we may conclude that in basic culture and language, the Ndaonese are a Savunese population who have, for several hundred years now, been gradually drawn into the political and cultural sphere of the Rotinese. What I wish to examine is the effect on Ndaonese social categories of this Rotinese political and cultural influence.

Transformations of Ndaonese social organisation and kinship

To appreciate the transformations that have occurred in Ndaonese social categories, it is necessary to begin with a brief summary of Savunese social categories.

The Savunese recognise a system of bilineal or double descent. Every Savunese belongs to both a 'patrilineal' descent group and to a 'matrilineal' descent group. This double descent system is, for the Savunese, part of a single 'origin structure' which consists of a vast succession of names. At a certain crucial juncture in this all-embracing genealogy, bifurcation occurs and names are reckoned through both males and females.

The succession of male names gives rise to numerous, localised groups which are known as udu. All of these 'clans' are named and most are divided into kerogo. In each domain, udu are assigned ceremonial precedence and ritual functions according to a complex traditional religious order. The succession of female names, on the other hand, gives rise to two ranked, non-localised moieties, known as Hubi Ae *Greater Blossom* and Hubi Iki *Lesser Blossom*. These, in turn, are divided into numerous named subgroups, known as wini *seeds*. Male-ordered

kerogo are strictly exogamous, whereas the female-ordered hubi and wini tend to be endogamous. (Descriptions of this Savunese social system can be found in Fox 1972b, 1979; Kana 1978, 1983.)

Ndaonese social categories present various significant points of difference to those of Savu. Like Savu, Ndao has a moiety system but, unlike Savu, the genealogical succession that creates this system is through male names, not female names.[7]

This moiety system forms the political scaffolding of the domain. Most descent groups belong either to Loasana, the moiety of the Lord, or to Apulungi, the moiety of the secondary Lord or fetor. Each of these moieties has an internal division dividing its constituent descent groups into 'Greater/Lesser' categories: Loasana Ae/Loasana Iki, Apulungi Ae/Apulungi Iki. Marriage is enjoined between the moieties. However, certain descent groups that claim 'local origin' and ritual precedence stand outside the moiety system and may marry into either of the two moieties.

As a formal structure, this political and connubial moiety system with its special third category of autochthonous origin is virtually identical to that of the domain of Thie on Roti. The moieties of Thie even have an internal division into 'greater/lesser' as is found in Ndao. (For a description of the moiety system in Thie, see Fox 1980:120-125.)

The domain of Thie shares roughly the same formal system with its neighbouring domain of Loleh and this would suggest a more general patterning to this structure. Thus the divergence in Ndaonese social organisation from that of Savu and the convergence on a quasi-political structuring of descent groups, as on Roti, suggests considerable accommodation to Rotinese models.

More striking still is the accommodation of Ndaonese kin terminology to Rotinese forms. A comparison of this terminology with that of Savu and Roti provides clear and precise indications of the transformation in social categories that have occurred on Ndao. The following schematic comparison gives a full listing of Ndaonese kin categories in relation to the relevant categories in Savunese and/or Rotinese (Termanu dialect). The focus here is on the Ndaonese terminology. Neither Savunese nor Rotinese terminology is complete. Savunese and Rotinese terms are listed where they are similar to those of Ndao and appear therefore to have a common basis or, in some cases, where they differ and thereby suggest a significant departure from the Ndaonese terminological system. Included in parentheses are specifications of terms that differ from those of Ndaonese. (For a discussion of Savunese kinship with a complete listing of terms, see Kana 1983:130-140; for Roti, see Fox 1968:333-360.)

An analysis of the Ndaonese terminology

Since the Ndaonese terminology, like most Austronesian terminologies, is organised according to generations, an analysis can appropriately follow this structural arrangement.

We may begin with the second ascending/descending generations. Here an immediate difference with the Savunese terminology is apparent. Savunese has a single term, apu, that applies to both second ascending and second descending generations: *grandparent/grandchild*. This term, apu, may, however, be distinguished according to gender as either mone *male* or bein *female*. In contrast to Savunese, for the second ascending generation Ndaonese has adopted the Rotinese

Schematic comparison of the Ndaonese terminology

NDAONESE	SPECIFICATIONS	SAVUNESE	ROTINESE
baki	PF	apu mone: PF, CS	ba'i
bei	PM	apu bein: PM, CD	be'i
ama	F, FB	ama	ama
ama ae	FeB	ama ae	ama ka'a
ama iki	FyB	ama iki	ama fadi
		(a)makemone: MB	
ina	M, MZ	ina: M, MZ, FZ	ina: M, MZ
ina ae	MeZ	ina ae: MeZ, FeZ	ina ka'a
ina iki	MyZ	ina iki: MeZ, FeZ	ina fadi
to'o	MB, FZH, WF, HF	--	to'o: MB
			ali-ama: WF, HF
teto	FZ, MBW, WM, HM	--	te'o: FZ
			ali-ina: WM, HM
ana hani	Z, FBD, FZD,	(a)nawani	feto
	MBD, MZD (m.s.)		
	WZ, BW		ina
ana mone	B, FBS, FZS,	(a)namone	
	MBS, MZS (w.s.)		
	HB, ZH		tou
a'a	*elder*	a'a	ka'a
	WeB (m.s.)		kela: WB, ZH
	HeZ (w.s.)		hi'a: HZ, BW
ari	*younger*	ari	fadi
ana	C, BC, ZC	ana	ana: C, BC
ana mone	S, BS, ZS, DH	ana momone	
ana bani	D, BD, ZD, SW	ana mobani	
			sele-dadi: ZC
apu	CC	apu	upu
lusi	CCC	nuhi: CCC, PPP	
kajaku	CCCC	kajaku: CCCC, PPPP	

terms baki/bei which specifically encode gender distinctions, and in the process has dropped gender modifiers for the second descending generation. Although in its formal organisation the Ndaonese terminology follows a Rotinese model for these two generations, it retains the term apu (not Rotinese upu), for the second descending generation.

In the first ascending generation, the Ndaonese terminology has borrowed the terms to'o/teto (te'o) from Rotinese while retaining, in modified form, Savunese usage in regard to the terms ama/ina. This amalgamation of terms, however, transforms the Ndaonese terminology into a new system, which is neither Rotinese nor Savunese. Thus whereas in Savunese ina refers to *mother*, *mother's sister*, and *father's sister*, in Ndaonese ina refers only to *mother* and *mother's sister* because Ndaonese has borrowed the term teto for the *father's sister*. However in Ndaonese, the term teto is applied also to the *mother's brother's wife*, who is referred to in Rotinese as ina to'o(k) and to the *wife's mother* and *husband's mother* who are referred to in Rotinese as ali-ina.

A corresponding transformation occurs with the Ndaonese term to'o. Savunese recognises the *mother's brother* who is classified as a kind of *father:* ama kemone or makemone. This term disappears in Ndaonese and is replaced by the

Rotinese term to'o. In this transformation, Ndaonese retains, in good Savunese fashion, the critical modifying terms ae/iki *greater/lesser* for ina/ama but drops the modifying terms a'a/ari that are used in Savunese to distinguish *'elder'* and *'younger' mother's brother:* makemone mone a'a/makemone mone ari. By contrast, Rotinese uses either the relative age terms ka'a/fadi or matuak/anak *large/small* to distinguish ina/ama, but does not apply these distinctions to to'o. In this respect, Ndaonese usage appears to follow closely Rotinese usage of the term to'o.

In Ego's generation, the Ndaonese terminology appears to be almost exactly like the Savunese terminology. The only apparent difference between Savunese and Ndaonese is the consonant change of w > h, which is a consistent feature of Ndaonese. In this generation, the Rotinese terminology is markedly different both in its terms and in the distinctions these terms make.

Similarly, in the first descending generation, Ndaonese is almost identical to Savunese. Instead of the gender modifiers momone/mobani, Ndaonese uses mone/bani. The only other difference between Savunese and Ndaonese is the fourth descending where Ndaonese has lusi instead of Savunese nuhi.[8]

Comment and conclusion

The Ndaonese terminology looks like a halfway house between Savu and Roti. Its first and second ascending generations have been radically transformed by borrowings from the Rotinese whereas the remaining generations have remained almost exactly as in Savunese.

In its social organisation, Ndao has a moiety system that organises marriage between male-ordered descent groups. In basic form, this system closely resembles the moiety system of Thie. It might therefore be argued that the changes in the Ndaonese terminology 'reflect' a shift from a bilineal Savunese structure to a more Rotinese-like system. This is plausible and not unreasonable, though it only describes and does not explain what has occurred. Certainly the structure of the Ndaonese terminology in its first ascending generation 'fits' a moiety system well, but it should be pointed out that the moiety system in Thie, which resembles Ndao's, operates equally well with a very different terminology. As Needham has repeatedly argued, positing a 'fit' between terminology and social organisation is generally a specious form of explanation (see, for example, Needham 1967:142 or Needham 1971).

Equally it might be noted that reflexes of the terms ina/ama are common to most of the languages in eastern Indonesia. These terms have as their minimal specifications: M, MZ/F, FB. In the region, terms designating FZ and MB are quite various and on comparative historical grounds would appear to represent a number of independent developments in the direction of lineality. Two linguistic mechanisms for achieving this are observable. Terms for FZ and MB are formed either by applying modifiers to ina/ama, thus designating the FZ and MB as some kind of *mother* or *father*, or by means of separate lexical designations, such as kia/loka in Kodi, be/mame in Tana Ai, or te'o/to'o in Rotinese (see Fox, in press). Ndaonese appears to have adopted this second linguistic mechanism and by substituting teto/to'o for ina/ama kemone has moved strongly toward the development of a 'lineal' cast to its terminology.

Change in social categories is neither random nor fortuitous. Change of this kind has somehow to be socially motivated. Significant cultural ideas must play a part in such change. In the case of Ndao, the basis of this motivation can

only be speculated on, but it is evident that the Ndaonese borrowing of Rotinese first and second generation categories involves an acceptance of certain key Rotinese ideas, in particular, the idea of maternal affiliation. This idea of maternal derivation, which is so fundamental to the Rotinese that they can not conceive of human life in any other terms, is principally designated by reference to the to'o/ba(k)i. All Rotinese rituals of the life cycle elaborate on this conception. (For discussion of this notion and its ritual elaboration among the Rotinese see Fox 1971, 1980:115-120.)

It is hardly surprising therefore that, drawn within the Rotinese cultural sphere, the Ndaonese have adopted particularly those categories that offer them social resemblance to the Rotinese. Awareness of these social categories would undoubtedly have come with the knowledge of Rotinese but would also have been fostered by the use of Rotinese ritual language for the preservation of their own special knowledge. In Rotinese ritual language ama/to'o and ina/te(t)o form critically important dyadic sets and occur in most compositions. Hence fluent use of this ritual speech could not but involve some commitment to these distinctions.

The effect of these ideas for Ndao was not to create a Rotinese social system but rather to produce a new system of social classification that lies, as one might expect, somewhere between Savu and Roti.

NOTES

[1]This structure takes many forms in eastern Indonesia and is intimately associated with a pattern of symbolic diarchy. A 'classic' example of the wondrous outsider is the Timorese figure of Sonba'i (Schulte-Nordholt 1971: 262-306). A similar pattern holds for the founding ancestors of the ruling clans of both Amanuban, the largest of the nineteenth-century Timorese domains, and of Termanu, the largest of the Rotinese domains. These dynastic founders originate as outsiders who establish their rule by contest with local ancestral figures. (For a discussion of this theme of the 'stranger king' in a Polynesian context, see Sahlins 1981, reprinted 1985:73-103.)

[2]Differences between the languages (and cultures) of Savu and Roti are marked. Ndaonese, with Savunese, is generally assigned to the so-called 'Sumba-Bima' subgroup of Austronesian whereas Rotinese, together with various languages of Timor, belongs to the putative 'Timor' or 'Timor-Ambon' subgroup of Austronesian. Although the internal status of these two subgroups remains to be established, this classification points to a significant linguistic division that divides Ndaonese from Rotinese. Ndaonese linguistic and cultural borrowings from Roti are particularly noteworthy because they cross this significant divide.

[3]It is possible that Ndaonese rights at Namo Dale date from the seventeenth century when the Dutch established their first pagar there. As late as 1966, the Lord of Ndao continued to maintain this seasonal settlement in Termanu.

[4]On my visit to Ndao in 1973, I specifically asked a group of knowledgeable elders about the origin of their tradition of gold- and silversmithing, only to be told that it was too dangerous to recite this origin account on Ndao at that time. Later, quite unexpectedly, two of the men, whom I had talked with on Ndao, sought me out on Roti late one night and one of them recited for me

the origin tale for gold- and silversmithing, as had been promised. To my surprise, this chant was spoken in excellent ritual language following Termanu traditions.

[5]This is such a standard image in Rotinese poetry that it is expressed in a parallel formula:

Benga lafafada	*Word is continually spoken*
Dasi lakatutuda	*Voices continually tell of*
Ina lena Ndao Dale la	*Extra women on Ndao Dale*
Feto lesi Folo Manu la.	*Additional girls on Folo Manu.*

[6]This matter of the sharing of specific patterns is a complex one. It is likely that the changes that made the Ndaonese costume resemble that of Roti began in the nineteenth century as a result of Dutch colonial pressures to fit Ndao politically within the Rotinese customary sphere. Equally important is the fact that the Rotinese cite and credit the Ndaonese with the origin of their textile tradition (see Fox 1980:46-48). For example, Ndaonese and Rotinese of Termanu — the domain where the Ndaonese have held rights of seasonal settlement since at least the eighteenth century — share one major pattern in common. Because of the similarities between Ndaonese and Rotinese men's cloths, Ndaonese cloths are not infrequently labelled as 'Rotinese' in many museum collections.

[7]On Savu, knowledge about the wini within each hubi is the special preserve of women. Instead of being openly discussed, as are udu/kerogo relationships, wini/hubi relationships are publically displayed through the patterns on women's textiles. For Ndao, rather than report that there exists no female-ordered relationship system, I can only report that I found none. If such a system did exist on Ndao and if it were hedged with prohibitions on open discussion as on Savu, it would be a difficult subject to investigate, especially in the course of a single visit.

It is also important to note that my one field visit to Ndao was in 1973, at a time when Ndaonese women had consciously given up the wearing of their traditional sarongs as part of a formal and determined acceptance of Christianity. It was therefore no longer possible to use cloth patterns as a 'way' to the system as I had done on Savu.

It is also possible to speculate that the Ndaonese ancestral separation from Savu occurred before the development or elaboration of the female moiety system and, for this reason, one can find no trace of it on the island.

[8]Savunese uses nuhi for the fourth and kejaku for the five ascending and descending generations. Ndaonese probably uses lusi and kejaku in a similar way, but I can not confirm this from my present notes.

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WHAT MEDIUM OF INSTRUCTION FOR TRIBAL MINORITIES IN SIND?

Warren W. Glover

1. INTRODUCTION

Linguists working with ethnic and linguistic minorities in a community have made fruitful contributions toward decisions regarding language policy and educational strategy for the benefit of those minorities. This paper examines the situation of depressed minorities in Sind, the south-eastern province of Pakistan, and suggests a strategy for uplift of these people.

The medium to use in primary education in multilingual societies has been, and is, a subject for considerable debate. Over 30 years ago a UNESCO report claimed that:

> It is axiomatic that the best medium for teaching a child is his mother tongue ... we recommend that the use of the mother tongue be extended to as late a stage in education as possible.
>
> (UNESCO 1953:11,47 quoted in Larson 1981:7)

At the time, though, this 'axiom' was by no means universally agreed. Larson (1981) has reviewed the arguments advanced for the use in primary education of either the vernacular or the prestige language of wider communication, classifying arguments under six areas. While there are pros and cons under each area, the reasons most argued in favour of the prestige language are in the political, socioeconomic, and financial areas, whereas those most argued in favour of use of the vernacular language in primary education are psychological, educational, and linguistic.

In the last three decades an increasing number of programmes for minority education in widely diverse countries *HAVE* employed the students' mother tongue as medium of instruction, but in other places the conventional wisdom of educating linguistic minorities directly in the prestige language has continued to guide educational policy and practice to the present day.

2. THE ETHNIC MINORITIES OF SIND

2.1 Social status

In the irrigated areas of Sind groups such as the Parkari, Kacchi, and Dhatki are generally landless labourers, working somewhat transiently for various landlords, and have taken on some characteristics of the caste division of

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South Asian society - in particular, each group maintains itself separate from other groups in matters of contact, direct or (through food) indirect. But because of the distinctiveness of these groups by their languages and customs, together with their practice of living in homogeneous villages or wards throughout Sind, I will refer to them as tribal people.

The boundary between *caste* and *tribe* is undoubtedly blurred, and many tribes of South Asia have been absorbed into the caste system, with its characteristic imposition of relative hierarchy of groups (Dumont 1970:21,193). The tribals of Sind have been treated traditionally as untouchable castes. In Hindu society untouchability is a result of heredity, occupation (such as leather-workers or cleaners), and diet (eating meat: sometimes buffalo and even beef or carrion). 'Untouchables' are called by the Government 'Scheduled Caste', and the 1961 Census of Pakistan enumerated 295,378 people of Scheduled Caste in the districts of Hyderabad and Tharparkar alone. One may conservatively estimate their number throughout Sind today as at least 500,000.

As Hindus in a Muslim country the tribals of Sind are without significant representation in the corridors of power. In Islam, all men are brothers, and this tenet has been, historically and in modern times, an attraction for converts to Islam. Especially is this so from the ritually untouchable segments of Hindu society. However, in Muslim society in modern Sind, the concept of accepting all men as brothers does not extend to Scheduled Caste Hindus, or to Christians converted from a Scheduled Caste background. To this extent, the caste divisions of traditional South Asian society, Hindu in origin, are perpetuated in Muslim practice. Thus the typical tea shop in a town of Sind will have separate cups, and a separate corner within, or outside, the tea shop, for tribal customers. A Canadian medical doctor, highly respected for his professional skill, was known to associate with tribal people and he found himself therefore served with the same cracked dirty cups the tea shops reserved for tribals!

2.2 Economic condition

In the desert areas of Sind, east of the range of hills which blocks the irrigation system from the Indus, many tribal communities live on their own land and follow a largely pastoral way of life - with some agricultural activity, the sowing of wheat and millet, when rain does come. These communities probably represent the traditional way of life of the tribal people of Sind before the coming of irrigation.

The extensive irrigation schemes from the Indus River built under British rule earlier in this century brought major agricultural development and population increase to Sind. The valuable irrigated land is largely owned by not only the former ruling families of Sind but by internal immigrants from other provinces. The traditional tribal groups own very little of the irrigated land, and mostly work as *haris* (landless labourers) in a semifeudal relation to their current landlord. They frequently live in conditions of severe poverty and continual debt - moving often from one landlord to another in search of fresh credit for loans.

2.3 Political weakness

In the desert area the tribals form the majority of the population, and occasionally have there gained control of some local town councils and thus have the potential of guiding their own uplift. But in the irrigated area the tribal communities are dispersed throughout the province, and are divided among themselves by caste prejudice. So they lack the ability to mobilise political power, and in large part they are at the mercy of individual landlords. Some landlords are good to their *haris* and seek to establish schools and clinics for their care and benefit, but if the landlord is unjust or harsh the tribals have no recourse but to move on, leaving home and crops.

2.4 Educational deprivation

The 1961 Census of Pakistan reported literacy rates among Scheduled Castes in Hyderabad District, all of which is irrigated area, and Tharparkar District, which includes a considerable desert area:

District	Men	Women
Hyderabad	3.98%	0.28%
Tharparkar	5.33%	0.53%

The Tharparkar figures are significantly higher, although still very low, and this confirms the impression that the tribals in the desert, though facing a very hard life struggling against physical and climatic adversity, are better off than those living as *haris* in the irrigated area.

There are economic and social reasons for the low educational attainments of the tribals. The work demands on families of *haris* are generally so great (since the *hari* receives only one quarter of the harvest in return for his labour) that every member of the family must work and children cannot be sent to school.

In particular, families are reluctant to send girls to school, both because they cannot conceive of economic return for this outlay, and because they do not wish to expose their daughters to the risk of insult or worse in a wider society where women are normally kept secluded. Sending a girl to school is likely also to ruin her marriage prospects - because the family has not kept her under constant close supervision they then have no defence against accusations, false or otherwise, of the girl's immoral behaviour.

The possibility of tribal children's receiving reasonable education is further reduced by the moving of the family from place to place after, typically, only a few years with one landlord. Thus even if a school is available in one location, and they are allowed to attend it, they may be suddenly uprooted and thus handicapped.

An important contributing factor to the low educational attainments among the tribal community is a general lack of motivation. While education is seen theoretically as a means of economic advancement for the next generation, in practice their expectations are limited more or less to their own experience. Thus, agencies that have started informal village schools have found that nearby village families are not sufficiently enthused over the idea to insist

that their children attend school. This attitude varies somewhat from group to group: those which regard themselves as ritually superior in caste, such as Kacchis, tend to be less motivated to seek or accept change such as schooling. But the 'lower' the group, such as Parkari Koli or Marwari Meghwar, the more they see education as a means of advancement, and there are men and women from these groups who have completed university courses.

3. LINGUISTIC AND SOCIOLINGUISTIC FACTORS

3.1 Prestige language

Sind has a complex pattern of language use. In November 1983 I surveyed people of the Dhatki Bhil, Parkari Koli, and Kacchi Koli communities to learn language preferences. Results were diverse and complicated. To the questions

> 'What advantage would you see in your children attending school where the teachers were of your own (e.g. Kacchi) people?
>
> ... where they taught in your own (Kacchi) language?
>
> ... where the textbooks were written in your own (Kacchi) language?

the practically unanimous reply from all Kacchi respondents was 'None!' To me this was quite an unexpected reply, as I thought I was bringing them a proposal for something they really wanted! However, the responses received reflect the tribals' viewpoint, namely:

(a) Education is seen chiefly as a means of economic advancement, for which their children must gain fluency in the prestige language(s).

(b) The children are already fluent in the mother tongue anyway, and the vernacular is not the key to good jobs, so parents see neither the need nor the reason for education in the vernacular.

(c) To date the tribal languages such as Kacchi and Parkari have very little literature, no agreed orthography, and certainly no body of textbooks at primary level, let alone in science or other higher studies.

Since the tribals responding in the survey had never seen a vernacular education programme in operation, to bring children through to literacy in the prestige language via literacy in the mother tongue, the questions above were asking them to make a great leap of imagination, weighing the benefits of something they had never observed and could hardly conceive. Perhaps this is a leap similar to what would have been required of parents in developed countries of a generation ago if asked 'What benefit would your child gain from doing his homework on a computer?' Not too much significance should be attached in either case to the answer 'None'.

The answers to another question on the survey ('What language would you like your children to study in?') represented the parental hopes for the next generation, and were found to correlate closely with the social circumstances and educational experiences of the particular respondents.

Thus the typical *haris* responded 'Sindhi'. They live in fairly remote, poor villages and, without having had any schooling themselves, wanted their children to study in Sindhi, the provincial language, because they know that is used in schools, markets, and Government offices.

A small minority of respondents said 'Urdu'. They had lived and/or worked for a time in the predominantly Urdu-speaking city of Hyderabad and were themselves literate in Urdu. Others said 'English'! They included a very unrepresentative minority attending high school in a city and studying English as a subject there.

The survey answers indicated the prestige different languages enjoy. They show the horizons of the respondents' economic expectations - not a realistic view on the language to be used for *INITIAL* schooling.

3.2 Script

Sound education depends on the principle of moving 'from the known to the unknown'. Thus illiterate children or adults learn the skill of reading (the unknown) most easily in their first language (the known). And they make the transition to literacy in a language of wider communication (the unknown) most easily if their learning to read, in their own language, has been in the script of the prestige language so that the script is 'known' when they come to the transfer stage. The choice of the Sindhi script for the tribal languages of Sind is therefore a logical, and popular, choice (J. Glover 1984).

3.3 Dialectal variation

An important feature of the linguistic situation in South Asia is "the extensive proliferation of dialectal variants of spoken Indo-Aryan vernaculars, these vernacular dialects being often in close proximity to one another" (Shapiro and Schiffman 1981:73).

Different tribal communities in Sind, such as Kacchi and Parkari, show different awarenesses of dialectal variation in their own vernaculars. Whereas Parkari informants "recognise at least four geographical dialects of Parkari" (Hoyle 1983:1), and there are obvious phonetic differences in Parkari according to the age, sex, and education of the speaker, yet Kacchi respondents in the survey uniformly denied any variation in Kacchi speech, either according to a speaker's age, sex, or place of residence. This is in accord with independent observations that the Kacchi are more nomadic but are distributed over perhaps a smaller total area than the Parkari (so that geographical variation tends to be smoothed out), and that they are more conservative against innovation (so that age and education are less prone to introduce variant speech forms).

3.4 Language attitude

Grierson (1919:6,10,11) described Kacchi as a "distinct dialect of Sindhi" with varying degrees of intermixture of Gujarati according to locality, and later writers have in general agreed, as reviewed by Shapiro and Schiffman (1981:3). However Kacchi respondents in my survey uniformly insisted on labelling what they spoke as 'Gujarati', not Sindhi! It appears there has been a shift in language attitudes over the years so that the Scheduled Caste background Kacchis who gave me information now think of themselves as speaking 'Gujarati' in reaction against the strongly Muslim connotation that the Sindhi language has acquired for them in modern Pakistan. (Most Hindu speakers of Sindhi migrated to India in 1947-48.)

One Kacchi man, who has visited Gujarat in India and been laughed at there for 'the funny way he speaks', explained to me that Kacchis speak "not Indian Gujarati, but Gujarati of Sind". Other Kacchis literate in Gujarati also acknowledge a difference between what they speak and standard literary Gujarati. However a difference between the spoken and written languages is not at all uncommon in South Asia, Tamil being an outstanding example, where the literary language preserves a 14th century dialect.

The tribals' antipathy to Sindhi, because of its Muslim connotation, is naturally a factor in the choice of medium of instruction for initial education.

3.5 Multilingualism

There is in Sind a high degree of both active and passive multilingualism. (By 'passive bilingualism' I mean the ability to understand what is heard in another language, though not to speak that language.) Actively, practically all tribal *MEN* in Sind speak Sindhi sufficiently for work and trading, and many control sufficient Urdu also for basic conversational needs. But there is very little evidence of tribal people speaking one another's languages. To the question in my survey "What languages do you speak with other Bhils, Kolis, etc.?" the normal answer was "We speak each our own language and we all understand". However Kacchi, Parkari, and Dhatki are different enough to be considered distinct languages on the basis of wordlist counts (Grainger and Grainger 1980).

4. EMERGING SOLUTIONS

4.1 Government policy

In 1972 and 1978 the Government of Pakistan announced new education policies. "The major goals of the [1972] policy was universal free education and close to universal literacy" (Nyrop et al. 1975:97). The 1978 policy specified some means of achieving adult and non-formal education, including radio and TV programmes, and added "Unutilized local resources will be mobilized by engaging teachers from local communities for individualized and personalized adult literacy programmes" (Government of Pakistan 1978:6). In addition, other agencies such as the Church of Pakistan have seen education as a means of helping the poor to combat both poverty and injustice by giving them resources to resist exploitation both political and economic.

Regarding medium, government schools must use Urdu or Sindhi - but the government does not discourage private endeavours in a different medium, and there has been a proliferation of English-medium schools.

4.2 Transitional education

The solution that Larson (1981) describes as having been effective in Peruvian Amazonia was

(1) to establish village schools with members of the minority community being trained as primary teachers for students of that community, and

(2) to use the vernacular language as an introductory medium of education and then a means of transition to education in the prestige language, Spanish.

This procedure is called, in Latin America, Australia, and elsewhere, 'bilingual education' but that term *CAN* sometimes be understood as implying that the two languages involved have equal status and role, which is neither correct nor intended. Hence I prefer the term 'transitional education' to emphasise that the mother tongue of the students is employed as a means of their making transition *FROM* illiteracy *THROUGH* literacy in the vernacular *TO* full participation in the national culture and education in the prestige language, with attendant openings for socioeconomic advancement.

In Sind the question is more complex than that in Peru of 'Spanish vs. vernacular'. Possible choices of medium are:

(a) Urdu, the national language (but in the 1981 Census the spoken language of only 7.6% of Pakistani households, and virtually no tribals);

(b) Sindhi, the essential lingua franca of the province (but viewed negatively by the tribals because of Muslim connotations);

(c) Gujarati, of which the tribal vernaculars are popularly believed to be dialects (though linguists disagree, and the script is foreign);

(d) the tribal vernaculars (but materials do not exist);

(e) English (though spoken by very few, it is seen by many as the best key to economic advance).

Pakistan's educational policy since 1972 excludes options (c), (d), and (e) from government-sponsored schools.

Existing schools in Sind already practise a form of transitional education, starting in Sindhi from Grade 1, introducing Urdu in Grade 3 and English in Grade 6. By college level some courses are taught in Sindhi, some in Urdu, and some in English. A fuller implementation of the principle of transitional education would call for children to be given their initial schooling in the vernacular, before proceeding to the Sindhi-medium schools. One may compare the vernacular pre-school projects being undertaken in North Solomons Province and other places in Papua New Guinea (Litteral 1984).

For literacy programmes for tribal adults in Sind I propose a system of transitional education with the following chief elements:

(a) adults learn the skill of reading through their mother tongue, using the Sindhi script;

(b) at the same time, they develop their skills in oral Sindhi;

(c) later, the skill of literacy is extended to Sindhi language materials.

Transitional education combines the advantages of both the vernacular and the prestige language as the medium of instruction, "to the advantage of both the vernacular speakers and the nation as a whole" (Larson 1981:24). Some practical considerations are:

(a) Socioeconomically, transitional education takes students more successfully from their monolingual status toward their personal goals of mastery of the prestige languages for their own social and economic uplift.

(b) Financially, money is better spent on a system which enables a high percentage of students to succeed, rather than drop out as discouraged failures.

(c) Linguistically, preparation of materials for the different vernaculars is under way. Sindhi script (chosen to facilitate transition to Sindhi) is also best suited to represent the tribal languages phonemically.

(d) Psychologically, learning takes place most successfully and quickly when students are motivated and given positive emotional support. Davis (in Larson and Davis 1981:239-240) cites studies from Ecuador and Peru documenting "that education in the vernacular improves and develops a student's native ability to learn a second language". This, above all else, is the reason for proposing the strategy of transitional education.

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THE GLOTTAL STOP IN TAGALOG: RESIDUAL PROBLEMS AND ATTEMPTS AT SOLUTIONS

Andrew Gonzalez

1. THE PROBLEMS

The Tagalog phonological system includes two glottal segments, a stop ' and a fricative h.[1]

In describing this system, problems arise not from determining the phonemic status of these segments (they do serve to signal differences in meaning)

bá:ta	*robe*	bá:ta'	*child*
há:ri'	*king*	'á:ri'	*possession*

but from the canonical form of lexemes in Tagalog, and their consequent transcription as well as the subsequent description of phonological (morphophonemic) rules on segment sequences.

The glottal stop ' clearly signals a difference of meaning in final position but is predictable in initial and medial position, i.e., one can describe all Tagalog segment sequences as starting with a consonant if one posits, in the absence of other consonants, an initial '.

bá:ta	*child*	ká:ka	*elderly sibling*
pá:ta	*knuckle*	gá:ga	*stupid*
tá:ta	*father*	'á:ga or	
dá:da	*(baby talk)*	á:ga	*early*

with the initial glottal stop being phonetically real. The problem is that whenever the other consonants do not occur, one can always state that ' is present. An alternate position would be to state that no consonant is present, the glottal being an articulatory necessity for beginning vocalisation with a vowel. However, the phonetic reality of #'- is dramatised by affixation:

mag-anak	(spelling)	*parent and child*
mag'á:nak	(phonetic transcription)	
*mag á:nak	(phonetic transcription)	
mag-á:ral	(spelling)	*to study*
mag'á:ral	(phonetic transcription)	
*magá:ral	(phonetic transcription)	

(whereas in Kapampangan, a Philippine language of the Northern group, ' is clearly absent in initial position: á:ral *lesson, study,* since magá:ral *to study* has no glottal stop after mag.)

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Likewise problematic is medial glottal stop -'- since in Tagalog, any vowel sequence automatically has a medial -'- between vowels (which is phonetically real)

maaari	(spelling)	*it can be*
má:'a:'á:ri	(transcription)	

which is again predictable (Ø→'/V-V) and differs from VV sequences in other Philippine languages where medial -'- does not occur, as in

Kapampangan	babá:i	*woman*
Tagalog	babá:'e ∿ babá:'i	

To restate the problem with the glottal stop, does one posit Tagalog ' in initial and medial positions (where it is predictable) as well as in final position (where it is not)?

For the glottal fricative, the problem has to do only with h in final position, for its occurrences in initial and medial position are quite straightforward.

há:lo'	*to mix*	bá:hay	*house*

Phonetically, h does not occur in final position, but morphophonemically, when a suffix follows a final V not followed by a glottal stop ', -h- occurs, as in:

bá:sa	*to read*	basá:hin	*to read* (patient subject)

but

basá'	*wet*	basá'in	*to wet* (patient subject)

The problem then has to do with the status of h in final position: unaffixed, certain formatives end in a vowel; when affixed, a medial -h- appears in surface phonological structure. Is -h- then to be posited as an underlying form (at a still undetermined level, morphophonemic or phonemic) or will it be introduced by a phonological rule of glottalic fricativisation or glottalic fricative intrusion after the underlying form is posited? Since it is not phonetically real, the contrast between

bá:sa
basá'

in final position being Ø (zero) and ', no phoneme in American Structuralist terms can be posited.

2. SOME SOLUTIONS

Bowen (1965) and Schachter and Otanes (1972) solve these two problems by positing, following Dempwolff (1938), a CVCVC canonical form for non-reduplicated roots and CVNCVC form with pre-stop medial nasals, and in effect list all their root forms in the glossary or lexicon (outside of reduplicated monosyllabic roots) as CVCVC forms so that

C V C V C	
/ b a : s a h /	*to read*

is transcribed between slashes / / (presumably phonemically) as having a final h and forms such as

C	V	C	V	C	
/ '	a	n	a	k /	*son or daughter*
/ t	a:	'	o	h /	*man*
/ b	a:	t	a	' /	*child*[2]

as having an initial ' and medial ' even if predictable, side by side with a final ', which is not.

There is a certain neatness and elegance to the solutions of the two glottals. However, final /h/ is not really articulated in /ba:sah/ *to read* or in /ta:oh/ *man*; to posit it as a phoneme in final position would violate the phonetic reality requirement (see Pike 1947). In the case of the glottal stop, /'/ freely varies with Ø (zero) in initial and medial position and does not really contrast with Ø (zero) to make a meaning difference; hence, one of the operational tests for establishing minimal pairs cannot apply. Moreover, there is no principled way of deciding for or against the alternative, namely, medial ' is a morphophonemic intrusion filling in Ø whenever VV occurs, as a kind of transitional sound. Finally, to posit that /'/ has a zero allophone would violate the biuniqueness principle (see Chomsky and Halle 1968) since, to be consistent, one would then be forced to concede that the non-presence of an established phoneme in a sequence could constitute the occurrence of its Ø allophone, a patent absurdity.

Most linguists not explicitly subscribing to phonemic theory based on American Structuralism have no difficulties positing a less rigid canonical form (e.g. Llamzon 1968, Blake 1925, Bloomfield 1917, and Lopez 1941).

(C)	V	(C)	(C)	V	(C)	
	ó:			o		*yes*
b	á:		l	o		*widow*
	a		l	ó	n	*wave*
h	á:		l	o	'	*to mix*
p	a	n	t	ó	g	*bladder*
k	i	s	k	í	s	*to rub against*

With this relatively straightforward solution, one can explain the predictable occurrence of initial ' but not its occurrence in mag'á:ral *to study* or the occurrence of h in suffixed formatives basá:hin *to read* (patient subject) unless phonological rules introducing ' and -h- are posited. In both cases, one glosses over problems arising from the violation of phonemic principles if one subscribes to American Structuralist phonemics.

3. A HISTORICAL SOLUTION?

A third solution hitherto not attempted and therefore novel and constituting the chief contribution of this paper is to look at the problem not merely synchronically, as has been attempted thus far, but likewise diachronically, by looking at the antecedents of these segments across time if they are retrievable.

By looking at the provenance of h and ', based on the methods of comparative linguistics and historical reconstruction of forms, perhaps some clues can be given on how to deal with the above problems.

Zorc (1979, 1981, 1982a, 1982b), based on extensive work in the comparative study of Philippine and Austronesian languages, reconstructs Proto-Austronesian, Proto-Hesperonesian (the Philippine languages and the Western Indonesian languages), and Proto-Philippine in his core etymological dictionary. When all its fascicles are finally published, the dictionary will contain more than 15,000 reconstructions.

Tagalog h and ' (=q) are traced thus:

Tagalog <	Proto Philippine <	Proto Hesperonesian <	Proto Austronesian
h (glottal fricative)	*h	*h	*S (based on Dyen 1953, building on Dempwolff 1938)
			*H (based on Dyen 1953, building on Dempwolff 1938)
' (glottal stop)	*q	*q	*q (= Dempwolff's *h)
	*'	*'	*' (= Zorc's *?)

(The controversies on Proto-Philippine (Reid 1982 and Zorc's 1984 answer) need not concern us here since the provenance goes beyond Philippine languages.)

There are enough etyma from the core etymological dictionary to show that the glottal stop may be traced to protoforms in initial, medial and final positions:

PAN*'	PAN	*pálu'	
	Tagalog	pálo'	*to beat with a stick*
	PPH	*bu'áŋ	*empty, open*
	Tagalog	mú:'aŋ	
	Bisayan	bú:'aŋ	*crazy person*
	PHN	*'ag'ag	*to shift, sieve*
	Tagalog	'ag'ág	*sifted*
	PAN	*ká'en	*to eat*
	Tagalog	ká:'in	
	PAN	*?ə̆nəm	*six*
	Tagalog	'á:/nim	
PAN*q	PAN	*qabúH	*ashes*
	Tagalog	'abó	
	PPH	*buqél	
	Tagalog	bu'ól	*ankle bone*
	PAN	*basáq	
	Tagalog	basá'	*wet*

Thus, in initial, medial, and final positions, Tagalog ' has historical provenance; based on historical grounds — without making any assertion that synchronically the native speaker is aware of such historical provenance — a case can be made that in contemporary synchronic Tagalog, ' and -'- are there as inherited segments rather than intruded by a phonological process even though synchronically their occurrence is now predictable.

Structural pressure in Tagalog at present places these segments even in forms where historically they were not there, as in

PAN	*baj	
Tagalog	(ba)bá:'i	*woman*
PAN	*Wásu	
PPH	*ásu	
Tagalog	'á:so	*dog*
PHN	*buŋsu	
Tagalog	bunsó' ∿ bunsó	*youngest sibling*

so that in effect what has happened is a process of relexification changing the underlying formative into a CVCVC pattern adding '-, -'-, -'.

In fact so strong is this pressure that even borrowings are subjected to the same process:

Malay	baŋsa	(from Sanskrit)
Tagalog	bansá'	*nation*
Spanish	báŋko	(originally Spanish spelled as *banco*)
Tagalog	baŋkó'	*bench*

A similar development seems to have taken place for the glottal fricative:

PAN *S	PAN	*(u)Sapuy	
	PPH	*hapúy	
	Tagalog	apúy (borrowed from Kapampangan; it should be hapoy)	*fire*
	PAN	*buSék	
	Tagalog	buhók	*hair*
	PAN	*tŭbuS	
	Tagalog	tubó	*sugarcane*
PAN *H	PPH	*háŋin	
	Tagalog	há:ŋin	*air*
	PPH	*áhit	
	Tagalog	á:hit	*to shave*
	PAN	*qalŭhí:pan	
	Tagalog	'alupí:han	*centipede*
	PAN	*qabúH	
	PPH	*qabúk	
	Tagalog	'abó	*ashes*
	PAN	*Ha:paw	*to top (off)*
	Tagalog	há:paw	

where the protophones occur in initial and medial positions for PAN *S and in all positions for PAN *H. The reflexes however are merged with Tagalog h, which does not occur in final position; the -h# 'reappears' when a suffix is attached, as in 'abuhín *to cover (something) with ashes*.

Again, the structural pressure for h to occur, even when it was not originally there, is present:

PAN	*beli	*to buy/sell*
Tagalog	bilí but bilihín ∿ bilhín	*to buy something*
PPH	*bayu	*to pound*
Tagalog	bayó but bayuhín	*to pound (something)*
Malay	baca	*to read* (from Sanskrit)
Tagalog	bá:sa but basá:hin	*to read (something)*

In fact, even for recent words ending in a vowel, final h intrudes as a productive process, as in English *barbecue* becoming barbekyú:han *a place where barbecued meat is served.*

Thus, Tagalog h has clear reflexes from PAN and PPH, occuring as h and -h- but Ø in final position but reappearing when affixed as -hin/han. So strong is this pressure now from historical forms that even recent borrowed forms and older forms without -h are relexified with an h when suffixed. Only when the underlying form already has a final inherited glottal -' is there an exception:

basá'	*wet*	→	basá:'an	*to make wet*
bá:sa	*to read*	→	basá:hin	*to read (something)*

4. CONCLUSION

Hence, to return to the problem, it would be best for reasons of parsimony and elegance and for historical reasons, to posit initial ' and medial ' as well as final ' in underlying lexical forms; similarly, it would be best to posit final h (at least in underlying forms) as well as surface h in initial and medial positions.

Such underlying forms would belong to what Chomsky and Halle (1960) call the morphonemic level or what traditional structuralists call morphophonemics. Final -h would need a deletion rule in surface phonetic structure *unless* it is followed by a suffix. Neither of the levels posited would constitute what the American Structuralist grammarians or Neo-Bloomfieldians call the *phonemic* level since initial ' freely varies with Ø (zero) and medial ' could be called a mere articulatory accompaniment of segments, with only ' in final position truly contrastive, and since final h does not have phonetic reality and moreover would violate the biuniqueness principle if posited. Otherwise, an allophone of h in final position would be Ø (zero) and we would end up positing Ø (zero) as an allophone of both /'/ and /h/.

The Tagalog glottals thus show one more example of the problem with positing an intermediate phonological level, the phonemic level, as significant, although perhaps this matter has become a non-issue among latter day post-phonemic phonologists.

Thus, too, Bowen (1965) and Schachter and Otanes (1972) did well in positing ' and h in all positions at all levels; their shortcoming was in placing these occurrences between / / (slashes) thereby claiming that these segments were

phonemes in the American Structuralist sense. In taking an intuitively correct solution, they were correct in the solution but violated their own working assumptions based on Neo-Bloomfieldian phonemic theory.

An interesting insight from this experience of attempting to solve the problem of the status of the glottals in Tagalog is that in doing synchronic phonology, one must sometimes go to diachronic phonology to arrive at a solution. This is a solution based on a linguist's viewpoint in establishing the provenance of certain problematic segments, not a claim that the native speaker has any notion of the historical antecedents of his system. Jakobson's dictum from classical European Structuralism that one cannot do synchrony without diachrony is thus verified.

Finally, one way out of Chao's (1957) non-uniqueness of phonemic solutions (which occurs if one takes a purely synchronic viewpoint) might be to appeal to diachrony to arrive at a unique solution after all!

NOTES

[1]For transcription purposes, I am using ' for the glottal stop (usually transcribed as q) to harmonise the transcription with Zorc's (1979), upon whom I rely for reconstructed forms. I do this to avoid confusion.

[2]Bowen and Schachter and Otanes use q for transcribing the glottal stop; I use ' for uniformity and to avoid confusion.

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GENETIC CLASSIFICATION REVISITED

George W. Grace

In 1965 I published a short paper entitled, 'On the scientific status of genetic classification in linguistics' (Grace 1965). In it I gave a sketch of what I took to be the standard assumptions about the processes of differentiation which underlie the linguistic family trees which we draw. I particularly discussed the notion of 'mixed languages', and explained why I thought that notion, at least in the form in which it then existed, was not a useful one. Stephen Wurm, on the other hand, has always believed that the concept of language mixture is a useful one. His fullest account of his views was published quite recently (Wurm 1978).

It is largely as a result of the efforts of Wurm and others that I have gradually come to the realisation that the picture which I drew in my 1965 paper was incomplete and misleading. What I propose to do here is to indicate some of the points in that paper which appear to call for further comment. I will quote the relevant passages — that is, the passages which present the standard assumptions concerning genetic relationship among languages and which discuss the concept of language mixture — and append comments. The relevant passages are the following (Grace 1965:1-3):

> A fundamental assumption is that any language spoken today represents a point in a tradition which is continuous in the past back to the (or an) origin of language. What is called genetic classification in linguistics is conceived of simply as the attempt to retrace this continuity of tradition. I will try to make the implications of this assumption somewhat clearer. Consider the languages spoken in the world today. Then consider the languages spoken a year ago. It seems obvious that the English spoken today is a continuation of the language which we called 'English' a year ago, rather than of any other language of that time. In fact the changes are probably entirely imperceptible. The point which I want to make is that if a language is observed at sufficiently frequent intervals, the continuity is obvious.
>
> Suppose for a moment that we should miraculously come into possession of documents which provided us with a complete inventory of the languages and dialects of the world as they existed on January 1 of each year from the present back to the

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> period before language evolved, and provided also an exhaustive description of each language and dialect existing on each January 1. We assume that each language spoken this year could be identified with one of the languages spoken in the previous year, that each language spoken in that year could be identified with one of the languages spoken in the year preceding that, and that it would be possible to make identifications of this sort back to the very beginning. As we move back we assume, of course, that some languages which are separate today would merge and appear as single languages in the past.

I think that this does represent the basic assumptions, and that the picture it presents is essentially valid as far as it goes.

> With nothing better than our present definitions of 'dialect' and 'language' it would not be possible to say at precisely what point this occurred.

The implied question here involves a critical assumption. The assumption is that the process of language split involves the emergence of a boundary of a particular kind, which we may call a 'language boundary'. What is remarkable about language boundaries is that the process of their emergence is irreversible. That is, they may emerge, but once emerged, they cannot re-submerge. Genetic classification in linguistics is the attempt to reconstruct past language boundaries. However, the underlying assumption is misleading in three respects. First, it is not very clear just how close any actual boundaries come to conforming to our assumptions about 'language-boundaries'. Second, it is not clear how different those boundaries which most nearly conform to these assumptions are from some other kind of boundary, e.g., dialect boundaries. Third, this approach seems to suggest that linguistic differentiation consists mainly in the creation of boundaries. That is certainly not true in general. Boundaries, to the extent that they are actually there, are an incidental by-product.

> However, the continuity of tradition should be easy to determine.

At least it should be easy to determine to the extent that all of the entities (languages and dialects) in question are clearly defined — that is, have clearly identifiable boundaries.

> The only kind of phenomenon known at present which appears to throw some doubt on this assumption is that of pidginized languages. However, it is best to disregard them for this discussion. It seems probable that even in the case of pidginized languages their earlier stages can be identified unambiguously. However, the issues involved are quite complicated, and pidginization appears not to have been an important factor in the history of the world's languages.

Two points: (1) it does not seem now that pidginisation is anything like as uncommon as was once supposed. (2) Pidginisation does not seem as nearly unique a phenomenon as it once did. On the contrary, extended exposure of speakers of one language to another language quite regularly produces consequences of what seem to be precisely the same kind as pidginisation (cf. Grace 1981).

> Quite apart from the instances of pidginization we frequently encounter allusions to languages which are supposed to be 'mixed'. Let us consider how the notion 'mixed language' could be defined so

> that it would be a useful concept in historical linguistics. One might apply the term to any language which contained morphemes which could be traced to different traditions.

Here I reflect the assumption that seemed to be standard in linguistics at the time, that all influence of one language on another proceeded via word (or morpheme) borrowing. That assumption seems quite wrong today. It quite ignores the kinds of change which William Labov (1972:178-179) has called 'change from below', the principal kinds of change involved in what is generally called 'linguistic convergence'.

> However, that would presumably be the case with all languages. Hence 'mixed language', so defined, and 'language' would have identical extensions and for almost any conceivable practical purposes maintaining both terms would be an unnecessary duplication.
>
> It would seem obvious that if 'mixed language' is to designate a useful concept, it will have to be defined so that unmixed languages could be said to exist.

Of course, this remains true. However, I imagine what we will find necessary is not a definition of 'mixed language', but rather a whole series of different notions of different kinds of influence of one language upon another, probably associated with sociologically different situations of 'contact'.

> There are many bases on which such a definition could be erected — for example, quantity of borrowings, quantity of borrowings within a given millennium, type of borrowings, or more directly observable criteria taken to reflect something of one of these sorts.

This involves the same assumption that influence necessarily proceeds via word borrowing. It is an even less useful proposal than it seemed at the time.

> However, at the moment I do not know what useful application could be found for a concept 'mixed language' defined along any of these lines.

Fair enough, compare the previous comment on 'mixed language'.

> As used by some people, the term 'mixed language' seems to imply a language compounded of elements of two (or more) earlier languages (which may be called A and B) in such a way that the number of elements from A and from B is approximately equal and that the range of structural and semantic roles played by the set of elements from A and by the set of elements from B is substantially equivalent. In the case of a mixed language of this sort, there would be no basis for saying that it was a continuation of A with borrowings and other kinds of influence from B, or that it was a continuation of B with influence from A. It would have to be regarded as a continuation of both, but it is precisely mixed languages in this sense that many people — I being one — assume not to exist.

What I think is still valid here is that the selection of 'elements' (whatever that means in this context) from each language is never random. It is dictated by factors in the contact situation. Therefore, it is a priori very unlikely that the linguistic roles of the set of 'elements' taken from A and that taken from B will be identical.

> The reasons are of two kinds: empirical (we do not know of any existing examples) the theoretical. The theoretical ground is that a language does not consist simply of an inventory of elements, but is more essentially a system. Elements in different systems are in a sense incomparable, and for that reason are not readily intersubstitutable. In more practical terms, it is not difficult to insert an occasional German word in an English conversation, or vice versa. It would also not be difficult to alternate English sentences containing some German words and German sentences containing some English words. However, it would be much more difficult to design a series of sentences such that it was impossible to determine in the case of each construction (i.e., phrase, clause, sentence, etc.) in which of the two languages it was cast, and *nota bene*, English and German are too closely related to constitute a fair test of the difficulty.

Interestingly, Wurm (1978) offers some actual examples of English-influenced German which show the inadequacy of my discussion here. It is now evident that the patterns of mixing which occur in the actual language-use of bilinguals are much more complicated than I allowed for (compare, for example, Forman 1973, Bradshaw 1978). What makes such mixed language-use relevant to the genetic problem is, as Laycock (1979) points out especially clearly, the possibility that such a pattern of mixed speech may, through the agency of external events, achieve the status of a distinct language. The point is that if a community of bilinguals who customarily mixed their two languages came for some reason to be isolated from monolingual speakers of either language, it is reasonable to expect that they, especially in later generations, would find it impossible to distinguish what in their linguistic repertoires originally belonged to one language and what to the other (Bradshaw 1978 reports that there is already some uncertainty in the multilingual Numbami community). Thus, they would be left with what would necessarily be interpreted as a single language, but which would retain elements of both of their former languages.

> In short, the theoretical argument is that, while it is commonplace to employ borrowings from one language while speaking another, a mixture in any really interesting sense would be a genuine *tour de force*.
>
> Therefore, it is assumed that a single language cannot be the continuation of more than one language of any single earlier period.

I still feel that this principle is valid under most circumstances (but compare the problem of mixed language-use, above), although in any case the continuity involved has less significance than is sometimes attributed to it.

> However, a language of an earlier period can be continued in more than one language of a given later period. In such a case, the various languages which are continuations of the same earlier language are *related* to one another.

One other relevant passage appears in a footnote (Grace 1965:10, fn.2):

> It is worth noting that pidginized languages generally do not qualify as 'mixed languages' in this sense [sc., the sense specified here]. Melanesian Pidgin English (Neo-Melanesian), the only such language of which I have first-hand experience, is sometimes described as being a mixture of English and 'Melanesian'. However, 'Melanesian' is not a language.

> Although it is clear that some structural and particularly some semantic features common in the languages of Melanesia are found in Pidgin, it is impossible to identify any specific language other than English as a source for Pidgin. Of course, there are loan words from Tolai (=Tuna=Kuanua) and from German in the New Guinea dialect of Pidgin and French loans in the New Hebrides dialect. However, these are clearly secondary, because Pidgin is clearly one dialectally differentiated language throughout.

No doubt not many people today would agree that Tok Pisin, Solomon Islands Pidgin, and Bislama are dialects of the same language. I would like to withdraw that claim (especially since I am not at all sure what the distinction between differences of dialect and differences of language is anyway).

> Although the characterization of Pidgin as a mixture of English and 'Melanesian' is not wholly false, it obscures an interesting fact about pidgin languages: that the two elements in the mixture have consistently different roles.

The key point is that any influence between languages takes place in a certain sociological setting and the particular linguistic results are responses to the pressures which arise in that setting. The roles of the two languages in whatever patterns of speech develop in response to those pressures could hardly be expected to be identical unless the roles being played by the languages in the first place were identical. The critical task is to discover how specific changes are induced by factors in the patterns of interaction in the actual situation, and, if possible, to attempt a classification of kinds of contact situations in terms of the linguistic results which they produce.

> That is, in Melanesian Pidgin English, Taki-Taki, Chinese Pidgin English, Haitian Creole, and Papiamentu, respectively, the roles of English in the first three, French in the fourth, and Spanish in the last are comparable to one another. Likewise, the roles of unidentified Melanesian languages in the first, Chinese in the third, and unidentified West African languages in the others are also comparable to one another. The very name 'Melanesian Pidgin English', rather than 'English Pidgin Melanesian', makes the point (compare Hockett 1958:420ff., especially 424).

Concluding remarks

The shortcomings of my original account seem to be of three kinds. First, there was the assumption that linguistic diachrony consists in the vicissitudes of a (large) number of separate linguistic traditions, and that the synchronic manifestation of each of these traditions at any given moment in time is a clearly demarcated linguistic entity. That is, it was assumed that diachronic processes take place within entities set off from everything else by the kind of 'language boundaries' described in the second comment on page 222.

Second, there was the assumption that influence of one language upon another could proceed only by means of the borrowing of words from one into the other. There is now ample evidence, including that supplied in Wurm (1978), that word borrowing is a superficial and often self-conscious kind of influence. Labov's notion of 'change from below' mentioned above, and mine of 'content-form' convergence (1981:26) and phonological convergence (1981:27) illustrate the

recently awakened awareness of the importance of kinds of influence other than word borrowing.

Third, there is a failure to take into account the possible consequences, as pointed out by Laycock, which mixing in language-use might have for genetic classification. A careful study of the phenomena of shifting and mixing in language-use with a particular view to their potential diachronic implications needs to be made before much more can be said.

It now seems apparent that we must not be misled by metaphors such as that of 'contact between languages' — which tends to evoke the image of some kind of juxtaposition and interpenetration of two languages (in the guise of linguistic descriptions in the current mode) — but must look instead at the kinds of patterns of linguistic behaviour which may exist within groups of individuals whose overall repertoire includes more than one language. Successful reconstruction of the historical relations among the languages of Oceania will surely sometimes require a more sophisticated understanding of the kinds of influences which one language can have upon another than we now have. Stephen Wurm's work has contributed to this understanding.

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PARTIAL EXPLANATION IN LINGUISTICS

Göran Hammarström

1. HISTORIOGRAPHICAL NOTE

The existence or non-existence of explanation has been one of the central problems in linguistics. According to the ideas of the neogrammarians formulated in the last century, which still survived at some European universities at least into the 1960s, their own 'historical' linguistics could explain. However, they considered that the 'mere' description of a state of a language was not scientific.

By adherents of the more recent development diachronic phonology, the accounts of the neogrammarians were largely considered as only descriptive whereas the new developments (pressure in the system, pull or push chain, gap in the system etc.) were thought to be explanatory.

The aim of most structuralists was to describe and the word 'descriptive' was practically synonymous with 'structuralist'. Joos (1957:96) notes that linguists 'try to describe precisely; we do not try to explain. Anything in our description that sounds like explanation is simply loose talk — deliberately loose perhaps, for the sake of persuasion by analogy ...'

The generativists, when working both in synchrony and diachrony, have believed they were capable of explanation while other linguists were considered to be 'merely' capable of description. In diachrony, changes in the rules were considered as explanations. Anttila, who is one of those linguists who do not believe that the generativists can explain, observes that 'linguists have always fallen easily into the trap of circularity. When it turns out that certain changes can be *described* as rule loss or rule reordering, it is easy to shift to stating that change occurred *because* of rule loss and so on — an easy way of changing a how into a why.' (1972:179-180).

In synchrony, the generativists have 'explained' (more or less) concrete examples by the rules which covered them. Other orientations were at best considered by them to be 'merely descriptive' as traditional grammarians or, at worst, just 'observational' as Bloomfieldians and the London school of Firth. This is, however, quite nonsensical since linguistic observations are theory-dependent and no orientation can be said to just observe. Also, all orientations attempt to formulate general statements each of which covers a number of more concrete constructions. Generativists call this explanation and others call it description.

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2. SOME RECENT POINTS

After this short historiographical account I should like to mention some points in the recent discussion.

In his important book (1980) Lass argues against explanation in diachronic linguistics. In my review of Lass I am basically in agreement with this author. Itkonen, on the other hand, while recognising the merits of Lass's book, argues in his perspicacious review that Lass is right in rejecting *deductive-nomological explanations* but that he is not right in also rejecting *statistical* and *teleological explanations* which Itkonen considers to be largely acceptable as explanations.

Vennemann (1983) believes (wrongly) that it is the reading of certain philosophers that has misled certain linguists into believing that the idea of explaining is not acceptable. However, he suggests a good term when he says that, if a feature is common and natural in various languages, then a 'preference theory' explains its coming into existence. He admits, however, that this is a 'weak' explanation.[1]

3. SOME BASIC VIEWPOINTS

In the extensive discussion on explanation in linguistics I believe that the following basic points should have been made with more emphasis than has been done in previous publications:

(1) Linguists tend to be either completely in favour of or completely against explanation.

(2) There are many kinds of explanation. A causal deductive-nomological explanation is one kind. A very different kind is an explanation based on the consideration that certain abstract statements cover certain concrete examples (which is better called description). For instance, having made clear that a direct object in German is in the accusative, one can 'explain' the form ihn in ich habe ihn gesehen by saying that it is a direct object, and *therefore* it is in the accusative. Or seen from another viewpoint: 'why is ihn in the accusative? — *because* it is a direct object'. The possibility of putting things in this way obviously does not imply that there is a cause and effect relation but only that one has given a reason for saying something.

(3) To be meaningful, discussions for and against explanation should imply something like cause or purpose because if explanation does not mean more than what many call description then there is no possible argument.

(4) The debate for or against explanation appears to have been partly brought about by linguists not giving the idea of *partial explanation* the importance it merits. Those who have rejected explanation would probably have accepted the idea that elements of explanation do exist, but to be accepted by them an explanation should be complete. For instance, in diachrony one should be able to explain why something happened at one point in time and not at another. Those who were in favour of explanation could probably have accepted the idea that there are explanations but that these are usually not complete since at least some element is missing.

(5) The debate which started in the last century has centred on 'traditional' problems of phonetics (including phonology), morphology, syntax and semantics. In several orientations which have been developed in interesting ways in more

recent years (contrastive analysis, error analysis, languages in contact, sociolinguistics, psycholinguistics, child language acquisition, discourse analysis, pathological language and speech etc.) there is scope for well founded and less incomplete explanations. These will, however, be outside the aim of this paper.

(6) Some orientations have accused others of being 'merely' descriptive while claiming the higher valued explanatory power for their own accounts. This misconceived idea has in particular, characterised neogrammarians and generativists.

4. DEFINING AND EXEMPLIFYING EXPLANATION

4.1 An explanation in the strong sense of the word must be either causal or teleological. For 'traditional' linguistic problems such explanations are practically never complete but usually partial.

4.2.1 In *diachrony* it is usually not possible to say why a sound a became b at the time it changed. Consider for instance an oral vowel merging with a following nasal consonant to become a nasal vowel, a long vowel becoming a diphthong or a voiceless consonant becoming voiced. In such cases one can invoke probability, ease of articulation, naturalness, some principle of 'diachronic phonology' etc. However, there is usually the strong counter-argument that, after all, the previous state had been used by the speakers, apparently without causing any problems of communication, for hundreds or thousands of years. If consequently there was no apparent necessity for change, one can still assume that the speakers had some purpose when they changed. I believe that this purpose is to increase or decrease idiolectal, sociolectal and dialectal differences (which belong to what I call the γ_1, γ_2 and γ_3-levels). With these differences, facts of attitude and register (β_1 and β_2) are usually intertwined. Why else should sounds be changed by the speakers? (I have made similar remarks in earlier works, for instance in 1966:86-92.)

4.2.2 Changes in a language's morphology can be illuminated in interesting ways. But again there is usually no explanation because one can usually say that, after all, the previous state also functioned. However, notions such as analogical change should perhaps be considered as containing traces of explanations. An explanation in a stronger (but still partial) sense can again be assumed to exist at the levels which I have just mentioned for sound change. For instance, if in my speech I use the Swedish verb forms simma, sam, summit (which sometimes happens) rather than simma, simmade, simmat, I know and the interlocutor probably notices that I do not speak like the younger generation and that the register is higher. If, as one would assume, the latter forms completely replace the others because people do not want to sound old and pompous, the purpose of the change will, ironically, have been lost because it will no longer be possible to use the forms specifically used by young people in opposition to older people. In another Swedish example, du has been replacing other forms of address at an amazing speed in the last 20 years or so. It is again ironic that, if the sociolectally lower (γ_2) and more intimate (β_1, β_2) du replaces all other forms of address, its function of making people feel more equal and informal, which was the purpose of the change, will (partly) have been lost (because the opposition has disappeared).

4.2.3 When words in different ways change their expression side or their content side, one can often describe but not explain what has happened although one can again assume that the β- and γ- levels are involved. However, there are some cases that seem to be amenable to explanation. One of these cases is 'therapeutic' change which removes an intolerable homonymy (South-Western French gat < cattu(m) and gallu(m), English let (allow and hinder) etc.; see Anttila 1972:182). Another case is when the lexicon has to be changed on some point because a new thing has been invented or an old thing has changed. One might think that this is more like a complete explanation but considering the fact that more than one innovation is always imaginable to solve the problem it appears to be more correct to allege partial explanation.

4.2.4 Many syntactic changes have been studied in various languages. One well-known example is the freer Latin word order combined with a system of case endings compared with the more rigid French word order without case endings on nouns. Again there can hardly have been a necessity for change as the Latin system had functioned well for a long period. I am convinced that, again, β- and γ- factors partially explain the change. However, the explanation will most certainly have to remain partial because what exactly happened cannot be established.

4.2.5 Except for some special cases, the phonetic (including the phonological), morphological, semantic and syntactic levels, or what I call the α- facts, functioned equally well at these levels before and after the change. Explanations are not to be found here. However, attitudes, registers, idiolectal sociolectal and dialectal facts, that is β- and γ- facts, can partially explain changes.

4.3 In synchrony one should consider the system ('language', knowledge, competence) of the speakers in the form they use it when they speak. Here, there is little that should be explained but much that should be described.

4.4 If we consider what happens in an act of communication by spoken language, it is possible to use the idea of cause and effect. For instance, if the speaker uses his speech organs in certain ways this can be said to cause the hearer to perceive certain sounds although this consideration may seem somewhat uninteresting. However, there are more interesting things to consider. In a 'practical syllogism', which I quote in a somewhat simplified form, Itkonen (1972:37-38) describes what happens in communication:

> presupposition: $p \supset q$
>
> A intends that B should know q
>
> A considers that he will not achieve his intention unless he utters p
>
> A sets himself to utter p

Although Itkonen does not consider this to be an explanation there is perhaps an element of explanation in the syllogism. If the speaker's purpose can be considered to be outside language it can explain his speech event. Therefore, one could even consider positing a cause or an intent. For instance, somebody meets a neighbour in the morning and the situation and his intention cause him to say good morning. However, such explanations are only partial, because they are probabilistic. Early in the morning there are also other reasonably probable expressions to use such as nice weather today. And for some reason, something quite out of place could have been said, for instance good evening or thank you.[2]

5. THE MAIN POINT OF THE PAPER

The main idea of this paper has been that the notion of partial explanation has been undervalued considering that it can be adequately used in many and varied cases. This notion could also have helped to put an end to some of the unproductive controversies between those in favour of and those against explanation. Both sides could probably have accepted the notion of partial explanation.

NOTES

[1]These introductory observations (in sections 1 and 2) concern things that I deal with in detail in the forthcoming paper 'Explanation in linguistics'.

[2]I have commented upon the practical syllogism in 1978:27.

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STORY OF *-n-:
*CV- VS. *CV-n- NOUN-CLASS PREFIXES IN AUSTRALIAN LANGUAGES

Jeffrey Heath

1. INTRODUCTION

This is an initial compilation of data from "prefixing" Australian languages in and around Arnhem Land suggesting reconstruction for some medium-depth proto-languages of an opposition between *CV- and *CV-n- forms of noun-class (NC) prefixes. Some basic conclusions:

(a) *CV-n- may have been used for intrans. subject and trans. object (i.e. Absolutive), vs. *CV- in Ergative-Instrumental and various "oblique" cases (including spatial ones).

(b) the *CV- vs. *CV-n- opposition may have been limited to non-human noun classes, though in some proto-languages it appears that certain human categories (especially feminine singular - FSG) had a similar opposition.

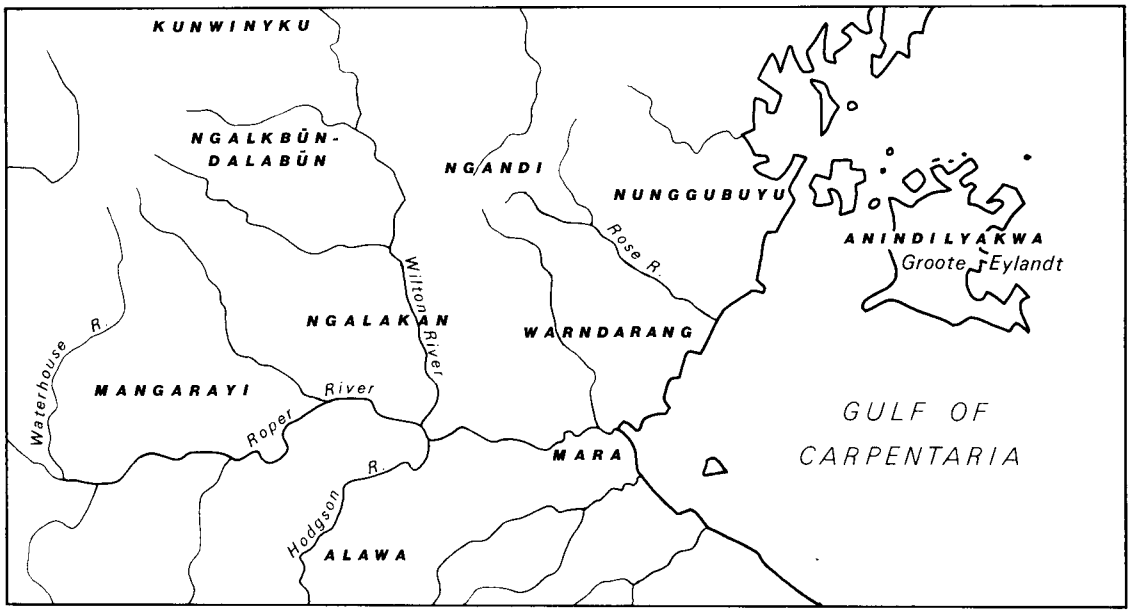
(c) a morpheme *-gu- or *-ga- with quasi-epenthetic value occurred between *CV-n- and a phonologically defined subset of following stems.

The *-n- is probably identical to an Accusative case suffix used with nouns in the (non-prefixing) "Pama-Nyungan" languages; its forms in those languages are -n, -na, -nʸa, -ŋa, etc. It does not occur as a nominal suffix in the prefixing languages in question. The *-gu-/*-ga- is apparently ultimately related to Dative/Genitive *-gu reflected in many Pama-Nyungan languages, though comparable case suffixes in these prefixing languages have different forms (pointing to *-gan, etc.). Both *-n- and *-gu-/*-ga- are also reflected in the pronominal-prefix complexes of prefixing languages (Heath 1976), and there are occasional analogical interplays between nominal and verbal prefix systems.

Overall, the identification of *-n- and *-gu- in the noun-class and pronominal-prefix systems of the prefixing languages is of considerable historical interest. First, they provide evidence that the genetic relationship between Pama-Nyungan (non-prefixing) and prefixing languages of Australia is somewhat closer than might otherwise be imagined in view of the slender number of lexical cognates. Second, since the specific configurations described are not found in Pama-Nyungan, these data suggest that at least those prefixing languages dealt with here descend not directly from Proto-Australian, rather via various intervening proto-languages. Third, the identification of case markers associated with noun-class prefixes suggests that these prefixes may have originated as generic nouns which were typically juxtaposed to more specific nouns and took case marking (e.g., perhaps something like **plant-CASE eucalypt*).

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The languages treated here are shown in the map. We may tentatively distinguish a southern group (Mara, Warndarang, Alawa, Mangarayi) from a northern one (Kunwinyku, Ngalkbon-Dalabon, Ngalakan, Ngandi, Nunggubuyu, Anindilyakwa - the last three probably forming a further subgroup).



Map 1: Selected 'prefixing' languages
South-eastern Arnhem Land, Northern Territory

2. MARA

Table 1 presents relevant noun-class (hereafter NC) prefixes along with suggested internal reconstructions for the immediate proto-language.

Table 1: Mara

	with nouns				with demonstrative			
	ABS		OBL		ABS		OBL	
MSG	Ø	*ŋa-	ŋa-	*ŋa-	ŋa-	*ŋa-	ŋa-	*ŋa-
FSG	n- / n-ŋa-	*ŋa-n- / *ŋa-n-ga-	ya-	*ya-	ŋa-	*ŋa-	ya-	*ya-
NE	n- / n-ŋa-	*CV-n- / *CV-n-ga-	nʸa-	*nʸa-	n-ga-	*CV-n-ga-	nʸa-	*nʸa-
DU	wur-	*wur-	wiri-	*wiri-	war-	*war-	wiri-	*wiri-
PL	wul-	*wul-	wili-	*wili-	wal-	*wal-	wili-	*wili-

Absolutive (ABS) is used for intrans. subject and trans. object, with zero case suffix. Oblique (OBL) prefixes are used for trans. subject (with zero case suffix), and in several non-zero case suffixes. Pergressive suffix -ya or -nʸa now takes zero NC prefix but may once have had OBL prefixes, to judge by (ABS) balba *river*, PERGR walba-ya with initial lenition usually associated with prefixation.

The asterisked (reconstructed) forms are based on attested forms with some modifications, and do not represent the actual system for the common ancestor of the southern languages. The main historical change suggested is truncation of initial *CV- in certain forms, so that at least two and perhaps more *CV-n- forms merge as n-, while masculine singular (MSG) *ṇa- ends up as Ø- in some functions (it is retained in others). We use "Neuter" (NE) for the specifically non-human class, which is partially but not fully merged with FSG.

An alternative to the view that MSG Ø- reflects truncation of *ṇa- is that there was a former unprefixed form, perhaps used as citation form or for focus or predicative use, which simply spread functionally at the expense of the *ṇa- form to create a new ABS/OBL opposition not previously present for this category. Since balba *river* shows no initial lenition it may reflect *balba rather than *ṇa-balba (*ṇa-walba). However, this isolated datum should be used with caution.

The variants n-ŋa- for FSG and NE ABS occur with following ṛ ḷ n ṇ, these being the possible stem-initial apical sonorants. The -ŋa- is absent from the corresponding OBL (FSG ya-, NE nʸa-).

Table 1 shows also prefixes before Distant and Anaphoric demonstratives, based on root -na- (ABS) or -ni- (OBL) with further suffixes. Proximate -nʸa induces shift of prefix vowel to i in ABS forms (ṇi-nʸa, wir-nʸa).

The -ga- in NE ABS n-ga- with demonstratives is historically the same *-ga- seen with nouns in n-ŋa- (with nasality assimilated from n-). Nominal n-ŋa- is used before apical sonorant; demonstrative n-ga- occurs before all roots (-na-, -nʸa-, -ya-) and thus has no synchronic relationship to stem-initial consonant. Perhaps it did originally (if -na- is the analogical source for the others). Synchronically, the n- in n-ga- may be dropped to produce demonstrative adverbs (n-gi-nʸa *this* [FSG/NE], gi-nʸa *here*) and syntactic defocusser ga-na (from n-ga-na, a reduced demonstrative used like a definite article).

3. ALAWA

This language is genetically close to Mara in the southern group. See Table 2 for relevant data.

Table 2: Alawa

	with nouns			
	ABS		OBL	
MSG	ṇa-	*ṇa-	a-	*ṇa-
FSG	an-	*ṇa-n-	ar-	*ṇa-r-
	an-ga-	*ṇa-n-ga-	ar-ga-	*ṇa-r-ga-
	an-g-	*ṇa-n-g-	ar-g-	*ṇa-r-g-
unmarked SG	Ø-	(*CV-n-(ga-))	Ø-	(*nʸa-)
DU	yir-	*yir-		
PL	yil-	*yil-		

The ABS/OBL opposition, and case marking, are like those in Mara. The "unmarked" class, along with DU yir- and PL yil-, have no prefixal opposition. For unmarked class (but not DU or PL), Locative suffix may be used in Ergative/Instrumental function: Ø-l̤ilmi *man*, LOC/ERG/INST Ø-l̤ilmi-ri.

Internal reconstructions in the table may be compared with those for Mara. Alawa shows a more limited truncation (of initial *C, not *CV) than Mara, and does not truncate MSG ṇa- in the ABS. Though Mara and Alawa both distinguish MSG ABS from MSG OBL, the opposition appears to be historically secondary in both cases, using different routes.

FSG an- has an extension an-ga- before r̤ l̤, which may be the only apical sonorants beginning noun stems and are certainly the only stem-initial liquids. Also, an- becomes an-g- before vowel. The form an-ga- matches Mara (FSG) n-ŋa-, but an-g- before vowel may be really a lower-level phonological insertion of g.

The FSG OBL forms point to *ŋa-r- (*ŋar- or *ŋal- is reflected in many northern languages). This does not match Mara ya- well. One possibility is that Mara ya- reflects *ŋa-r- via truncated *Ø-r-, since tap r is unstable and rare as word-initial segment and might shift to y here. The a in ya- could reflect analogy or "euphony", but may also be originally the automatic vocalic murmur accompanying a tap *r.

Examination of Alawa demonstratives and associated forms suggest traces of an older, Mara-like system. Alawa MSG ABS galu *that over there*, FSG an-galu, adverbs galu *over there* and gadanʸagi *in that direction*, seem to begin with the *-ga- seen also in Mara. Alawa gida(nʸa) *here* is related to Mara gi-nʸa *here*, and Alawa defocusser gada matches Mara ga-na. It is possible that Alawa formerly had *CV-n-ga-ROOT demonstratives with *CV-n- NC marker and epenthetic *-ga-, matching Mara ABS forms. Does Alawa likewise have traces of Mara OBL NE nʸa-?

Mara -gayi *other* (ABS) has suppletive OBL stem -argul, hence NE ABS n-gayi vs. NE OBL nʸa-'rgul. This last form seems to match a synchronically isolated form in Alawa, nʸagul *other*, though it is not always OBL. Textual attestations involve *woomera* and *spear* as referents, so it is apparently NE. Unless nʸagul is a recent borrowing, it supports reconstruction of Mara-like NE OBL *nʸa- vs. NE ABS *CV-n-ga- with demonstratives. I am inclined to reconstruct *nʸa- also for nouns, vs. ABS *CV-n- (*CV-n-ga- before apical sonorant or at least liquids).

Alawa also has some NC suffixes added to verbs to disambiguate some 3rd-on-3rd transitive combinations. Sharpe's base forms are: 3MSG subject /-na-ŋga/ and object /-na/, 3FSG subject /-ŋara-ŋga/ and object /-ŋara/. We will not discuss the history of these forms here.

4. WARNDARANG

This is another southern language. See Table 3.

Table 3: Warndarang

	MSG	FSG	DU	PAUCAL	PL	A	WU	MA
with nouns	ṇa-	ŋi-	yiri-	yili-	wulu-	(ṛ)a-	wu-	ma-
with demonstratives	ṇa-	ŋa-	wuru-	wulu-		(ṛ)a-	wu-	ma-

The three non-human NC prefixes (ṛ)a-, wu-, ma- are most likely borrowings from languages just to the north, reflecting older *ṛa-, *gu-, *ma-.

Comparison of DU and PL forms with those of Mara and Alawa suggests possible ABS/OBL opposition by vocalism: ABS *wur(u)-, *wul(u)- vs. OBL *wir(i)-, *wil(i)-. If so, Warndarang has squashed these forms into a single series, with some innovations including split-off of a new Paucal category ('a few').

FSG ŋa- with demonstratives matches the Mara ABS form. FSG ŋi- with nouns is a poor match for Mara/Alawa FSG ABS *ŋa-n-. It is conceivable that it represents FSG OBL *ŋa-r- (Alawa ar-, perhaps Mara ya-). We would need *ŋi-r- as intervening form in one scenario, either with vocalism analogically influenced by non-singular forms, or from assimilation in the case of a variant *ŋa-ri-. Or perhaps this *ŋa-ri- had an intermediate form *ŋa-yi- with weakening of *r to *y.

Warndarang has no obvious vestiges of a *CV-n- prefix combination. There are possible vestiges in the initial segment of demonstrative root -nnʸaya (variant -dnʸaya), used in some adverbs, and non-human interrogative pronoun -ngana (and variants).

5. MANGARAYI

The genetic position of this language is not yet clear to me, but it is probably part of the southern group with Mara, Alawa, and Warndarang. Basic noun forms appear in Table 4.

Table 4: Mangarayi

	M	F	NE
trans. subject	ṇa-	ŋaḷa-	ṇa-
intrans. subject	ṇa-	ŋaḷa-	Ø-
trans. object	Ø-	ŋan-	Ø-
OBL_1 (Genitive/Dative, Locative)	ṇa-	ŋaya-	ṇa-
OBL_2 (Allative, Ablative)	Ø-	ŋaya-	Ø-

"Neuter" nouns in this language differ from Masculine only in distribution of the non-zero allomorph, and may or may not be historically related to NE in Mara or "unmarked" class in Alawa. The case suffix for objects and all subjects is zero, as usual in the southern languages.

F object (Accusative) ŋan- matches Mara/Alawa ABS *ŋa-n-, but is not used for intransitive subject. F OBL ŋaya- could be another problematic reflex of *ŋa-r- (Alawa ar-, perhaps Mara ya-, Warndarang ŋi-). The unusual Nominative (subject) form ŋaḷa- is enigmatic (F. Merlan has a paper on this matter but I do not presently have access to it).

The occurrence of Ø- as a M allomorph is a datum in support of the suspicion voiced earlier that Mara MSG ABS Ø- may represent original *Ø- instead of or as well as truncation of *ŋa-.

Kin terms have a special M Accusative ŋaṇ-. As Merlan indicates, this may well be a recent innovation based on F Accusative ŋan-. One chronic problem we will have in reconstructing the distribution of *CV-n- patterns is that some attested reflexes could be analogical extensions.

6. KUNWINYKU (GUNWINYGU)

This language is spoken in the far north and west of the area under review. Broadly, it is a "northern" language genetically. Relevant forms (in the transcription used in this paper, not the current practical one for the language) are FSG ŋal-, and two non-human classes with man- and gun-. These are *ma-n- and *gu-n- historically, showing spreading of what may once have been a strictly ABS prefix form to other cases. Sue Kesteven informs me (personal communication) that short forms mi- and gu- can still be used as a type of locative sense (with no case suffix): mi-baṇḍe *under the banyan tree*, gu-reŋe *by foot*.

7. NUNGGUBUYU

This is another northern language, though not tightly subgrouped with Kunwinyku. Table 5 gives representative forms, showing some but not all of the luxuriant growth of distinct series of NC affixes in the language.

Table 5: Nunggubuyu

	NC_{infl}				
	Punctual	Continuous	NC_{der}	Object	Suffixal
M	na-		niG-	-nu-	-gi
NA	yi:-	na-	niG-	-ni-	-gi
F	ŋara-		ŋariG-	-ŋu-	-gi
ŊAPA	yi:-	ŋara-	ŋariG-	-ŋu-	-gi
PL	wara-		uG-	-wara-	-ru
WARA	wa:-	wara-	uG-	-wara-	-wi/-wa
ANA_{wu}	a-	ana-	uG-	-wu-	-ni
$ANA_{Ø}$	a-	ana-	uG-	-Ø-	-ni
MANA	ama-	mana-	maG-	-ma-	-mi/-ma

The inflectional (NC_{infl}) prefixes are rough functional equivalents to NC prefixes in the other languages. Human categories M, F, PL have just one series. Non-human classes (NA, etc.) have two series, here labelled Punctual (PUN) and Continuous (CON). Three of the non-human classes are identical to human forms except for the PUN variants, which are only non-human.

The non-human categories with no human counterpart are ANA_{wu}, $ANA_{\emptyset}$, and MANA. These represent *gu-, *ṛa-, *ma- historically. The *gu- and *ṛa- classes have largely fallen together, and can be distinguished now only by object marking in transitive pronominal prefixes with verbs: ŋa-wu-na-nʸ *I saw it*(ANA_{wu}) vs. ŋa-Ø-na-nʸ (*ŋa-ṛa-na-nʸ) *I saw it*($ANA_{\emptyset}$).

In nominal morphology, ANA forms are PUN a- (*ṛa-) and CON ana- (*ṛa-n-), while MANA has PUN ama- (reshaped from *ma-) and CON mana- (*ma-n-). We thus have clear reflexes in Nunggubuyu of the *CV- vs. *CV-n- opposition, but (as in Kunwinyku) only in non-human nouns.

WARA class PUN wa:- vs. CON wara- (neutralised before vowel) is a recent splitting of a single form (*war-, or more accurately *bar-). NA and ŊARA classes (related to M and F, respectively) share PUN form yi:-, which we may internally reconstruct tentatively as *yir(i)- (some demonstratives show yir- or yiri- even now). One possibility is that this goes back to *ŋir-, a putative variant of F *ŋar(i)- (*ŋ is dropped irregularly in some other prefixes).

NC_{der} is the label for a set of "inner" (derivational) NC prefixes used in word-formation (they are preceded by NC_{infl}). I show them as ending in stop archiphoneme /G/, the effect of which is synchronically to harden some continuants to stops (historically: to prevent lenition of following stop). It is not clear whether the /G/ corresponds to any actual consonant etymologically; if so it could be a stop or possibly a nasal, so we cannot totally rule out the possibility of *CV-n- prototypes for this series (though I am skeptical).

uG- occurs in the NC_{der} series for PL/WARA and for the two ANA subclasses. Probably this is a secondary merger from PL *bVG- (perhaps *baG-) and non-human *guG-.

Though not shown in the table, NC_{der} (but not NC_{infl}) prefixes require following epenthetic -ŋu- when the following stem begins with a stop. This is related to *-ga- (nasalised -ŋa-) in Mara and Alawa. (For *-gu- as the etymon cf. Ngalakan, below.)

The curious suffixal NC series (Table 5, far right) is used with demonstrative pronouns (and in reduced and reshuffled form with personal pronouns). The whole series is innovative. ANA -ni and M/F and NA/ŊARA -gi are reinterpretations of non-NC morphemes (demonstrative root *-ni, Locative allomorph *-ki), and the other forms were invented to fill out the new paradigm.

8. NGANDI

Though very close in general morphology to Nunggubuyu, this language has a rather different NC system, with basically a single formal series (used also with verbs as pronominal prefixes). The common ancestor of the two was probably intermediate, with Ngandi then compressing and Nunggubuyu splitting to generate more NC series. See Table 6 for the Ngandi forms.

Table 6: Ngandi

	MSG & ŊI	MDU	FSG & ŊA	PL	A	GU	MA
prefix	ŋi-	bari-	ŋa-	ba-	a-	gu-	ma-

Ngandi has non-human classes (ŊI, ŊA) with the same forms as M and F, respectively, but no non-human class associated with (Human) PL. There is a MDU form bari-, but semantic FDU is lumped under PL. There are no PUN/CON or ABS/OBL distinctions in Ngandi, so there is no reflex of the *CV- vs. *CV-n- opposition, and the surviving forms are of the *CV- type.

PL ba- probably reflects *bar- (cf. Nunggubuyu wara-), reduced to fit the prevailing CV- prefix shape. MDU bari- is *bar- plus M *-ni-, possibly an innovation representing spreading of the 3MDU pronominal prefix in verbs (Ngandi bari-, Nunggubuyu cognate wini-).

M ŋi- and F ŋa- are a little surprising in view of counterparts in closely related languages suggesting M (or MSG) *na- and F (FSG) *ŋar-. It is likely that the F form reflects immediate prototype *ŋa-, with consonant analogically changed to match that of the M form (shifting the oppositional burden to the vowels). This *ŋa- from *ŋar- (or perhaps *ŋal-) is another case of reduction to CV- prefixal shape. The remaining problem is the i vowel in M ŋi- (the retroflexion is no problem since all apicals are retroflexed by rule in Ngandi word-initially). Since the single Ngandi series might reflect compression of more than one proto-series, I suspect that the corresponding 3MSG pronominal prefix ŋi- (cf. Nunggubuyu ni-) has spread from the verbal system into the nominal NC system (as with MDU bari-).

9. NGALAKAN

This language has some affinities to Ngandi and some to Kunwinyku, so we will simply describe it here as another "northern" language. Some forms are shown in Table 7.

Table 7: Ngalakan

	M	F	GU	MU
ABS	ŋu-gu-	ju-gu-	gu-n-gu-	mu-n-gu-
OBL	{ŋu- / Ø-}	{ju- / Ø-}	gu-	mu-
Note: OBL ŋu- and ju- are common with kin terms, demonstratives, etc., but have some lexical restrictions.				

The forms listed as ABS are used for intransitive subject and transitive object, but the "OBL" forms are also attested in these grammatical functions. I do not understand the nuances, but my data show that the "ABS" forms commonly have given or presupposed-reference function and are thus regularly used for subject or adjectival predicates ('X is big', etc., with focus on the predicate). The

OBL forms are used with the non-zero case suffixes, including Ergative/Instrumental -yi?, though sometimes the NC prefix is omitted.

Historically, gu-n-gu- and mu-n-gu- are *gu-n- and *ma-n-, with the final *-gu- presumably in quasi-epenthetic function (preventing the *-n- from forming a cluster with the stem-initial consonant). There is now no association with specific stem-initial consonants (contrast Nunggubuyu -ŋu-, Mara -ŋa-, etc.).

On the other hand, ṉu-gu- (M) and ju-gu- (F) may very well be Ngalakan innovations, modelled on gu-n-gu- and mu-n-gu-. Since we do not get *ṉu-n-gu- or *ju-n-gu-, I am inclined to reconstruct an earlier situation where the human gender prefixes had a single form each, ṉu- (perhaps really *na-) and ju-, which are still used with kin terms and certain other stems.

Vowel u has obviously generalised in NC prefixes, perhaps starting from *gu- class forms. The ju- morpheme could possibly be another reflex of the F (FSG) OBL form *ŋar- or *ŋari- via truncated *ri-, but there may be other explanations involving a distinct cognate set.

10. SUMMARY: *CV- vs. *CV-n-

Though far from complete, our collation of data suffices to prove the existence in the proto-languages for all of the prefixing languages considered of a *CV- vs. *CV-n- opposition in NC prefixes. In the northern groups we can reconstruct *ṛa- vs. *ṛa-n-, *ma- vs. *ma-n-, and *gu- vs. *gu-n- as non-human class markers. In the southern group we can reconstruct FSG *ŋa-r- (approximate transcription) vs. *ŋa-n- and one or more non-human sets represented here schematically as *CV- vs. *CV-n- (the *CV- is lost by truncation). The northern groups show little evidence for an opposition within F (FSG); the reconstructable form appears to be *ŋar- or *ŋal-.

The function of the opposition (which may, by secondary developments, extend to additional NC categories) is basically Absolutive *CV-n- vs. Oblique (including Ergative) *CV- in the southern group, except that Mangarayi restricts *CV-n- (the only exception being FSG ŋa-n-) to Accusative function. In the northern languages we find sharp disagreement among the languages. Ngandi generalises *CV- to all functions, Kunwinyku generalises non-human *CV-n- with only vestigial locative usage of non-human *CV-, and Ngalakan roughly distinguishes non-human ABS *CV-n- from OBL *CV- but has the *CV- forms used sometimes in absolutive contexts.

Adding to our exposition of the Nunggubuyu PUN vs. CON series for non-human NC prefixes, we observe that there is a broad association between PUN and spatial (and other marked) cases on the one hand, and between CON and subject and object on the other. An important cross-cutting factor is discourse givenness; CON is associated with given, absence of prefix with focus (or predicative status). Finally, in the direct sentential scope of a negative, all nouns must have CON prefix regardless of other factors.

There is thus an element of discourse-status marking in the Nunggubuyu and Ngalakan reflexes of the *CV- vs. *CV-n- opposition, with *CV-n- having the association with givenness. (The languages differ in that *CV-n- is usual for all subjects and direct objects in Nunggubuyu, but for the smaller category ABS in Ngalakan.) For the northern languages, then, as far as we can determine the *CV- vs. *CV-n- opposition involved both case marking (probably ABS *CV-n- vs. OBL *CV-) and an overlay of discourse statuses (*CV-n- having an additional

nuance of givenness). The case marking appears to match the southern situation, but the discourse overlay is not attested in any of the southern languages.

11. SUMMARY: EPENTHETIC *-gV-

We also reconstruct southern *-ga- and northern *-gu- as morphologically specialised epenthetic elements which could be inserted after *CV-n- and possibly other consonant-final NC prefixes before certain types of stems. In the south, Mara and Alawa appear to agree in using *-ga- before liquids (and perhaps generally before all apical sonorants). In the northern languages, *-gu- generalises in Ngalakan so it is used after all occurrences of *CV-n-. Nunggubuyu uses *-gu- with nouns only after "inner" NC_{der} prefixes and before stem-initial stops; it is difficult to interpret this historically since the NC_{der} series is probably new in its present form and since Nunggubuyu has a highly-developed phonology based on a stop (or sometimes stop/nasal) vs. other-consonant opposition. We therefore cannot tell what stem-initial consonants favoured *-gu- in the northern proto-language(s).

12. NOTE ON KIN TERMS

Although the Nunggubuyu NC_{der} system is probably innovative, certain similar prefixes in a small number of archaic-looking kin terms do have an august history, since we find close parallels in the genetically somewhat remotely related, and geographically non-contiguous, Mara (where the forms in question are totally isolated synchronically):

Nunggubuyu:	{ni-gi ŋari-yi	Mara:	{ni-ja- ŋayi-ya-	*(man's) son* *(man's) daughter*
	{ni-maṛig ŋari-maṛig		{ni-ba- ŋayi-wa-	*(woman's) son* *(woman's) daughter*

I suspect that the stems here are cognate, via some irregular developments, but the prefixes are clearly comparable, and even agree on having surface stop after M *niG- and continuant after F *ŋari- (nasals, of course, are exempt from this alternation).

SOURCES

Alawa: Sharpe 1972
Kunwinyku: Oates 1964
Mangarayi: Merlan 1982
Mara: Heath 1981
Ngalakan: own field notes from 1973-77 (F. Merlan has since done more thorough fieldwork)
Ngandi: Heath 1978
Nunggubuyu: Heath 1984
Warndarang: Heath 1980

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LINGUISTIC DIFFUSION IN THE BIRDSVILLE AREA

L.A. Hercus

1. INTRODUCTION

In discussing the 'special nature of Australian languages', S.A. Wurm (1972: 30-37) has given an outstanding account of the problems of regional versus genetic similarities between Australian languages. These problems have since attracted considerable interest as is shown for instance by the work of B. Alpher on Cape York (1976) and particularly J. Heath (1978) in Arnhem Land. The Lake Eyre Basin is another important area of regional similarities. The aim of the present paper is to illustrate some aspects of linguistic diffusion in the Birdsville area, in the north-eastern section of the Lake Eyre Basin.

In the Birdsville area three language groups border on each other. Their ultimate genetic relationship is distant by any of the criteria one might apply (Dixon 1980:251ff). They are:

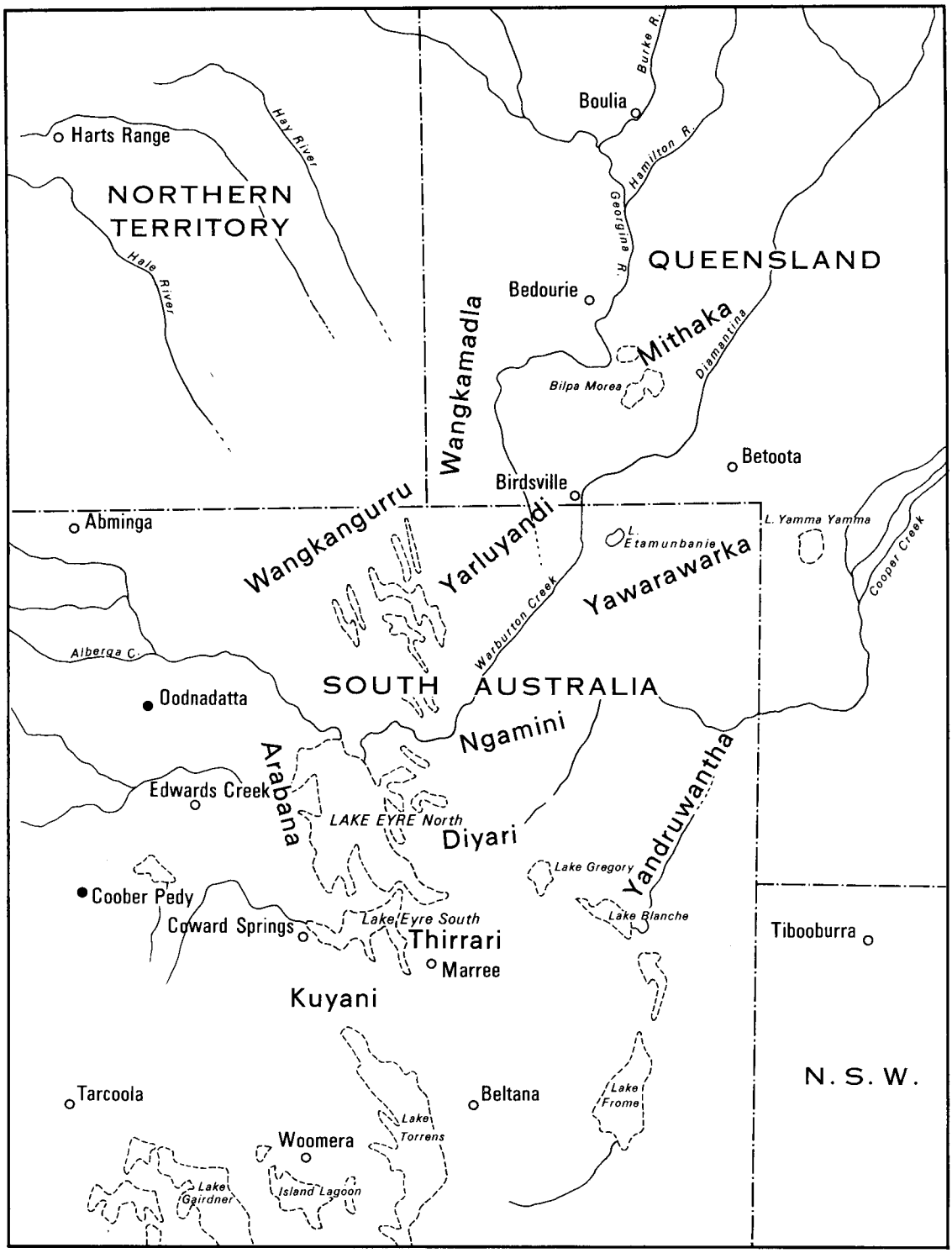
(1) The Diyaric group, which includes Diyari, Thirrari, Pirlatapa, Yawarawarka, Yandruwantha, Ngamini, Yarluyandi and Mithaka, as shown by Austin (1981:6ff) and Breen (1971). Mithaka and Yarluyandi are the two languages of this group that belong to the Birdsville area. Mithaka, which was recorded by Breen is now extinct and only one person still has a fragmentary knowledge of Yarluyandi, which has been recorded by Breen and Hercus.

(2) Arabana-Wangkangurru: this was spoken to the west and north of Lake Eyre. It was Simpson Desert Wangkangurru, particularly the eastern dialect, which was closest to the Birdsville area. The present work is based on the knowledge of the last Wangkangurru speakers.

(3) The Pitta-Pitta group, which was on the far north-eastern fringes of the Lake Eyre Basin. The Pitta-Pitta dialect involved was Lhanima, also alternatively known as Tarlimanha and as Wangkamanha *Bad Speech*. Wangkangurru people referred to the language and its speakers by the Wangkangurru version of this name, Wangkamadla *Bad Speech*, and this is the term most widely known through the work of Tindale. Wangkamadla people occupied the area to the north of Birdsville on what is now Glengyle and Sandringham. Their language is now extinct (Blake 1979).

The boundaries between these three groups were not far from present-day Birdsville as can be seen from Tindale's map (1974). Some adjustments are however necessary according to the evidence of Johnny Reece and the late Mick McLean and Maudie Naylon, all of whom had great traditional knowledge of the area.

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 245-255. *Pacific Linguistics*, C-100, 1987.
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Map 1: Languages of the Birdsville area

The boundary between Wangkangurru and Yarluyandi and Mithaka was further to the east than indicated in Tindale's map: as Tindale himself explains (1974:219) the boundary was changing. Within the Simpson desert Wangkangurru country reached much further north than is implied by Tindale's map. Traditionally Lake Mirri-ngupa-ngupanha *many (dead) people lying about*, i.e. Lake Mirranponga Pongunna, and Warrapulanha, Lake Thomas near Poeppel's Corner are Wangkangurru mythological sites, as is Madlu well, over the Queensland border. The eastern boundary of Wangkangurru was close to 'the Georgina' (Eyre Creek) and not far from Birdsville.

2. TRADITIONAL ASSOCIATIONS BETWEEN PEOPLE AROUND BIRDSVILLE

There were trade, social and ceremonial reasons why the Birdsville district could act as a centre of diffusion: the much prized pituri *native tobacco* grew by the Mulligan River in Wangkamadla country and the route by which this was traded to the south passed through the Birdsville district (Mulvaney 1976:87). There was a network of social and ceremonial ties. Thus the Wangkangurru people who lived in the Simpson Desert had close genetic links with Arabana people to the south-west, they intermarried with Lower Southern Aranda people, and their ceremonial affiliations spanned both sides of the desert, from the country of the Lower Southern Aranda in the west to the country of the Yarluyandi and Wangkamadla to the east. Wangkangurru mythology and traditional chants describe the travels of Ancestors from the country of neighbouring groups across the desert by various routes. Thus the 'Two Boys' started at Witjira, Dalhousie Springs, on the border of Lower Southern Aranda country and they then travelled to Parra-parranha *the Long One*, a well in the central Simpson desert; then they went east to Wangkamadla and Yarluyandi country. A major site for this myth was at the Dickerie waterhole, north of Birdsville. The Warrthampa History connects the rare tree, *Acacia puce* which grows near Andado in Aranda country across the desert to the other stand of these trees which is just four miles from Birdsville.

Wangkangurru mythology relates how the Ancestor Markinjangkurla travelled through the lower Macumba in Aranbana country crossing over to the Diamantina and to Nharimaya, on the lower Eyre Creek, not far from Birdsville. The 'Two Men', were probably the best known Ancestors of the Lake Eyre Basin, and various versions of their story are given by Reuther and by Howitt. The last Simpson Desert Wangkangurru man, the late Mick McLean recited the song-cycle that belongs to their myth. The 'Two Men' went from the MaRaru claypan in the central Simpson desert all over the Lake Eyre Basin including Yarluyandi and Yawarawarka country to teach people about circumcision knives. The Fire History, including the Wapiya song-cycle goes in the opposite direction, from Wangkamadla country to the Macumba. Many more examples could be given: there are, for instance, four different rain-histories that cross various parts of the desert.

The natural environment of most of the area once occupied by the speakers of all three language groups, Wangkangurru, Diyaric and Pitta-Pitta was extremely harsh. The country of the Simpson Desert Wangkangurru consisted of huge dunefields with no surface water (Hercus and Clarke 1986), and the same applied to much of Wangkamadla country. Most of the land of the Yarluyandi and Mithaka was stony desert. Nevertheless there were good seasons, and after the Diamantina and Eyre Creek were in flood huge stretches of the countryside around the two rivers in the Birdsville area were a lush paradise. This was the time for great ceremonies at the ritual centres connected with the Ancestors whose travels involved

the whole area. People gathered together from afar in order to be able to perform the ceremonies for 'the whole line' and in order to take part in increase rituals. The waterhole which is the location of present-day Birdsville was such a site for the Fish Increase Ceremony, The Kalidawarry waterhole north of Lake Muncoonie in Wangkamadla country was the biggest ceremonial centre for the Warrthampa history. Koonchera waterhole south-east of Birdsville was the major Emu centre. These ceremonies were the occasion not only of ritual, but also of social and trade exchanges.

3. THE LAKE EYRE BASIN AS A LINGUISTIC AREA

On account of these social and ceremonial links between the different groups it is not surprising that there was considerable linguistic diffusion in the Lake Eyre Basin. Various linguistic features crossed the genetic boundaries, but this diffusion — as one might expect — shows no absolute regularity: there was not only one, but a number of centres of diffusion. The spread of pre-stopping of medial nasals and laterals (Hercus 1972) does not cover the same ground as the semantic development described in Austin, Ellis and Hercus (1976), and this in turn does not show the same geographic distribution as the loss and weakening of some initial consonants (Hercus 1979). Linguistic diffusion in the Lake Eyre Basin does not follow a simple pattern, it is diverse in range, and has intricate variations.

The most obvious evidence of diffusion is in the semantic field. The Lake Eyre languages form a subtle semantic unity, there are common ways though not means of expression: there are common grammatical categories. The following examples illustrate this situation.

(a) 'ALTRUISTIC' FORMS

We find for instance an 'altruistic' (Austin calls it 'benefactive') form of the verb; an affix is added to the stem of transitive verbs to imply that the action is performed on behalf of somebody else. In Arabana-Wangkangurru, as also in Pitta-Pitta (Blake 1979:205) this affix is -la, in Diyari it is -yirrpa, -ipa, and in Yarluyandi -pa (Austin 1981:78). There is however a difference between the language groups: both in Pitta-Pitta and in the Diyari group as pointed out by Austin, this affix can also be added to intransitive verbs, though in a different function, namely as a transitiviser: thus tharrka- *to stand*, tharrkipa- *to make something or somebody stand up*. This additional function is not shared by the corresponding Arabana-Wangkangurru affix.

Examples of the use of 'altruistic' or 'benefactive' forms of the verb are:

in Arabana,

athu njipa wirra-rnda
I ERG *clothes* *buy*-PRES
I'm buying some clothes (for myself)

but

athu njipa wirra-la-rnda
I ERG *clothes* *buy*-ALT-PRES
I'm buying clothes for somebody else

similarly in Pitta-Pitta,

mari- *to get*, mari-la- *to get for somebody else*

in Diyari,

kurlka- *to save*, kurlka-yirrpa- *to save for somebody else*

(b) SWITCH-REFERENCE MARKING

A very important areal syntactic feature is 'switch-reference marking' (Dixon 1980:465), which is found not only throughout the Lake Eyre Basin but also over a wider area of Central Australia. Peter Austin (1981:193ff) has described this feature in detail for Diyari. Arabana-Wangkangurru makes exactly the same type of distinction as does Diyari between complex clauses where the subordinate clause and the main clause share the same subject noun-phrase and where they do not. I had this distinction made clear in a practical way: long ago while on a field-trip with Mick and Arthur McLean I wanted to call out to them 'I am just cooking your breakfast, it will be ready in a minute!' I said, attempting to speak in Wangkangurru:

Athu kathi wadni-ra anti tharni-lhiku.
I *meat* *cook*-PRES *soon* *eat*-PURP

They laughed and said 'So you are going to eat ours too!' This was because I had used the purposive suffix on the verb 'to eat'. The use of this suffix implies that the subject of the two verbs, in this case the main clause verb 'to cook' and the dependent clause verb 'to eat' had to refer to the same person. What I had actually said was *I am just cooking this meat so that I can eat it soon.* What I should have said was:

Athu kathi wadni-ra anti tharni-nha-nga.
I *meat* *cook*-PRES *soon* *eat*-NP-LOC
I am just cooking this meat so that soon (someone other than me) can eat it.

In Wangkangurru the use of the locative of the non-past participle implies that there is a switch of subject. This 'switch-reference' distinction applies to relatives and to other kinds of implicated clauses, not only purposive clauses, and it is found in all the Diyaric languages as well as in Arabana-Wangkangurru. It is interesting to note that in Yarluyandi a switch of subject in a relative clause is marked by the affix -nimu and in Ngamini by -iyimu. This is particularly close to the Wangkangurru situation, since -mu is the locative case marker, whereas in the other Diyaric languages there is no such affiliation with the locative.

(c) 'IN THE ABSENCE OF'

The use of the locative is part of another characteristic areal feature common to Diyaric and Arabana-Wangkangurru. This is a construction with the Wangkangurru adjective padni *nothing*, Diyari pani where it conveys *in the absence of*. Thus Austin (1981:127) quotes from Diyari:

Puka pani-nhi ...
food *none*-LOC
When there was no food ...

Making use of an identical construction an Arabana woman said:

Kadnhakardi padni-nga, maltja nhanhi-lhiku waya-rnda.
pebbles (i.e. money) *nothing*-LOC *not* *see*-PURP *wish*-PRES
When there isn't any money, I don't want to look (in shop windows).

In Arabana-Wangkangurru when a pronoun is used, both the pronoun and the adjective padni have to be inflected for the locative:

anth'-ita padni-nga
I-LOC *nothing*-LOC
when I was nothing (i.e. before my time)

There is a similar locative construction referring to a period in the life of a person. Thus in Diyari:

Kanku waka-nhi ...
boy *small*-LOC
When he was a small boy ...

And in Wangkangurru:

Uka-kinta mankarra-nga ...
she-LOC *girl*-LOC
When she was a little girl ...

These and a number of other grammatical features that are shared in the area may not be unheard of elsewhere in Australia, but the important fact is that they are common to the Lake Eyre region: there is a close semantic bond between the languages, although the morphemes used are entirely different. The situation is not as extreme but approaches that quoted by Heath (1978:122) from a South Asian context:

> The sentences ... are lexically distinct in almost every respect, yet they have identical grammatical categories and identical constituent structures ... It is possible to translate one sentence into the other by simple morph for morph substitution. (Gumperz and Wilson 1971)

4. WANGKANGURRU AND PITTA-PITTA

J. Heath (1978) in his important studies of linguistic diffusion in Arnhem Land has shown how even bound morphemes can cross boundaries, some more readily than others. In his analysis he differentiates between bound morphemes that are usually diffusable and those that are not (p.105). The non-diffusable morphemes include verbal inflectional affixes.

There are a few instances where Wangkangurru and the Pitta-Pitta group actually share not only grammatical categories, but also some unusual verbal inflectional affixes. Thus the affix -li is used to mark the habitual in both language groups. There are further interesting equivalents: Blake (1979:208) mentions a Pitta-Pitta form tunYtYili meaning *used to cry a lot*. He goes on to state:

> This example also occurs with -pariya suffixed to -li. -pariya also occurs with nhangka-li, nhangkalipariya meaning *used to live*. We have not been able to ascribe a meaning to -pariya.

The answer appears to be available from Simpson Desert Wangkangurru. This language makes frequent use of a far distant past habitual form -liparna, as in thangkaliparna *(they) used to sit there long ago*, and kapirri pirdaliparna *(they) used to kill goannas long ago*. This Wangkangurru form is totally unlike

the corresponding form in the closely related Arabana dialect, which is -apukanha, as in thangka-apukanha *they used to sit there long ago*. -liparna thus shows every indication of being borrowed from Pitta-Pitta.

Blake continues:

> In a few instances the concomitant suffix -maru is added to -li with no apparent function
>
> wama pithi-li-maru ngant^{y}a
> snake kill-li-Con I
> I kill snakes.

Arbana-Wangkangurru has an identical suffix -limaru. This has two clearly defined functions. It is used in subordinate clauses as a past completive or pluperfect implying causality:

> Kangi puntha-limaru ngurlpa thangkarda.
> *too much drink* -PAST *sick sit*
> *He is sick because he has been drinking too much.*

It can also be used with the main verb as a completive:

> Paya karka-nangka-limaru.
> *bird squawk*-CONT-PAST
> *Those birds have stopped their continuous squawking.*

The Wangkangurru particle manarni *maybe* has no equivalent in Arabana, but it resembles Pitta-Pitta marna *maybe*. Adverbs are usually formed with the suffix -li, but there is also a rare adverb-forming affix -marnda, as in nhuka-marnda *greatly, too much*, which is identical with the standard Pitta-Pitta adverbial suffix.

These instances of grammatical borrowing indicate close contact between Wangkangurru and the Pitta-Pitta group. There is, however, an even closer bond of diffusion between Wangkangurru and Yarluyandi, centred around the Birdsville area. This too involves not only semantics, but actual morphemes.

4. LEXICAL AND MORPHOLOGICAL DIFFUSION BETWEEN WANGKANGURRU AND YARLUYANDI

There are a number of words that hav spread throughout the Lake Eyre basin, words of social importance, for example the names for the moieties, names for rituals, such as the Wiljaru secondary initiation ritual, and names for sacred objects. On a more local basis there is also evidence of actual borrowing between Wangkangurru and Yarluyandi. It was particularly the eastern dialect of Wangkangurru that was influenced by Yarluyandi — some of the words are very obvious and common: for instance Eastern Wangkangurru people say ko for *yes*, like the Yarluyandi, Ngamini and Diyari, while the Western Wangkangurru say piyi. This word ko usually written as kawu in Diyaric does not even fit into the Wangkangurru phonemic system. Eastern Wangkangurru has muRu for *vegetable food* (which resembles Yawarawarka muluru, Breen 1971) while Western Wangkangurru has wakarinji. Eastern Wangkangurru wari-wari *cod*, nhampurru *bream*, thampani *driftsand* are all identical with the corresponding Yarluyandi words as opposed to Western Wangkangurru marrkara, parru and miljura.

Particularly striking is the similarity in the use of the emphatic clitic. In Western Wangkangurru, as in Arabana, there is an emphatic clitic -thu,

Thiyara yuwu- thu?
where person - EMPH
Where are the (Aboriginal) people?

and,

Nhayi-thu wiya malka thudni-li ...
this - EMPH *child not cry* -HAB
But this child wouldn't cry ...

This clitic is particularly common in Eastern Wangkangurru, and in this dialect, after a final -i it shows vowel harmony and becomes -thi.

Minha wararda?
what that
What's that?

Kapirri-thi!
goanna - EMPH
It's a goanna!

Yarluyandi has a clitic which is always -thi. It is difficult to establish whether borrowing occurred from or into Yarluyandi: all that is certain is that there was diffusion of the use of -thi across language boundaries and a distinct gradation: -thu in Western Wangkangurru, allophonic variation between -thu and -thi in Eastern Wangkangurru, and -thi only in Yarluyandi.

There is moreover in Wangkangurru and Yarluyandi a clear case of diffusion of a verbal affix: it is the affix marking the present tense. Between Arabana to the west, across the two dialects of Wangkangurru and across the boundary to the genetically not closely linked Yarluyandi there exists a gradation, a step-by-step change in the way the present tense is marked. A characteristic of Arabana-Wangkangurru is the difference in tense suffix according to transitivity. The Arabana situation is as follows:

-rnda in intransitive verbs marks the present, both habitual and actual, in transitive verbs marks a general and habitual present.

-rda is the allomorph used when the verb root contains a nasal-plosive cluster.

-ra is used only in transitive verbs, whether the object is expressed or not. It marks an actual, punctiliar present.

-thira is the allomorph used after the 'altruistic' suffix -la and the verbaliser -ma.

In Wangkangurru the suffix -rnda/-rda marks the present of intransitive verbs as in Arabana, but the punctiliar present of transitive verbs is always marked by -ra in verbs ending in -i and by -yira in verbs ending in -a. In Arabana-Wangkangurru, transitive verbs thus show a finer distinction in tense-marking than intransitive verbs; this is logical as most intransitive activities, walking, sitting, talking, coughing etc., involve some inherent continuity, and a punctiliar form is not strictly necessary. In Yarluyandi there is a present tense marker -yara, which is used with all verbs whether transitive or intransitive. This suffix is added in its full form to all verbs, whether their stem ends in -a or in -i.

The gradation can perhaps best be seen from examples of the actual present (as opposed to the continuative) of two verbs 'go' and 'know'.

	Intransitive	Transitive
	I go	*I know*
Arabana (in Arbana this includes the continuative)	antha yuka-rnda	athu-ngurka-ra
		ngurka-la-thira (allomorph) *they know something connected with me*
Western Wangkangurru	antha yukarnda	athu ngurka-yira ngurka-la-yira *(they) know something connected with me*
Eastern Wangkangurru	antha yukarnda	athu ngurka-yira ngurka-la-yira *(they) know something connected with me* pronounced as [ngurkaira, ngurkalaira]
Yarluyandi	nganji yutari-yara	ngathi ngurka-yara

The languages which are genetically most closely related to Yarluyandi, namely Ngamini and Diyari, mark the present with the suffix -yi, and there is nothing within the language group to explain the suffix -yara. It would seem plausible therefore that the -(i)ra type of suffix was borrowed from the neighbouring Wangkangurru, but was adapted to Yarluyandi morphological structure, that is no distinction was made between transitive and intransitive verbs.

From the social data it is clear that the obvious point of contact was in the Birdsville district. The last fluent speaker of Yarluyandi, Maudie Naylon Akawilhika died in 1980, but fortunately she recorded enough of the language to shed light on this part of the 'linguistic area'. From the available evidence it is certain that there was an intricate network of social and linguistic contacts in the whole of the Lake Eyre Basin. There was not just one centre of diffusion, but several, and the Birdsville area was clearly one of the most important of these.

NOTE

In this paper a practical orthography has been used. Plosive consonants other than the retroflex plosive have been written as unvoiced, (k, p, th, t), but prestopped consonants have been written with voiced plosives as this corresponds most closely to the pronunciation, hence bm, dn, dnh, dnj, dl, dlh.

Retroflexes have been written as r + consonant, that is,

rl is retroflex l,
rn is retroflex n,
rd is retroflex t.

Interdentals have been wirtten as consonant + h, hence ng, th, lh.

Palatals have been written as consonant + j, hence tj, nj, lj.

ng has been used for velar n.

The three r-sounds have been transcribed as follows:

r = the alveolar flap,
rr = the trilled r,
R = retroflex r.

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WHY IS SMOKE NOT A SMOKE?
LANGUAGE TABOO AND PROBLEMS OF ELICITATION IN THE LANGUAGES OF THE MARKHAM FAMILY

Susanne Holzknecht

INTRODUCTION

The problems of eliciting even basic vocabulary are familiar ones for linguists, and have been discussed in detail by Laycock (1970) with particular reference to the New Guinea area. In this article I will discuss the problems associated with eliciting the specific words for 'smoke of fire' and 'tobacco' in the languages which make up the Markham Family[1] of Austronesian languages in the Morobe and Madang Provinces, Papua New Guinea.

1. ELICITATION PROBLEMS

Elicitation using a lingua franca, usually Tok Pisin in this geographical area, can lead to the 'pitfalls' referred to by Laycock (1970:1127). In the examples I will be discussing in this paper, the Tok Pisin word smok could be interpreted as meaning either *smoke of fire* or *tobacco, cigar, or cigarette*. If just the word for smok is asked for, the translation given in the vernacular could refer to either of the above meanings. The referents of smok can be disambiguated by asking for smok bilong paia *smoke of fire* or for brus *tobacco* or smok long brus *a cigar or cigarette of tobacco*.

2. WORD TABOO PROBLEMS

However, this problem caused by ambiguity of items in the language of elicitation is not the only source of recording errors in these languages. The cultural practice of word taboo which exists in these communities of the Markham languages can also cause the apparent mixing-up of items of vocabulary, and the existence of doublets and triplets.

Word taboo in Oceanic languages, the effects it can have on the phonologies, morphologies and vocabularies, and the implications for comparative linguistics have been discussed in detail by Dyen (1963), Keesing and Fifi'i (1969) and Simons (1982). The situation among the speakers of the Markham languages is

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similar in many respects to that described by Keesing and Fifi'i, and by Simons, in that the taboo is on calling the names of affines. In all the languages of the Markham, there is a taboo on a person saying the names, or words containing the names of a mother-in-law and father-in-law, and in some groups also of a sister-in-law and brother-in-law. Saying these names can incur penalties of varying degrees of severity, ranging from a general feeling of 'shame' to paying large amounts of compensation to the injured party. As names are, in this area, often the names of objects, actions or processes in the language, the names of these things are also taboo between people in these relationships.

The words for 'tobacco' in the languages of the Markham family are frequently used as personal names, as are the words for 'smoke of fire'. As a person acquires affinal ties his or her personal name becomes taboo for a group of people. In a small sommunity this can extend quite widely. If the person is called by the word for 'tobacco' or 'smoke', certain strategies must be used to avoid saying the taboo word. One strategy is to use a word which is descriptively similar to the taboo word, so to use 'smoke of fire' instead of 'tobacco' would be one possible way of avoiding this taboo word; another is to use the word for the item from a neighbouring dialect, or from a neighbouring language. Thus the words for 'tobacco' and 'smoke of fire' may cross over within one language, or across language boundaries. Since the advent of Tok Pisin into the Markham area, people have used Tok Pisin words to replace taboo words, and in the Adzera language I have heard smok used to replace pau *tobacco*.

The problem of recording and recognising taboo items, replacements and doublets is one aspect of the elicitation process. Another problem associated with word taboo arises in the contact between the researcher and the informants. If the researcher asks an informant for an item which happens to be taboo for him or her, then the researcher may have difficulty in eliciting the 'correct' form because the informant or even a group of informants may not say this word. They may knowingly give an alternative or substitute word in order to avoid the taboo word, as breaking the taboo can incur penalties as mentioned above. Franklin discusses this in relation to Kewa, a Papuan-speaking group in the Southern Highlands of Papua New Guinea (Franklin 1975:720). Thus a researcher not familiar with the languages or the taboo system may record incorrect items without realising it. However, cross-checking of data with other speakers of the language may alert the researcher to these errors.

3. HISTORICAL BACKGROUND OF TOBACCO

Tobacco is a native plant of the Americas, where the Portuguese first obtained it and knowledge of its use in smoking. Riesenfeld (1951:70) suggests that it was introduced into the New Guinea area by the Portuguese who, in 1511, first visited Amboina (Ambon) island where *Nicotiana tabacum* was first recorded by Rumphius, writing between 1670 and 1690. The reported presence of the Portuguese along the north and south coasts of New Guinea during the 16th and 17th centuries is connected with the introduction of the plant and its use in smoking. The word for *tobacco* in many of the communities which acquired it reflects the Portuguese word *tabaco* which is itself derived from the word tabako, which is from the Arawak language. Riesenfeld lists as many words for 'tobacco' from the New Guinea area as he could find from existing sources.

Many of these words reflect the word *tabaco*, but in some of the areas where tobacco was known the word is 'probably ... derived from the word "smoke"' (Riesenfeld 1951:90). K. Holzknecht (1971:245-246) notes that in the Adzera language, a member of the Markham Family, the word for *tobacco* is pau and is the same as the word for *light smoke*, although this meaning of the word is no longer recognised and the more general term for *smoke*, dugunt, is now used for all smoke. It is therefore reasonable and easily explained if a researcher, when asking for the word for 'tobacco', 'cigar' or 'cigarette' may be given a word that means 'smoke of fire' owing to the extension of the word for 'smoke' to cover 'tobacco'. But it is less likely when asking for the word for 'smoke of fire' that he or she will be given the word for 'tobacco', unless the items are homophonous in the language which is not the case in the Markham languages.

The languages of the Markham Family are all descended from a language or group of related languages which broke up and migrated from the coast into the Markham, Watut, Leron, and Busu River valleys well before the 16th or 17th centuries, when tobacco was probably introduced into the western part of the New Guinea island. Oral history traces the acquisition of tobacco by the Markham people to the mountains to the north of the Markham River in recent times (K. Holzknecht 1971:245). At the time of the first European contact with the people speaking the languages of the Markham group, the Adzera speakers, and probably the Mari speakers of the upper Ramu valley, had knowledge of smoking tobacco (Froehlich 1908:209), but the Wampar people of the lower Markham valley did not (Neuhauss 1911:126,279, cited by Riesenfeld 1951:74). The people in the mountains to the north of the Markham valley, from the north Huon Peninsula coast to the Adzera area, had tobacco and smoked it at the time of European contact (Riesenfeld 1951:74). K. Holzknecht (1971:245) notes that tobacco was obtained by the Adzera people through trading with the Jarus dialect group, who had in turn obtained it from the Awara people in the mountains to the north-east.

So it appears that tobacco and its use was moving into the Markham Valley from north-west to south-east but had not reached the Wampar, and thus probably not the other languages in the lower Markham valley and lower Watut valley, by the time of European contact in the early 1900s. As the introduction of tobacco definitely postdates the breakup and dispersal of the Markham languages, no protoform of the word can be reconstructed for the whole Family, or even for subgroups within the Family.

4. LANGUAGE DATA

Word lists collected in a survey of the languages of the then Morobe District by SIL personnel in the 1960s can provide examples of the types of elicitation problems discussed above when trying to record the words for 'tobacco' and 'smoke of fire'. The anomalies in these lists could also have been caused by word taboo. The lists were elicited using Tok Pisin. In some of the original lists (Standard Survey List) the words for 'smoke' and 'tobacco' are recorded. In other lists (English-Kâte List Part 1) only 'smoke' is recorded. For the languages of the Markham Family, the word for 'smoke' actually recorded in many cases was that for 'tobacco' and not the correct, and entirely different word, for 'smoke of fire'. The item 'smoke' appeared on the Standard Word List between the items 'fire' and 'ashes', and on the English-Kâte List between 'water' and 'ashes'. The item in the Standard Word List was provided with a Tok Pisin translation, smok bilong paia, and in the English-Kâte List with an

unambiguous Kâte translation. Edited lists were published in Hooley 1970; 1971. The items recorded for 'smoke' were included in these edited lists, but the items for 'tobacco' were not.

In the table below, the column headed SMOKE 1 lists the words recorded for 'smoke' in the SIL lists, and are reproduced, with language names, as published in Hooley 1971. The column headed TOBACCO tabulates the words in those languages for 'tobacco' as I recorded them, and the column headed SMOKE 2 lists the words for 'smoke of fire' as recorded by myself during my research in 1985.

LANGUAGE[2]	SMOKE 1	TOBACCO	SMOKE 2
1. Adzera (all dialects)	dugunt	pau*	dugunt
2. Mari	gaunt	puka*	gaunt
3. Wampur	ragunt	buka*	ragunt
4. Sukurum	bak	bak*	rugun
5. Sarasira	urugung	ba:k*	rugun
6. Unank (North Watut)	hasu?	buga?*	asu
7. Dangal (South Watut)	momowan	dafum	mwamwangun
8. Maralango (South Watut)	buga?	buga?*	mwamwangun
9. Silisili (Middle Watut)	sanggasong	mboga*	sangason
10. Dagin (Wampar dialect)	wason	dafum	wason
11. Wampar	datum[3]	dafum	wason
12. Musom	tahu	tahung	wasun
13. Duwet	dawen	tahung	ndaweng
14. Guwot (Duwet dialect)	tuhun	tahung	ndaweng
15. Sirak (Nafi)	seku	seku	wasun
16. Labu[4]	le?	tahu	le
17. Bukawa[5]	daung	dahung	wasu

(starred items appear to be reflexes of the word tobacco)

The words listed for SMOKE 1 are, for seven items out of seventeen, identical with the words which I recorded for 'tobacco' in those languages. In ten out of the seventeen languages, the word recorded for SMOKE 1 is the word meaning 'smoke of fire'. In the seven instances where the word recorded for SMOKE 1 is actually the word for 'tobacco', the correct word for 'smoke of fire' is completely different and not related to or derived from the word for 'tobacco'.

5. REASONS FOR APPARENT HOMOPHONY OF ITEMS

What appears to be, at first glance, homophony between the items in SMOKE 1 and TOBACCO for languages 4, 8, 11, 12, 14, 15 and 17 can be attributed to either of the two possible sources of elicitation and recording problems discussed in sections 1 and 2 of this paper. That is, it could be recording error due to ambiguity in the language of elicitation, or it could be a consequence of word taboo.

It is unlikely that every case of homophony between the words for 'smoke of fire' and 'tobacco' here can be attributed to word taboo, as it would be too much of a coincidence for seven out of seventeen informants, in different places and at the same time, to be unable to use the word 'smoke of fire' and have to substitute the word for 'tobacco' instead. And as pointed out above, it is less likely that the word for 'tobacco' would be substituted for 'smoke of fire' than vice versa.

However, it is much more likely that the Tok Pisin word smok was used to elicit 'smoke of fire' without being disambiguated. For those languages where, to my knowledge, the English-Kâte List was used, and not the Standard Survey Word List, the correct word for 'smoke of fire' was recorded. The fact that the homophony between the words for 'tobacco' and 'smoke of fire' was not picked up and remarked upon when checking the responses for the word for 'tobacco' where that occurred in the list is, however, surprising.

6. CONCLUSIONS

The consequences of recording incorrect items as a result of such ambiguity in the elicitation language, or as a result of not recognising word taboo in operation, can be quite serious particularly in a short word list. The apparent dissimilarity between the items recorded for the different languages can give rise to mistaken conclusions about the history, lexicostatistics, borrowing, variation in rates of retention and innovation, and other problems which are frequently encountered by comparative linguists, particularly in the languages which belong to New Guinea Oceanic. (See Simons 1982:189-190 for a full exposition of these problems.)

Short survey lists are particularly vulnerable to errors being made, as there is less opportunity for cross-checking within the list. As the sample is small, even one or two errors can have a proportionally large effect on the statistics produced. Some solutions to the problems are to use longer word lists, cross-check within the lists and with different informants in the same language, and for the researchers to inform themselves about the customs of the people whose language is being studied before taking lists.

NOTES

[1]This group of languages has formerly been called the Adzera Family (Hooley 1970; 1971) but to avoid confusion with the name of one member of the Family, the Adzera language, I am calling it the Markham Family. See also Ross 1986. The study of the languages of the Markham Family was undertaken while I was a Research Scholar in the Linguistics Department, Research School of Pacific Studies, ANU, from 1984-1987. I would like to thank the ANU and the Department of Linguistics for supporting my work during this time.

[2]Language names in this list are as published in Hooley 1971. The names used in my study, where they are different, are in brackets. Where a 'language' is actually a dialect of another in the list, this is also indicated in brackets beside the language name. Hooley did not include the Yalu language in his study, so I have not included data for this language here.

[3]This must have been a mistake in transcription. The correct form is dafum.

[4]The status of the Labu language with respect to the languages of the Markham Family is still not clear, see Ross 1986.

[5]Bukawa is not a member of the Markham Family, but does share many vocabulary items with neighbouring languages which do belong to the Family, as given here for 'tobacco' and 'smoke'.

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n.d. English-Kâte Survey List, Part One.

n.d. SIL Survey Word List (Standard).

INDICATIONS OF THE CHANGING STATUS OF WOMEN IN MODERN STANDARD CHINESE TERMS OF ADDRESS

Beverly Hong-Fincher

Introduction and summary definitions

Most Chinese terms of address are kinship terms. Their distinguishing features are age and gender. Even the kinship terms which are used for 'non-kin' in wider social contexts follow the same principle of classification by age and gender. This paper examines the socio-linguistic evolution of the three best known social titles for women in polite, casual Chinese speech — taitai, xiaojie, furen. In order to see the process of their linguistic evolution clearly, it is necessary to discuss the interaction of these titles with their counterparts among men's titles — laoye, shaoye, xiansheng. Considered in their historical setting, the changing usages provide indications of the changing status of women from ancient times up through modern China's social revolution. The principal relevant terms, can be briefly defined as follows:

taitai *highest-highest* > the most senior > the mistress of the household, especially a household with servants, 'madame'; meaning in social interaction, 'I respect you as the highest person of the (your, his, my) household', 'wife'.

xiaojie *little older sister* > the daughter of a household with servants; meaning in social interaction, 'I respect you as one would respect his/her older sister, but I also recognise your young age so as not to appear too solemn with you'.

furen *man + person* > a marquis' wife > wife of a member of the landed gentry; meaning in social interaction, 'I respect you as one would respect the spouse of a person of status'.

laoye *old + father* > grandfather > old master of the household of an official wealthy gentleman, husband; meaning in social interaction, 'I respect you as one would respect his/her father or grandfather in your role as head of this household where I am employed or as a government official who has complete authority over me'.

shaoye *little + father* > young master of the house, son; meaning in social interaction, 'I submit to you as one would submit to his father and I also recognise your young age so as not to be too solemn with you'.

xiansheng *first + born* > older > teacher, husband; meaning in social interaction, 'I respect you as someone born before me and acknowledge that you have something to teach me'.

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The mid-century situation

In his article on 'Chinese terms of address' published in *Language* (1956), Y.R. Chao states that xiansheng *Mr*, taitai *Mrs* and xiaojie *Miss* were the most frequently used terms of address in Chinese daily social life. Today, three decades later, the linguistic scene is rather different. In fact as he was writing that article, changes had already been taking place. His data excluded language use by speakers from the vast China mainland which was not accessible for linguistic field work. The many speakers of Chinese who had crossed the border had quickly adjusted themselves to the ways of speaking Chinese in communities outside mainland China, as did the others who followed them afterwards. Relatively few travelled in the other direction until the late 1970s. They did so with little impact on mainland speech, though already by the early 1970s, those who returned began to have things to say about changes they observed but did not adopt.

When he classified these terms under the heading of 'titles', Chao implied that they were used somewhat formally. Indeed, individuals were (and are) not only addressed directly or 'called' xiansheng, taitai or xiaojie *Mr*, *Mrs* and *Miss*; at least xiansheng and taitai could (and can) also be used to refer to individuals in linguistic exchanges between others: for example, my xiansheng *husband* and so and so's taitai *wife*. That is, the same terms served as 'vocative' and 'designatives', except that it is possible to refer to so and so's xiaojie *daughter*, but not to my xiaojie — unless to indicate teasingly that 'mine is a daughter over whom I have no more authority than over someone else's'. The vocative form for wife was described by Chao as eh, *name*, taitai, *mama etc.*, the designative being qizi, taitai, laopo. For husband the vocative was eh, *name*, baba, etc., and the designative zhangfu, nanren, xiansheng.

Usages in traditional China

The one term for men xiansheng and two terms for women taitai and xiaojie discussed by Chao, and a third term for women furen have been in existence for many centuries.

xiansheng can be traced to at least the time of Confucius. At that time, besides meaning *older person*, it also had its other present meaning, that of *a teacher*, making it a respectful term of address expressing status.

taitai may have begun as a term created by analogy for referring to the grandmother di tai taihou of the Emperor Ai of the former Han Dynasty. The title was instituted in a decree of Emperor Ai in 7 B.C. *(Hanshu Yiji, Zhonghua Shuju, Beijing* 1975:339*)*. The characters used are di *emperor*, hou *empress* and tai *highest, most esteemed*. The compound tai + hou already meant *empress dowager* before that time. Preceded by both di and an additional tai, the compound for *empress* taihou thus was in a single string, di tai taihou, identifying the emperor's grandmother in Dubs' translation as *grand august empress dowager*.

It is quite possible that this expression for the highest possible rank and status of a female was 'corrupted' through use over a long time. Setting aside di *emperor* as the possesser of the noun phrase in question, and recognising hou as having the particular meaning *queen* or *empress*, taitai remains as a combination empty of any substantive meaning in its original context (di tai taihou) which was free to indicate any woman who might be 'grand and august'. In any event, by the Ming dynasty (1368-1644), it had descended into use as a term of

status for wives of upper middle or high level officials. By the late Qing (1644-1911) it was used for the wives of foreign merchants in Canton, perhaps by servants or former servants of such officials, perhaps by officials who had contact with foreign officials and merchants.

furen, a term not discussed by Chao, but one which whose frequency has recently been increasing, is probably an even older term than taitai. A Confucian Classic of the Former Han period, the *Guliang*, defines the term thus: 'the meaning of furen is one who follows a gentleman'. (Furen zhi yi cong jun zhe ye.) The Emperor Wang Mang (who reigned A.D. 8-23) awarded the title to the spouse of a lord of his realm. By the third century A.D. this term had come into wide usage for women whose husbands had a high social standing. The morphological make-up is very like that of 'madame' *(ma + dame)*.

xiaojie was historically the latest import into this set of polite terms for women of status. xiaojie was used to address or refer to daughters of persons with higher official status beginning in the Qing dynasty (1644-1911). Unlike taitai which descended from the highest social circles, or xiansheng and furen whose social meaning spread more or less horizontally among males and their spouses, xiaojie had to overcome dubious associations indicated by its use for prostitutes.

The modern history of terms for addressing women

taitai and xiaojie began to be used outside their traditional context in the wake of the Republican Revolution of 1911 and during the campaigns for cultural change that were known after 1919 as 'The May Fourth Movement'. Though they came into very general use through the 1920s and 1930s, they became obsolescent with spread of the word airen for *spouse*. airen was heard in localities 'liberated' by Communist armies as early as the 1940s and came into general use on the mainland after 1949. However, taitai and xiaojie were retained and spread up to the present in Chinese speech communities outside the mainland. Since the late 1970s, the opening up of mainland Chinese society has brought some linguistic concessions to the very common usage of both taitai and xiaojie among ethnic Chinese and foreigners from all over the world. Mainlanders have gracefully adopted these terms for use with outsiders. But, except in circles such as those of Canton where frequent contact with outsiders might make such usage 'trendy', they stop short of general use of the terms with each other.

taitai and xiaojie thus mark a socio-linguistic boundary in otherwise easy communications between post-1949 mainland 'insiders' and post-1979 'outsiders'. The awkwardness of switching back and forth between usages thought appropriate for insiders and outsiders has led to much linguistic experimentation. This includes substitutions of furen for taitai and airen. It functions as a dual purpose term despite its having lapsed into very circumscribed usage through the first three quarters of the twentieth century. The change has come in a manner and under social circumstances reminiscent of those which accompanied the earlier spread in use of the term taitai.

(a) Republican period changes

As Kroeber remarked in a 1933 study, Chinese kinship terms have rigorously expressed distinctions of gender (sex) and age throughout two millenia of changes. Faithful to this framework, at the beginning of the twentieth century,

in traditional Chinese families with enough social standing usually to assure the presence of personal servants, the male head or patriarch of the household was called laoye *old master*, sons were called shaoye *young master*. Females were also distinguished by their age, with taitai reserved for the elder and xiaojie for the younger among those entitled to the attention of servants. The situation is reconstructed in Chart A which follows:

Chart A: Traditional usage

		GENDER	
		Female	Male
AGE	Old	taitai	laoye
	Young	xiaojie	shaoye

The Republican Revolution brought a 1912 Presidential order banning use of the term laoye for reference to officials. The term laoye perpetuated feudalistic attitudes and practices which the revolution sought to eliminate from China's bureaucracy and politics. In the eyes of Republican revolutionaries, the preferred terms for officials were those that might apply to other males, such as xiansheng *mister* and tongzhi *comrade*. But if traditional deference to officials could no longer be shown directly, the language provided indirect means. The new Republican order led to the 'back door' expression of deference to officials through use of the term for their wives of taitai.

taitai was not only a traditional term; it was the traditional term most loaded with hierarchical deference. Three of the terms in Chart A use the informal personal prefixes of lao-, xiao- and shao-, whereas the fourth uses the most formal personal prefix in the Chinese system of address, tai-. Ironically, with the approach of the May Fourth Movement, use of the term taitai was nonetheless supported by social modernisers anxious to emulate what they took to be evidence of the Western emancipation of women. Comment focussed on evidence that, in traditional households, women were expected to stay as much as possible out of sight and out of earshot, unseen as well as unheard. It was observed that the Chinese language did not even provide a 'vocative' with which to call or address a wife, even in designative forms. In traditional usage, when referring to their spouses, Chinese men tended to use the term neiren *inside-the-house person* for a wife. Moreover, while women used nanren *male person* for a male in a way which identified him as a particular person, as 'my man' or 'my husband', the analagous term in the language, nüren *female person*, did not necessarily identify a particular person ('wife' as opposed to one of a number of women who could include concubines, mistresses or prostitutes).

A variety of innovations were considered. For example, an article on 'Personal views on terms of address between husband and wife' which appeared in a 1918 women's journal, proposed adding the suffix jun — a polite title — for use in situations for the spouse of either gender addressed of '50 steps and beyond'. However, a different formulation was honoured in practice. Actual linguistic behaviour in the 1920s and the 1930s involved increasing use of the term taitai for a wife in combination with that of xiansheng for a husband.

Combined use of the terms taitai and xiansheng for wife and husband was followed by the introduction of xiaojie as a term for an unmarried female. This novel western marking of marital status spread with the literary revolutionary works

of the May Fourth era and quickly supplanted the marking of age or generation as a semantic feature. Along with the Western emphasis on marital status came the tendency also to make that distinction general for women but not for men. The result was a set of three terms of address featured in Chart B below in a way which emphasises an asymmetry. Where there were two terms for women, taitai and xiaojie, there was only one for men, xiansheng. Such asymmetry is as novel to the Chinese language as is the displacement of the normal emphasis on age with an emphasis on marital status.

Chart B: Westernised usage

MARITAL STATUS	GENDER: Female	GENDER: Male
Married	taitai	xiansheng
Unmarried	xiaojie	xiansheng

We can see more clearly through Charts A and B how the terms taitai and xiaojie carry traditional Chinese class overtones while introducing Western style discriminatory treatment of women, albeit in a benign 'ladies first' form. Under the influence of the vogue for democracy, intellectual revolutionaries may have shed the linguistic shackles of class by adopting xiansheng, a new use of a traditional term of address to end discrimination between old and young and high and low males. Yet, when compensating for centuries of not addressing directly their own wives or the wives of others, they paid females the dubious compliment of using the most formal and empty of old status terms both in calling and in referring. And they substituted a new distinction between married and unmarried females for the traditional distinction between the old and the young. Their adoption of taitai aligned them linguistically with tradition-minded bureaucrats who used the same term to compensate for social levelling mandated by the early Republican proscription on the use of laoye.

(b) Communist period changes

Their mixed feudal-bureaucratic and quasi-revolutionary Western parentage limited the appeal of the terms taitai and xiaojie over the longer run. To the extent that it emulated an earlier innovation designed to preserve some of the traditional social status of officials, the use of taitai was thus at odds with the Western democratic vogue of the May Fourth Movement by which it was inspired. And, to the extent that the new use of taitai and xiaojie diluted Chinese deference towards age with Western discrimination on the basis of marital status, it did less than its advocates pretended to improve the situation of women. An additional problem was the simple breach of normal canons of oriental modesty involved in any such direct imputation of high status to one's spouse and, by implication, to one's self.

The critical problem, however, was the instability the new usages introduced into the normally well balanced Chinese system for addressing social acquaintances. As already noted, where two terms were provided for females, a single term had to do where two had once been available for males of comparable status; and the instability that accompanied this asymmetry was compounded by the introduction of a distinguishing semantic feature completely novel to the

Chinese system: marital status rather than age. Well established distinctions on the basis of age were not only suppressed, but actually subverted by the novel distinction between married and unmarried women. For example, lao xiansheng became and remains a very respectful vocative term for old men; but lao taitai remains very ambiguous (that is, is it meant to be respectful or uncomplimentary?) and lao xiaojie only means *spinster*.

The relatively quick disappearance of the earlier, innovative use of taitai and xiaojie on the mainland after 1949 therefore reflected only in part the revolutionary rejection of a set of terms of address identified with the pre-revolutionary social system. The change also involved the rejection of a set of terms which fit poorly into the Chinese socio-linguistic system, both because of their asymmetry and because of their suppression of the previously obligatory feature of age. They were supplanted by further innovations which more or less accompanied the consolidation of Communist authority in the 1940s and 1950s. Of the three common terms discussed by Chao, only the term xiansheng survived in the set of formal terms of address which became standard in post-1949 mainland China. The new set includes a term coined before the time of the 1911 Revolution and urged on the Chinese by Sun Yatsen and other Revolutionaries before it was more successfully espoused by the Chinese Communists, tongzhi *comrade*. tongzhi was once considered a term of solidarity. Today its use is so extensive as to fall into two very different categories. First it is used restrictively with a surname or full name to indicate the extra distance required by formal situations, such as a reprimand; secondly, it is very frequently used to make a common noun in neutral descriptions such as ta shi ge nü tongshi *it's/she's a female person*, and, in a polite extension of such usages, tongzhi alone is a way to address a stranger face-to-face, as when asking Tongzhi, zhe che qu dongwu yuan? *Sir/Madame, does this bus go to the zoo?*

Among the linguistic changes that accompanied the mid century revolution of the Communists, the most pertinent indicator of changing attitudes towards the status of women is the introduction of the term airen *beloved* for general references either to one's own spouse or those of others regardless of gender. airen conformed to the revolutionary rejection of arranged marriage. It thus accorded well with the tenets of the Mao Zedong Communists in Yenan after the mid 1930s Long March and during the war with Japan. Its usage is confined to designation. For example, one can say Ni airen zing shenme? *What's your wife's/husband's surname?* but not *Li airen *Mr/Mrs Li*. The vocative must take other forms — such as the prefixes lao *old* or xiao *little* plus surname, or surname plus the suffix tongzhi.

airen is a pure neologism. However, it is morphologically very Chinese, implying the expression so ai de ren *the one who is loved*. Its use avoids the asymmetry of the taitai, xiaojie, xiansheng formulations that bothers those accustomed to the normal balance in Chinese terms of address. However, a major problem with the term airen has been the resistence to its use expressed since the mid 1970s by members of Chinese speech communities outside of mainland China. Surrounded by sets of foreign language terms which have long shaped use of taitai, xiaojie and xiansheng in such communities, the term airen is left with discomforting connotations of illicit or explicitly sexual love conveyed by its literal appropriateness as a translation of the common foreign word 'lover' rather than the rather uncommon or literary word 'beloved'. Sensitive to possible aversions to the term among a group of Chinese-Americans he received in 1972, the late Premier Zhou Enlai professed that at his age he preferred the term laoban *old companion* rather than airen for his wife. Though

in fact generally characterised by a puritanical emphasis on sexual continence, the presumed political extremism which accompanied the spread of the term on the mainland is another source of discomfort among Chinese speakers outside the mainland.

Despite gestures to outside sensitivities like that made by Zhou Enlai, mainlanders have shown little interest in an unqualified restoration of the previously abandoned terms **taitai** and **xiaojie**. Both terms too readily appear in references to someone thought to be putting on airs, as when passengers might ridicule an airline stewardess as a **'Shanghai xiaojie'**. Indeed, the aversion to the presumed pretensions of those who accept the title of **taitai** is enough to inhibit many mainlanders from terms to which it is tied, especially in a phrase such as 'my **xiansheng**'.

The awkwardness of the situation has worked to bring **furen** into wider and wider use both as a replacement for **taitai** and as a synonym for **airen** in references to a wife. Like **taitai**, the term **furen** comes from traditional terms of deference for the wives of high status men. But, as is noted above, unlike **taitai**, the term **furen** has been used in only very restricted ways throughout earlier parts of the century. Even among the Nationalists, it was used only for the wives of top leaders. For example, of the two famous Song (Soong) sisters who supported opposite sides during the struggles between the Nationalists and Communists, the one married to Chiang Kaishek, Song Qing Mei, has been addressed as **Chiang Furen** *Mme Chiang*. It was also used occasionally for non-professional women whose husbands had a very high social status, such as the wife of the Yunnan Governor Long Yun.

Until recently, mainlanders have not used the term at all. Thus the Song sister, Song Qing Ling, who married President Sun Yatsen and who, as his widow, supported opposition to Chiang's Nationalists was not called ***Sun Furen** but rather Song plus one of her own titles, including that of Honorary Chairman (of the People's Republic of China): **Mingyu Zhuxi**. We also note that, along with many other notable women, Deng Yingchao (Mme Zhou Enlai) is not referred to as **Zhou Furen** either. These women are either addressed by their official titles or by extended kinship terms, such as **Deng dajie** *big sister* or **nainai** *grandma*.

The new use of the term **furen** is, like the original Republican use of **taitai**, a search for a Chinese equivalent for Western terms such as Mrs or Madame. The hyper-respectfulness paid married women (but only married women) is a problem for users of **furen**; but it is evidently a more distant problem than that associated with the use of **taitai**. The very restricted use of **furen** in the immediate past leaves it available for present and future 'corruption'.

Conclusion

In the reformist 1980s, on a road sometimes resembling that mapped out by 1920s liberals, one hears young men among the Chinese intelligentsia refer to their wives as **wo furen**. The expression violates oriental norms which require modesty in references to a spouse since such reference indirectly reflects one's evaluation of his own status. But the expression is also a bow to the international influence of the women's liberation movement, as is reflected in the fact that official translation of women's social titles are always 'Madame'.

Changes in terms of address for women since the early twentieth century reflect profound social changes. Women have travelled further and further from the shadowy silence to which traditional socio-linguistic codes assigned all but occasional elderly matrons. While confirming upheavals in the social system, changes since the middle of the century reveal structural pressures towards symmetry in the Chinese linguistic system — particularly the balancing of the features of gender and age. Changes like those in the use of **furen** since 1979 are comparable to efforts six decades earlier to deal with incongruities between usages by adaptation of **taitai** and **xiaojie**. But any accommodation between terms of address that does not respect the normal Chinese socio-linguistic balance between features of gender and age is likely from past experience to remain unstable.

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DEATH OR LIFE:
THE PROGNOSIS FOR CENTRAL BUANG

Bruce A. Hooley

0. INTRODUCTION[1]

In Papua New Guinea, everyone speaks a minority language. There are 740 languages spoken; 200 are Austronesian, and 540 non-Austronesian, or Papuan. Language size ranges from less than 100 speakers to more than 160,000, with the mean around 3-4000. According to Sankoff (1980b) the 80 largest languages include over a million speakers, while at the other end of the spectrum, the 200 smallest account for only 50,000.

Thirty years ago few of these facts were known, and it is due largely to the work of Stephen Wurm that we know as much as we do about the linguistic picture, and the languages, of Papua New Guinea (see for example Wurm 1977). Now that we have such knowledge, we are faced with another question: what is to be the ultimate fate of all these languages?

With the emergence of Papua New Guinea as an independent country moving strongly towards modernisation, economic growth, and mass communication, the answer to this question is by no means a simple one. Tok Pisin is spreading rapidly as a lingua franca. And in order to promote unity and facilitate communication, the use of English is being emphasised, especially for educational purposes. Yet at the same time the government has expressed a desire to preserve the local languages and cultures which form such a distinctive part of Papua New Guinean life. With these conflicting forces at work, the fate of the minority languages becomes an important consideration. This paper will look briefly at the history of contact and its impact on one average-sized Papua New Guinean language. It will try and reach some conclusions regarding the future viability of the language, and of many like it in Papua New Guinea.

1. THE CENTRAL BUANG LANGUAGE

Central Buang is an Austronesian language of the Buang family (Hooley 1970), spoken by about 4,600 people living in the central part of the Snake River Valley in the Mumeng sub-province of the Morobe Province. Some of the degwa, or kin groups (Sankoff 1972) have been living in the valley since beyond the limits of living memory or even folk tales. These original inhabitants were

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joined by other groups at various stages of their history. One such group was forced out of the Wau-Bulolo area by encroaching Angans, and were allowed to settle in the valley. Others came from the coastal side of the range after the destruction of the settlement of Legga following a disagreement over a woman, Adii atov. Ties are still maintained in this direction today, particularly with the Vehes group from Buasi village. Some families, tracing their rights through Adii atov, have gardening land on the coastal side of the range. Trading partnerships were also developed and maintained with the Ho'te' to the south, and the Patep to the west. Relationships, largely through marriage, existed with the people living at either end of the valley. The headwater people speak a dialect of Central Buang, while those from Mangga, lower down the valley, speak a closely related language. It is obvious from all this that Buang, in prehistorical times, must have come in contact with a number of other languages, mostly Austronesian. This contact would have been of the egalitarian type described by Sankoff (1980b).

2. CONTACT WITH WESTERN SOCIETY AND LANGUAGE

2.1 Prewar contact

First contact with non-indigenous people took place under the German administration prior to 1913. This contact was mainly with government patrols and recruiting expeditions seeking plantation labour.

Further contact came in a secondary way shortly afterwards, through the visits of the Lutheran Mission evangelists from the coast. These evangelists were Papua New Guineans trained by the mission and using the Jabêm language,[2] although some of them did make an attempt to learn Buang. As the Lutheran Mission became more firmly established in the valley, it introduced Jabêm as a medium of instruction. The first school was established in the village of Dawong (Wij) in the mid twenties, with students from a number of different Buang villages. The teachers came from the coast, mostly from the Bukaua and Kela languages, and so they were already teaching through the medium of a second language. Some of the more promising young men were sent away to Malalo, near Salamaua, for further training, and these eventually became leaders in the Buang congregations.

By the late twenties the gold fields had opened up in the Wau-Bulolo area. The Buang were one of the groups who provided carriers and servants and who helped work the claims; being less aggressive than other groups along the route from Salamaua they were popular in such roles. They were also used as carriers for patrols by the government and others. Since they excelled as personal servants and cooks, they became quite mobile, accompanying government officers and other employers to postings in various parts of the country. The consequence of their extensive contact was that many became proficient speakers of Tok Pisin.

2.2 Postwar contact

The work of the Lutheran church was somewhat in abeyance during the war, but soon afterwards virtually all the Buang joined the church, which was organised into three congregations, matching roughly, but not exactly, the dialect/language boundaries. The church's influence throughout the area was much

greater than that of the government, whose officers only made annual or semi-annual patrols of a few days or weeks duration into the valley. For many years mission schools were the only viable option for formal education. They were conducted in the Jabêm language until well into the sixties, but thereafter were held in Tok Pisin or simple English. They have now been replaced by government English schools.

Although mission contact during the war was limited, Buang men continued to have considerable contact with expatriates. They served as carriers and stretcher bearers for the allied troops, and they continued to move around the country whenever an opportunity presented itself.

Movement away from the villages continued after the war, as men resumed their roles on the goldfields and as household servants. Many went to Lae, but nuclei collected in Madang, Rabaul, and other centres. Port Moresby was especially popular, and the current Buang population there is numbered in the hundreds.

By the mid fifties, there were virtually no young men between the mid teens and the mid thirties left in the Buang villages. Another significant factor began to emerge during this period. Whereas in the past men had gone away to work as contract labourers, or for just a few years, before returning home, this was now no longer the norm. Men began to stay away for five, ten, 15 or more years, with only occasional visits home. Two problems emerged as a result. Many girls of marriageable age did not have husbands and many wives did not see their husbands for years.

As communication links improved and movement became easier, a new tendency developed. Wives began to go to the urban centres to live with their husbands; children were born and began to grow up in the towns. This did lend stability to the expatriate Buang groups, but was viewed with some concern by their families still living in the villages. The urban Buang groups tended to gather together at least once a week. These meetings were based on the congregations existing in the home area, so that people from several different villages might be present at a meeting, but for the most part they would all speak the same dialect/language and be linked by well recognised relationships. Such activities served to maintain a fair amount of cohesion. Some of the people also assumed leadership roles in the Lutheran church in Port Moresby, which meant using Tok Pisin apart from the work situation when relating to non-Buang. These people organised evening devotions in specific locations around the city and carried out other group-related functions.

The Buang in Port Moresby also became involved in business ventures, — first lawnmowing, and then taxi-trucks. These were often family or village ventures, and at one stage there was a loose-knit Buang Taxi Truck Company operating.

In 1964 a system of local government was established in the Mumeng sub-province, with councillors elected from the villages in each Buang area, as well as from other language areas around Mumeng and along the Watut River. Meetings, conducted in Tok Pisin, were held monthly in the administrative centre at Mumeng. The Council was replaced by Community Government, but contact outside the local area is still through Tok Pisin.

There are other entities active in the valley which normally use Tok Pisin to communicate. One of these is the Coffee Society, another is the Savings & Loan Society. The church continues to exert considerable influence, though not as much as in earlier days. A Buang Group has been set up by the Lutheran

church and comprises the four congregations of the three Buang areas. While not constituted as a full circuit, the Group still exercises a fair measure of autonomy in the conduct of its affairs. There is often a large degree of overlap in the leadership of all these various organisations.

Currently three government schools operate in the valley teaching up to Year 6. Few students passing through these village schools qualify to go on to High School. Those who do usually go to Lae, but hardly any stay on and graduate. Those who do are mostly children who have grown up in the towns and gone to school there. One reason for this is that lack of opportunity to use English in everyday life in the village results in poor fluency and understanding. Consequently students feel inadequate, and usually leave the school. Even today, I am aware of only one Buang who has graduated from University.

More and more children are now going to English school. Earlier, many people sent their children out to the towns to stay with relatives and go to school. With schools in the valley, there is less need to do this now. In fact there is a tendency toward sending children back from the towns to stay with grandparents when they begin to talk. This is more often done with a second or third child, but appears to be a growing practice. Some at least of these children stay on to go to school in the village. There appear to be two reasons for this practice, apart from concern over a growing lawlessness in urban centres. One is to satisfy and strengthen kin ties, and perhaps to make up to grandparents for the fact that the parents themselves are rarely home. The second seems to arise from a concern that the children are not learning Buang in the towns, although they often understand it. Many of these young people are using Tok Pisin as their first language. A few who have been all the way through High School in Port Moresby will only speak English with me, and claim not to understand Buang.

In the last few years there have been a few young men who have returned from the towns and who are showing signs of settling down in the villages. This movement is small, but may be indicative of a change. Others at least come home periodically for holidays, and express their solidarity with their kin by giving appropriate gifts of goods and money. There is also a steady flow of money from the towns back to home villages for various projects such as iron roofs for houses, water tanks, vehicles, or for village projects such as rebuilding a church. Most recently there have been signs of reluctance towards contributing in this way. For some this may indicate an attenuation of their ties with the group. For others it reflects the rising cost of living in the towns or just possibly a desire for more funds to enjoy the attractions of town life. Relatives also come to the towns to visit and may stay for up to several months. Even though they spend most of their time with the Buang community, there is still much contact with, and need for, Tok Pisin during these sojourns.

In 1980 a group of ten young people received training from the Summer Institute of Linguistics to enable them to teach reading and writing in their own language, and they began to conduct classes for both adults and children in their own villages. There was a fair measure of enthusiasm on the part of the teachers themselves, but the elders did not for the most part support or encourage them. While feeling distressed that many of the urban Buang children were not learning to speak Buang, these elders still did not perceive the relevance of vernacular literacy. Some of the teachers dropped out over the next year or two, but a few have persisted till the present, and are convinced of the value of what they are doing.

3. EFFECTS OF CONTACT ON LANGUAGE USAGE

3.1 Prewar

Buang was especially influenced by Jabêm and Tok Pisin during the prewar period, mainly through terms borrowed for new items of material culture, or terms pertaining to religion. One or two syntactic features were borrowed for special purposes. Such impact as English had was mediated through Tok Pisin. German exerted its influence via Tok Pisin and Jabêm, although German-speaking Lutheran missionaries may also have had some part. It is not always clear where particular borrowings originated, nor how they were transmitted. Those borrowings which came via Jabêm were usually interpreted through the grid of the coastal languages spoken by the mission teachers.

Borrowings during this period were assimilated into the phonological system of the language, sometimes to such an extent as to be unrecognisable any longer as a borrowing. For example:

ketang atov (atov = *big, adult*) — *Cavendish banana*

Which seems like a perfectly normal Buang word, but is actually derived from 'Cooktown', the north Queensland town which was the origin of the species. Other words among many borrowed ultimately from English include:

bakëë	*blanket*	tevor	*table*
pakep	*bucket*	sëa	*chair*
suu	*shoe*	hoos	*horse*
ting	*tin*	kaujor	*councillor*

Some of these came via Jabêm. Ting, at least, was such a one, since Jabêm does not permit alveolar nasals word finally. Other words with final -n, borrowed through Jabêm as proper nouns, also show this occurrence of the velar nasal, for example:

Sadang	*Satan*	Rubeng	*Reuben*

Jabêm introduced or mediated much religious terminology, including many names, since people adopted either Biblical names, or Jabêm expressions, when they were baptised (Hooley 1972). Other borrowings from Jabêm included:

katam	*door*	Apomtau	*Lord*
bingano	*amen*	Ngalau Dabung	*Holy Spirit*
poko	*chalk*	bingsu	*missionary*
kavasung	*orange*		

(now replaced by the Tok Pisin muli in its Buang form mori)

porom *bread*

(now replaced by brët from Tok Pisin bret)

Some words show a change in pronunciation over the years, e.g. the original form for police was berisboo *police boy*; now one invariably hears polis.

At least one grammatical construction was borrowed from Jabêm in the phrase Hil yi Apomtau *Our Lord*. The introduction of the third person singular pronoun yi in the possessive follows Jabêm. The expected construction in Central Buang would be Hil Apomtau. This Jabêm borrowing is heard much less frequently today than 20 years ago.

Borrowings from German included:

kapiya	*paper, book* (from *papier*)
taperë[3]	*potato* (from *kartoffel*)
taperë	*blackboard* (from *tafel*)

The expression dagesën was used by some Buang to express their thanks. It comes, of course, from *dankeschön* German: *thankyou* but it fitted neatly into Buang, as it seemed like a compound formed with the common deictic sën *this*.

A few words borrowed from Tok Pisin (e.g. barus *aeroplane*) come originally from the language of the Gazelle Peninsula in New Britain, rather than from English.

3.2 Postwar

The years of contact brought on by travel and the war meant greater influence of Tok Pisin on the speech habits of the Buang. Tok Pisin was needed in almost all working situations, in contact with government and government agencies, and for other business purposes. Many women have learned Tok Pisin as they have become more mobile, or lived away from the home area. Jabêm is not as widely known now as it once was. It is no longer taught in the village schools, nor heard as often in the church. Buang is used in most social interaction with other Buang, especially in the villages, but even in the towns. Apart from Jabêm being used less frequently, the codes appropriate to specific domains remain much as Sankoff found them in the sixties (Sankoff 1968).

In the villages, Tok Pisin is heard in the following situations:

(i) some church services and sermons
(ii) some speeches or parts of speeches at meetings presided over by the local government councillor or village officials
(iii) parts of meetings where foreigners are present, (school teachers, pastors, etc.)
(iv) displays of anger by people in authority, especially those who represent the government or a government agency
(v) imported children's games, such as marbles
(vi) joking or play-acting situations
(vii) talking to foreigners
(viii) the councillor, or other official when talking on 'official' business, or explaining something relating to the law or government regulations.

The use of Tok Pisin in Buang speech is not uncommon in the following situations:

(i) Substitution of words where the Tok Pisin word comes more readily to mind

hurmahen ya dewasim sir
the children went to wash
(wasim = Tok Pisin *to wash*)

sa bë skurim gagek
I want to add something to the discussion/story
(skurim = Tok Pisin skruim *to add on*)

This is most common with younger people who have spent extended periods of time away from the village. Pro-verbs, such as wokim *to make* and mekim *to do* are especially likely to be used in this way. As the first example shows, the appropriate pronominal prefixes are added as to a normal Buang verb.

Substitutions longer than single words also occur. In a public meeting one man was heard to link two Tok Pisin clauses with the Buang conjunction gak *but, rather, on the other hand* to produce a negated antonym sentence:

ol i no ken opim stua long orode, gak ol i mas pasim
they must not open the store on the holiday, they must keep it closed

(ii) Kin names. It is a cause for shame if one uses the given or 'ground' name of one's in-laws in their hearing (Hooley 1972). To avoid this, it is common to substitute the equivalent word from another language, or to use nicknames. Baptismal names, or a Tok Pisin translation of the ground name, may also serve this function.

(iii) Words denoting new items or concepts. Many examples of these could be given ranging from the parts of a car to the notions of self-government and independence. The borrowings are sometimes partially translated into Buang as in the phrase:

huk ejin
work relating to hygiene
(huk = *work*)

This was discussed in the meetings of the local government council as wok haijin, and then reported back to the village as above.

Another example illustrates how the language sometimes deals with new verbs. Verbs beginning with v- commonly change to b- in the potential aspect. Some people, but not all, have been heard to adjust the potential form of the borrowed verb vot *to vote* to bot, for example:

rëk debot
they will vote

(iv) In quoted speech. In the story of a patrol, the government officer is quoted as having said:

'Nogat paiawut!'
'There's no firewood!'

In another example, some Chimbu men were quoted as having said,

'Apinun tambu!'
'Good afternoon, friend!'[4]

Again, in the same story, the judge is quoted as saying:

'Nogat kot! Yu ken i go bek nau.'
'There's no case! You can go home.'

This is not the invariable practice in dealing with quotes, but it is common. Occasionally a three-way mix is heard, as an example from another story shows:

sa pasim katam
I (Buang) *closed* (Tok Pisin) *the door* (Jabêm)

Often when someone uses Tok Pisin in a Buang utterance, he will immediately apologise, or in some way indicate that he has made a mistake — for example, by joking about it. A friend living in Port Moresby says in such a situation:

O! Sa miksim gagek!
Oh! I'm mixing languages!
(miksim = Tok Pisin *mix*)

There are other clues to the fact that the people have an ideal with respect to language usage, and that they consider using mixed language to be not quite the thing. In translating the New Testament, if was difficult to find a suitable Buang equivalent for 'mad' in certain contexts. My Buang co-translator suggested that we use Tok Pisin longlong. This brought a strongly negative reaction from a group of the leaders, and a lecture on the fact that there must certainly be a good Buang term which we should use. The point was well made — except that their spokesman used only longlong himself throughout his whole harangue.

Even though Buang is still used in the towns in social interaction with other Buang, it is characterised by more borrowings and interspersed with Tok Pisin utterances. Most business and work related activities are conducted in Tok Pisin. Meetings of the Buang Taxi Truck Company were conducted in Tok Pisin even when those present were all Buang.

Another symptom of breakdown in language use in the towns is the fact that some parents are stepping outside the closed traditional naming system (Hooley 1972), and are using European type names for their children. Sometimes this arises from difficulties non-Buang have with Buang phonology, but not always. Children are being named by, or after, employers and friends, and so we find such names as Margaret, Rebecca and Bryan.

The change in usage in the religious domain away from Jabêm towards Tok Pisin has been noted above. Now that the Lutheran Church has established a Buang group in the valley as an entity within the Circuit, it is becoming more common to use Buang in church meetings. The Buang group includes the headwater dialect and the Mangga Buang villages within its bounds, as well as Central Buang. If people speak in the vernacular, they speak in their own dialect, or language, and are understood by their peers at least by virtue of the passive bilingualism described by Sankoff (1968).

4. THE VIABILITY OF THE BUANG LANGUAGE

The future of the Buang language is by no means sure. It is coming under increasing pressure of the type mentioned by Dorian and others (Dorian 1981; Hill and Hill 1977; Dressler and Wodak-Leodolter 1977). For example:

(i) radios and tape-recorders are common in the villages, with television promised for the not too distant future,
(ii) economic pressures or desires move large segments of the population into the urban centres,
(iii) there is widespread borrowing and codeswitching,
(iv) a number of semi-speakers are beginning to appear,
(v) the Buang leaders do not see any need to promote a vernacular literacy program but desire to see education in English from the beginning because of its assumed economic advantage,
(vi) English is the usual medium of instruction in the educational system, and according to Williamson and Van Eerde (1980:81) the educational function is the critical factor.

On the other hand the Buang do value their own language. Its potential viability is demonstrated by efforts being made to maintain it:

(i) concern shown for children growing up in the towns who are not able to speak the language fluently,
(ii) good group cohesion even in the towns, and the high value placed on kin and the ties back to the home area,
(iii) some young to middle-aged men are returning to the villages, and some town born children are being sent back,
(iv) concern shown that correct Buang forms be used.

Buang as a language of social intercourse is not about to die in the near future. It is nowhere near the advanced stages of decay described in the literature on language death. Nevertheless, it is likely to experience further modification through loss of traditional cultural terms and the addition of more loan words. There is some hope that it may achieve the kind of diglossic equilibrium state described by Schlieben-Lange (1977:102) — that of a minority language which persists as the language of solidarity, alongside the official language or language of power. That it could maintain such a status indefinitely is doubtful. The external pressures are likely to increase, and unless some change of attitude occurs among the Buang themselves, or some other factor emerges, the language will eventually disappear.

The same pressures are at work on all the other minority languages of Papua New Guinea, and they too may eventually expect the same fate. The size of the language group, and the extent of the contact will have a great deal to do with how soon it happens, but lacking significant changes the eventual outcome seems inevitable.

There are signs in some parts of Papua New Guinea that such change is on the way. This is especially true in the North Solomons Province where there has been a resurgence of interest in the local languages. That Province has had sufficient contact with Tok Pisin and English to react strongly in favour of its own languages, and so the Provincial Government has supported and helped finance a project to teach local languages in a two year pre-school program throughout the Province. This scheme is proving most successful, and students going through these courses are developing excellent ability with their own languages and are able to move directly into literacy in Tok Pisin. They are also adapting much more successfully and rapidly to further education in English. Other provinces have been watching this experiment carefully, and similar projects have started in parts of the Highlands and the Sepik. If Buang leaders were to catch the enthusiasm for such a scheme and apply it themselves, it could change the prognosis dramatically, even allowing Buang to live indefinitely as a language of solidarity alongside Tok Pisin and English. The same would apply to many other languages of Papua New Guinea.

NOTES

[1]Fieldwork relevant to this paper was carried out over a number of years of residence in Papua New Guinea working under the auspices of the Summer Institute of Linguistics. Further research took place in March 1981 at the SIL Research Conference in Dallas. A longer, unpublished version of this paper was prepared at that conference which was partly supported by Grant No.4088 from the Wenner-Gren Foundation for Anthropological Research. I would like to thank Shirley Brice-Heath for her invaluable comments on that original draft.

[2]Jabêm is an Austronesian language from the Finschhafen area which was adopted by the Lutheran Mission as a means of evangelism. The Mission spread the language through the coastal parts of the Morobe Province.

[3]The German words *kartoffel* and *tafel* have both become taperë in Buang.

[4]This is an extended use of the term tambu, which usually means *in-law*, to cope with a meeting between cross-sex strangers.

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MALAY TALK ON BOAT:
AN ACCOUNT OF BROOME PEARLING LUGGER PIDGIN

Komei Hosokawa

Map No.24 of the *Language atlas of the Pacific area*, part 1 (Wurm and Hattori 1981) suggests that a 'Japanese Pidgin English' was once spoken in the north-western Australian port of Broome, although the editors of the map carefully attached a question mark. Broome is well known for its pearling, which caused an influx of the Asian indentured labourers into this small town. The heyday of pearlshell fishing was before World War I. In 1904, according to Western Australian official records, there were 2700 employees in the pearling companies registered in Broome, of which 1235 (or 46%) were Malay (probably including a large number of 'Koepangers' from Timor and the surrounding islands) and 812 (or 30%) were Japanese. The Asian population in Broome had another peak in 1917, when nearly 95% of the employees of the pearling companies were transient Asian labourers. It was then composed of 1569 Japanese (67% of the total employees), 445 Malays (19%), 61 'Manillamen' (i.e. Filipinos), 4 Chinese and 121 'unspecified Asiatics'.[1] It is generally believed that there were many more Asians in Broome than were counted in the official statistics. However, the above figures give us an idea of the major ethnic composition of the Broome pearling workers. These Asian migrants composed nearly all of the Broome inhabitants between the early 1890s and 1942. The Aboriginal population was (and still is) seasonally variable, so that it is difficult to state how many Aborigines were in Broome. In the late 1870s nearly one thousand Aboriginal men were taken by force to work in the pearling industry (Anderson 1978:18). After the introduction of Asian labour in the 1890s, however, the number of Aborigines concentrated in the township of Broome was estimated to have been numbered around 100 to 300 at least. The White people were considerably fewer.

The likeliness of the formation of a Japanese-derived pidgin as a lingua franca of the (prewar) Broome population is suggested by Mühlhäusler (1985). On the suggestion of, and encouragement by, Professor Wurm and Dr Mühlhäusler, the present author started fieldwork in the Broome area in order to elucidate the history of language contact in the area. Although the research is still in progress, major findings to date may be summarised as follows.

1. Contrary to the rumour among pidgin-creolists about the possible development of Japanese PE and/or Pidgin Japanese in Broome, the lingua franca on the pearling boats was basically a simplified Malay, with inclusion of several Japanese

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grammatical particles and words, as well as of a large number of English (mostly Aboriginal PE) words. In the present paper, the variety is tentatively referred to as the Broome Pearling Lugger Pidgin (hereafter PLP).

2. The following facts suggest that PLP was a typical pidgin language:

i) Its use was limited to a particular social context, namely the pearling labour setting. It ceased to be spoken along with the decline (in the late 1960s) of the multiethnic labour force composition in the pearling industry.

ii) It is modified to such an extent that it can hardly be regarded as a dialect of Malay. The modification was not necessarily a simplification. PLP developed some peculiar grammatical devices that have never emerged in other varieties of the Malay language.

iii) Even the native speakers of Malay tended to use PLP forms, rather than using proper Malay forms, when talking to the other Asian or Australian Aboriginal labour mates.

iv) PLP was also employed as a medium of communication among non-Malays, i.e. between Japanese and Aborigines, between Chinese and Japanese, and so on.

3. PLP was usually called 'Malay talk'. The Japanese people, however, were aware of the fact that the 'Malay talk on boat' was different from the proper Malay, which they referred to as 'Book Malay' or 'Singapore Malay'. The Malay people called PLP 'broken Malay'. The Aboriginal people often confuse Malay and Japanese, taking Japanese words or phrases for Malay, or vice versa, and what they remember is often PLP.

4. Before the arrival of the Asian migrants and the formation of PLP, an Aboriginal PE was already well established among Aboriginal groups in the Broome area, who had been forced to engage in pearlshell fishing in its earliest period (1870s to 1890s).[2] No Japanese PE or Chinese PE seem to be formed in (or brought from other parts of Australia into) Broome. It was generally the case that the Asians, who had very little command of English when they arrived, picked up English from the Aborigines. That is, they acquired the Aboriginal PE, rather than the 'Whitefella's English'. English spoken today by the older Japanese, Chinese or Indonesian Australians in Broome still reveals a remarkable similarity to the Aboriginal PE spoken by the older Yawuru (Jauor), Bardi or Karajarri people in the area.

5. Although the Broome area was probably within the range of Macassan visits, there is no apparent influence on the formation of PLP (in the 1890s to 1900s) from the Macassarese Pidgin that had possibly spread among the Aborigines of the north-west Kimberley region.[3]

The following examples may give readers an idea of the make-up of the PLP.

(1) bure: masa se:(-ya).
bread cook IMP
E M masak *(cooked)* J *(do it)*
Bake the bread!

(2) po:rr kotor -ya, tera baiya.
pearl dirty PRED NEG *buyer*
E M J *(be)* M tidak *(not)* E
The pearl is clouded. It won't sell.

(For each example, the first line gives PLP forms. The second line gives glosses, which are the meanings established in the context of PLP and are fore not always the same as those of their etyma in English, Malay or Japanese, which are identified by the letters E, M and J in the third line. Other abbreviations used in this paper are: KM for Kupang Malay, BI for Bahasa Indonesia, PE for (Aboriginal) Pidgin English. The Japanese forms cited are those of the Western Dialect, not of the standard Eastern Dialect.[4] The original form of the etymon is given when necessary. If some semantic modification or derivation is involved, the original meaning in Malay or in Japanese is given in parentheses.)

The users of PLP were the Japanese, Malays, Koepangers, Hakka Chinese, Filipinos, and a small number of Koreans, as well as the local Aborigines. The Cantonese, mostly shopkeepers ashore, are unlikely to have been users of the PLP. The principal group of Aborigines who provided the 'deck-hands' aboard the pearling luggers were the Bardi people (Baard and Jawi) of Lombadina (now Djarindjin community) and Sunday Island (now migrated to the mainland community of One Arm Point). The Bardi were traditionally skilled sea-fishermen, which is why this particular group of Aborigines was prominently involved in pearlshell fishing. Also involved, though to a lesser extent, were the Nyulnyul, Jabirrjabirr, Jukun, Yawuru and Karajarri people. In contrast, very few Mangala, Walmajarri and Nyikina people were involved in pearling labour and, consequently, did not become active speakers of PLP. Some of them, however, understand a bit of PLP and did (and still do) use several fossilised PLP words or phrases, such as makan *meal*, piki-piki *go, go!* or *do it, don't hesitate!*, terrarra ∿ terdarda *nothing, none*, and minom-rraa *drink!* in their casual verbal interaction either in English or in traditional languages, and even in the initiation ceremonies.[5]

The European population in Broome seems never to have been a part of the PLP speaking community.

Although the use of PLP was primarily restricted to the labour setting aboard, it was also spoken occasionally in the pubs and on the streets, where the Asians and the Aborigines of diverse linguistic backgrounds interacted. However, such an interaction on shore was much less intensive than it was on the luggers during the pearlshell fishing season (April to September), when the multinational crews spent as many as six months together at sea, initially without any language in common.

A majority of words used in PLP are derived from Malay. Some are given below, with Malay etyma. (Here we cite the standard Malay/Indonesian forms. This is *not* to suggest that these are the direct etyma of PLP.)

NOUNS:

owang *money* (M uang), luku *cigarette, smoke* (M rokok), chinda *lover, girl-friend* (M cinta *love*), nashi *cooked rice* (M nasi), etc.

VERBS:

tau *know, be aware* (M tahu, KM tau), ratang *come* (M datan), angkaa ∿ hangka *hoist the sail* (M angkat *lift up*), pasang *bet, raise the stake (in gambling)* (M pasang *put, set; pair, set*), etc.

ADJECTIVES:

bussa:rr *large* (M besar), jau *far* (M jauh), bagu ∿ bagus ∿ bagush *good, nice* (M bagus), etc.

ADVERBS:

shiki *a bit* (M sedikit ∿ sikit *little, few*), banyaa *much, many* (M banyak *much*), beso: *tomorrow* (M besok), lakkas *quick* (M lekas), etc.

WH-INTERROGATIVES:

mana *where?, which?* (M mana), apa ∿ appa *what?* (M apa *what?, how?*), pokorr ∿ pokkoro *what time?* (M pukul *stroke (of clock)*, pukul berapa *what time?*), etc.

Malay nominals are often employed in PLP as verbs, as in the case of panchin *to fish* (M pancing *fishhook, fishing rod*, memancing *to fish*). The Malay verbal prefixes (mem-, ber-, etc.) generally do not occur in PLP. In the case of makan, on the contrary, the Malay verbal form makan can be used in PLP either as nominal (*food*) or as verbal (*to eat*) (M makanan *food*). The nominal use is more usual than its verbal use, partly due to the inclusion of PE-derived i:jim *to eat (eat-him)*.

Personal pronouns are: 1sg saya, 1pl(excl.) kita-orang, 1pl(incl.) samua-orang (M semua *everyone*), 2sg koi, 2pl koi-orang, 3sg de ∿ dea, 3pl deorang. The peculiar 2sg form is likely to be derived from some eastern Indonesian dialect form, rather than from the western forms enkau, enkau, kamu, etc.[6] According to the Malay people in Broome, koi originates in the Koepangers' talk kwĕi *you*(sg). According to Steinhauer (1983:50), however, the Kupang Malay pronominal form for 2sg is lu, which is, again according to what the Broome Malays and Koepangers claim, a 'Chinese talk'. Other KM forms, as reported by Steinhauer, 1sg beta, 1pl(excl.) botong and 1pl(incl.) kotong, are not used in PLP. The 2pl form koi-orang seems to be an innovation in PLP.

The negation marker in PLP is tera, which is employed as an 'all-purpose negator'. It is used not only in verbal negation (in place of M tidak) but also in copulative clauses (in place of M bukan).

(3) inihari tera kurua.
today NEG *go-out*
M M M kēluar *(leave)*
We don't depart today.

(4) saya -nga tera singgapo:rra
1sg TOP NEG *Singapore*
M J -ga (NOM) M M
I am not from Singapore.

The PLP form tera may have been derived from some eastern Indonesian dialect form, such as Malu u dialect tra, rather than the standard Malay/Indonesian tidak.[7] The Kupang Malay negation marker son ∿ sonde is not found in PLP.

Whereas the Malay-derived lexemes in PLP are usually independent words and productive in various phrases, the Japanese-derived ones are either unanalysed whole phrases, or else words referring to typically Japanese things: mo:cho: *more* (J mo:-choi *a bit more*), o:kiniyo: *thank you* (J o:ki-ni-yo:), ippe:-ka: *Do you want a drink?* (J ip-pai ∿ ip-pe: *one-cup* + question marker, see below), saki *grog (in general)* (J sake *rice wine*), samo: *wrestling* (J sumo:), sasmi ∿ sasimi ∿ chachimi *fresh fish fillet flavoured with lime, onion and vinegar* (J sashimi *fresh fish fillet flavoured with soy sauce and horseradish*), etc.

With regard to the Japanese elements in PLP, what is most intriguing is the frequent use of the particles such as yo: 'EMPHatic/VOCative', se: 'IMPerative'

(J s-ei ∿ s-e:, imperative form of the verb s-uru *do*), -ya 'PREDicate formation particle' (J -ya, standard form is -da 'copula'), -nga 'TOPic NP marker' (its function in PLP seems to be similar to that of J -wa 'TOPic marker', rather than the NOMinative marker -ga, which is phonetically -nga). An important function of -ya in PLP is observed in the following examples:

(5) po:rr kicchi: (.)
pearl small
E KM kici
small pearl or *The pearl is small.*

(6) po:rr kicchi: -ya.
PRED
J
The pearl is small.

Example (5) can be interpreted either as a NP or as a clause, while (6) is a clause. Such surface ambiguity as in (5) is also the case in Malay. PLP, however, developed a device to resolve the ambiguity, making use of the J-derived particle -ya, as in (6).

Another prominent feature of PLP is its use of the question marker (Q) -ka:. Malay and Japanese happened to have quite similar forms of the question particle: J -ka 'Interrogative/Indefinite marker' and M -kah 'Question focus marker'. Although the similarity in form and function is a matter of coincidence, such similarity seems to have reinforced the frequent and liberal use and functional expansion of the PLP particle -ka: (often pronounced as -ga: by the Aboriginal speakers). While J -ka marks both polar and Wh-questions, PLP ka: marks only polar questions; along the lines of Malay grammar. On the other hand, however, the Malay sentence-initial Apa-kah (most simple form of polar question marking) was not introduced into PLP, where the particle -ka: is usually attached to the final constituent of the interrogative clause, along the lines of Japanese grammar. In the example given below, the use of -ka: to express indefiniteness is obviously a structural copy of the Japanese -ka construction:

(7) chirikurok -ka: hokurok -ka: peke kriki.
three-o'clock Q *four-o'clock* Q *go* *creek*
PE J PE J KM PE
We shall enter the creek (for the supply of water) at three or four o'clock.

In (9) below, -ka: seems to be employed as a marker of the conditional mode (IRRealis). Such a use of Q particle is observed neither in Malay nor in Japanese.

(8) ujan banya: ratang angka: dekko.
rain much *come* *anchor drop*
KM M banyak M datang E E *let-go*
The rain is (too) heavy, drop the anchor. (Realis)

(9) ujan banya: ratang -ka: tera karaja dekko angka:.
IRR NEG *work*
M/J M M kerja
If the rain gets heavier, we shall stop working and drop the anchor.
(Irrealis)

Note that the particle -ka: in (9) is pronounced with a high flat pitch, while it is usually pronounced with a low or mid-high pitch when simply marking a question. In the Pidgin English speech of an old Koepanger in Broome, the particle in question is still frequently heard, as in:

(10) Yu kam burrum japang-ka: sau.
you come from Japan south
Did you come from Japan or from the south (i.e. Perth)?

Such use of -ka: is one of the remnant features of PLP that give a peculiarity to the Broome PE today. Other PLP particles still heard in the PE spoken by the elder Broome Asians and Aborigines are yo: and -nga.

(11) Mi to:k japani yo:.
me talk Japanese VOC
I (can) speak Japanese!

(12) Aptawo -nga nomo nomo pilipi:no.
after-war TOP *no-more Filipino*
As for after the war, there were no Filipinos (in Broome) any longer.

In quite a few cases, lexical blending took place in PLP as a sort of pragmatic compromise between the Japanese and the Malays. It is visible in the cases of minom *to drink* (M minum, J nom-u), ara *to be there* (M ada *to have, to possess*, J ar-u *to be there*), nate *to wait* (M nante, J mat-e *Wait!*), etc. The Aboriginal users of PLP employ these blended forms, not the straight Malay or Japanese forms.

A number of English-derived words are also incorporated in the PLP lexical stock. We should point out here that many of these English-derived items in PLP show phonological similarities to the forms of Aboriginal PE. This may suggest that they are derived from the Aboriginal PE, through the contact of Asians with Aborigines, rather than with Whites. Those PLP words likely derived from PE include chin *chain*, taka *food, provisions* (E *tucker*; to be semantically contrasted with makan *readily prepared meal*), chakkoi *chuck away*,[8] i:jim *to eat (eat-him)*, kicchim *to catch, to get (catch-him)*, kírin *clean*, kríki ∿ kíriki *small bay, inlet, tidal channel (creek)*, kaikai ∿ makan kaikai *a major victory (in gambling)*,[9] etc.

In a smaller number of PLP items, we can see phonological modifications peculiar to Japanese, as in mairo: *mile*, ho:sherr *fore-sail*, dekko *to drop anchor* (E *let go*),[10] etc. A still limited number of English-derived items in PLP seem to carry phonological modifications of the kind to Malay, as in buku *book*, kopi *coffee*, sau ∿ saurr *south*, no:rr *north*, etc.

Word order in PLP is variable. Subject/agent is often omitted. The phrase *to drink beer* could be either minom biya (VO) or biya minom (OV). When the emphatic/vocative particle yo: is attached, however, the OV order seems to be the rule.

(13) banya: saki -rra[11] minom yo:.
much grog like drink EMPH
M banyak J sake J M minum J
I will drink hard!

Note that even the Malay speakers of PLP often employed the OV order instead of the proper Malay VO order.

Okamura Masatora, an old Japanese resident in Broome, who worked as a diver in both the prewar (1930s-42) and postwar (1953-60s) period, told the author:

> Before the war we used to talk the Koepangers' language on the boat, because most of the deckhands were Koepangers. When we started the work again after the war, the crews were no longer Koepangers but were the Malay boys (who came mainly from Singapore and Malaysia). At first I kept using the Koepang talk which I had learned before, and I could still make myself understood. But by and by I picked up the Malay talk. It was not so difficult, as many Malay words were quite similar to the Koepangers'.

The Malays also claim that the senior Japanese divers or skippers talked "like Koepangers". It seems, therefore, that a process somewhat similar to relexification took place when the pearlshell fishing restarted in the 1950s. We would hesitate to apply the term 'relexification' here, for the lexical divergence between Kupang Malay and Peninsular (and/or western Indonesian) Malay is not so great, particularly as far as those basic vocabulary items employed in PLP are concerned. We should, however, take into account the fact that the users of the language are, more often than not, quite sensitive to such subtle differences and the social values that could be attached to them. Most of the material collected during the author's fieldwork reflects forms similar to those of Peninsular Malay and/or western Indonesian.[12] However, some forms, such as those given below, may be considered as remaining features of the Kupang (or eastern Indonesian) influence on PLP in its formative period before World War I: kicchi: *small* (KM kici, BI kecil), piki *to go* (KM piki ∿ pii, BI pergi), stenga *a bit more* (KM stenga, BI setengah), tare *to pull* (KM tare, BI tarik), terrarra *nothing at all* (KM tar-ada *not to be there*, BI tidak ada); the case of koi and tera, already mentioned above, may be added here.[13]

Also observed in the history of PLP is a process of what we might call depidginisation. Some of the younger Japanese divers in Broome who took to the profession in the 1960s tended to pick up 'proper' Malay after learning initially 'broken Malay' conventionally used by the senior divers/skippers. For example, they came to use suda (M sudah) 'Past/Perfect marker' preposed to the predicate verb. They also use bokang (M bukan) in place of tera in negative copulative clauses. These features were not established in prewar PLP. The use of J-derived particles -nga and -ya seems to have decreased, too, among the younger users of the 'Malay talk on boat'.

According to informants, the head diver (or kappara daiba in PLP), who, almost exclusively, was Japanese in most of the pearling companies in Broome and whose role was somewhat like the boss of a trade union, negotiated with the White master pearliers in a conventionally simplified style of (Pidgin) English. PLP was not reported to be used in the communication with the White people.

The Asian transients in Broome often had a close association with the Aboriginal and part-Aboriginal women. Their verbal interaction seems to have been chiefly in Pidgin English, although quite a few (part-)Aboriginal women did understand PLP phrases to some extent. When an Asian boy married a 'half-caste' girl (which was much more likely than marriage with a 'full-blood'), their children usually picked up some of the father's tongue, as well as the mother's. The Asian fathers' casual speech at home was a mixture of PLP, PE and their own language (some dialect of Japanese, Chinese or Malay). Such a mixture is sometimes called

'Broome Creole' by the local people. However, neither PLP nor PE acquired the status of a native language or even that of a primary everyday language of the second generation Asian-Aboriginals.[14] In other words, the creolisation of PLP did not take place, principally for two reasons. Firstly, its use was so specifically bound to the labour setting on the pearling boats that it was hardly expandable to a full-ranged language serving family life. Secondly, but perhaps more decisively, the upward orientation (or desire for social promotion) was so strong and prevailing among the 'half-caste' mothers that they made every effort for their children to acquire a command of 'good English' and achieve a high educational standard. (And many of their children actually did.) Most of these 'half-caste' women had been educated at the Roman Catholic missions of Beagle Bay or Lombadina (both north of Broome) and they had a fairly good command of standard-like English, which became the principal language of the second-generation Asian-Aboriginals. Although PLP is no longer in active use, some of the remnants (fossilised words and phrases) are often used, not merely by the Asians and Aborigines who settled in the town of Broome, but also by the younger generation of Asian-Aboriginals as a sort of in-group jargon. It may be one of the sociolinguistic devices with which they express their ethnic identity.

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I am most grateful to the Broome people of various ethnicities for their cordial help and hospitality, without which the continuation of research would be impossible.

NOTES

[1]These 'unspecified Asiatics' may include a number of the Japanese who illegally entered the country via Singapore. See Sissons 1977.

[2]See Anderson 1978:10-19.

[3]See Urry and Walsh 1981 for an intriguing discussion of the sociolinguistic impact of the Macassarese pidgin on the multilingual Aboriginal society in north-eastern Arnhem Land.

[4]Most of the Japanese came from the Western Dialect area. For general backgrounds of the Japanese in Broome pearling industries, see Sissons 1977.

[5]The author recently had an opportunity to chat with a Wangkajunga elder man in the Junjuwa community, Fitzroy Crossing. Surprisingly, he knew several PLP

words and phrases, despite the fact that he never worked in the pearling companies himself.

[6]Some readers might recall the Javanese form kowe. Apparently, however, few Javanese people were involved in the indentured labour in Broome.

[7]The Maluku form is suggested by Handiyo Kartawinata. Professor Wurm suggests that similar forms are also found among many of the eastern Indonesian Austronesian languages/dialects.

[8]Although the form presently used in Broome PE is chakam *(chuck-him)*, the sound modification of E [-wɛɪ] to PE -oi is not unusual, as in the case of Broome PE ándaboi *over the sky, over the tree/house, etc. (on-top-way)*.

[9]kaikai is used in Broome PE both as nominal *bush food* and as verbal *to eat, to catch food (of predatory animals)*. In PLP, however, it is not used in the meaning of *food* or *to eat*.

[10]E [lé-], [lɛ́-] or [lǽ-] is often modified to de- in the speech of Broome Japanese, as in dendoroba: *landrover*, deappu *lay up* (i.e. the period of suspension of the pearling), deba *liver* (as food), etc.

[11]The frequent use of the nominal particle -ra is one of the peculiar features of Wakayaman talk (a Western Dialect of Japanese). It corresponds functionally to the Eastern forms -nado, -nazo, -nanka, etc.

[12]See Hosokawa 1986 for the textual materials of PLP.

[13]KM forms cited here are from Steinhauer 1983. The Broome Malays told the author that Koepangers' form of *to go* was begi, not piki or peke.

[14]They are now around the ages of 40-60. The fourth generation is just emerging. These Asian-Aboriginals are locally called 'coloured people', which term usually does not, at least in the Broome social context, bear a pejorative or derogatory connotation.

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WORLD LANGUAGES IN RADIO BROADCASTING AND AS OFFICIAL LANGUAGES[1]

Björn H. Jernudd

The importance of English as a language of wider communication is undisputed in today's world. To precisely express this importance is difficult because one would have to measure the occurrence of English relative to a great many different topics of talk, groups of speakers and listeners, and so on. The precise measurement of the use of English on a global scale would have to add up observations on all characteristics that could differentiate between the choice of one rather than another language in all speech communities in which English is likely to be used. This is not very practical, particularly if our aim is simply to present the fact of the relative importance of English. Yet, it is very misleading, in our view, to measure its importance with reference to 'numbers of speakers'. Such a measure is too crude. One would have to find a reasonably expressive measure, which at the same time can differentiate *somewhat* between speech communities with regard to the amount of use of the contending languages, and which is practical in terms of the time it takes to assemble the information. The maps in this paper demonstrate that it is possible to find such measures.

Maps on the use of English and a number of other languages of wider communication - the importance of one language is really only apparent if compared to the use of another - were compiled from data sources that are available in a decent university library.

It must be noted that the base of mapping is the entire country; thus, an official language may not be used outside a specified region of the country, yet, the entire country will be marked to indicate use of that official language, on the maps.

Cambodia was left blank because of the unsettled situation there. A blank space means either that the measure did not apply or that information was missing. Iran and some other countries are annotated with such data as was available but the validity of the data is uncertain.

1. OFFICIAL LANGUAGES

The map on official languages is based on:

(a) a handbook, *Constitutions of the countries of the world*, edited by A.P. Blaustein and G.H. Flanz (Oceana Publications, Dobbs Ferry, New York, 1971 and updates),

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Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 297-308. *Pacific Linguistics*, C-100, 1987.
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(b) *Political handbook of the world 1980*, edited by Arthur S. Banks and William Overstreet (McGraw, 1980), and

(c) miscellaneous sources, such as the *Pacific Islands yearbook* (14th edn Pacific Publications, Sydney, 1980).

By *official language* for purposes of the map we mean:

(a) any named language that is mentioned in a nation's constitution sanctioning its use, in whatever context; thus, the constitution may say: "The state language of the Republic is Bengali" (the Bangladesh Constitution, Part I, Article 3).

In the terminology of the map, Bengali is *an* official language of Bangladesh. But the Bangladesh Constitution also mentions English:

> There shall be an authentic text of this constitution in Bengali, and an authentic text of an authorised translation in English, both of which shall be certified as such by the speaker of the Constituent Assembly ... provided that in the event of conflict between the Bengali and the English text, the Bengali text shall prevail. (Article 153:(2))

Since the authenticity is attributed to the English version on the strength of certification by the Assembly, English is included as *an* official language in Bangladesh, too.

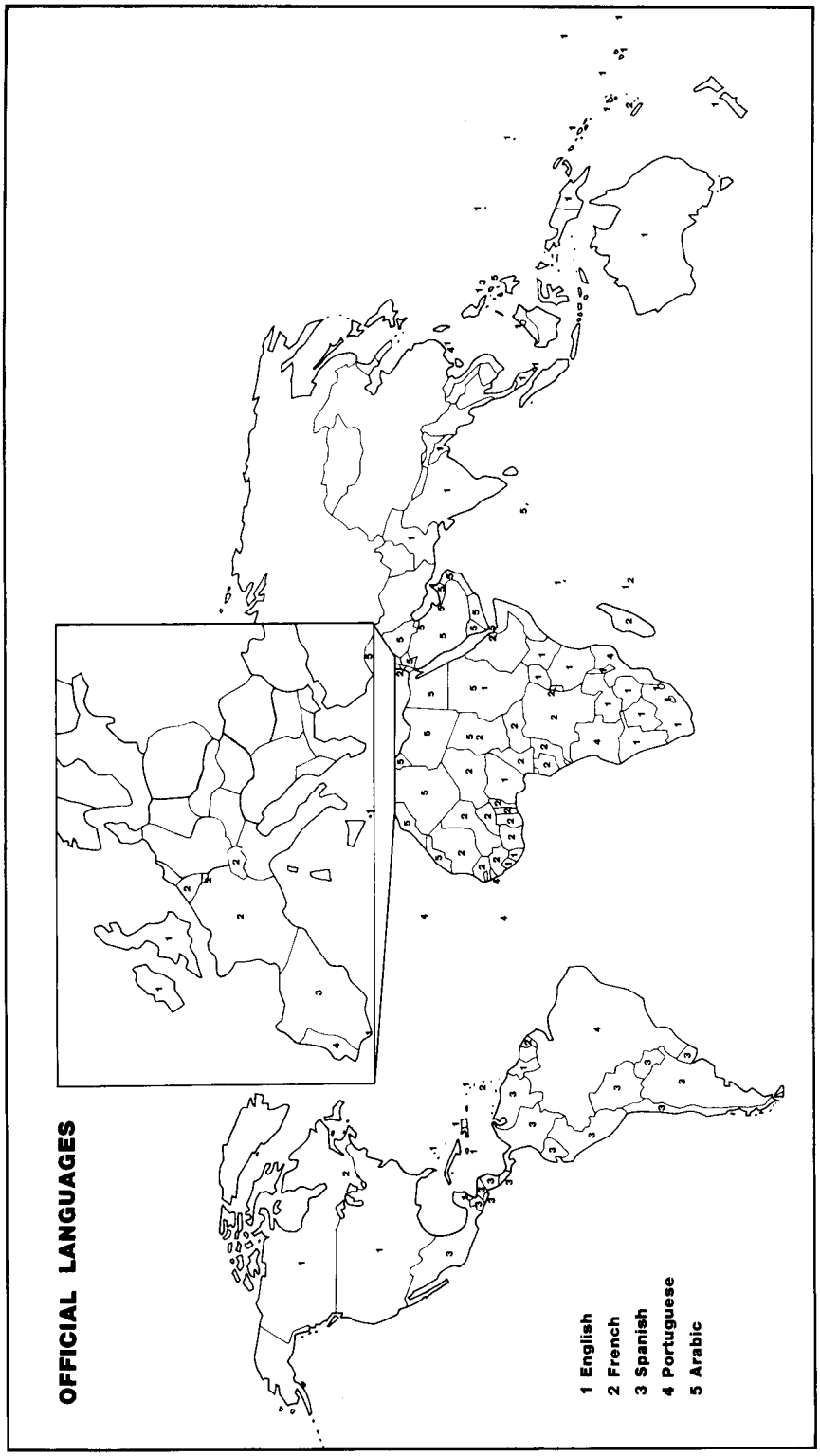
The normal case, however, is either that of Bahrain: "... and Arabic is the official language" (Bahrain's Constitution, Part One, Article 2), or that of Brazil with no constitutional mention of language but with full implicit agreement on Portuguese (as reflected in other handbooks and miscellaneous sources).

But by *official language* is also meant:

(b) that the official language(s) assigned to a country were determined not on the basis of mention in a Constitution, but on the basis of discovering in which language a Constitution is written or the language(s) used by decree in parliament (or the equivalent institution). (This is indicated by an asterisk in the tables but not distinguished on the maps.)

As concerns Arabic, it is not sufficient that Islam is a state religion to note it as an official language on the map.

Map 1 displays English, French, Spanish, Portuguese and Arabic as official languages. This information is given in tabular form on Tables 1 to 5.



Map 1: Official languages

Table 1: Countries and dependencies in which English is an official language

American Samoa*	India	Puerto Rico*
Anguilla*	Ireland	Seychelles
Antigua*	Isle of Man*	Sierra Leone
Ascension Island*	Jamaica	Singapore
Australia*	Johnson Island*	Solomon Islands*
Bahamas*	Kenya	South Africa
Bangladesh	Kiribati*	Sudan
Barbados*	Lesotho	St Helena*
Belize*	Liberia*	St Kitts*
Bermuda*	Lord Howe Islands*	St Lucia*
Botswana	Malawi	St Vincent*
Brunei*	Malaysia	Swaziland*
Cameroon	Malta	Tanzania*
Canada	Marshall Islands*	Tonga
Cayman Islands*	Mauritius	Trinidad & Tobago
Channel Islands (U.K.)*	Micronesia*,Fed.States of	Tristan da Cunha*
Christmas Island*	Midway Island*	Turks & Caicos Islands*
Cocos (Keeling) Islands*	Montserrat*	Tuvalu*
Cook Islands*	Namibia*	Uganda
Dominica*	Nauru*	United Kingdom
Falkland Islands*	New Zealand*	USA*
Fiji	Nigeria	Vanuatu
Gambia	Niue Island*	Virgin Islands*
Ghana*	Norfolk Island*	Wake Island*
Gibraltar*	Northern Mariana Islands*	Western Samoa
Grenada*	Pakistan	Zambia
Guam*	Palau*	Zimbabwe
Guyana*	Papua New Guinea	
Hong Kong*	Philippines	

Table 2: Countries and dependencies in which French is an official language

Belgium	Guinea*	New Caledonia*
Benin*	Guiana*,French	Niger*
Burundi*	Haiti*	Reunion*
Cameroon	Ivory Coast	Rwanda
Canada	Lebanon	Senegal
Central African Republic	Luxembourg*	Seychelles
Chad	Madagascar*	St Pierre et Miquelon
Comoros*	Mali	Switzerland
Congo*	Martinique*	Togo*
Djibouti*	Mauritania	Upper Volta
France*	Mauritius	Vanuatu
French Polynesia*	Mayotte*	Wallis and Futuna*
Gabon	Monaco	Zaire*
Guadeloupe*		

Table 3: Countries and dependencies in which Spanish is an official language

Argentina*	El Salvador	Peru*
Bolivia*	Equatorial Guinea*	Philippines
Chile*	Guatemala	Puerto Rico*
Colombia*	Honduras	Spain*
Costa Rica*	Mexico*	Uruguay*
Cuba*	Nicaragua	Venezuela
Dominican Republic*	Panama	Virgin Islands*
Ecuador	Paraguay	

Table 4: Countries and dependencies in which Portuguese is an official language

Angola*	Cape Verde*	Mozambique*
Azores*,Portuguese	Guinea-Bissau*	Portugal*
Brazil*	Macao*	São Tomé and Principe*
Canary Islands*	Madeira*	

Table 5: Countries and dependencies in which Arabic is an official language

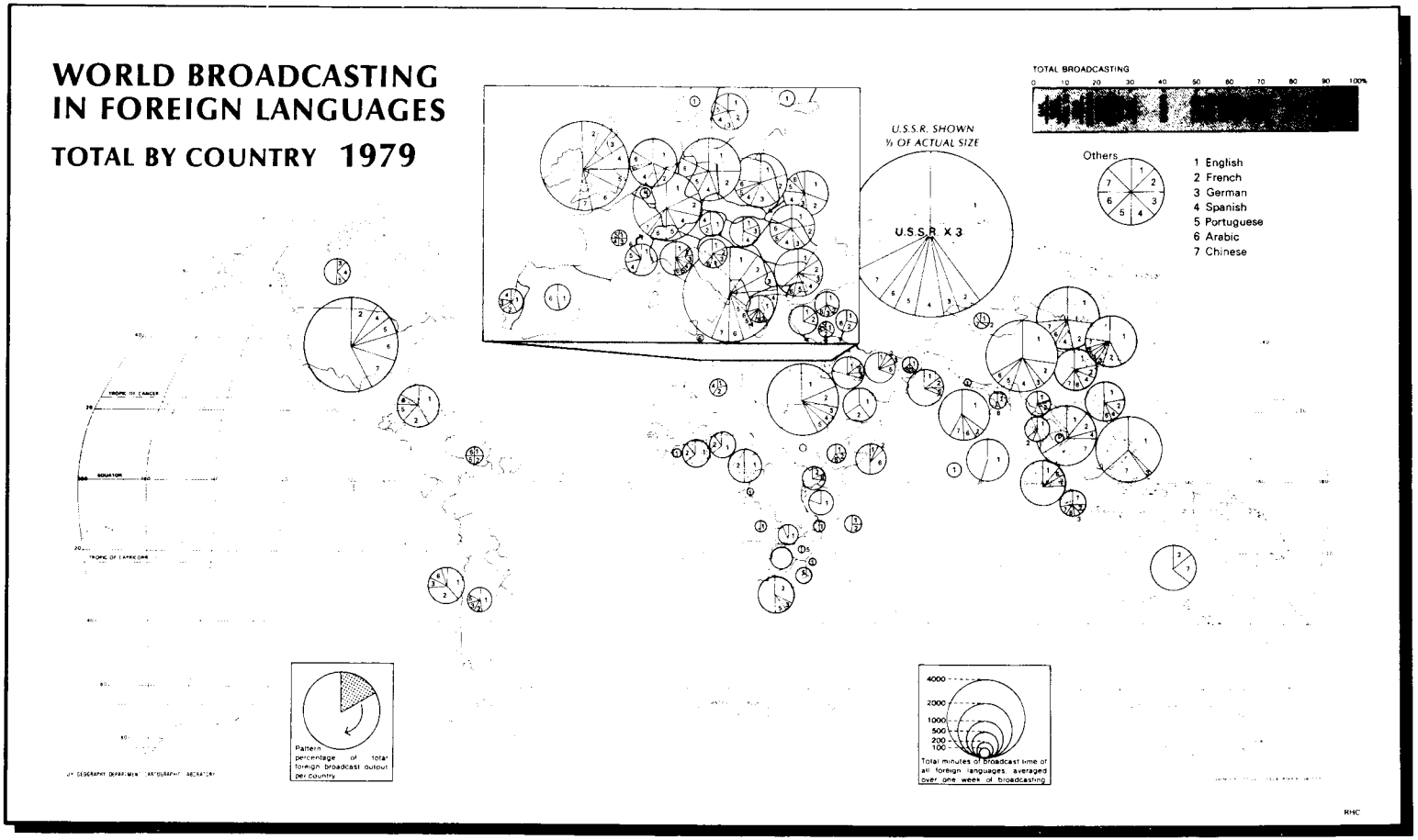
Algeria	Kuwait	Qatar
Bahrain	Lebanon	Saudi Arabia*
Chad	Libya	Sudan
Djibouti*	Maldives	Syria
Egypt	Mauritania	Tunisia
Iraq	Morocco	United Arab Emirates
Israel	Oman*	Yemen Arab Republic
Jordan	Philippines	Yemen*,People's Democratic Republic of

2. RADIO BROADCASTING LANGUAGES

The map showing language use in radio broadcasting is based on information in the *World radio TV handbook*, 33rd Edition 1979 (Billboard Publications Inc.) supplemented in a few cases by programming details requested directly from broadcasting stations and for the United States by the *Broadcasting yearbook 1979* (Washington, D.C.).

A clear distinction is normally maintained in the sources between domestic or home broadcasting, and international or foreign broadcasting services. Therefore, information was coded in the *Handbook* according to two categories: domestic or foreign broadcasting. In each category was noted whether English, French, Spanish, Portuguese, German, Arabic, or a variety of Chinese is used, and in the foreign broadcasting category also how many other languages are used.

Coding within the domestic broadcasting category is limited to whether the language in question is used 'much', or 'some'. A language which is used 'much' is used in daily scheduled broadcasting and is the expected home radio language.



Map 2: World broadcasting in foreign languages

A language which is used 'some' is used less, e.g. for news bulletins on the hour or half-hour during the night or for an hour's daily broadcasting on various topics, or seasonally only, e.g. for summer broadcasting for holiday-makers from abroad.

Coding within the foreign broadcasting category calculates the average amount of time in minutes a given language is used per 24-hour period during one week's broadcasting, and calculates also the percentage of total broadcasting time that this represents. Total broadcasting time *does not include* 'excluded' language(s) for each country, that is to say, it does not include Albanian in the case of Albania, Danish in the case of Denmark, etc., namely official and significant native languages of a country. We are interested here in the relative use of languages *foreign* to that country, not in total broadcasting time independently of this, nor in broadcasting directed primarily at nationals and natives of the broadcasting country. Although the measure may thus be distorted the author excluded the British Broadcasting Corporation's use of English, Voice of America's use of English, and France's use of French. Otherwise it would severely obscure measuring the relative importance of *foreign* language choices in these countries. It is important also to note that religious stations broadcasting internationally, military networks, and Radio Free Europe have also not been included.

Table 6 summarises foreign language radio broadcasting. Data on individual countries (for English, French, Spanish, Portuguese, German, Arabic and Chinese varieties) is given in tables 7-13.

Table 6: Foreign radio broadcasting

	Number of countries broadcasting per foreign language(s)	Number excluded countries per foreign language	Total minutes broadcasting per 24 hours in the foreign language*	Average minutes broadcasting per 24 hours in the foreign language*
English	69	8	24 770	360
French	51	6	8 680	170
Arabic	38	13	5 790	150
Spanish	32	6	5 950	190
Portuguese	27	1	3 800	150
German	28	4	2 800	100
Chinese varieties	15	2	4 860	320
Other languages	46		39 060	
TOTAL countries	78			
TOTAL minutes/24H			95 600	

*to nearest 10 minutes

English dominates foreign radio broadcasting. French is on par with Arabic, Spanish, Portuguese and Chinese varieties as a language of foreign broadcasting. Although French is used by more countries, and total broadcasting time for French per 24 hours is a little higher than for the latter languages, average radio broadcasting time per 24 hours is higher for both Spanish and Chinese. But English is used by more countries for more time: a quarter out of each radio broadcast hour on the short-waves is in English! No other language accounts for even 10% of the total broadcasting time. French is the closest with just over 9%, followed by Spanish and Arabic with approximately 6% each.

English also dominates broadcasting: some 90 countries and dependencies use English 'much' and about 50 'some'. Tabulating the other languages one arrives at the following relative figures:

	'much'	'some'
French	44	22
Spanish	27	12
Arabic	21	7
Portuguese	10	7
German	6	16
Chinese varieties	6	8

Table 7: Domestic radio broadcasting in English in 1979

1. Countries and dependencies with substantial daily scheduled domestic radio broadcasting in English

American Samoa	Grenada	New Zealand
Anguilla	Guam	Nigeria
Antigua	Guyana (Republic)	Niue Island
Antilles	Hong Kong	Norfolk Island
Ascension Island	India	Northern Mariana Islands
Bahamas	Iran	Pakistan
Bahrain	Ireland	Papua New Guinea
Barbados	Jamaica	Philippines
Belize	Jammu and Kashmir	Phoenix Island
Bermuda	Johnson Island	St Helena
Botswana	Jordan	St Kitts
Brunei	Kenya	St Lucia
Cameroon	Kuwait	St Vincent
Canada	Lesotho	Saudi Arabia
Cayman Islands	Liberia	Seychelles
Christmas Island	Lord Howe Island	Sierre Leone
Cocos (Keeling) Islands	Luxembourg	Singapore
Cook Island	Malaysia	Solomon Islands
Cyprus	Malawi	South Africa
Diego Garcia	Mauritius	Sri Lanka
Dominica	Micronesia (Trust	Sudan
Falkland Islands	Territory of)	Swaziland
Fiji	Midway Island	Tonga
Gambia	Montserrat	Trinidad & Tobago
Ghana	Namibia	Tristan da Cunha
Gibraltar	Nauru	Turks & Caicos Islands
Gilbert Islands	New Hebrides (*now* Vanuatu)	Tuvalu

Table 7 (cont'd)

Uganda	Virgin Islands	Zambia
United Kingdom	Wake Island	Zimbabwe
USA	Western Samoa	

2. Countries and dependencies with some or occasional domestic radio broadcasting in English

Algeria	Ethiopia	Mexico
Andorra	French Polynesia	Morocco
Angola	Greece	Mozambique
Bangladesh	Guatemala	Niger
Benin	Haiti	Oman
Bhutan	Honduras	Puerto Rico
Bolivia	Indonesia	Qatar
Bulgaria	Israel	Romania
Burma	Italy	Senegal
Canary Islands	Japan	Syria
Congo	Korea (South)	Thailand
Costa Rica	Lebanon	Togo
Cuba	Libya	United Arab Emirates
Denmark	Madeira	Venezuela
Dominican Republic	Mali	Vietnam
Egypt	Mauritania	

Table 8: Domestic radio broadcasting in French

1. Countries and dependencies with substantial daily scheduled domestic radio broadcasting in French

Algeria	Gabon	New Caledonia
Andorra	Guadeloupe	New Hebrides (*now* Vanuatu)
Belgium	Guinea (Republic)	Niger
Benin	Haiti	Reunion
Burundi	Ivory Coast	Rwanda
Cameroon	Lebanon	St Pierre & Miquelon
Canada	Luxembourg	Senegal
Central African Republic	Malagasy Republic	Seychelles
Chad	Mali	Switzerland
Comoros	Martinique	Togo
Congo	Mauritania	Tunisia
Djibouti	Mauritius	Upper Volta
Dominica	Mayotte	USA
France	Monaco	West Germany
French Guyana	Montserrat	Zaire
French Polynesia	Morocco	

2. Countries and dependencies with some or occasional domestic radio broadcasting in French

Angola	Greece	Libya	Saudi Arabia
Australia	Israel	Mozambique	Sierra Leone
Bulgaria	Italy	Romania	Syria
Egypt	Iran	St Kitts	Uganda
Gambia	Japan	St Lucia	Vietnam

Table 9: Domestic radio broadcasting in Spanish in 1979

1. Countries and dependencies with substantial daily scheduled domestic radio broadcasting in Spanish

Andorra	Dominican Republic	Nicaragua
Argentina	El Salvador	Panama
Bolivia	Ecuador	Paraguay
Canary Islands	Equatorial Guinea	Peru
Cayman Islands	Gibraltar	Spain
Chile	Guatemala	USA
Colombia	Honduras	Uruguay
Costa Rica	Mexico	Venezuela
Cuba	Netherlands Antilles	

2. Countries and dependencies with some or occasional domestic radio broadcasting in Spanish

Algeria	France	Morocco
Angola	Japan	Philippines
Australia	Mauritania	West Germany
Canada	Montserrat	

Table 10: Domestic radio broadcasting in Portuguese in 1979

1. Countries and dependencies with substantial daily scheduled domestic radio broadcasting in Portuguese

Angola	Cape Verde	Mozambique
Azores	Guinea and Bissau	São Tomé and Principe
Brazil	Macau	USA
Canada	Madeira	

2. Countries and dependencies with some or occasional domestic radio broadcasting in Portuguese

Australia	France
Bermuda	Senegal
Congo	Venezuela

Table 11: Domestic radio broadcasting in German in 1979

1. Countries and dependencies with substantial daily scheduled domestic radio broadcasting in German

Austria	Switzerland
Belgium	USA
East Germany	West Germany
Luxembourg	

2. Countries and dependencies with some or occasional domestic radio broadcasting in German

Australia	Denmark	Madeira
Bolivia	Egypt	Namibia
Bulgaria	Iran	Romania
Canada	Italy	Spain
Canary Islands	Japan	USSR

Table 12: Domestic radio broadcasting in Arabic in 1979

1. Countries and dependencies with substantial daily scheduled domestic radio broadcasting in Arabic

Algeria	Kuwait	Saudi Arabia
Bahrain	Lebanon	Sudan
Chad	Libya	Syria
Djibouti	Mauritania	Tunisia
Egypt	Morocco	United Arab Emirates
Iraq	Oman	Yemen Arab Republic
Israel	Qatar	Yemen, P.D.R.
Jordan		

2. Countries and dependencies with some or occasional domestic radio broadcasting in Arabic

Australia	Mali
Cameroon	Senegal
France	Uganda

Table 13: Domestic radio broadcasting in Chinese varieties in 1979

1. Countries and dependencies with substantial daily scheduled domestic radio broadcasting in Chinese varieties

Brunei	Malaysia
China	Singapore
Hong Kong	Taiwan

2. Countries and dependencies with some or occasional domestic radio broadcasting in Chinese varieties

Australia	Korea (South)	Surinam
Christmas Island	Macau	Vietnam
Japan	Mauritius	

NOTE

[1]The author thanks especially Mark Rohe, Ralph Channell, Phyllis Miyamoto and Terry Schulze for their help with producing the maps. This paper is a revised and abridged version of a Culture Learning Institute report entitled 'World languages of wider communication in the media and higher education', by Björn H. Jernudd and W.D. Shaw.

A ROYAL EDICT OF EMPEROR YINGZONG GEGEGEN OF THE YUAN DYNASTY IN THE MONGOLIAN ḤPAGS-PA SCRIPT

Junast

In the last few years, I have gathered some new texts in the Mongolian ḥPags-pa script, one of which is presented here. This is not the text of an inscription — inscriptions making up almost all the material in ḥPags-pa script — but a rare official document issued by the Yuan court. Only one other document of this kind is known: the 'Huaining Imperial Decree', edited and translated by Professor Pelliot in G. Tucci's 'Tibetan painting scroll'. The present document was found in Tibet. A few years ago, in another part of China, I found the originals of two edicts in the ḥPags-pa script issued by Emperor Renzong Buyantu and preserved in the Qujiang Nanhua Temple, Canton, which were published in *Chinese Linguistic Journal* (1, 1982).

The Yuan official document I am now introducing is kept by a Tibetan scholar. The document was in the custody of a group of monks headed by kar-ma-wa ʻen-sa-wa. Here kar-ma-wa is the equivalent of Tibetan kar-ma-ba, designating the Tibetan Buddhist sect Karma; and ʻen-sa-wa seems to be the Tibetan word dben-sa-ba transliterated into Mongolian, being an honorific title of a certain eminent Buddhist monk. If this is so, it must refer to Rang-byung rdo-rje (1284-1339), who was the leader of the Karma sect at that time. According to our sources, he established the Karma lha-stengs Temple and built other temples in many parts of Tibet and in Xikang, taking in followers and teaching Buddhist doctrine. As a venerable and respectable leader of the Karma sect, it was appropriate that he should be honoured with an imperial edict. Since our document is concerned with the Karma sect, and on the basis of our interpretation of ʻen-sa-wa, the protected temples and monks were certainly located in the Tibetan region.

The document is in good condition. It consists of 39 lines, sealed four times with the Chinese seal, reading Yu Qian Zhi Bao *Imperial Seal*. All four characters are in the Zhuan style. It ends with Zhizhi san nian Zhuer nian xiaji mo yue chu san meaning *the third (day) of the last (=sixth) month in the summer of the Year of the Pig, third year of Zhizhi*, corresponding to A.D. 1323. Emperors never put their names on Mongolian edicts in ḥPags-pa script, but usually referred to their predecessors' edicts. The edict under study mentions the former emperors up to Renzong Buyantu. We can therefore infer that the edict was issued by Yuan Yingzong Gegegen, whose rule fell within the date of the edict.

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 309-313. *Pacific Linguistics*, C-100, 1987.
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All edicts in ḥPags-pa script issued by the Yuan emperors were aimed at protecting the rights and interests of the temples and palaces, so they followed the same model. Several books and many articles have been written on these documents; the work of Professor Pelliot and Professor Poppe is especially well-known. It is unnecessary to repeat what we already know. I would like only to make a few corrections to some clerical errors in the original, and to suggest a new explanation for one word, which is given in the footnotes to the transcription. I first present the Latin transcription, followed by the translation of the text. The original text is reproduced on page 311.

Latin transcription

Please note the following:

(1) Generally, ḥPags-pa scholars use q to transcribe the letter  , and consider its pronunciation as [q‘]. However, I use G, since in my opinion this letter of the ḥPags-pa script represents the voiceless uvular stop (there is no disagreement among scholars about this). However, it does not always represent an aspirate [q‘]; it may also indicate the relative non-aspirate under given conditions: it is pronounced as a non-aspirate [q] after a vowel (at the end of a syllable).

(2) Some ḥPags-pa scholars use a raised dot ˙ to transcribe the letter  , and others use a raised comma, ’. There are also two different opinions about its function: some consider it as a glottal stop, others as a syllable-dividing mark or a symbol for zero initial. I favour the latter view. As a matter of fact, I believe it has three functions:

(i) When it is at the beginning of the writing unit, it serves as a symbol for zero initials, or as a syllable-dividing mark. For example, ėrk‘e˙ud *Christian* is pronounced as ėrk‘e-ud.

(ii) When it occurs between the same vowels in a writing unit, it becomes a symbol of long vowels, as in Ga˙an *emperor*, which is pronounced as q‘aan/q‘ān.

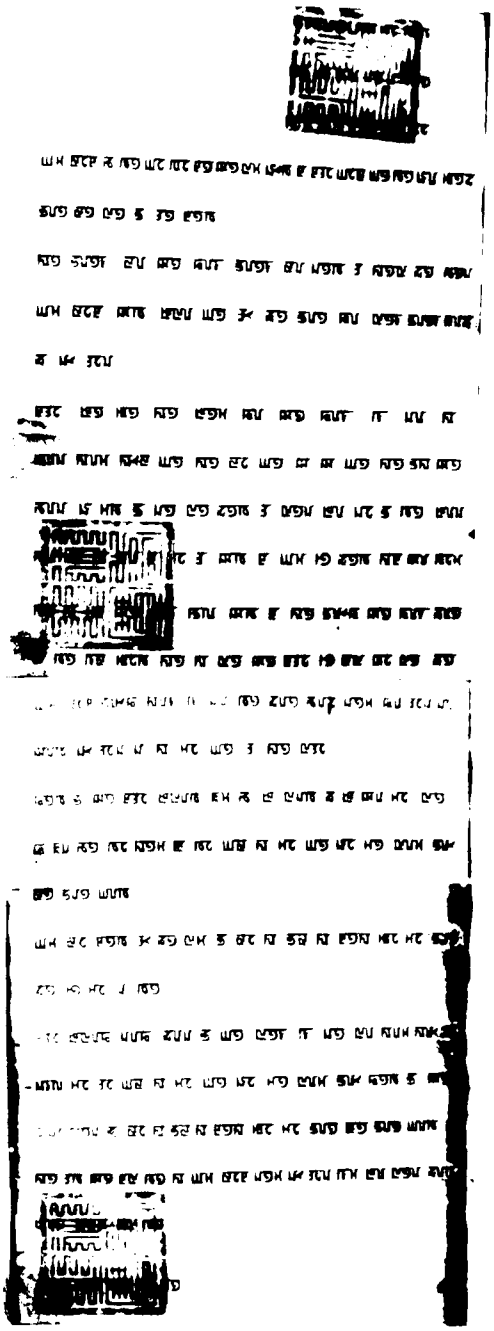
(iii) When it occurs between different vowels in a writing unit, it is a symbol of a diphthong, as in yabu˙asu *if it is on*, or *walk*, pronounced as yabuasu.

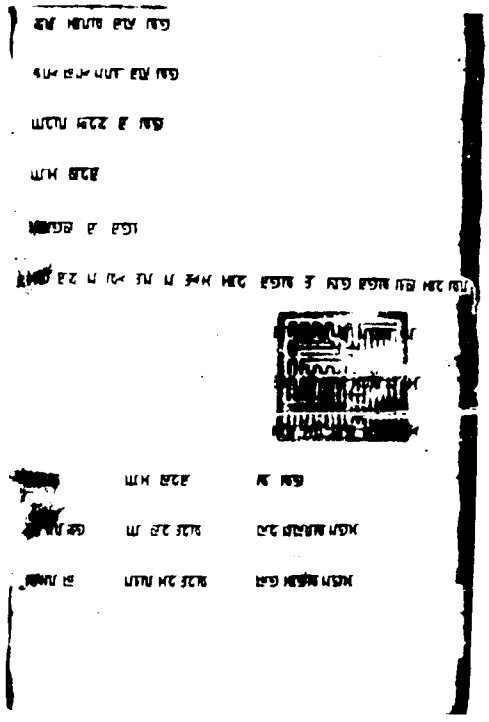
(3) The ḥPags-pa letter  is regarded by many scholars as a specific symbol for an initial a. I cannot agree with this. I think that it is a symbol of zero initial before vowels preceding a word (see also below), and I use ’ to transcribe it.

(4) I am of the opinion that there are two special writing symbols in the ḥPags-pa script: one is the dash - as a head-word symbol, and the other is a vertical bar | used as a link symbol. The head-word symbol is in fact a symbol of zero initial, and is complementary to the appearance of the other symbol of zero initial: ’ is used for the initial vowel a and the vowel letter e (eu = ü, eo = ö) and for the semivowel u̯, and - is used for the vowels i, u, ė, and o. The vertical bar | is used for linking the writing units — the elements of a syllable, such as the head-word symbol, the letter for vowels, semivowels and consonants, and it is usually placed on the right side. It is placed on the middle line only when the head-word symbol is linked with o or u (for instance, line 19: uridan-u). It occurs when o is linked with other letters (for instance line 1: moŋk‘a), and when u linked with the head-word symbol, precedes other letters (there is no such example in our document). These two writing symbols are not represented in our transcription system.

(5) The hyphen - at the end of a line in the transcription system indicates the division of a word; elsewhere it indicates the boundary between stems and case suffixes.

(6) The Chinese words in the document are transcribed according to the system devised by Professor Yang Naisi.





A royal edict of
Emperor Yingzong Gegegen
of the Yuan Dynasty

Transliteration of the inscription

1. moŋk'a dėŋri-yin k'uč'un-dur
2. yėke su ǰali-yin ʿihe'en-dur
3. ɢa'an ǰarliɢ man-u
4. č'eri'ud-un no-
5. yad-da č'erig hara-
6. n-a balaɢad-un da-
7. ruɢas-da noyad-da yorč'iɢun yabuɢun ėlč'in-e
8. duɢulɢaɢuė
9. ǰarliɢ
10. ǰiŋgis ɢan-u
11. 'ök'ödeė ɢa'an-u
12. seč'en ɢa'an-u
13. 'öl ǰeėt'u ɢa'an-u
14. k'ülug ɢa'an-u
15. buyant'u ɢa'an-u ba ǰarliɢ-dur doyid ėrk'e'ud sėn-
16. š1hiŋud 'aliba 'alba ɢubč'iri 'ülu 'üǰen
17. dėŋri-yi ǰalbariǰu hiru'er 'ögun 'at'u-
18. ɢayi k'e'egdegsed 'aǰu'uė ėdu'e ber bö'e-
19. su uridan-u
20. ǰarliɢ-un yosu'ar 'aliba 'alba ɢubč'iri 'ü-
21. lu 'üǰen
22. šakiamuni buryan-i ǰalbariǰu hiru'er 'ö-
23. gun 'at'uɢayi k'e'en karmawa ʿEnsawa t'eri'u-
24. t'en doyid-da bariǰu yabu'ayi
25. ǰarliɢ 'ögbeė ėden-u sümes-dur geyid-dur
26. 'an-u ėlč'in bu ba'ut'uɢayi ula'a ši'usu
27. bu barit'uɢayi ts'aŋ t'amɢa bu 'ögt'ugeė sü-
28. me-de ėle ɢariyat'an ɢaǰar usun baɢ t'egir-
29. med haran 'adu'usun ya'ud k'ed-i 'an-u k'ed
30. k'ed ber bolǰu buliǰu t'at'aǰu bu 'abt'u-
31. ɢayi k'uč'u bu k'urget'ugeė ėde ba-
32. sa doyid
33. ǰarliɢt'an k'e'eǰu yosu 'üge'uė 'üėles
34. bu 'üėle(d)t'ugeė 'üėledun yabu'asu mud
35. 'ülu'u 'ayuɢun
36. ǰarliɢ man-u dži tsi ɢut'u'ar hon ɢaɢayi ǰil ǰun-u heč'us
37. zara-yin ɢurban ši-
38. ne-de š1aŋdu-da bu-
39. guė-dur bič'ibeė

The stem of the word 'üėle(d)t'ugeė in line 34 should be 'üėled- *do*, consisting of a noun root 'üėle *act, deed* plus denominal verbal suffix -d. There is no example of the verbal suffix -d being lost before the imperative suffix -t'ugee. This is obviously an error in writing. Therefore d should be added.

According to Poppe, 'u in 'ülu'u (line 35) serves as an interrogative particle corresponding to -uu in Written Mongolian and to -gu in modern Buriat. He cites ilegu/ülegu *superfluous* in support of his argument, reconstructing -uu in Written Mongolian as *-ɣu. Nevertheless, -uu in modern Mongolian and -gu in Buriat, and their equivalent in the other Mongolian languages, are quite different from the 'u of 'ülu'u in ḥPags-pa script usage. We know that in Mongolian languages this interrogative particle comes only after a predicate. It is unthinkable that it should appear after an adverb and before a predicate. Therefore we must try to find another explanation.

Let us consider what part of of speech is represented by 'ülu. We know that this word (equal to ülü in Written Mongolian) does not change in modern Mongolian and is classified as an adverb, modifying only verbs. However, the situation was different in ancient Mongolian: it could be followed by the participial suffix of the future tense and by auxiliary verbs. Other words, which were previously assigned to the same part of speech as ülü and which have negative meaning (for example ese *not*), continue to have the participial form of the future tense: ese-gu. This shows that the ˙u of 'ülu˙u and the -gu of esegu are one and the same thing (˙ and u in ḥPags-pa script correspond, respectively, to ɣ/g and u/ü in Written Mongolian). Secondly, the ˙u in 'ülu˙u, like its equivalent in other verbs, can be followed by case suffixes. Compare the following sentence in *The secret history of the Mongols:*

ene eye-dür man-u oro-gu ülü-˙ü-yi ker medekde-gü
this deliberation-in our obedient be not obedient how do not know
(We) do not know whether our deliberation will be obeyed.

Here oro-gu and ülü˙ü are coordinate members and serve as object (with the suffix -yi) of medekde-gu. Hence I think that the ˙u in 'ülu˙u in ḥPags-pa might be considered as a participial suffix of the future tense. In regard to the modal nature of the sentence, I am of the opinion that it is a rhetorical question (expressing a positive meaning) rather than a general question. Therefore I have translated this sentence as *If they do so, will they not be afraid?*

Translation

By the strength of Eternal Heaven and by the protection of the great grandeur, our imperial edict.

An edict, addressed to military officers and soldiers, the daruɣa *of cities, officials* (noyan), *and travelling emissaries.*

In the edicts of Chinggis qan, *Ogedei* qaɣan, *Sechen* qaɣan, *Oljeitu* qaɣan, *Kulug* qaɣan *and Buyantu* qaɣan, *it was stated that Buddhist, Christian and Taoist clergy, not observing any tribute or tax, are to pray to Heaven and pronounce benedictions. Now, stating that they, in accordance with previous edicts, not observing any tribute or tax, are to pray to Sakyamuni and pronounce benedictions, We have issued an edict to the Buddhist monks of the Karma sect headed by Ensaba. Messengers must not stop at their temples and dwellings, they must not take relay mounts and provisions and must not collect land tax and business tax. With reference to the lands and waters, gardens, mills, inns, people and cattle belonging to the monasteries, or anything of theirs, no one is to use force. Those who receive and keep the present edict in their turn must not commit unlawful deeds, saying that they have an edict. If they do so, will they not be afraid?*

Our edict was written on the third (day) of the sixth month, in the summer of the Year of the Pig, the third year of Zhizhi, while staying at Shangdu.

ETHNOLINGUISTIC THREADS FROM FINLAND THROUGH HUNGARY TO JAPAN

Lajos Kazár

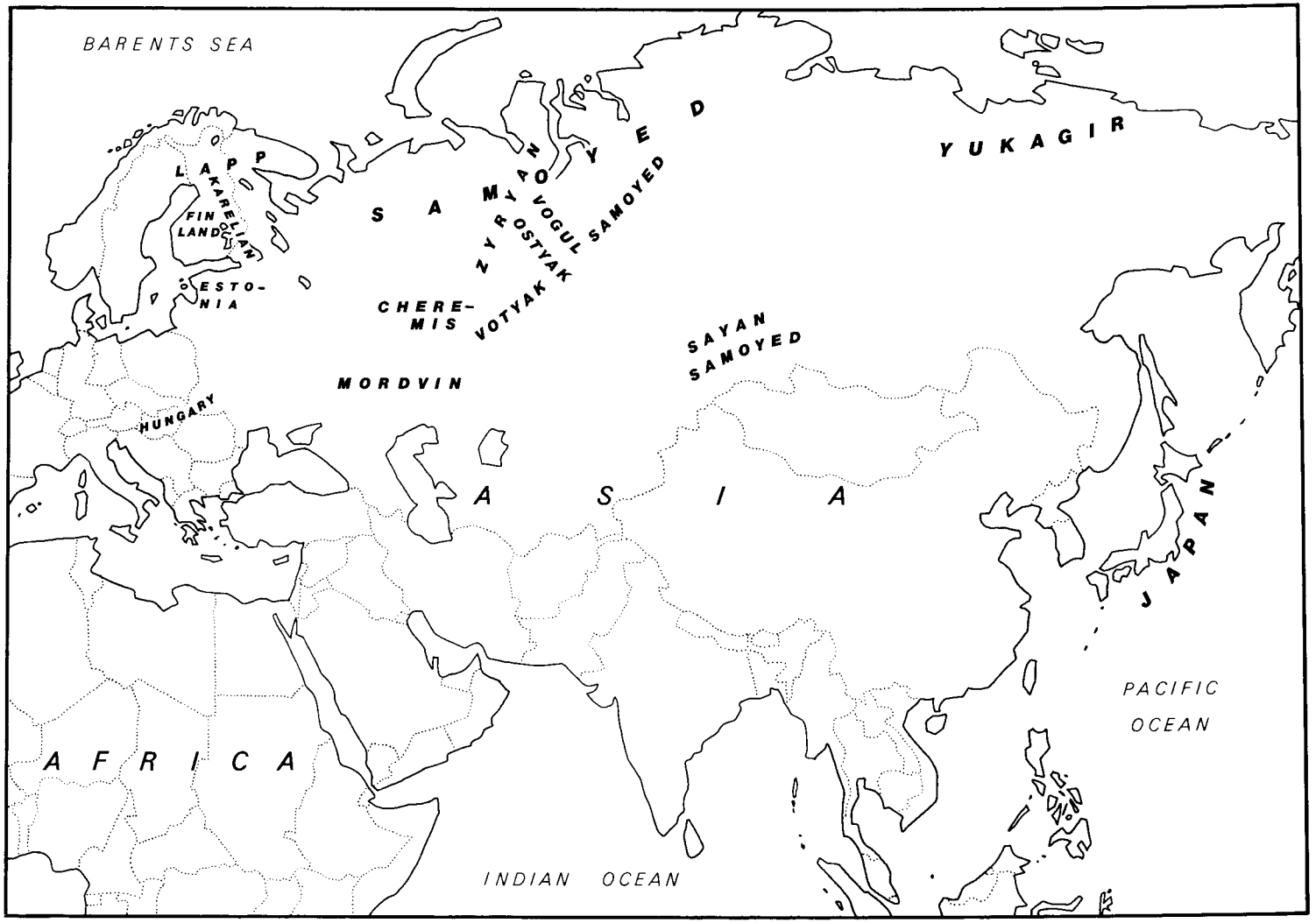
This paper deals, broadly speaking, with the Uralic and Altaic peoples (to which latter group the Koreans and Japanese are sometimes also added). Needless to say, it is impossible in a short paper to give a detailed picture of even the linguistic relationships of all the peoples involved, let alone a detailed ethnological picture.

Korean has a syntax similar to that of Japanese, but also to that of the Altaic and Uralic language groups. The Altaic group consists of Turkic, Mongol, and Manchu-Tungus. These are fairly well known and this paper will just touch on them. The Uralic languages and their speakers are far less known, so some elaboration is necessary.

The Lapps, whose own name for themselves is Sābme, live in the northern parts of Norway, Sweden, Finland, and European Russia, namely, on the Kola Peninsula. Altogether they number approximately 31,500. As to their race, they are mostly of old European stock mixed with Mongolid elements. As hunters and breeders of reindeer they were gradually pushed to the northern edges of Europe. Having been for a long time the immediate neighbours of Finnic peoples, their originally non-Uralic language gradually fell into disuse and became replaced by a language perhaps close to that of the ancient Finns. Many old Finnic forms can be reconstructed with the help of Lapp, in which a number of ancient word shapes have become fossilised.

The Finns, or Suomi, approximately 4.5 million strong, live in Finland (capital Helsinki). They moved there in the first centuries of our era, mainly from the area that later became known in European history as Estonia. There are several extinct or near-extinct Finnic languages, and it is certain that, although thinly spread, the Finnic or Fennic peoples once populated the central and northern half of the area which, from the second half of the 9th century, has been known as European Russia. Finnish anthropologists and archaeologists tend to state that the original home of the Finnic peoples was somewhere between Estonia and the Ural Mountains. Finnish linguists are not so sure on this score, and they tend to agree with Hungarian and other scholars that the original home of the Finnic peoples, together with that of the Ugric and Samoyed ones, lay east of the Ural Mountains: perhaps in the taiga zone, perhaps in the once fertile Turanian Plain, where the Finno-Ugric-Samoyed, i.e. Uralic, predecessors may have been the neighbours of the forebears of the Altaic peoples (and I might add that perhaps even the forebears of the Japanese came from that neighbourhood).

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Map 1: Approximate distribution of the Uralic languages on the Eurasian continent

The Estonians, approximately 1.2 million strong, live in historical Estonia (capital Tallin), now a part of the USSR. Around the birth of Christ, before migration to the later Finland began on a large scale, the Estonians were the strongest Finnic people in the Baltic Sea area. Modelling themselves on the Vikings, Estonian sea-farers raided the opposite Scandinavian coasts and withstood the attacks of the Vikings and the warriors of Novgorod. However, they later succumbed to German eastward expansion, which began under the cloak of trade and the spreading of Christianity.

South-east of the Estonians, on both sides of the Volga, live the Cheremis (or, in their own tongue, Mari people), approximately 500,000 strong. The capital of the Mari Republic (within the USSR) is Yoshkar-Ola, north-west of Kazan.

South-west and south-east of the Cheremis live the approximately 1.4 million strong Mordvins, in two groups, differing somewhat linguistically: Erza Mordvins and Mokša Mordvins. Their republic's capital is Saransk. Like the Cheremis, the Mordvins were a very warlike people in the past, and they still maintain their ethnic identity, although Russification in their area is strong.

While all Uralic peoples show some admixture of Mongolid racial characteristics, the strongest being among the eastern Ostyaks and the Samoyeds, the Mordvins can be said to display the smallest amount of such racial traits.

North-east and north of the Cheremis, between the mighty Kama and the smaller Vyatka rivers, live the Votyaks (in their own tongue Udmurt), approximately 630,000 strong. The capital of their republic is Izhevsk.

Generally north of the Votyaks live the approximately 430,000 strong Zyryans, or Komi, with their capital Syktyvkar, at the confluence of the Sysola and Vyčegda. A part of the Zyryan-inhabited areas lies north of the Arctic Circle, as does the greater part of the Lapps' area.

Although records show that until about 1500 A.D. Voguls, and probably Ostyaks, lived west of the Ural Mountains, one can assume that these hunting and fishing peoples were then living on both sides of that mountain range, which constitutes no great difficulty in traversing. Since that time, the Voguls (in their own language Mańśi), and Ostyaks, or Khanti, have lived along the Ob and its tributaries, their capital, since the Russian Revolution, being Khanti-Mańśiysk. The Voguls now number about 6,000 and the Ostyaks some 19,000. By linguists and ethnologists they are frequently referred to as Ob-Ugrians which name links them to the Hungarians whose closest language relations they are. Hungarian, Vogul, and Ostyak form the Ugric group in the Uralic family.

The term *Ugric* probably comes from the Old Russian appellation *Ugry* (cf. the Old Turkic tribal name *Ogur*) for the Hungarians. Compare also Polish *Venger*, German *Ungar*, Italian *Ungherese*, French *Hongrois*; however, these probably come from *Onogur*, the name of a related Old Turkic tribe (On-og-ur: *10 + arrows + men*, since their original organisation was in units named 'arrows', similarly to the Manchu military organisation into 'arrows' and 'banners'), for prior to their conquest of the Carpathian Basin at the end of the 9th century the Hungarians were composed of at least two large entities, one of which was of Onogur extraction, or named after its habitat in former Onogur territory (roughly on the northern shores of the Black Sea).

It is interesting to note that the own name of the Voguls for themselves, i.e. *Mańśi man, human kind* is at the basis of the Hungarians' own name for themselves, i.e. *Magyar*, composed of *mańć3 + *er or *eri *male*. The Hungarians or Magyars, approximately 10 million strong in Truncated Hungary (capital Budapest), and numbering between 15 and 16 million with those parts of the Hungarian

population which now live under Czechoslovakian, Russian, Roumanian, Yugoslav or Austrian rule (as a result of the dismemberment of Historical Hungary at the end of World War I) and in the West, are the most numerous among the Uralic peoples. Their homeland is the most westerly among the habitats of the Uralians. A part of Central Europe, the Carpathian Basin is geographically and climatically the continuation of the Sarmatian Plain. The same flat stretch of fertile land continues between the Caspian Sea and the southern reaches of the Ural far into Western and Central Asia. It is thus not surprising that the great plain watered by the Danube and the Tisza and naturally protected by the wreath of the Carpathian Mountains has been inhabited by many peoples. Early in the 5th century of our era it became the centre of the European empire of the Huns (Attila 434-453), then it was held by Germanic peoples; in 567 the Avars, coming from Central or East Asia, took possession of it and made it into the centre of their new empire; they went into eclipse around 800 under the blows of Charlemagne's Frankish armies, but seem to have stayed on without notable political organisation; around 892 the Hungarians under Árpád entered the area and conquered it by approximately 896 A.D. In 1241-42 the East Asian Mongols or Tartars not only devastated Hungary but also planned to establish their European centre there (luckily for Hungary and the West generally, Ögödei Mongol khan died late in 1241 and, as a result, the Mongol armies left Hungary in the summer of 1242). A string of Central or East Asian peoples, such as the Pechenegs, Kumans, Uzes, Osman Turks also wanted to take the Carpathian Basin (the Osman Turks held most of it for about 150 years!) and the historical, archaeological, anthropological, and ethnological links of that area with Central and East Asia are beyond doubt.

Peoples of Central and East Asia - first on foot, later on horseback - spilled over many times westward, but they also moved southward towards China and India, and, no doubt, eastward towards Korea and, in small waves, they reached Japan, too. The Turkic speaking Yakuts have migrated since the 13th century northward into the very cold Lena Basin.

Eastern Hungarian tradition has it that the Hungarian conquest of the Carpathian Basin at the end of the 9th century was a reconquest. Other evidence also shows that considerable masses of the Avar population in the Carpathian Basin must have spoken a Uralic language akin to Hungarian.

In support of this claim, the following points are to be mentioned:

(1) Since place-names of Slavic peoples settled by the Avars in and around the Carpathian Basin have survived to the present day, it would be odd if names of equally strong Avar settlements within the Carpathian Basin had disappeared without trace.

(2) Less than 90 years passed between the defeat of the Avars by the Franks and the arrival of Árpád's Magyars in the Carpathian Basin (at the end of the 9th century).

(3) One bishopric of Christian Avars in the north-western part of the Carpathian Basin is known to have been functioning at the time of the Magyar Conquest.

(4) When the register of Avar cemeteries (unearthed by archaeologists) in the Carpathian Basin was compared with the map of early settlements of the Hungarian kingdom, it was found that only a handful of the settlements near known Avar cemeteries bore Turkic sounding names (many historians assumed the Avars spoke a Turkic language) - such as *Várkony*, from one ethnic name of the Avars: *Uarkun*. The rest were as the other Hungarian place-names in the same period.

(5) Settlements of the Székelys, now concentrated in eastern Transylvania, were once scattered in various other areas of the Carpathian Basin, too, and the Székelys have always maintained that their forebears had long been in the Carpathian Basin before the arrival there of Árpád's people.

(6) Judging by the oldest Székely place-names, we have no reason to think that the Székelys have acquired their Uralic Hungarian language in the Carpathian Basin. Nor is there any record or tradition to suggest that their language has ever been other than a type of Hungarian.

We might also note that the very conservative Székely dialect and its close dialectal relation on the western edges of Historic Hungary seem to display more similarity with Japanese than the other Hungarian dialects. This phenomenon is striking because the Avars are thought to have their surest continuation in the areas of the former two. Further, because the Avars, who around 567 A.D. settled in the Carpathian Basin, are considered by numerous scholars to have been, at least in part, members of that Central and East Asian confederacy which, until the middle of the 6th century, prevailed in the area of the Hun confederacy centred on Lake Baikal, the long suspected links of a considerable part of the Hungarian nation with Central and East Asia become more plausible. Ethnologists, anthropologists, and musicologists have pointed to such connections of the Hungarians for a long time. Linguists have found no Uralic speakers as far east as the Baikal area. Because of this, Uralic language researchers have, as a rule, limited their work to the habitats of the known Uralians, of which the generally accepted easternmost ones are those of the Samoyeds on the Taimyr Peninsula (on the edge of the Arctic Sea) and in the region of the Sayan Mountains, south-west of Lake Baikal. (Yukagir, in the far north-east of the continent, is discussed further on.)

The fact that by the early 18th century (when the Swede Philip Johan Tabbert von Strahlenberg first made a kind of linguistic survey of the Russian empire - see his famous work: *Das nord- und ostliche Theil von Europa und Asia ...*, Stockholm 1830), there were no Uralic languages in the Baikal area, does not mean at all that there had never been any. One should only consider the case of the Samoyeds in the region of the Sayan Mountains who, as described below, have replaced their Uralic language with Altaic Turkish.

The Samoyeds, the third large group of the Uralic family, live along the shores of the Arctic Ocean, beginning with the coastal areas north of the Zyryan habitats and spreading as far east as the Taimyr Peninsula (110°N), almost reaching the northernmost habitats of the Altaic Tunguses. The Nenets or Yurak Samoyeds number about 25,000, the Nganasan or Tavgi Samoyeds some 700, the Enets or Yenisey Samoyeds between 300 and 400, the Selkups or Ostyak Samoyeds approximately 4,000; the total number may be just under 30,000. They live mainly by reindeer-keeping, hunting, and fishing. Some 140 years ago, Samoyed languages were spoken and recorded in the Sayan Mountains area, south-west of Lake Baikal, but Turkish has replaced them since.

It is interesting to note that while the Koreans readily acknowledge their ethnic and linguistic ties with peoples on the Asian mainland (and Korean is generally classed as a quasi Altaic language), most Japanese prefer to regard their own language as unrelated, which circumstance makes it and its speakers unique. Nevertheless, numerous attempts have been made also by Japanese to tear away the veil hiding Japanese origins. As places of provenance, some researchers have suggested the island world of the Pacific, others India, again others South-east Asia, and even the Middle East. One Japanese scholar, Professor Hisanosuke Izui, of Kyoto University, was bold enough to suggest the

possibility of Japanese-Uralic language ties, without specifying the place from where the eastward migration of the Japanese ancestors may have started. In his general proposition he followed European tradition, for since the 1820s J. Klaproth, P.F. von Siebold, A. Boller, L. de Rosny, J. Grunzel, H. Winkler, V. Pröhle, and others had suggested Japanese-Uralic-Altaic links, with Pröhle putting forward considerable evidence in 1916 that Japanese had a striking number of characteristics of the Uralic languages and that on the basis of structural and etymological comparisons Japanese was most likely related to the Uralic language family. Unfortunately, Izui's probing into Uralic was short-lived (in the late 1940s and early 1950s) and not followed up by other Japanese linguists.

However, a very relevant article is that of Matsumoto, Ōsaka University's Faculty of Medicine (1985). On the basis of the ratio of certain blood characteristics (especially ST), Professor Matsumoto shows that among the populations he investigated the Mongolian-speaking peoples in the vicinity of Lake Baikal stand closest to the Japanese. A similarly high occurrence of the same blood characteristic was found by him among the Turkic-speaking Yakuts (in the valley of the Lena), further among the Koreans, Okinawans, Ainus, Koryaks, and Eskimos, with the ratio diminishing in the Athabaskan Indians of North America, and even further among the peoples of China and South-east Asia as one proceeds south.

Matsumoto evidently took the suggestion of possible Japanese-Uralic relationship seriously, for he also travelled to the area of the Ural Mountains and found that a not insignificant percentage of the blood characteristic in question was present there, too. (Matsumoto most likely investigated the Uralic-speaking Voguls (Mańśi), Ostyaks (Khanti), and Samoyeds.)

His research does not postulate language identity or relationship between the Japanese and those peoples in whose blood the ST characteristic is about as high as it is in the Japanese, but it rightly points in the direction of eastern Central Asia as a place whence the ancestors of the dominant part of the Japanese people likely migrated through Korea to the Japanese archipelago. Matsumoto's findings thus clash with suggestions that the Japanese on the whole are of South- or South-east Asian or Oceanic origin, with a corresponding provenance of the Japanese language which, in such a context, is claimed to have passed through a process of "Altaicisation" due to the influence of the small number of "Altaic" speakers who reached Japan, or at least South Korea, at an undetermined time in Japanese history.

Matsumoto's results definitely strengthen the proposition of Professor Namio Egami and his school. According to them, Japan was invaded towards the end of the Yayoi period (ca. 300 A.D.) by a North-east Asian horseriding people (*kiba minzoku*), and that invasion changed the agricultural, fairly peaceable land into a warlike one. Of course, the mainland horseriding invaders suggested by Egami need not have been the only wave of peoples before the recorded arrival of Korean and Chinese immigrants/refugees to Japan. Some 6,000 years ago, the sea level around Japan was about 40 metres below the present level and until then people from the mainland could migrate to the archipelago without much difficulty. Nor is it guaranteed that any wave of mainland immigrants/invaders arriving in Japan before written records was "Altaic" (Turkic, Mongol, Manchu-Tungus) in language. For it is quite conceivable that a considerable number of the arrivals in question spoke, say, a primitive Ural-Altaic tongue. Again, even in the Baikal region the newer Mongol and Turkic languages may have supplanted former Uralic ones, just as the Samoyeds of the Sayan Mountains have lost their Uralic language since the 1840s.

That early waves of Uralic (or "primitive Ural-Altaic") speakers may have migrated as far as Japan is made plausible by the presence of the Yukagirs in the Anadyr area of North-east Asia, who are, according to several researchers, a far-flung splinter of the once widespread Uralic family whose westernmost exponents are the Hungarians.

On the basis of my research I suggest that ancient Japanese was another chip of the once mighty Uralic block, and having reached the archipelago through Korea - we don't know when, nor whether it was in one wave or in several waves - and having thus become isolated it was in a good position to preserve ancient language characteristics which can be put to very good use by Uralic and Altaic comparative linguists now.

APPENDIX: Examples of proposed ethnolinguistic parallels between Uralic(-Altaic) and Japanese

ABBREVIATIONS AND SYMBOLS

i^1, e^1, o^1 marks still discussed quality difference in Old Japanese as against i^2, e^2, o^2; the absence of figures means that the difference is unclear

* marks reconstructed or assumed forms

∿ marks alternation; approximately the same

Ch	= Cheremis	OHu	= Old Hungarian
ClJ	= Classical Japanese	OJ	= Old Japanese
Est	= Estonian	Os	= Ostyak
Fi	= Finnish	pSam	= proto-Samoyed
FU	= Finno-Ugric	Sam	= Samoyed
Hu	= Hungarian	U	= Uralic
J	= Japanese	Vg	= Vogul
Lp	= Lapp	Vty	= Votyak
Md	= Mordvin	Zr	= Zyryan

K 1980 refers to Kazár 1980

(1)

J	am.e	*rain, sky, heaven*
OJ	am.a	*rain, sky, heaven*
Fi	J.um.a.la	*God, godhead*
Est	j.um.a.l	*sky, godhead*
Ch	j.um.o	*sky, godhead*
Md	j.um.i	*sky, godhead*
Sam	J.am.a.l	(Jamal Peninsula at the mouth of the Ob - an ancient sacrificial place)

(cf. K 1980, No.11)

OJ ama shows the older form. On the U side, j- is most likely prothetic, thus secondary (the phenomenon is frequent in U). This proposition is strengthened by the following variant forms of jumala:

Fi	ilma	*air, weather, storm*
Fi	Ilmari	*weather god of the ancient Finns*
Fi	Ilmarinen	*weather god of the ancient Finns*
Lp	âlme-	*weather, snowstorm*
Vg	ĩləm	*weather, sky*
Os	iləm	*weather, sky*

In these words, the diminutive formant l is the same as -la/-l in the first column but has come before m through metathesis. The restored forms would be:

Fi *im.a.l
Fi *Im.a.la.ri
Fi *Im.a.la.ri.nen (-ri and -nen are also dimunitive formants)
Lp *âm.â.le
Vg *ɬm.ə.l
Os *im.ə.l

Before metathesis had taken place, Fi jumala probably had a (split) variant something like *imala and so on. The occurrence of such variant pairs (doublets) is well attested on the U side. It is found in J, too: yuku : iku *go, proceed*; nogasu *let escape* : nigeru *to escape*; o.koru *get excited* : o.kiru *get up, rise, stir*; koru *cut/chop wood* : kiru *to cut, chop, hash.*

(2) J, OJ as.a *morning*
J, OJ as.u *morning, daybreak*
J as.a.i *light, pale*
Zr as.u.v *morning, tomorrow*
Zr as.i̯.l *morning, tomorrow*
Zr as *in the morning*
Zr as.e *in the morning*
Vty as.i̯.l *daybreak*
Os was.χaχint *it begins to dawn*
Md ăs.o *white*
Hu ez- *white, light*
(cf. K 1980, No.24)

In the Os word above, w- is likely to be secondary (prothetic). When speaking of the connection between the name Ostyak and their food-providing river Ob, we might note that they call it Ăs, and the Russians thus began to call them Äs-jaχ *people (living on the)* Äs. Some researchers have suggested that äs has to do with the *pale, white* appearance of the surface of the water when covered by fog or ice.

(3) J fur.u.i *old, aged, ancient; used*
OJ pur.u.si *old, aged, ancient; used*
OJ por.u *grow senile; become decrepit*
Lp boar.e.s *old (man)*
Lp vuor.a.s *old, aged*
Zr pe̯r.i.s *old, aged*
Os pu̯r.ə.ś *old, aged; decrepit*
(cf. K 1980, No.59)

(4) J in.u *dog*
J in.u.ko.ro *puppy*
OJ in.u *dog*
OJ wen.u *dog*
OJ wen.o.ko *puppy*
Fi pen.i *dog*
Md pin.e *dog*
Ch pin.e.ɣe *puppy*
Zr pon *dog*
Zr pun *dog*

?Hu	fen.e	*wild animal*
Sam	ben.e.ku	*dog*
Sam	bun	*dog*
pSam	*wen	
cf. Tungus	iň.a	*puppy*
cf. Tungus	in.a.kin	*dog*

(cf. K 1980, No.131)

For the loss of initial w- before i on the J side, cf. OJ wiru > J iru *to be, exist, live, stay, inhabit a place.* Note the formants -ko, -ye, -ku, -kin. J -ro is also a formant.

(5)	J	ha(ne)	*feather, wing*
	OJ	pa(ne)	*feather, wing*
	Hu	fa.n	*pubic hair, thicket, thick forest*
	Hu	fo.n	*pubic hair, thicket, thick forest*
	Hu	fo.na	*pubic hair*
	Vg	pu.n	*feather, hair*
	Vg	po.n	*feather, hair*
	Os	pu.n	*hair, wool*
	Md	po.na	*feather, down, hair, wool*
	Fi	pu.na	*redness, red colour*
	Est	pu.na.ne	*reddish animal, red*
	FU	*pu.na	
	?Manchu	fun.i.jehe	*hair, wool*
	?Manchu	fuń.e.he	*hair, wool*
	?Turkish Osman	jün	*hair (of animals), wool; down (of birds)*

(cf. K 1980, No.67)

The concept of 'redness' comes into the picture as a specialised meaning; the hair of some animals, such as bears, foxes, hares, stags takes on a reddish hue.

(6)	OJ	it.u	*sacred, divine, hallowed, pure; vigorous, healthy*
	OJ	it.i-	*sacred, divine, hallowed, pure; vigorous, healthy*
	Hu	id.ü.l-	*become refreshed/invigorated; recover from illness*
	Hu	üd.e	*healthy, fresh*
	Hu	id-	(: id-ház) *holy/sacred house, church*
			(: id-nap) *holy day*
	Hu	üdv.ö.s	*wholesome*
	Hu	üdv.ö.sség	*salvation*
	?Turkish	i̲d.u.q	*holy, sacred*
	?Yakut	i̲t.i̲.k	*(an animal) selected for sacrifice*
	?Tungus	e̲t.i̲.k	*sacrificial pole*
	?Mongol	id.o.m	*sacred*

(cf. K 1980, No.145)

In an OHu text the following word is found: id-fon (= Igfon) *holy/sacred thicket.* The place in former Eastern Hungary used to be the sacrificial grove of Hungarians living in that area. The first component is identical with the stem id-/üd-/üdv- seen above. The second component, i.e. -fon is the same word as Hu fan/fon *thicket, thick forest* listed under No.5 above.

(7)	J	hom.e.ru	*to praise, extol, exalt, eulogise*
	OJ	pom.u	*to praise, extol, exalt, eulogise*
	J	hom.a.re	*honour, glory*

Hu	im.á.d-	*beg, implore, pray for, revere, adore, worship (God)*
OHu	wim.á.d-	*beg, implore, pray for, revere, adore, worship (God)*
?OHu	hum.e.rou kut	*sacrificial well/spring*
?OHu	hum.o.ru tetö	*sacrificial hilltop*
J	him.o.ro-gi }	*holy tree under which or on which sacrifices were/are*
OJ	pim^{1}.o.ro-ki^{1} }	*offered*
OJ	Pom.u.da	(J imperial ancestor)
?Zr	vom.i.dź	*harm, illness caused by the evil eye*
?Zr	vom.i.dźal-	*cause illness to someone with the evil eye*
?Hu	Hom.o.ród	(place name)

(cf. K 1980, No.111)

In Hu imád-, OHu wimad-, -d- is a frequentative verb formant; since OHu times, w- has been eroded. In Hungary, there are many geographical names of the shape Homoród, which were most likely connected with OHu heathen worship. If the Zr words belong to Hu imád-, etc. then it is necessary to explain the seemingly opposing meanings. From the history of religions we know that the person or the animal that was offered up by the community as an expiation was often cursed, that is, worship and cursing were then inseparable; cf. Latin sacer *sacred* : exsecror *to curse, execrate, call down evil upon*; French sacré *sacred, consecrated; damned, cursed.*

(8)	J	kot.o	*Japanese harp*
	OJ	ko^{2}t.o^{2}	*Japanese harp*
	J	kot.o-ba	*words* (ba < pa *leaf*)
	Fi	kant.e.le	*Finnish harp*
	Fi dial.	kand.e.l	*Finnish harp*
	Fi dial.	kand. la	*Finnish harp*
	Lp	kadd.e.la.s	*harp*
	OJ	mi-ko^{2}t.o^{2}	*godhead* (mi honorific prefix)
	?Mongol	xut.u.k	*divine/sacred nature*
	?Manchu	xut.u	*soul, spirit*

OJ o^{2} in some cases alternated with a (e.g. yo^{2}mi^{2} *Hades* ∿ yami^{2} *darkness*); both the kantele and the koto used to be highly regarded shamanistic instruments. Fi -le/-l/-la, Lp -la are diminutive formants (as in the case of Juma.la, etc.), Lp -s is an additional noun formant. In the Fi words, -n- is most likely a secondary intruder which has caused the voicing of t in kandel and kandla (the same applies to Lp kaddelas in which form dd is the result of gemination); thus, the bare reconstructed stem form of Fi kantele would be *kat.e; if we consider that the change of a into ä/e is frequent in the Finnic area (the same as in Hu, e.g. Magyar > Megyer; cf. OJ mara > mare *rare*, pata > peta *edge, side*), then we might reconstruct *kat.a which comes fairly close to OJ ko^{2}to^{2}.

It is interesting to note that the Finnic as well as Vg and Os shamans used the five-stringed harp/zither in addition to the shaman drum. On the other hand, the shamans and shamanesses in OJ times similarly used the drum (cf. Nichiren's practices as late as the 13th century), and the koto was the shaman instrument par excellence of the ruler. The Kojiki (chapter 92) tells us that the Empress Okinaga-Tarasi-Pime-No-Mikoto (better known as Empress Jingū), wife of Emperor Chūai, fell from time to time into trance, that is, she functioned as a medium in learning the will of the gods. That was the opportune time for the Emperor to play the godly harp, the koto, and ask the gods for their advice. The gods spoke through the mouth of the Empress and promised rich reward from a conquest across the

western sea, i.e. in Korea. But the Emperor could see no land at all from his vantage point and decided that the gods had told him a lie. Annoyed, he put the koto down. Thereupon the gods became very angry and the Emperor found his death on the spot.

Under K 1980, No.215, with a question mark, J koto, OJ kǒtǒ *Japanese harp, koto*, were tentatively grouped with J. koto *matter, fact, affair*; OJ kǒtǒ *word, speech, affair, thing*, and the assumed word family was compared to U *kele *tongue, language, word* (cf. Os köl, ket *word, speech, news*). The two propositions need not be mutually exclusive, since -t- and -l- may have resulted from *-t- (or *-ð-?) (see Lakó 1968:68-69) and the palatal vowel order of U *kele could have come about once a final -a became e [ä] as discussed above.

(9) J ki.r.u *put on/wear (clothes)*
OJ ki¹.r.u *put on/wear (clothes)*
J ki.s.eru *to clothe, dress, let/make wear*
OJ ki¹.s.u *to clothe, dress, let/make wear*
OJ ke¹.s.u *to clothe, dress, let/make wear*
Os ki.r- *put on/wear (clothes)*
pSam*ke.r.ɜ- *put on/wear (clothes)*
Sam ky.rr.i *outer garment of men and women*
Sam kō.rr.ɪ̄ *women's coat*
(cf. K 1980, No.198)

OJ ki¹.r.u and ki¹.s.u (with ke¹.s.u as a variant of the latter) form a minimal pair indicating an ancient root *ki¹- ; the derived forms on the J side containing -r- seem to go with the Os and Sam forms in question.

(10) J,OJ ma *space, room, interval*
J,OJ i.ma *time, a while, now, the present time*
J,OJ -ma *land, district, country*
Hu ma *today*
OHu ma *now, at the present time*
Hu ma.st *now, at the present time*
Fi mā *earth, land, country*
Fi -ma *earth, land, country*
Ch mü *earth, land, field*
Vty mu *earth, land, field*
Vg mā *earth, land, field*
Sam *mü *earth, land, field*
(cf. K 1980, No.240)

cf. Adu-ma, Pari-ma, Yeno-ma, (?) Saya-ma, Tadi-ma, Tagi-ma, Tera-ma, Tanagi-ma, Kuku-ma, Asadu-ma, Mi-ma, Same-ma, Iru-ma, Kura-ma : Fi Pohjan-maa-ma (where both -maa and -ma are encountered), Savo-ma, Häme-ma; Est Insel-ma, West-ma; Zr Ma, Pečora-ma, Iž-ma, etc. - Hu -st is an adverbial suffix-cluster.

(11) J i .e *dwelling, house*
OJ ip.e¹ *dwelling, house*
?J i .o *hut, house*
?OJ ip.o *hut, house*
Vg wāp.i *dwelling hole (of a large bird)*
Sam waw *sleeping place*
U *wop.ɜ

?Old Turkish eb *house*
?Chuvash av *house*
(cf. K 1980, No.120)

(12) J,OJ an.e *elder sister*
Hu án. .d' *sister of the husband, wife of an elder brother/cousin*
Vg ōń *aunt*
Vg ōń.i *aunt*
Vg āń.j' *sister-in-law*
Os ań.ə.ki *wife of an elder brother; step-mother*
Zr ön.e *sister-in-law*
Zr uń.e *aunt*
Zr oń.a *daughter-in-law, sister-in-law*
Sam oń.e *aunt*
Sam ōń.a *aunt*
(cf. K 1980, No.17)

Hu -d' and Os -ki are diminutive formants.

(13) J it.o.shi.i *beloved, dear, loving*
OJ it.o.si *beloved, dear, loving*
Hu éd.e.s *beloved, dear; sweet*
Hu dial. id.e.s *beloved, dear; sweet*
OHu id.e.s *beloved, dear; sweet*
?Lp aacc.e- *show love/tenderness*
?Os jec. .k *beloved*
?Os ic. .g *beloved*
(cf. K 1980, No.143)

J -shii, OJ -si, Hu -s [š], Os -k/-g are adjective formants.

(14) J os.a *head (of a family), chief (of a tribe/clan)*
OJ wos.a *head (of a family), chief (of a tribe/clan)*
J os.a.meru *to rule, govern; gather*
OJ wos.a.mu *to rule, govern; gather*
Hu ős *distant progenitor*
OHu is *distant progenitor*
OHu es *distant progenitor*
Fi is.ä *father*
Est is.a *father*
Lp âčč.e *father*
?Md ot'ś.ɛ *paternal uncle*
Sam jas.e *father*
Sam es.e *father*
Sam es *father*
(cf. K 1980, No.364)
cf. Tungus bos- *to rule, direct*

J -meru has developed from the OJ verb formant -mu.

(15) J sak.i *point, front part; cape, promontory, angle*
OJ sak.i[1] *point, front part; cape, promontory, angle*
Hu szög *pointed peg, nail, corner, angle, peninsula*
OHu szög.u *pointed peg, nail, corner, angle, peninsula*
Hu,OHu szög. .let *corner, nook, angle*

Vg sɛŋk *wedge, peg*
Vg suŋ *wedge, peg*
Vg sankw *wedge, peg*
Ugric *seŋk.3
(cf. K 1980, No.384)

cf. Kawa-saki, Naga-saki, Iwa-saki, Kabura-zaki, Tani-saki, Ishi-saki, etc. : Hu Isa-szëg, Tó-szëg, Kalota-szëg, Simon-szëg, Kustán-szëg, Kö-szëg, Járó-szëg, Hát-szëg, Kar-cag < Kard-szag (where -szeg/-szag always means an elongated piece of land).

Hu -let derives from szëgel(l)- *recede, project* with the deverbal noun formant -(e)t.

(16) J ku. i *stake, post, pole*
OJ kup.i[1] *stake, post, pole*
OJ -gup.i[1] (: wi-gupi[1]) *logs (forming a weir or protecting wall)* (wi *water*)
?J kab.u *stump, stub, root*
?OJ kab.u *stump, stub, root; head*
?Vty kip.i *log*
Vg kōp *boat, log*
Vg hāp *boat, log*
Os hop *Ostyak boat*
FU *kęp.3
?Hu haj.ó *boat*
(cf. K 1980, No.222)

The semantic link between *log* and *boat* is found in that boats were made from a single tree-trunk.

(17) J im.u *abhor, avoid, shun, abstain from, taboo*
J im.i *mourning, taboo*
J im.a.shimeru *admonish, warn, prohibit*
OJ im.u *prohibit, restrain from tabooed things; shun, dislike*
OJ yum.u *prohibit, restrain from tabooed things; shun, dislike*
OJ im.a.simu *admonish, warn, prohibit*
OJ yu- (: yu-yu-si *something to be treated with great respect*)
Hu in. .t- } *urge; entice; seduce; admonish, caution, warn; to wink,*
OHu im. .t- } *give a sign (by hand, etc.)*
Os jim *holy, hallowed*
Os jem *taboo, the prohibited*
?Turkish im *sign, wink, handsign*
?Turkish im. .nä- *blink, wink (with the eye), nod in agreement*
(cf. K 1980, No.129)

(18) J maj.i.na..u *to charm, cast a spell*
J maj.i.na..i *enchantment, charm, spell*
OJ maz.i.napu *to charm, cast a spell*
OJ maz.i.napi *enchantment, spell*
OJ maz.i- (: mazi-waza *a deed work, a curse, anathema*) (waza *deed*)
?OJ mat.i *omen, portent, sign (cut in a tortoise shell or the shoulderblade of a deer for divination)*
Ch muž- *to prophesy*
Ch muž.a.ŋ *divination*
Ch muž.e.da- *to divine, prophesy, guess, conjure, practise magic*

Os mut- *to pray (especially in connection with pagan offerings)*
FU *mus.ɜ-
or *muš.ɜ-
(cf. K 1980, No.243)

(19) J me *female*
J me.su *female* (-su is a suffix)
J -mi.na *woman* (: o-mina *woman, little/young woman*) (o *little*)
OJ me[1] *female; woman, girl*
OJ -mi[1] *female; woman*
OJ -mi[1].na *woman* (: wo-mina *woman, young woman*) (wo *little*)
OJ -mu.na *woman* (: wo-muna *woman, young woman*)
Fi mi.njä *daughter-in-law*
Lp mâ.njä *wife of one's brother's son or sister's son*
Vty me.ń (: ken-meń *daughter-in-law*; ken *young woman*)
Zr mo.ń *daughter-in-law*
Vg mi.ń *daughter-in-law*
Os me.ń *daughter-in-law*
Hu me.ny *daughter-in-law*
Sam Yurak mē.je *wife of one's younger brother*
Sam Yenisei mĭ *daughter-in-law*
U *mi.ńä
?Tungus be.ne *younger sister*
?Korean mje.nari *daughter-in-law*
(cf. K 1980, No.257)

A comparison of the words on the J side shows the element -na to be a formant. On the U side, Sam mĭ could be the result of contraction, but could also be an open monosyllabic word (of which there are many in Sam). The second syllable of U *mi.ńä seems to be a formant, an allomorph of U *-n (cf. proto-Lapp *-na). For details, see K 1980:258.

(20) J min.e } *peak, summit, top (of a hill/mountain), back/ridge of the*
OJ mi[1]h.e } *blade of a sword*
OHu muń.i *sky, heaven; ornamental roof of a bed; firmament, the vault of heaven*
Hu mëń *sky, heaven; ornamental roof of a bed; firmament, the vault of heaven*
Md ḿeń.e.l' *sky, heaven*
Md ḿäń.i.l' *sky, heaven*
FU *miń.ɜ
(cf. K 1980, No.261)

Md -l' is a denominal noun formant. For the semantic side, cf. Chinese yü *the canopy of heaven; space; cover, shelter; the part of a house sheltered by the eaves*, Sino-J. u *eaves, roof, house; heaven.*

(21) J,ClJ nom.i *flea*
Vty nim.i *midge*
?Vty num.i.r *worm*
?Vty nom.o.r *worm*
?Vty -nom.e.r (: tel-nomer *European firefly*; tel *fire*)
Zr nom *midge*
?Zr nom.i.r *worm*
?Sam Yurak nĭb.e.rü *? midge, thrips*
?Sam Yurak nim.i.ðü *midge, thrips*

?Sam Selkup ńim.e.re *midge, thrips*
?Sam Yurak nib.i *small spider*
(cf. K 1980, No.330)

On the U side, -r, -rü, etc. are derivational affixes.

(22) J oj.i *old man; uncle*
OJ wod.i *old man; uncle*
Hu bát' } *uncle; older brother; respectful way of addressing an older*
Hu báč } *male person*
Hu báč.i }
Sam Yenisei bûs.e *old man*
Sam Kamas bŭź.e *old man*
(cf. K 1980, No.352)

(23) J,OJ yab.u *thicket, bush, underbush; an area naturally covered with trees, bushes, and grass*
Hu d'ëp *grass-plot, turf*
Hu,OHu d'ep.ü *grass-plot, turf*
Hu d'ep.ü } *a stretch of forest difficult to penetrate; marshland*
Hu dial. d'ëp.ü } *covered with such a forest; entanglement; fence made of planted thorny bushes; uncultivated strip of land between two properties (formerly between countries, for defence purposes)*
(cf. K 1980, No.575)

(24) J yu. u *plant fibre; spinning yarn spun from plant fibre; wool*
OJ yup.u *plant fibre; spinning yarn spun from plant fibre; wool*
Hu d'ap.o.t *cotton; yarn spun from cotton or wool*
Hu dial. d'ap.a.t *cotton; yarn spun from cotton or wool*
OHu d'ap.u.t *cotton; yarn spun from cotton or wool*
?Hu d'apj.ú *wool*
?Hu dial. d'ap.é *wool*
?Hu dial. d'ap.ó *wool*
?Hu dial. d'ap.u.t *wool*
?Turkic Osmanli yap.a.gĭ *wool (of sheep)*
?Turkic Osmanli yap.a.k *wool (of sheep)*
Bashkir yab.a.ya *wool (of sheep)*
Kirghiz žab.a.gĭ *wool (of sheep)*
?Turkic yap- *to cover*
(cf. K 1980, No.594)

In the Hu words in question, -t is an inetymological addition (by analogy). On the Altaic side, the stem is of CVC shape.

With these examples, an attempt has been made to illustrate how certain Uralic word families, some of which can be complemented with Altaic ones, can be lined up so that together with Japanese words or word families with fairly matching semantic content we seem to have "Japanese-Uralic(-Altaic)" word families. It is appropriate to point out that, to the knowledge of the present writer, the above lineups constitute the first attempt to bring Japanese, Uralic, and Altaic together in this manner.

One should note, however, that while the general phonetic shapes of the bases of the words in question appear to be those of cognate words, no attempt is made - at least at this stage - to show genetic relationship within Japanese-

Uralic-Altaic. For the field is not only extremely broad, but even the relationship of the Turkic, Mongol, and Manchu-Tungus languages to one another has not yet been demonstrated to such a degree that an etymological dictionary of the Altaic group of languages would be available. That was the case at the end of the 19th century, too, and for that reason the established Uralic language family has been, since then, treated separately from "Altaic".

In the meantime, a lot of work has been done in both areas, and good Japanese dictionaries have come out, with the help of which one can have access to the genuine Japanese vocabulary. With greatly improved tools in all three areas, new approaches can be made in various directions.

Agreeing with the excellent Altaicist and general linguist W. Pröhle (1916/17, 1943), I believe that on the levels of phonology, lexicon, and morphology Japanese stands definitely close to Uralic, while on the level of syntax Japanese, Uralic, and Altaic can be treated together.

Having made a second step towards the comparison of Japanese with Uralic, I would now like to interest Japanologists, Uralicists, and Altaicists in considering what can be dug up from the combined fields when one looks for ethnolinguistic threads. The above examples are merely samples.

Even if one can never establish genetic relationship(s) among Japanese, Uralic, and Altaic, or for any two of the three, the application of the complex method - involving linguistics, ethnology, archaeology, anthropology, etc. - can likely give us sufficient evidence to say, at least, that the dominant part of the Japanese ancestors must have been neighbours of the ancestors of the Uralic and Altaic peoples, somewhere on the Asian mainland for many thousands of years.

Even such a provisional result would be immensely helpful for the pooling of efforts and means - something which so far has not been done at all.

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PIJIN CALQUING ON KWAIO: A TEST CASE

Roger M. Keesing

THE CALQUING HYPOTHESIS[1]

In several recent papers, I have examined possible influences of substrate languages on Melanesian Pidgin; and in particular, on Solomon Islands Pijin (Keesing 1984, 1985b, 1985c). I have advanced evidence suggesting that speakers of South-east Solomonic (and especially Malaita) languages who learned Pijin as young adults, in plantation contexts, calque heavily on their substrate languages. To a substantial degree, I have argued, it is possible for a speaker of a Malaita language to learn Pijin by learning new labels for the lexical items and grammatical particles of his native language, and to use the syntactic rules he has acquired natively to produce Pijin sentences. To the extent such calquing is possible, often on a morpheme by morpheme basis, this phenomenon demands historical as well as synchronic interpretation; and I have advanced some tentative historical explanations for the emergence of a Melanesian Pidgin with a fundamentally Oceanic (Austronesian) structure, and for the incorporation of more specifically South-east Solomonic patterns in the development of Solomons Pijin from an antecedent Queensland Pidgin (Keesing 1984, 1985b, 1985c).

My evidence for calquing onto a Malaita language comes mainly from Kwaio (central Malaita) speakers, with whom I have done anthropological fieldwork over two decades. Speaking Kwaio more fluently than I speak Pijin, and having acquired the latter after I spoke Kwaio well, I am particularly aware intuitively as well as on the basis of analyses of both languages (see Keesing 1985a) how closely Pijin can be, and is, calqued onto Kwaio. I have shown (Keesing 1984) how, for example, the tense/aspect/mode system of Kwaio corresponds morpheme by morpheme to the Pijin system, as it is used by older Kwaio speakers.

Here, I assay a rather different approach to the question of calquing on the substrate language. I begin with a text recorded in Kwaio, in 1983, from Tomu Kwalafane'ia, a man in his 60s who learned Pijin on a plantation in the Western Solomons in the years immediately preceding World War II. Using a dictionary of lexical equivalences whereby lexical items and grammatical particles in Kwaio are hypothesised to have Pijin equivalents, and using a computer program written by John Haviland for text analysis, I have generated the Pijin sentences that would be produced by applying the syntactic rules of Kwaio. These sentences 'predicted' by the hypothesis of exact calquing are given on the third line of each string of text; the second line, in between the Kwaio sentence and its putative Pijin equivalent, consists of a morpheme by morpheme gloss of the Kwaio sentence.

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Two sorts of comparison then become possible. First, it is possible to ask whether the 'predicted' Pijin sentences are indeed well-formed sentences that would, or might be, used to convey the meanings of the Kwaio sentences. The phonological shapes of Pijin forms used in the 'dictionary' of correspondences (Appendix 1) assume a substantial influence of Kwaio phonology (which, for example, has no /p/ or /h/, and in which /l/ and /r/ are in complementary distribution conditioned by the following vowel). Given the anticipated 'bush' phonology, it will not be transparent to most readers whether the Pijin sentences anticipated by the calquing hypothesis are indeed well-formed and appropriate. I have marked with preceding asterisks (*) elements in the Pijin sentences anticipated according to the calquing hypothesis which in fact are redundant in Pijin (principally some pronouns and locative particles); after the English gloss of each sentence, I indicate, and where appropriate explain, other deviations between the Kwaio and Pijin patterns.

Second, I have provided an account of the events of the same period recorded from the same speaker, Tomu Kwalafane'ia, *in Pijin*, several days after the initial recording was made. Kwalafane'ia does not dwell on exactly the same events in the same detail, so there is no direct correspondence between the two accounts; but comparison of the two texts, and of the Pijin sentences 'predicted' according to the calquing hypothesis with the Pijin sentences actually used in discourse, will provide a different avenue for assessing the degree of correspondence in global syntax and discourse conventions.

Having given the Kwaio sentences and the corresponding Pijin sentences predicted by the 'calquing hypothesis', and the actual Pijin account by Kwalafane'ia, I return to assess the extent to which the 'calquing hypothesis' is borne out in this exercise, and through this, to assess the grammatical parallels, and contrasts, between the two languages.

KWALAFANE'IA'S KWAIO TEXT AND PREDICTED PIJIN EQUIVALENTS

The following account in Kwaio by Kwalafane'ia deals with his trips to plantations in the Western Solomons just prior to World War II, and the events he encountered in the initial phase of the Japanese invasion. As noted, the first line of text is in Kwaio; the second gives an interlinear morpheme by morpheme gloss of the Kwaio; the third line gives the Pijin equivalent as predicted by the dictionary of equivalences; and the fourth line gives an English gloss.

eteeta-la-gu na ku leka naa faka
begin-ing-me me I go to plantation
mi stat taem *mi mi go long teisin
It began when I went to the plantation.

See discussion of blocking rule for paired pronouns, below; eta-la-gu *my beginning*, is idiomatic at the beginning of a Kwaio narrative, and has no exact counterpart in Pijin.

eta-la-gu ku leka la fori-nau 'ani-a nga tirii baone
begin-ing-me I go they pay-me with-it ART *three pound*
mi stat taem mi go olketa-i bae-m mi weit-em Ø tiri-fala baone
When I first went, they paid me three pounds.

alata na ku leka late-gu
time me I go chin-my
taem *mi mi go fes bulong mi
When I went my face

See discussion of pronoun repetition below.

e 'ame buru 'ua
it not bushy yet
hem-i no gar-em-hea ieti
wasn't bearded yet.

Pijin speakers would be likely to use a different idiom, e.g. mi naating seve iet, for not having a beard.

tu ia na ku leka a-i i na'o
2 year me I go to-it at front
tu ia *mi mi go long hem *long fastaem
I went for two years at first,

In Pijin, long is redundant before a temporal.

ma ku ori mai ku me'e nigi i fanua
and I return here I come arrive at place
'anaa mi kambaeke mi kamu kas-im ples
came back; I got back home

Note that Pijin lexicalises the contrast between kambaek and gobaek where Kwaio uses the verb ori *return* with a directional particle; note also that Pijin uses the transitive verb kas-im *reach* (a place) where Kwaio uses the intransitive nigi *arrive* with a locative particle *at.*

ma rua-na fe'e ori-nga ku ori la'u; ku nana'i, naen manisi
and 2nd time return-ing I return again I stay 9 month
'anaa meke-tu taem fo go mi kambaeke moa; mi stafu, naen manisi
and a second trip I came back again; I stayed, nine months

e sui a-gu ma rua-na fe'e ori-nga na ku ori la'u
it finished to-me and 2nd time return-ing me I return again
hem-i finisi long mi 'anaa meke-tu taem fo go *mi mi kambaeke moa
had passed by for me and a second trip I came back again.

ori la'u fa-na tu ia la'u. tu ia na ku ori fa-i na ku
return again for-it 2 year more 2 year me I return for-it me I
kambaeke moa fo tu ia moa. tu ia *mi mi kambaeke fo hem *mi mi
Came back again for two more years. I came back for two years, I

leka ku waka no'o i diakamba. diakamba fanua naa rifa la'u-mola
go I work PRF *at Diakamba Diakamba place of Lever's too*
go mi waka nao long Diakamba. Diakamba ples bulong Rifa tuu
went and worked at Diakamba. Diakamba was a Lever's place too,

i korubangala. fanua lo-ko'u alata lo-'oo la bi'i iriiri-a
on Kolombangara place there time here they just call-it
long Korubangala. ples ia taem ia olketa-i das kol-em
on Kolombangara. Nowadays that place is called

Pijin would be likely to use the lexicalised destaem where Kwaio uses *time* qualified by a demonstrative deictic.

wesiteni lo-ko'u ma alata i na'o
Western there but time in front
Westeni ia bataa taem long bifo
Western, but in the old days

Pijin would use long taem bifo, or simply taem bifo, where Kwaio uses, literally, *time in front*.

gila fa'a-lata-a lobiana.
they CAUS-*name-it Roviana*
olketa kol-em Lobiana.
they called it Roviana.

See below regarding the formation of causatives with causative prefixes and transitive suffixes.

na ku ngari-a tu ia a-i leeleka - farisi la'ula'u ma fiu singari
me I take-it 2 year at-it go and go year whole and 7 month
*mi mi tek-em tu ia long dea googo - ia furu 'anaa sefen manis
I signed up for two years there, and then - a year and seven months

Here Pijin would prepose the adjective to the noun to form furu ia *a full year*; this pattern is used with many common statives in Kwaio, but not with la'ula'u.

ku fa'a-sui-a ma na
I CAUS-*finished-it and me*
mi finis-im 'anaa *mi
I had finished and

Again, see discussion of causatives below.

ku-a kwa'i-a masita a-meeru. du'a-na nga keto-nga ka
I strike-him master PsP-*us exchange-of the eat-ing he*
mi kil-im masita bulong mifala. bikos des-fala kaikai hem-i
I hit our boss. Because of the food, he

kwate-a keto-nga fa-meeru e 'ame le'a. mele faafata i
give-it eat-ing for-us it NEG *be good we 2 quarrel at*
gif-im kaikai fo mifala hem-i no gut. mitufala faafaete *long
gave food for us badly. The two of us fought

du'a-i ma
because-it and
fram hem 'anaa
because of that, and

The locative in Kwaio is idiomatic, and Pijin would be likely either to use faafaete fram hem or to use a locative faafaete long hem; in either case, Pijin could use deswan as object of the preposition.

na ku kwa'i-a.
me I hit-him
*mi mi kil-im.
I struck him

Here as in some of the other instances where the doubled pronouns in immediate succession are blocked in Pijin, a Pijin speaker of this generation would be likely to use a topicalising particle between the two pronouns, which would allow realisation of both: mi nao mi kil-im.

sui ma i-na ku leka ku kalabusi i giso - ono singari. ono
finish and me I go I prison at Gizo - six month six
finisi 'anaa mi nao mi go mi kalabusi long Giso - sikis manis. sikis
And then I went and I went to jail in Gizo - for six months. Six

singari la ngari-nau ku belesini i giso. oru wane - wane
month they take-me I prison at Gizo 3 man man
manis olketa-i tek-em mi mi belesini long Giso. tri-fala mane - mane
months they imprisoned me, I was imprisoned in Gizo. Three men - a man

e futa i buri-la Maakona la
he born at behind-Mr Maakona they
hem-i bon long bihaen Maakona Ø
who was the younger brother of Maakona,

Here Kwaio marks the birth order of the siblings with *born behind*, where a Pijin speaker would be likely simply to say hem-i barata bulong ....

Baba'aniaboo ma la Larikeni wela i
Baba'aniaboo and Mr Larikeni boy from
Baba'aniaboo 'anaa Ø Larikeni boe long
Baba'aniaboo and Larikeni, a 'boy' from

Kwaio uses personal articles, la and ni, before the names of men and women, respectively; Pijin uses no articles in these slots.

'ale'ale. meeru oru wane la fee-'emeeru
'Are'are we 3 man they take-us
'Ale'ale. mifala tri-fala mane olketa-i tek-em mifala
'Are'are. They took the three of us

Pijin topicalises a direct object by fronting in exactly the same way as Kwaio.

fa-ni giso. meru nana'i naa ono singari sui ma la bi'i
to-there Gizo we stay for 6 month finish and they just
long Giso. mifala stafu long sikis manis finisi 'anaa olketa-i das
to Gizo. We stayed for six months, and then they

fa'a-sui-'ameeru mai. meru ori mai meru - alata i na'o
CAUS-*finished-us hither we return here we time in front*
finis-im mifala kam. mifala kambaeke mifala - taem long bifo
let us out. We came back, we - in the old days,

lauta wane 'oo waawaka sui ma 'o ko leka i belesini 'oo
if man you work finish and you you go to prison you
fosi mane iu waawaka finisi 'anaa *iu iu go long belesini iu
if you were working (on a plantation) and then you went to prison, you

ori mo-o bi'i eta la'ula'u lo fa-na taemu a-mu 'a-ni rifa
return you just start all-over here for-it time PsP-*you* INF-*it Lever's*
kambaeke iu das stat olowe ia fo taemu bulong iu fo Rifa
came back, and then you had to start your time to get Lever's

'a-ni fa'a-sui-'o no'o-na.
INF-*it* CAUS-*finished-you there*
fo finis-em iu long dea.
to discharge you.

In this sentence the Kwaio infinitive-marker has an imperative force *to get Lever's to discharge you*, which Pijin could render with, e.g. mek-em Rifa hem-i mas finis-em iu.

alata ngaa lo-'oo lauta wane e
time it here if man he
taem *hem ia fosi mane hem-i
Nowadays, if a man

The use of the focal pronoun here in Kwaio is idiomatic; again, Pijin would be more likely to use the lexicalised destaem than taem with a demonstrative.

leka i belesini e ori mai me-e sui e leeleka
go to prison he return here and-he finish he go and go
go long belesini hem-i kambaeke 'anaa hem-i finisi hem-i googo
goes to jail, he comes back and he is finished, he goes

no'o i fanua
PRF *to place*
nao long ples
back home,

Kwaio idiomatically uses fanua *place* to refer to one's home area; Pijin would be more likely to use homu.

ma alata i na'o 'amoe. leeleka 'oo waka fa-na ngaa -
but time in front NEG *if you work for-it* ART
bataa taem *long bifo nomoa. fosi iu waka fo Ø -
but not in the old days. If you worked for -

wan ia e sui am-mu 'o ko leka i belesini 'oo
one year it finish to-you you you go to prison you
wan ia hem-i finisi long iu *iu iu go long belesini iu
you'd finished one year, and you went to prison, you

The doubling of pronouns in direct sequence is blocked in Pijin; iu nao iu go is possible.

ori mai mo-o bi'i eta la'ula'u bu'i fa-na wan ia
return here and-you just start entire now for-it one year
kambaeke iu das stat olowe nao fo wan ia
came back again and you would just start all over again at that point

no'o a-mu fa'a-sui-a.
PRF PsP-*you* CAUS-*finished-it*
*nao bulong iu finis-im.
for your one year to finish.

The no'o in Kwaio is idiomatic here, and Pijin nao, which corresponds directly to it in a range of syntactic contexts, is not used in this particular construction; the Kwaio sentence omits in the final clause what would be obligatory in a well-formed sentence - an infinitive marker plus subject pronoun, *for you to finish it*; the Pijin is correspondingly elliptical.

na'a na ku ori mai meeru
then me I return here we
oraet *mi mi kambaeke *mifala
Anyway, I came back and we

See below for blocking of doubling of pronouns.

meru waka fa-na fiu singari e sui ma ta-miru bi'i
we work for-it ? month it finish and FUT-*we just*
mifala waka fo sefen manis hem-i finisi 'anaa baebae mifala das
worked until our seven months were finished, and we were to

ori bi'i fa'a-sui-a taemu ma mae naa diafane e nigi
return just CAUS-*finished-it time and war with Japan it arrive*
kambaeke das finis-im taemu 'anaa faete long Diafane hem-i kamu
come back, (we had) just finished our time, when the war with Japan arrived,

no'o nigi no'o faa-fi-'ameeru.
PRF *arrive* PRF *above*-TrS-*us*
nao kamu nao antap long mifala.
descended on us.

The metaphor of *coming on top of* is distinctively Kwaio here, and Pijin would use a different idiom, such as hem-i kamu nao kas-im mifala.

nigi no'o faa-fi-'ameeru alata 'a-meeru i stanumoa. ma ta'a
arrive PRF *above*-TrS-*us time* TOP-*we at Stanmore and people*
kamu nao antap long mifala taem mifala nao long Stanumoa. 'anaa evriwan
Descended on us, at the point where we were at Stanmore. Then we people

miru tofutofu-a 'ifi no'o. ma diafane e saasari no'o mai
we cutcut-it house PRF *and Japan it prepare* PRF *hither*
mifala kaakat-em haos nao. 'anaa Diafane hem-i state fo nao kam
built houses. And the Japanese prepared to come

Here Pijin would use state nao fo kam.

fa-ni solomon aelan. meru waka naa 'ifi meru waawaka naa 'ifi
to-there Solomon Islands we work on house we workwork on house
long Solomon Aelan. mifala waka long haos mifala waawaka long haos
to the Solomon Islands. We built houses, worked and worked on houses,

naa faka no'o-na i stanumoa la 'ubu-na kalonga.
on plantation there at Stanmore there inside-it bush
long teisin ia long Stanumoa long dea insaet long sikalafu.
at that plantation at Stanmore, in the interior forest.

miru kwa'i-a o'oba 'ubu-na ano naa mae naa diafane
we cut-it shelter inside-it bush then war with Japan
mifala kat-em haos insaet long sikalafu 'anaa faete long Diafane
We cut lean-to's in the interior forest and the war with Japan

te-'e nigi no'o mi kwa'i-a o'oba fa-na 'akwa-nga miru
FUT-*it arrive* PRF *we cut-it shelter for-it escape-ing we*
baebae hem-i kamu nao mifala kat-em haos fo ranawe mifala
was about to strike. We cut lean-to's for refuge, for us

'akwa a-i 'akwa 'ubu-na ano. fa'a-si-a diafane no'o
run to-it run inside-it bush away-TrS-*it Japan* TOP
ranawe long dea ranawe insaet long sikalafu. mek-em Diafane nao
to hide in, in the forest. So that

gwa'a me'e nigi ma ta'a 'e-meeru 'ubu-na ano.
even if then arrive but FUT TOP-*we inside-it bush*
nomata kamu kas-im bataa baebae mifala insaet long sikalafu.
even if the Japanese came, if they arrived, we people would be in the forest.

ngaa tofu-o'oba-nga no'o miru age-a 'ubu-na ano
ART *cut-shelter-ing* TOP *we do-it inside-it bush*
des-fala waka long haos nao mifala du-im insaet long sikalafu
In our house construction in the forest, in the forest,

gwa'a foo-'i kwalo mo-o sia tofutofu-a la'u gwa'a
even bundle-of vine you NEG *cutcut-it too even*
nomata pis rofu iu no save kaakat-em tuu nomata
you couldn't even cut vines, you couldn't even

fee 'ai mo-o sia tofu-a la'u. gwo o kiikirini-te-'e karisi
piece wood you NEG *cut-it too even you bundle-of leaf*
pis wut iu no save kat-em tuu. nomata iu olketa rifi
cut lengths of wood either. Even bunches of leaves

Here, as in the preceding 'extract', Kwaio uses a developed set of numerical classifiers which exists in Pijin only in attenuated form.

lo-fo'u ma foo-'o kwalo 'oo ngari-a kau 'oo gau-'i bata-'ai
there and bundle-of vine you take-it thither you bind-it middle-of-it
ia 'anaa pis rofu iu tek-em go iu taemafu melewan long hem
and vine you had to take there, for lashing, because

lauta 'oo tofu-a ma ka malonga ma gila aga-si-a mai lari
*if you cut-it and it withered and they see-*TrS*-it hither root*
fosi iu kat-em 'anaa hem-i drae 'anaa olketa luk-im kam ruti
if you cut them and they became withered, they would see that the plants

ka gu'a. 'ai mo-o sia tofu-a la'u. na'a miru waawaka
it dead tree you NEG *cut-it too so we workwork*
hem-i dae. trii iu no save kat-em tuu. oraet mifala waawaka
were dead. You couldn't cut trees either. So we worked

'i-no'o-na sui ma i-nau ku sui ni 'ubu-la-i,
there finished and me I finished there inside-it
olsem finisi 'anaa mi nao mi finisi nao *long insaet long hem,
like that, and then I finished in the midst of it all,

In Pijin the locative preceding *inside it* would be redundant; these Kwaio locatives are morphologically nouns, so locatives are used for spatial reference: *at the front part of it, in the inside-part of it,* etc.

taemu a-gu e sui no'o 'ubu-na alata no'o-na.
time PsP*-me it finished* PRF *inside-it time there*
taemu bulong mi hem-i finisi nao insaet long taem ia.
my time was finished in the midst of that episode.

sui ma miru eta lo-ko'u eta i sitanumoa miru
finished and we start there start at Stanmore we
finisi 'anaa mifala stat kam long dea stat kam long Sitanumoa mifala
And then we started there, started from Stanmore, we

ori no'o mai meru ori 'ubu-a kurumalau faka la
return PRF *hither we return inside-it Kurumalau ship they*
kambaeke nao *kam mifala kambaeke insaet long Kurumalau sifi olketa-i
came back, came back in the Kurumalau, the ship they

fa'a-lata-a kurumalau.
CAUS*-name-it Kurumalau*
kol-em Kurumalau.
called the Kurumalau.

Again, see section on causatives below.

'a-me'e la baba'aniaboo mele ori no'o mai 'ubu-la-i.
we two Mr Baba'aniaboo we two return PRF *here inside-it*
mitufala Ø Baba'aniaboo mitufala kambaeke nao Ø insaet long hem.
Baba'aniaboo and I came back here on it.

larikeni mele 'akwa-si-a no'o kau
*Larikeni we two escape-*TrS-*it* PRF *thither*
Larikeni mitufala rus-im nao go
The two of us left Larikeni,

In Pijin the order of the perfect marker nao and the directional go would usually be reversed.

ta alata ngaa a-na e 'ame sui 'ua.
some time it PsP-*him it* NEG *finished yet*
sam-fala taem *hem long hem hem-i no finisi ieti.
some time of his wasn't finished yet.

The focal pronoun is used in Kwaio in these possessive constructions - optionally - in that they are syntactically locative phrases in verbless clauses; hem long hem is redundant in Pijin.

'e-me'e mele ori mai mele nigi i gafutu
we two we two return here we two arrive at Gavutu
mitufala nao mitufala kambaeke mitufala kas-im Gavutu
The two of us came back, and reached Gavutu

Again, Kwaio uses *arrive at* where Pijin uses *reaches*; hence the locative is not used in Pijin, where the location is direct object of *reach*.

meru me'e nigi i gafutu. mele maa'ala i gafutu 'e-meeru
we then arrive at Gavutu we two visit to Gavutu TOP-*we*
mifala kamu kas-im Gavutu. mitufala kamu long Gavutu mifala nao
we arrived at Gavutu. We arrived at Gavutu, and

meru lee i wafu naa kurumalau ma ta'a lo-ko'u i gafutu
we lie at wharf on Kurumalau and people there at Gavutu
mifala lee long wafu long Kurumalau 'anaa evriwan ia long Gavutu
we laid alongside the wharf in the Kurumalau, and the people at Gavutu

'i-laba'a no'o "ou diafane e nigi lo-'oo tala'ina. na'a nga
QUOT PRF *oh Japan it arrive here today then* ART
see nao "ou Diafane hem-i kamu ia tudee. oraet des-fala
said, 'Oh, the Japanese got here today. And the

rua 'erofeleni lo-'oo ngai lo-fo'u i taniboko e bi'i
two planes here it down there at Taniboko it just
tu-fala 'erofeleni ia hem daon dea long Taniboko hem-i das
two aeroplanes from down at Taniboko

belo-ga e bi'i belo-ga bu'i." ma 'a-meeru miru
chase-them it just chase-them now and TOP-*we we*
raus-em olketa hem-i das raus-em olketa nao." 'anaa mifala nao mifala
chased them away, just chased them away a minute ago.' We

nana'i nana'i nana'i nana'i oru-na gani ma 'a-meru-a ta'a meru-a
stay stay stay stay third day and we people we
stafu stafu stafu stafu make-tirii dee 'anaa mifala evriwan mifala
stayed and stayed and stayed for three days, and we people

'akwa 'ubu-na ano meru leka 'ubu-na ano.
run away inside-it bush we go inside-it bush
ranawe insaet long sikalafu mifala go insaet long sikalafu.
ran away into the bush, we went into the bush.

ta'a i gafutu 'i-laba'a "nga diafane e nigi e nigi noo
people at Gavutu QUOT ART *Japan it come it come* PRF
evriwan long Gavutu see "des-fala Diafane hem-i kamu hem-i kamu nao
The Gavutu people said, 'The Japanese who have arrived

'i-lo'o-ri sia mou la'u.
here NEG *be broken again*
long hia no save borok tuu.
surely can't be stopped.

The Kwaio idiom is not a usual one in Pijin.

ta'a moru leeleka noo 'ubu-na ano." ta'a i gafutu me'e
people you gogo PRF *inside-it bush people at Gavutu then*
baebae iufala googo nao insaet long sikalafu." evriwan long Gavutu kamu
You all go into the forest.' The people at Gavutu

kwa'i-a o'oba la'u tofu-a o'oba la'u 'ubu-na ano lo-ko'u i
cut-it shelter too cut-it shelter too inside-it bush there at
kat-em haos tuu kat-em haos tuu insaet long sikalafu ia long
had built lean-to's as well, built lean-to's in the bush there on

gela. 'a-meeru miru leka 'ubu-na ano i gela miru kee
Gela TOP-*we we go inside-it bush at Gela we go*
Gela. mifala nao mifala go insaet long sikalafu long Gela mifala go
Gela. We went into the forest on Gela, and we

aga-si-a la niuboo. tomu niuboo ma i-nau ma wane la
see-TrS-*him Mr Niuboo Tomu Niuboo and me and man they*
luk-im Ø Niuboo. Tomu Niuboo, 'anaa mi nao 'anaa mane olketa-i
ran into Niuboo. Tomu Niuboo, I, and a man

fa'a-lata-a la 'eribe'u na'a miru leka miru leka fa-na
CAUS-*name-him* ART *'Eribe'u so we go we go for-it*
kol-em Ø 'Eribe'u oraet mifala go mifala go fo
who was named 'Eribe'u, we all went, we went to

kwaikwailo-ngari. kwaikwailo-ngari 'ubu-na nga ano lo-ko'u
hunthunt-canarium nuts hunthunt-canarium inside-it ART *bush there*
faend-em nate. faend-em nate insaet long Ø sikalafu ia
gather canarium nuts. Gather canarium nuts in that forest there

i gela. miru kwaikwailo-ngari sui ma miru so'oso'o-fi-a
at Gela we hunthunt-canarium finished and we pick up-TrS-*it*
long Gela. mifala faend-em nate finisi 'anaa mifala bikemafu
on Gela. We hunted for the nuts, and then we picked up

ngari lo-'oo miru-a age-a karisi fa-i miru ngari-a me'e
canarium here we make-it leaf for-it we take-it come
nate ia mifala wak-em rifi fo hem mifala tek-em kamu
the canarium nuts and we made a leaf (container) for them, we took them and

nigi 'aa'ae-na fou lo 'a-miru bi'i to'oru 'a-meru-i bi'i
arrive base-of rock there INF-*us just sit* INF-*us just*
kas-im borom long siton ia fo mifala das sidaon fo mifala das
reached the base of the rock, in order to sit down and

bakabaka-a ngari la'a-kau; miru longo kau ma 'erofeleni
crackcrack-it canarium there we listen thither and plane
hamar-im nate ia; mifala seke go 'anaa 'erofeleni
crack those nuts; we listened and an aeroplane

e ruuruuu no'o mai
it hum PRF *hither*
hem-i meemekenois nao kam
made a noise coming toward us.

Again, Pijin would usually reverse the order of the postverbal particles: meemekenois kam nao.

vvvvvvvvvvvvvvvvvvv - la niuboo wane ngai ne-'e su'a la'a i suri-a
ONOM *Mr Niuboo man him* TOP-*he know also around about-it*
vvvvvvvvvvvvvvvvvvv - Ø Niuboo mane hem nao hem-i save tuu *long abaot-em
Bzzzzz - and then Niuboo, who was a man who knew about those things,

The locative particle before suri-a *around, about* is idiomatic in Kwaio and no locative is used here in Pijin.

ngaia wane e nana'i i gafutu lo-'oo ngai e 'i-laba'a "ou nga
him man he stay at Gavutu here him he QUOT *oh* ART
hem mane hem-i stafu long Gavutu ia *hem hem-i see "ou des-fala
being a man who was staying at Gavutu, said, 'Oh, this

Because of the blocking rule, hem could be used preceding hem-i only if it were topicalised with nao or ia.

'erofeleni e ruuruu mai nga 'enemii lo'o no'o
plane it hum hither ART *enemy here now*
'erofeleni hem-i mekenois kam des-fala 'enemii ia *nao
aeroplane which is buzzing in our direction is an enemy one,

Here lo'o no'o is idiomatic in Kwaio, and represents the partial deletion of an embedded locative phrase.

suri-a ruuruu-nga e ori ma-tari.
because-it hum-ing it return differently
bikos saond hem-i kambaeke narawe.
because its sound is different.

The idiom here of 'coming back in a different direction' is distinctively Kwaio, and would not be used in Pijin; Pijin would use difren or no olsem.

nga rua 'erofeleni ngaa lo-fo'u i gafutu lo-ko'u rua
ART *two plane it down there at Gavutu there two*
des-fala tu-fala 'erofeleni hem daon dea long Gavutu ia tu-fala
Those two aeroplanes down at Gavutu there, the two

wasimani lo-fo'u a-i ai ngaai
lookout down there at-it one another
wasimani ia long dea wan-fala narawan
patrol planes down there, one of them,

In Pijin, wan-fala narawan is redundant; narawan or wan-fala alone would be used.

sikis koloko mone ma ka 'aoto. leeleka e laalaone 'ubu-na
6 o'clock morning and it go out when it circle in-it
sikis koloko mone 'anaa hem-i 'aoto. taem hem-i laalaone insaet long
at six o'clock in the morning, takes off. When it flies around during

nga gani lo-'oo
ART *day here*
Ø dee ia
the course of a day

The 'inside' is idiomatic in Kwaio; Pijin would simply use long dee.

tala'ina leeleka sikis koloko ma ka me'e sifo te-'e me'e sifo.
today then 6 o'clock and it then land FUT-*it then land*
tudee googo sikis koloko 'anaa hem-i kamu lane baebae hem-i kamu lane.
like today, then when six o'clock comes then it lands, it will then land.

ma nga ai lo-fo'u e naana'i e du'a-a no'o.
and ART *one down there it stay it replace-it* PRF
'anaa Ø wan-fala ia hem-i stafu hem-i sens-em nao.
And the one that has stayed down takes it place.

e eta naa sikis koloko laulafi lo-'oo e leka fa-na nga
it start at 6 o'clock evening here it go to-there ART
hem-i stat kam long sikis koloko 'ifining ia hem-i go fo Ø
It starts at six in the evening and goes on until

sikis koloko mone
6 o'clock morning
sikis koloko mone
six o'clock in the morning,

Pijin would be more likely to use long sikis koloko.

te-'e me'e sifo la'u gala sensi 'i-no'o-na. miru longo
FUT-*it come land again they 2 change like that we listen*
baebae hem-i kamu lane moa tufala-i sensi olsem. mifala seke
and then it lands; the two of them change places like that. We listened,

kau ma "ou 'erofeleni lo-lo'o no'o." "ou, ngaia no'o ngaia no'o."
thither and oh plane up there now oh him now him now
go 'anaa "ou 'erofeleni antap nao." "ou, hem nao hem nao."
and said, 'Oh, the aeroplane is up above now.' 'Oh, there it is, there it is!'

eta lo-fo'u ma ngaia ka 'i-laba'a "ou, fu'u wane
start down there and him he QUOT *oh bunch friend*
stat kam long dea 'anaa hem nao hem-i see "ou, olketa fren
At that point he said, 'Oh, our friends

a-dauru i gafutu
PsP-*we at Gavutu*
bulong iumi long Gavutu
at Gavutu

Kwaio uses wane plus a possessive for *friend*; wane a-gu is a characteristic speech pattern for which Kwaio are sometimes named; Pijin lexicalises fren.

waa lo-lo'o la o'uto'oana la kwailoboo la ba'eka la - ni wane e
man up there Mr O'uto-oana Mr Kwailoboo Mr Ba'eka Mr PLU *man it*
mane ia Ø O'uto'oana Ø Kwailoboo Ø Ba'eka Ø - olketa mane hem-i
O'uto'oana and Kwaioloboo, Ba'eka, and - there are

aula meeru mani aula naa .... ka 'i-laba'a "ou rua wane
be plenty we now plenty at he QUOT *oh two man*
plende mifala nao plende long .... hem-i see "ou tu-fala mane
lots of us, we're a big bunch at .... He said, 'Oh, you two

molo ori-te'e-ni-a naa fu'u wane laka a-dauru molo
you 2 return-TrS-*it to bunch friend* PsP PsP-*we you-2*
iutufala tek-em gobaek long olketa fren Ø bulong iumi iutufala
take it back to our friends, you two

fee-a aiiola fa-ga. nga 'erofelaeni e nigi no'o
convey-it canoe for-them ART *plane it arrive* PRF
tek-em kiniu fo olketa. des-fala 'erofelaeni hem-i kamu nao
take the canoe for them. This aeroplane that's come

te-'e bomu no'o." ma 'a-me'e la 'eribe'u mele sifo
FUT-*it bomb* PRF *and we two* ART *'Eribe'u we 2 go down*
baebae hem-i bomu nao." 'anaa mitufala Ø 'Eribe'u mitufala godaon
will drop bombs now.' So 'Eribe'u and I went down

mai ma mele
hither and we 2
*kam 'anaa mitufala
and the two of us

Pijin would be likely to use a lexicalised kamdaon rather than *descend* with a directional particle *hither*.

usu-a aiiola lo-fo'u ma mele ta'e mele leka 'ubu-na
push-it canoe down there and we 2 embark we 2 go inside-it
fus-um kiniu ia 'anaa mitufala goafu mitufala go insaet long
pushed the canoe and got aboard, and went out to

Kwaio uses ta'e *ascend* and sifo *descend* with the specialised meanings of *embark* and *disembark*; while a Kwaio speaker of Pijin might well use goafu here, most Pijin speakers would not.

asi ma
sea and
solowata 'anaa
the deep water, and

Pijin would be likely to use long solowata here.

'erofeleni lo-ko'u e - daone faa-fi-a tulake lo-ko'u ma ka
plane there it dive on top-TrS-*it Tulagi there and it*
'erofeleni ia hem-i - daone antap long Tulake ia 'anaa hem-i
that aeroplane dived over Tulagi, and

a'o-a fe'e bomu a-i. fe'e bomu ka a'o-a no'o
throw-it one bomb at-there one bomb it throw-it PRF
leeko wan-fala bomu long dea. wan-fala bomu hem-i leeko nao
dropped a bomb there. It dropped a bomb

mai i tulake.
hither at Tulagi
kam long Tulake.
on Tulagi.

The probable order of postverbal particles in Pijin would be kam nao; note that the syntactic pattern of fronting a topicalised direct object is identical in Kwaio and Pijin.

sui ma ka eta lo-ko'u mai me'e nigi maa-na i gafutu
finished and it start there hither come arrive eye-it at Gavutu
finisi 'anaa hem-i stat kam long dea kamu kas-im foin long Gavutu
Then it started from there and came back and reached the tip of Gavutu

lo-fo'u ma ka a'o-a fe'e bomu a-i. ma ta'a
down there and it throw-it one bomb at-it and people
ia 'anaa hem-i leeko wan-fala bomu long dea. 'anaa evriwan
and it dropped a bomb there. And the people

lo-fo'u e - lo-ko'u i gafutu lo-ko'u la 'akwa mai
down there he down there at Gavutu there they run away hither
ia hem-i - long dea long Gavutu ia olketa-i ranawe kam
there - there at Gavutu - fled

naa tale-'e baot ma - fe'e bomu lo e me'e sifo me'e
in array-of boat and one bomb here it then descend then
long olketa baot 'anaa - wan-fala bomu ia hem-i kamu godaon kamu
in a bunch of boats, and - that bomb fell,

sifo i lalo a-ga ma
descend to middle of-them and
godaon *long bitiwini long olketa 'anaa
fell in the middle of them, and

The Kwaio locative preceding *space in between*, which is morphologically a noun, has no counterpart in Pijin, where bitiwini is itself a preposition.

soloata e buasa fa-ni langi ma ki 'ame aga-si-a
sea it splashed to-there sky and we(incl.) NEG *see*-TrS-*it*
solowata hem-i buasa long sakae 'anaa iumi noh luk-im
the sea plumed into the sky, you couldn't see

no'o 'ubu-na nga fanua i gafutu; 'amoe no'o. naa soloata le-'e
PRF *inside-it* ART *place at Gavutu* NEG *now so sea here-it*
nao insaet long Ø ples long Gavutu; nomoa nao. oraet solowata ia hem-i
(anything) in that place at Gavutu. Not at all. So the sea

busu 'i-lo'oo e ori tori mai ma ki bi'i
burst like this it return downwards hither and we(incl.) *just*
buasa olsem hem-i kambaeke daon 'anaa mifala das
plumed like this [gestures], *came back down, and then you*

aga-si-a kau lefu.
see-TrS-*it thither place*
luk-im *go ples.
could see that place.

Kwaio speakers of Pijin might use the directional go here, but for other Pijin speakers it would be redundant.

sui ma 'a-me'e la 'eribe'u mele 'ame nigi no'o i gafutu
finished and we two ART *'Eribe'u we 2* NEG *arrive* PRF *at Gavutu*
finisi 'anaa mitufala Ø 'Eribe'u mitufala no kas-im nao Gavutu
OK, then, 'Eribe'u and I didn't go to Gavutu

naa alata no'o-na.
at time there
long taem ia.
on that occasion.

Pijin would be likely to use a lexicalised dattaem where Kwaio uses *time* with a deictic.

mele ori no'o mai mele ori no'o mele
we two return PRF *here we two return* PRF *we two*
mitufala kambaeke nao mitufala kambaeke nao mitufala
The two of us came back, came back and the two of us

'akwa no'o mai.
run away PRF *hither*
ranawe nao kam.
ran away.

Pijin would use ranawe kam nao or simply ranawe nao.

naa 'ola e lau fa-meeru naa mae
so thing it happen to-us in war
oraet samting hem-i hafen fo mifala long faete
That, then, was what happened to us in the war

Kwaio here uses the particle fa- to mark the semantic role of goal, where Pijin would use the locative long; on use of this old Oceanic form in South-east Solomonic languages, see Lichtenberk 1984.

naa diafane lo-'oo alata miru ori mai. meru nigi i gafutu
with Japan here time we return hither we arrive at Gavutu
long Diafane ia taem mifala kambaeke. mifala kas-im Gavutu
with Japan there, when we came back. We reached Gavutu

lo-fo'u naa mae naa diafane e bomu no'o faa-fi-'ameeru a-i.
down there in war with Japan it bomb PRF *on top*-TrS-*us at-there*
ia long faete long Diafane hem-i bomu nao antap long mifala long dea.
there in the midst of the war with Japan, they dropped bombs on us there.

KWALAFANE'IA'S PIJIN TEXT

Having examined the Pijin sentences predicted according to the calquing hypothesis, it will be useful to turn to the account of the same period recorded some days later from Kwalafane'ia in Pijin. Here I identify the Pijin morphemes lexically or according to grammatical function, as appropriate; the abbreviations used are set out in Appendix 2. Note the considerable phonological variation in Kwalafane'ia's Pijin. It is characteristic of Kwaio speakers of this generation, and their counterparts in other South-east Solomonic language groups whose Pijin I have recorded, that their Pijin shows wide phonological flexibility. The characteristic direction of such flexibility lies on the one hand in an inconsistent adaptation of consonants (here, such as /p/ and /h/ that have no counterparts in the speaker's first language, but occur in other Solomons languages and hence the Pijin of other speakers) to the speaker's native phonology; and on the other, in inconsistency in using either consonant clusters (which do not occur in the substrate languages) or interconsonantal vowels, and in using final vowels or not (since there are no final consonants in most of the substrate languages, including Kwaio).

taem mifala ko waawaka longo kiso finisi, mifala finis-im
when SRP(1pe) AUX *work*(RED) LOC *Gizo* PRF SRP(1pe) *finish*-TrS
When we were finished working at Gizo, had finished our

sikis-manisi finisi, oraet mifala kambaeke. nao mifala istate fo taem
six-months PRF *then* SRP(1pe) *return* *then* SRP(1pe) *start* *on time*
six months, then we came back. So we started our (contract) time

bulong mifala moa, ia. mifala stat fo taem bulong mifala. mifala
PsP Pr(1pe) *again* RHET SRP(1pe) *begin on time* PsP Pr(1pe) SRP(1pe)
all over again. We started on our time. We

wante finis-im. nala sikis-manisi hem-i stafu, mifala go kalabusi,
MOD *finish*-TrS *another six-months* SRP(3s) *remain* SRP(1pe) *go gaol*
wanted to get it over with. We had six months to go when we went to gaol,

mifala kambaeke fo finis-im moa, ia. hem nao, mifala
SRP(1pe) *return* INF *finish*-TrS PstVbP RHET FPr(3s) TOP SRP(1pe)
so we came back to finish it again. So we were

waawaka googo kas-imu - mifala kamu nao, diafane hem-i state
work(RED) *then* *reach*-TrS SRP(1pe) *come* PRF *Japanese* SRP(3s) *start*
putting in our time, we had come back, when the Japanese started

haate nao fo kamu long solomon aelan. nao olketa masta bulong
strongly PRF INF *come* LOC *Solomon Islands* *then* PLU *master* PsP
getting ready to invade the Solomons. So then our (white) bosses

mifala i see, oraet, evriwane iumi go waka long sikarafu nao fo
Pr(1pe) SRP(3) *say* *OK* *everyone* SRP(1pi) AUX *work* LOC *bush* PRF INF
said, 'OK, let's all go into the jungle

wak-em olketa haos, fo iumi, fosi diafane hem-i kam turuu nao,
make-TrS PLU *house* *for* Pr(1pi) *if* *Japanese* SRP(3s) *come really now*
to build houses, so if the Japanese really come

iumi masi haeti longo hem, long siklafu. nao mifala wak-em
SRP(1pi) MOD *hide* LOC Pr(3s) LOC *bush* *then* SRP(1pe) *make*-TrS
we can hide in them, in the bush. So we built

olketa haos longo sikalafu, oraete, finisi nao, googo nao, mifala waka
PLU *house* LOC *bush* *then* *be done* PRF *then* PRF SRP(1pe) *work*
houses in the bush, and then when they were finished, we worked

insaed longo - atingi mifala kamu mifala finis-imu tirii manis, nara
within LOC *maybe* SRP(1pe) *come* SRP(1pe) *finish*-TrS *three month* *another*
for a - we'd been back about three months,

tirii manis nao mifala waka longo olketa haos longo sikrafu, ia.
three month TOP SRP(1pe) *work* LOC PLU *house* LOC *bush* RHET
and for three months more we worked on the houses in the bush.

nao faete hem-i kamu haate nao, fo kamu - i save kamu nao, ia.
then war SRP(3s) *come strongly* PRF INF *come* SRP(3) MOD *come* PRF RHET
Then the war started in earnest, it was really coming.

oraete, mifala waawaka nao, mi finis, mi finis
well then SRP(1pe) *work*(RED) PRF SRP(1s) *be finished* SRP(1s) *be finished*
So we worked, and then I was done, my time was up.

nao. diafane i no kam ieti, mi finis. oraete, mi
PRF *Japanese* SRP(3) NEG *come yet* SRP(1s) *be finished* *then* SRP(1s)
The Japanese still hadn't come, and my time was up. So my

finis-im taem bulong mi nao, masta i see ou, iu
finish-TrS *time* PsP Pr(1s) PRF *master* SRP(3) *say* EXCL SRP(2s)
time was up, and the boss sayd, 'Oh, you're

finis nao. nao mifala, mi 'anaa barata bulong mi hem-i
be finished now then FPr(1pe) FPr(1s) *and brother* PsP Pr(1s) SRP(3s)
finished.' So we, I and my brother - he's

dae nao, ia, barata long maakona nem bulong hem baba'aniaboo,
be dead PRF RHET *brother* LOC *Maakona name* PsP Pr(3s) *Baba'aniaboo*
dead now, Maakona's brother Baba'aniaboo -

mitufala kam insaet long kurumalau nao, saet long sitanmoa. mifala kamu
SRP(1de) *come inside* LOC *Kurumalau* PRF *side* LOC *Stanmore* SRP(1pe) AUX
come in the Kurumalau, from Stanmore. We reached

kas-imu gafutu nomoa, olketa gavutu boe ia i see, ou, diapan
reach-TrS *Gavutu* PstVbP PLU *Gavutu native* DEM SRP(3) *say* EXCL *Japanese*
Gavutu and the Gavutu natives said, 'Oh, the Japanese

hem-i kamu tudee long hia, kolsap sut-im mifala. mifala, ee, turuu?
SRP(3s) *come today* LOC *here almost shoot*-TrS Pr(1pe) SRP(1pe) EXCL *true*
came here today, and almost shot us.' We said, 'Is that true?'

ee, turuu, ia. oraet, mifala silifi long naet ia, googo kas-im
EXCL *true* RHET *so* SRP(1pe) *sleep* LOC *night* DEM *then reach*-TrS
'Hey, it's really true!' So we slept all night, and in the

mone, oraete, wan mane longo - hem-i dade bulongo mi tuu,
morning well then one man LOC SRP(3s) *father* PsP Pr(1s) *too*
morning one man from - he was my 'father' too -

hem-i see, atingi oloketa boe long gafutu i waka long sitima,
SRP(3s) *say probably* PLU *native* LOC *Gavutu* SRP(3) *work* LOC *steamer*
said, 'The Gavutu natives must work on the ship.

ia. stima hem-i tek-em kako kam nao, olketa waka long hem long
RHET *steamer* SRP(3s) *take*-TrS *cargo* DIR PRF SRP(3p) *work* LOC Pr(3s) LOC
It must be that steamer that brings supplies that they are working on, on

wafu. nao hem-i see, iumi finistaem, olketa finistaem, iumi go
wharf then SRP(3s) *say* FPr(1pi) *repatriate* PLU *repatriate* SRP(1pi) *go*
the wharf.' He said, 'We who are finished our contracts let's go

narasaeti. oloketa haos mifala wak-em, narasaeti, ia.
opposite PLU *house* SRP(1pe) *make*-TrS *opposite* RHET
over to the opposite shore. The houses we built are on the opposite shore.

iumi go siisilifu long hem. diapani baebae hem-i kam tudee, ia.
SRP(1pi) *go sleep*(RED) LOC Pr(3s) *Japanese* FUT SRP(3s) *come today* RHET
Let's go sleep there. The Japanese are going to come today.'

nao samfala i no wiling fo go. ou, nomoa, iufala go.
then some people SRP(3) NEG *be willing* INF *go* EXCL NEG SRP(2p) *go*
But some men were unwilling to go. 'Oh, no, you go.'

nao mifala, tirifala nomoa go, go long soa mifala go faend-em
then SRP(1pe) *three only go go* LOC *shore* SRP(1pe) AUX *find*-TrS
So we, the three of us who had gone, went to that shore. We went to get

nate, ia. googo finis nao mifala teke nate ia kam nao,
canarium RHET *then be finished* PRF SRP(1pe) *take canarium nut* DEM DIR PRF
canarium nuts. So then we brought the nuts and we

mifala sidaon weit-em olketa siton nao, olketa hamar-imu nate, long
SRP(1pe) *sit with*-TrS PLU *stone* PRF SRP(3p) *hammer*-TrS *nut* LOC
sat down with stones, the ones people used for cracking nuts,

hem ia, mifala wante hamar-im nate ia, bulek-em fo nate
Pr(3s) DEI SRP(1pe) MOD *hammer*-TrS *canarium nut* DEM *break*-TrS *for nut*
intending to crack open those nuts, and get the meat

nomoa. mifala seke nao ma 'erofilen i mekenois kamu nao.
PstVbP SRP(1pe) *check* PRF *and aeroplane* SRP(3) *make noise* DIR PRF
out. We noticed the noise of an approaching plane.

bulong diapan nao, ia. oraet, mekenois kam nao. mifala see, ee,
PsP *Japanese* TOP RHET *so make noise* DIR PRF SRP(1pe) *say* EXCL
A Japanese one. Its sound was coming in our direction. We said, 'Hey,

wanem? 'erofilen i mekenois kamu. ating bulong diapan nao,
what aeroplane SRP(3) *make noise* DIR *probably* PsP *Japanese* TOP
what's that?' 'There's a plane coming.' 'I'll bet it's a Japanese one.'

ia. narafala mane ia hem-i gogo wet-em mitufala ia ou, ating
RHET *other*-A/SMkr *man* DEM SRP(3s) *go*(RED) *with*-TrS Pr(1de) DEM EXCL MOD
That was the other man, who had come with us. 'Oh, it

i mekenois mifala hir-em olsemu 'erofilen hem-i kam iastade,
SRP(3) *make noise* SRP(1pe) *hear*-TrS *like aeroplane* SRP(3s) *come yesterday*
sounds like the plane that came yesterday.

ia. saond bulong hem i olsem hem nao. nao mifala rukuruku
RHET *sound* PsP Pr(3s) SRP(3) *be like* Pr(3s) PRF *then* SRP(1pe) *look*(RED)
It's noise is the same as that one.' So we looked and looked,

nao, ma, ou. mifala ruku nomoa olsem nao ma hem-i - ou, mane ia
PRF *and* EXCL SRP(1pe) *look* PstVbP *like that* PRF *and* SRP(3s) EXCL *man* DEM
and - 'Oh'. We looked like that and he - 'Oh', that man

i see, ou, hem nao, ia. hem nao 'erofileni hem-i waeti,
SRP(3) *say* EXCL FPr(3s) TOP RHET FPr(3s) TOP *aeroplane* SRP(3s) *be white*
said, 'Oh, that's the one! That's it, the white plane!

ia. hem nao, ia. oraet, mifala seke nomoa ma hem-i daon kam
RHET FPr(3s) TOP RHET *then* SRP(1pe) *check* PstVbP *and* SRP(3s) *dive* DIR
That's the one!' So we kept watching and it dived

nomoa antap long tulake ia. hem-i leeko wan-fala bomu kamu nao.
PstVbP *above* LOC *Tulagi* DEM SRP(3s) *release one*-A/SMkr *bomb* DIR PRF
over Tulagi. It dropped a bomb.

mifala seke nao, ma hem-i kam bafa longo solowata nao. diapani -
SRP(1pe) *check* PRF *and* SRP(3s) AUX *hit* LOC *sea* PRF *Japanese*
We watched and it came 'splash' into the sea. Japanese -

ou, i diapani turuu nao. oraet, hem-i suwing kam moa antap long
EXCL SRP(3) *Japanese really* PRF *so* SRP(3s) *swing* DIR PstVbP *above* LOC
'Oh, it's really Japanese!' So then he swung back over

mifala long gafutu ia, hem-i maak-em nomoa long wafu long gafutu
Pr(1pe) LOC *Gavutu* DEM SRP(3s) *aim at*-TrS PstVbP LOC *wharf* LOC *Gavutu*
us to Gavutu, and took aim on the wharf at Gavutu,

ia, hem-i maak-em nomoa, wan-fala bomu hem-i kamu moa.
DEM SRP(3s) *aim at*-TrS PstVbP *one*-A/SMkr *bomb* SRP(3s) *come* PstVbP
took aim and a bomb dropped again.

bitiwini mifala everiwan long solowata nao, ia. mifala badolo go long
between Pr(1pe) *everyone* LOC *sea then* RHET SRP(1pe) *paddle* DIR LOC
In the middle of us all in the sea. We were paddling

kanu tuu. nao evriwan long gavutu kamu tuu. laesis kam fo soa.
canoe too then everyone LOC *Gavutu come too hurry* DIR LOC *shore*
canoes. Everyone from Gavutu was coming as well. Hurrying for the shore.

badolo kamu fo soa nao, ia. oraet, googo na 'erofilen hem-i bomu
paddle DIR LOC *shore* PRF RHET *so then and aeroplane* SRP(3s) *bomb*
Paddling for the shore, right. OK, so then the plane which had bombed

longo gavutu ia hem-i no kas-im enibodi. nomoa. hem-i kam bang
LOC *Gavutu* DEM SRP(3s) NEG *hit*-TrS *anyone* NEG SRP(3s) AUX *hit*
at Gavutu hadn't hit anyone. Not at all. They [the bombs] just splashed

longo solowata nomoa. no 'eni mane i kas-im. nomoa. nomata kainiu,
LOC *sea only* NEG *any man* SRP(3) *hit*-TrS NEG *even canoe*
into the sea. They didn't hit anyone. Not at all. Not even canoes

wanemu, nomoa. hem-i kamu banga long si nomoa. 'andaa evriwan mifala
whatever NEG SRP(3s) AUX *hit* LOC *sea only and everyone* SRP(1pe)
or anything at all. They just splashed into the sea. And we all

lane go longo - mitufala tanebaeke moa go long soa nao. nao evriwan
flee DIR LOC SRP(1de) *turn round* PstVbP *go* LOC *shore* PRF *then everyone*
fled to - we turned back and went ashore. And everyone

i kam tuu. oraete, finis nomoa long 'ifiningi, wan-fala
SRP(3s) *come too then be finished* PstVbP LOC *evening one*-A/SMkr
else came as well. So then in the evening a

'eroflen hem-i - tu-fala wasimane long gafutu ia, wan-fala hem-i
aeroplane SRP(3s) *two*-A/SMkr *patrol* LOC *Gavutu* DEM *one*-A/SMkr SRP(3s)
plane - there were two patrol planes at Gavutu, and one had

go nao, ia. hem-i state longo sikis-kolok mone nao, hem-i waka
go PRF RHET SRP(3s) *start* LOC *six o'clock morning* PRF SRP(3s) *work*
gone out. It started at six in the morning and

raon nao, longo diafosi nao, googo, nara sikesiki i go moa longo
around PRF LOC ? PRF *then another section* SRP(3) *go* PstVbP LOC
patrolled around, around [?] then another [plane] took its place and

'ifiningi, baebae hem-i kam. nao na nara-fala hem-i sensi
evening FUT SRP(3s) *come then and other*-A/SMkr SRP(3s) *replace*
then finally returned in the evening. And then the other took its place

moa. wan-fala hem-i sidaon nomoa taem 'erofilen hem-i kam nao,
PstVbP *one*-A/SMkr SRP(3s) *stay* PstVbP *when aeroplane* SRP(3s) *come* PRF
again. One of them was down when the plane came

hem-i state nao, goapu nao, hem-i lanawe nomoa, ma nara-fala
SRP(3s) *start* PRF *ascend* PRF SRP(3s) *run away* PstVbP *and other*-A/SMkr
and it started up, took off, and escaped, while the other

'erofilen ia hem-i see, pmm, bihaen. googo nao ko sut-im
aeroplane DEM SRP(3s) *say* ONOM *behind then then* AUX *shoot*-TrS
plane went 'pmmmm' behind. And it went and shot

'erofilen bulong diafani nao, ko folodaon long saete longo - long wea,
aeroplane PsP *Japan* PRF AUX *fall* LOC *side* LOC LOC *where*
the Japanese plane, which went down at - let's see, where

ia - long saete kam long tulake ia. saete kam long tulake ia.
RHET LOC *side* DIR LOC *Tulagi* DEI *side* DIR LOC *Tulagi* DEI
was it? - on the near side of Tulagi. The near side of Tulagi.

'efofilen bulongo wasimane i ko, ko sut-im nao. 'erofilen bulong
aeroplane PsP *patrol* SRP(3) *go* AUX *shoot*-TrS PRF *aeroplane* PsP
The patrol plane went and shot it down. The Japanese plane

diapan hem-i foldaon long solowata nao.
Japanese SRP(3s) *fall* LOC *sea* PRF
went down in the sea.

THE CALQUING HYPOTHESIS EVALUATED

The sentences predicted by the calquing hypothesis very closely approximate the Pijin sentences that would or could be used to express the same meanings; the essentially parallel grammars of the two languages emerge strikingly if we compare the predicted Pijin sentences with the ones Kwalafane'ia actually uses. The differences between the two grammars are relatively minor, reflecting the more limited morphological possibilities and lexical resources of Pijin, contrasting idioms and metaphors in the two languages, and minor differences such as the transitive *reach* in Pijin and the intransitive *arrive at* in Kwaio. Only a few of the contrasts have any systematic grammatical significance. It will be useful to examine them.

The most interesting, I think, lies in the pronominal system. As I have argued elsewhere (Keesing 1985a), Solomons Pijin inherited from Queensland Pidgin a simplified form of the Oceanic pronoun copying rule that places a pronoun referencing an explicit or implicit noun subject within the verb phrase. The Queensland version was simplified in that the pronoun copy for non-singular forms (other than 1st person inclusive forms) had the invariant form of the third person singular copy pronoun, i (the much misunderstood 'predicate marker' of Pidgin studies); whereas in the Oceanic pattern, all the copy pronouns are marked for person and number. I have shown how this pronominal paradigm has apparently been reanalysed, in the pre-war dialect of Solomons Pijin, to reincorporate a full system of person and number marking on the copy pronoun. Where a sentence has a pronominal subject, the obligatory pronominal constituent is the copy pronoun within the VP; if the pronoun subject is emphasised or foregrounded, a corresponding free or focal pronoun is used in the subject NP slot. The full paradigm, I infer, is:

		FREE (FOCAL) PRONOUN	COPY PRONOUN (SUBJ.REF.)
Singular	1	mi	mi
	2	iu	iu
	3	hem	hem-i i
Dual	1 incl.	iumitufala	iumitufala
	1 excl.	mitufala	mitufala
	2	iutufala	iutufala
	3	tufala	tufala(-i) i
Plural	1 incl.	iumi	iumi
	1 excl.	mifala	mifala
	2	iufala	iufala
	3	olketa	olketa(-i) i

Kwaio, like other South-east Solomonic languages, has an exactly corresponding pronominal system. However, where in Kwaio the focal pronoun and the corresponding copy pronoun (what I have called a 'subject-referencing pronoun') can follow one another in direct sequence (having distinctive phonological shapes), in this dialect of Solomons Pijin used by older speakers, the two paired pronouns cannot be used in direct sequence. However, they can be used in sequence when a particle intervenes. I have referred to this elsewhere as a 'blocking rule'. The intervening particle most commonly used is the topicaliser nao, the future-marker baebae, or a modal such as maet or ating.

Clear evidence that Kwalafane'ia, like other Pijin speakers of his generation who learned Pijin as a second language in young adulthood, is using a pronoun copying rule, and that hem-i is the full form of the 3ps copy pronoun (not simply a pronoun plus a 'predicate marker') comes in comparing the results of the calquing hypothesis with Kwalafane'ia's actual sentences. I could have used either hem-i or i as the Pijin equivalent of the Kwaio 3ps subject-referencing pronouns e and ka; in fact, either hem-i or i can be used interchangeably, as we see from Kwalafane'ia's 'erofileni hem-i and 'erofileni i, and his diafane hem-i and diafane i. However, with 3ps referents, Kwalafane'ia uses hem-i 38 times in this text, and uses i only 13 times. We thus produce a closer equivalent to his actual discourse style by using hem-i as 3ps copy pronoun, equivalent to Kwaio e and ka. The blocking rule in Pijin renders exact equivalents of na ku or ngai e, *mi mi and *hem hem-i, ungrammatical, although mi bae mi or hem nao hem-i would be quite acceptable and common.

A second fairly general contrast is that Kwaio often uses a verb or a temporal in a way that generally specifies the act or the time period, but which is qualified by a directional particle or a deictic - *return hither, that time* - where Pijin has drawn on the lexical resources of the superstrate language to lexicalise the contrasts: kambaeke vs. gobaeke, destaem vs. dattaem, etc.

An examination of the causative constructions in Kwaio and their Pijin equivalents shows another contrast. Kwaio, like Proto-Oceanic (Pawley 1973), uses two mechanisms for forming causative transitive verbs from stative verbs and intransitive verb roots. One is to use a causative prefix (Kwaio fa'a-) in a construction whereby the experiencer of the state or the actor of the intransitive verb becomes the direct object of the causative verb (which is marked with a clitic -a *it* suffix); thus fa'a-sui-a *cause-be finished-it*. The second device, used with a smaller subset of stative verbs, is to attach a transitive suffix directly to the verb root (again followed by a clitic *it*); thus 'ago-fi-a *heat it*. Because Melanesian Pidgin evolved a relatively clumsy causative construction (mek-em i bik-fala *cause it to be big*), common causative forms in Pijin are mainly formed with a transitive suffix. Thus *cause it to be finished* is expressed in Pijin as finis-im; *heat it* is, as in Kwaio, hot-im; *cause it to be extinguished*, which is expressed in Kwaio with a causative prefix, fa'a-mae-a *cause-be extinguished-it* (lit. *cause-be dead-it*), is expressed in Solomons Pijin as dae-em *die-ise*.

Comparison of the sentences will show how closely the Pijin pattern as used by Kwaio speakers follows the tense-aspect system of Kwaio: thus the preverbal kee and me'e in Kwaio are systematically equated with Pijin go and kam as auxiliaries; the future-marker in Kwaio fits exactly where its counterpart in Pijin is placed, preceding the subject-referencing copy pronoun; the aspect marking bi'i *just* preceding the verb corresponds directly with Pijin das as used by Kwaio speakers like Kwalafane'ia;[2] the negatives no and no save exactly correspond to the modals 'ame and sia in Kwaio, and fit in the same slot; and the modal of possibility maet or ating fits in the initial slot in the verb phrase

where Kwaio bala fits. So pervasive and exact is this fit that in his Kwaio, Kwalafane'ia can freely borrow a Pijin form like ating and use it in place of the corresponding Kwaio form.

There are some minor differences in the order of postverbal particles in Kwaio and Pijin, as has been noted (so that in Pijin the directional kam or go directly follows the verb it qualifies, where in Kwaio it can be separated from it by an aspect marker such as the perfect-marking nao). There are also some minor contrasts in the stylistics of discourse. A notable example is the rhetorical ia with rising inflection, in clause-final position, which is extremely common in Solomons Pijin (and in other daughter dialects of Queensland Pidgin), but has no direct counterpart in Kwaio.

There are other contrasts, mainly minor, between the grammars of Kwaio and of Pijin as used by these Kwaio speakers. But they are overwhelmingly overshadowed by the parallels, which massively allow of direct calquing using formulae of lexical substitution of the sort I have illustrated. For these older Kwaio speakers, as for their counterparts in other parts of the south-east Solomons, learning and using Pijin has been a process requiring extensive lexical acquisition but only minor modifications of grammatical patterns already acquired through native language-learning.

APPENDIX 1: TABLE OF EQUIVALENTS

'a-me'e	mitufala	'ubu-la-i	insaet long hem
'a-meeru	mifala nao	'ubu-na	insaet long
'a-meru-a	mifala	a'o-a	leeko
'a-meru-i	fo mifala	a-dauru	bulong iumi
'a-miru	fo mifala	a-ga	long olketa
'a-ni	fo	a-gu	bulong mi; long mi
'aa'ae-na	borom long	a-i	long dea; long hem
'ai wut	trii	a-meeru	bulong mifala; long mifala
'akwa	ranawe	a-mu	bulong iu; long iu
'akwa-nga	ranawe	a-na	long hem
'akwa-si-a	rus-im	aga-si-a	luk-im
'ame	no	age-a	du-im; wak-em
'amoe	nomoa	ai	wan-fala
'ani-a	weit-em	aiiola	kiniu
'aoto	'aoto	alata	taem
'e-me'e	mitufala nao	ano	sikalafu
'e-meeru	mifala nao	asi	solowata
'enemii	'enemii	aula	plende
'erofelaeni	'erofelaeni	bakabaka-a	hamar-im
'erofeleni	'erofeleni	baone	baone
'i-laba'a	see	baot	baot
'i-lo'o-ri	long hia	bata-'ai	melewan long hem
'i-lo'oo	long hia; olsem	belesini	belesini
'i-no'o-na	olsem	belo-ga	raus-em olketa
'ifi	haos	bi'i	das
'o	iu	bomu	bomu
'ola	samting	bu'i	nao
'oo	iu	buasa	buasa
'ua	iet	buri-la	bihaen
'ubu-a	insaet long	buru	gar-em hea

busu	buasa
daone	daone
du'a-a	sens-em
du'a-i	fram hem
du'a-na	bikos
e	hem-i
eta	stat kam
eta mai	stat kam
eta-la-gu	mi stat taem
eteeta-la-gu	mi stat taem
fa'a-lata-a	kol-em
fa'a-si-a	mek-em
fa'a-sui-'ameeru	finis-im mifala
fa'a-sui-'o	finis-im iu
fa'a-sui-a	finis-im
fa-ga	fo olketa
fa-i	long dea; fo hem
fa-meeru	fo mifala
fa-na	fo; long
fa-ni	long
faa-fi-'ameeru	antap long mifala
faa-fi-a	antap long
faafata	faafaete
faka	teisin; sifi
fanua	ples
farisi	ia
fe'e	wan-fala; taem
fee	pis
fee-'emeeru	tek-em mifala
fee-a	tek-em
fiu	sefen-fala
foo-'i	pis
fori-nau	bae-m mi
fou	siton
fu'u	olketa
futa	bon
gala	tufala-i
gani	dee
gau-'i	taemafu
gila	olketa
gu'a	dae
gwa'a	nomata
gwo	nomata
i	long
i-na	mi nao
i-nau	mi nao
ia	ia
iriiri-a	kol-em
ka	hem-i
kalabusi	kalabusi
kalonga	sikalafu
karisi	rifi
kau	go
kee	go (as verbal auxiliary)
keto-nga	kaikai
keto-nga	kaikai
ki	iumi
kiikirini-te-'e	olketa
ko	iu
koloko	koloko
ku	mi
ku-a	mi
kwa'i-a	kil-im; kat-em
kwaikwailo-ngari	faend-em nate
kwalo	rofu
kwate-a	gif-im
la	olketa-i; Ø (as personal article, preceding man's name)
la'a	tuu
la'a-kau	ia
la'u	moa; tuu
la'ula'u	olowe (as adverb); furu (as adjective)
laalaone	laalaone
laka	Ø
lalo	bitiwini
langi	sakae
lari	ruti
late-gu	fes bulong mi
lau	hafen
laulafi	'ifining
lauta	fosi
le'a	gut
le-'e ia	hem-i
lee	lee
leeleka	googo; fosi; taem
lefu	ples
leka	go
lo	ia
lo-'oo	ia
lo-fo'u	daon dea; long dea (prep.); ia (demonst.)
lo-ko'u	long dea (prep.); ia (demonst.)
lo-lo'o	antap (prep.); ia (demonst.)
longo	seke
ma	'anaa; bataa
ma-tari	narawe
maa'ala	kamu
maa-na	foin
mae	faete
mai	kam
malonga	drae
mani	nao
manisi	manisi
masita	masita
me'e	kamu (as verbal auxiliary)
me-e 'anaa	hem-i

meeru	mifala	ou	ou
mele	mitufala	rua	tu-fala; tuu (before units of time)
meru	mifala		
meru-a	mifala	rua-na	meke-tuu
miru	mifala	ruururuu	meemekenois
miru-a	mifala	ruuruu	mekenois
mo-o	iu	ruuruu-nga	saond
mola	nomoa	saasari	state
molo	iutufala	sensi	sensi
mone	mone	sia	no save
moru	iufala	sifo	godaon; lane (of aeroplane)
mou	borok		
na	mi	sikis	sikis
na'a	oraet	singari	manis
na'o	bifo; fastaem	so'oso'o-fi-a	bikemafu
naa	long; bulong; 'anaa	soloata	solowata
naen	naen	su'a	save
nana'i	stafu	sui	finisi
ne-'e	nao hem-i	suri-a	abaot-em; bikos
nga	Ø; des-fala	ta	sam-fala
ngaa	hem; Ø	ta'a	evriwan; baebae (as tense marker)
ngaai	narawan		
ngai	hem	ta'e	goafu
ngaia	hem nao	ta-miru	baebae mifala
ngari	nate	taemu	taemu
ngari-a	tek-em	tala'ina	tudee
ngari-nau	tek-em mi	tale-'e	olketa
ni	nao long; olketa (as plural marker)	te-'e	baebae hem-i
		tirii	tiri-fala
nigi	kamu	to'oru	sidaon
nigi i	kas-im	tofu-a	kat-em
no'o	nao	tofu-o'oba-nga	waka long haos
no'o-na	long dea (prep.); ia (demonst.)	tofutofu-a	kaakat-em
		tori	daon (as second verb in compounds)
noo	nao		
o	iu	tu	tu
o'oba	haos	usu-a	fus-um
ono	sikis	waa	mane
ori	kambaeke	waawaka	waawaka
ori mai	kambaeke	wafu	wafu
ori-nga	taem fo go	waka	waka
ori-te'e-ni-a	tek-em gobaek	wan	wan
oru	tri-fala; trii (before units of time)	wane	mane; fren
		wasimani	wasimani
oru-na	make-tirii	wela	boe

APPENDIX 2: KEY TO GRAMMATICAL ABBREVIATIONS

A/SMkr	adjective/stative marker
AUX	auxiliary verb
DEI	deictic
DEM	demonstrative deictic
DIR	directional particle

EXCL	exclamation
FPr	focal pronoun (person and number in parentheses)
FUT	future/irrealis marker
INF	infinitive marker
LOC	locative particle
MOD	modal
NEG	negative-marker
ONOM	onomatopoeia
PLU	plural marker
Pr	personal pronoun, object of verb or preposition or possessive
PRF	perfect aspect marker
PsP	possessive particle
PstVbP	post-verbal particle
RED	reduplicated
RHET	rhetorical particle, with rising intonation in clause-final position
SRP	subject-referencing (copy) pronoun; person and number in parentheses
TOP	topicalising particle
TrS	transitive suffix

NOTES

[1]Stephen Wurm has created, in the Research School of Pacific Studies, a Department of Linguistics uniquely fostering close collaboration by linguists and colleagues in cognate disciplines such as anthropology and prehistory. That an anthropologist such as I, an amateur linguist and lexicographer, has been given so much advice, encouragement and opportunity in pursuing linguistic interests exemplifies Professor Wurm's catalytic role. I am indebted to Christine Jourdan for advice on Pijin equivalents of Kwaio forms.

[2]While these texts do not illustrate this possibility, elsewhere Kwalafane'ia and other Kwaio speakers of his generation use Pijin baebae + subj. ref. pron. + das to mark an aspectual relationship where the act of the verb that follows will occur 'after a while'; this pattern corresponds exactly, syntactically and semantically, to a parallel construction in Kwaio: ta- + subj. ref. pron. + bi'i (ta- is the future-marking particle in Kwaio).

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1987 ADDENDUM

Continuing research and writing on Melanesian Pidgin in historical perspective has led to a considerable expansion of the argument sketched at the beginning and end of this paper. In a forthcoming book, *Melanesian Pidgin and the Oceanic Substrate* (Stanford University Press), I place the relationship between Solomons Pijin and substrate languages in a wider historical, comparative and linguistic framework.

I would now recast my description of the Oceanic and Pidgin pronominal systems in that I no longer consider the obligatory subject-referencing pronouns within verb phrases to be copy pronouns (a transformational interpretation, borrowed from Sandra Chung's work on Polynesian, that no longer seems viable). Chapters 9, 10, and 12 of my forthcoming book examine Pidgin pronominal systems in considerable detail.

WORD ORDER IN WIK-MUNGKAN

Christine A. Kilham

1. INTRODUCTION

One of the most recent papers on word order in an Australian Aboriginal language is that written by Blake (1983) on a western Queensland language, Kalkatungu. It is good to see this subject receiving serious attention. I would now like to add some ideas to the melting pot, from my background of having struggled with word order in another Queensland language, Wik-Mungkan,[1] from several perspectives: that of linguistic description and analysis, as well as that of using the language in a bilingual school programme and in a translation programme. Both these programmes have afforded many opportunities to observe Aboriginal writers, translators and editors at work and also to observe the evolution of a written style in Wik-Mungkan.

I would like to make three observations. Firstly, for practical use of a language, it is not enough to know that theoretically such and such a number of permutations of a sentence are possible, e.g. Blake (1983:143-144) points out that in Kalkatungu '...an English sentence such as 'this big dog chews bones' can be rendered in any of the 120 possible combinations of the five corresponding words...', but then rightly goes on to point out that not all orders are equally likely, and later explains some differences in word order as being due to focus. For a language with apparently fairly free word order, I have found it important to try and understand why some permutations are far more common and acceptable; why others are theoretically possible, but may be barely understandable; whether some orders are only acceptable in certain contexts or positions of a discourse; whether word order is affected by factors like given versus new information; or whether word order variations are found related to the mainline of the text, as against explanatory or background material; and related questions. In other words, I have found it important not only to know that such and such a structure or word order exists, but also to try and understand why it exists when it does.

Secondly, I have found it not enough to describe all word order variations from the preferred norm as being due to focus, or emphasis or prominence, or whatever term is chosen. Such terms easily become 'catch-alls'. What kind of focus, or what kind of prominence, are questions that need to be addressed. Blake (1983: 153) talks of a focus-first principle in Kalkatungu, where focus is defined as: '...the most important part of the comment, the essential part'. This is one form of prominence in languages, but there are many other kinds also, some involving the theme or topic as against the comment.

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Thirdly, I have observed in Wik-Mungkan that when a written style is developed by the native speakers, word order is not as free as for oral speech. Constraints are applied in writing, and also in editing.

In my study of word order in Wik-Mungkan, not all the questions that I asked 'scratched where it itched', but some did. Gradually the picture emerged of some word orders being more normal, or more preferred, than others. The many variations from these normal orders were found to be due to a variety of factors, such as case ranking, new versus given information, and prominence given to marked themes. These all interplay with one another. In Section 2 a brief sketch is given of the case system of Wik-Mungkan, followed by a description, in Section 3, of the normal word orders. In Section 4 the factors that cause variations in word orders are discussed. Lastly, word order in written style is discussed in Section 5.

2. WORD ORDER AND CASE IN WIK-MUNGKAN

Like many other case-marking languages, Wik-Mungkan appears on the surface to have a fairly free word order in oral speech. Wik-Mungkan nominals inflect for case, while verbs inflect for person of subject, tense, and some moods. The cases distinguished are as follows: Ergative (Transitive Subject); Nominative (Intransitive Subject and Object); Referent (includes Indirect Object, Allative and Benefactive); Instrumental, Stationary Locative, Temporal, Goal, Accompaniment, Source, Possessive and Vocative. The case markers are enclitics, occurring at the end of the phrase if the argument is represented by more than one word. Discontinuous phrases also occur; and when they do, the case enclitic would mark both of the appositional elements.

Nouns, demonstratives, interrogatives and indefinite pronouns inflect according to a nominative-ergative case system. Personal pronouns, on the other hand, inflect according to a nominative-accusative system.

Thus with a case system so clearly defined by inflection, the order of the words varies considerably and at times appears to be unrestricted.

3. PREFERRED WORD ORDERS

The combination of analysis, usage and observations of Aboriginal writers and editors has shown that there are in fact normal or preferred word orders in Wik-Mungkan, with freedom within limits. There are also some typical variations that can be accounted for by grammatical or discourse features.

Two preferred word orders of the clause are observable in Wik-Mungkan, SOV and SVO. These basically depend on whether the O is identified by a noun or personal pronoun, i.e. these two orders correlate with the nominative-ergative and nominative-accusative systems respectively (see Section 2). These are:[2]

(S) O_{noun} V

(S) V $O_{pronoun}$

Thus typically object nouns occur before the verb phrase (1), and object pronouns typically follow the verb (2). This is especially the case with third person objects.

(1) .. way min anangan thath-thathinweya, shelf thon-thonangan angan
*things those.*nom *see-see.*3P.past.comp *shelf different ones on.there*

wunin, puk manyiya, yuk many truck thakan thathin ...
*lie.*3P.past *babies thing small truck etcetera see.*3P.past
They saw those things on the different shelves, they saw the dolls, toy trucks etcetera.

(2) Nil wuut nguk alangan thath pulang. Puuny al-alangan
*He old-man owl that.*erg *see.*3S.past *those two-*obj *hornets those.two.*erg

pakang makin nunang.
*clingingly stick.*3P.past *him.*obj
The owl-man saw those two. The hornets were swarming all over him.

These word orders relate to the information and thematic systems of the language. When the subject occurs as a free form (whether a noun or pronoun) it typically occurs initially in the clause as the unmarked theme. The position immediately before the verb phrase, which is the intonation centre of the clause (i.e. the part which receives clause stress, defined in terms of loudness and pitch) is normally reserved for new information. It may be completely new information, which has not been mentioned before, or on the other hand, it may add colour or provide a different slant to something already given. Since nouns as objects are often new information they typically occur immediately before the verb phrase. However, first and second person pronouns, which normally do not substitute for nouns, occur before the verb about 50% of the time in Wik-Mungkan clauses.

4. FACTORS THAT MAY CAUSE VARIATIONS IN WORD ORDER

4.1 Case ranking

There is constraint in Wik-Mungkan as to how many clause constituents can occur before the verb. More than three is considered overloading, and even three is a lot! This affects word order. Case-ranking is apparent in Wik-Mungkan in that subject and object (when identified by nouns) typically occur as the first two items in the clause before the verb phrase. A noun marked for Referent case has the next highest rank. However, a third person pronoun in Referent case typically follows the verb as do third person object pronouns. The normal word orders are affected when one or more of the above do not occur. Then, by default, words or phrases marked for non-nuclear cases, e.g. Stationary Locative, Source, and Accompaniment, may occur preceding the verb phrase. The exceptions are nouns marked for Goal case, which may occur before the verb phrase, but frequently occur after the verb even when there is nothing before it.

4.2 Dominance of new information

It can be seen from the above that two important factors affecting word order in Wik-Mungkan clauses are new versus given information, and case-marking. What happens then if more than one clause constituent is new information? Typically the item with higher rank will occur before the verb phrase and take the intonation centre. If however, of two clause constituents, one is lower ranking case but new information, and the other is a higher ranking case but given or implied information, then the system of new information becomes the dominant factor. The co-ordinate Instrument phrase in the next example is new information, whereas the object following the verb is shared background knowledge.

(3) Nga'alangkang-a, wiy-a, ochanganang kuyam umpin kuutan
*bottle.*inst-seq *some-*seq *mussel.*inst *used.to cut.*3P.past *umbilical.cord*

puk manyiy ngamparam keenkan aak-ngeeyina.
*child small.*emph *ours* *long.ago.*def *place-hear.*3P.past
With glass, or sometimes with a mussel, they used to cut the cords of the children who were born amongst us.

4.3 Thematic factors

In studying Wik-Mungkan word order, I looked at several kinds of prominence. Sometimes a speaker wants to make his theme or topic (as against the comment) prominent; or he wishes to remind the listener what he is talking about — that is, of his current theme. Again he may want to introduce contrast, or sharpen his definition, or underlie the importance of his point, or introduce a surprise element. The first two kinds, which I have called fronting and tagging respectively, especially proved relevant to word order in Wik-Mungkan. In some cases, they are also combined with other grammatical devices to achieve the speaker's end. A second question I found necessary to ask about prominence was: over what domain does the speaker intend a certain item to be in prominence — throughout his whole discourse, or over a paragraph or two, or just very briefly? Several thematic levels were found operating simultaneously in Wik-Mungkan, and this is discussed in the following sections on fronting and tagging.

4.3.1 Fronting of marked theme

As stated earlier, the unmarked theme of Wik-Mungkan clauses and sentences is very often expressed by a grammatical subject. This may itself receive prominence by the suffix combinations -ana' or -aniya'[3] which indicates a foregrounding of the speaker's current theme. These are referred to as -ana' and -aniya' fronting. An example of -aniya' fronting follows:

(4) Nil pul many-aniya' work anman iiy-iiywey, may
*she young.mother small-*fronting *work only* *go-go.*3S.past.comp *food*

kaamp-kaamp yota.
*plant-plant.*3S.past *lots*
As for that young mother, she only worked and worked, and planted lots of food.

However, a subject receiving -aniya' or -ana' fronting does not cause variations to the preferred word order. There is however almost no limit as to what can be fronted if the speaker chooses that item as theme, e.g. objects (5), or items in the cases of Source, Locative (6), Instrument, etc. — even though the more normal position may be at the end of the clause or sentence. Furthermore, pronouns (which would normally occur post-verb) can also be fronted in this way (7).

(5) Kemp nungkaram naniya' panchant thee'āng nintang.
flesh yours *that.*fronting *birds.to throw.*1S.fut *you.*obj
As for that flesh of yours, I will throw it to the birds.

(6) A' ang keny man-paantang-ana' ngay kan-ngul than-thanang ...
*then there high high.limb.*fronting *I.*subj *then-now stand-stand.*1S.past
And on that top limb, I stood up ...

(7) Thanang-ana' ompam maman kalin thanang keny aakanakan ...
them-fronting *waist holding take.*3P.past *them high to.there*
As for those ones, they put their arms around them and helped them up there ...

In a Wik-Mungkan discourse, there are several thematic levels operating simultaneously, with a global theme covering the whole discourse, and a number of subsidiary themes, whose domain of relevance or prominence may be associated approximately with paragraphs, sentences and clauses. -ana' fronting is more often associated with clauses, and -aniya' fronting more often with sentences and paragraphs, whereas at paragraph boundaries it is not unusual for double fronting to occur. At such points, there may be a new point in the development of the story or discourse theme, involving a reshuffling of participants, or the introduction of a new participant. It is not unusual for an object phrase to precede the subject at such points (8):

(8) Ngaa' thon-aniya' puk many-aniya' kaath-kunchanga' pek
day another-fronting *child small*-fronting *mother-own.*subj.seq *down*
kalan wo'uwak.
*carry.*3S.past.obj *river.to*
The next day, as for the child, the mother took him down to the river.

4.3.2 Fronting of temporals

At paragraph boundaries, there is often an indication of major temporal change. As can be seen from example (8) above, temporal words or phrases that provide a new departure point or set the scene, will typically receive -aniya' fronting and occur in initial position preceding other fronted items. A further example (9) follows:

(9) Ngaa'tham-aniya' wanch ananganiya' woolal kan pathantan.
next.day-fronting *women those.*fronting *sacred.dance* punct *sing.*3P.pres
The next day those women sing the mourning dance.

4.3.3 Tagging

Tagging in Wik-Mungkan is similar to what Halliday calls 'delayed theme' for English, the meaning of which he says is something like (1967:240): '...first I'll say what I have to say and then I'll remind you what I'm talking about'. Naturally tagging affects word order.

Tagging typically occurs at the end of the clause, sentence or of several sentences. A tagged phrase typically refers to known information, and usually to that which has already been given in the context of discourse (10). Often a noun or pronoun earlier in the clause or sentence may be in cross-reference to the tagged phrase (11).

(10) .. puk manyanwey kalan, piip-kunchang-aniy.
*child small.*def.comp *carry.*3S.past.obj *father-own.*erg.-tagging
He took the child, the father did.

(11) Nil-aniya' pi'ana, pam alanganiya, kuutan alangan.
he-fronting *keep*.3S.pres. *man that*.tagging *godfather that*.erg
As for him, he keeps it, that man does, the godfather.

The suffix combinations -an and -aniy are used also in tagging, and are referred to as -an and -aniy tagging.

Most typically, subject (10) and (11) or object noun phrases (12) occur in the tagging position, which is not the normal position for either.

(12) .. yangk pungk pek anman ukant, yi'-waathan.
leg knee down same go.down.3S.ref *grass-skirt*.tagging
It came down past her knees, the grass skirt did.

More than one item can be tagged at once, especially at the end of paragraphs. The following example (13) shows an object followed by a subject noun phrase:

(13) .. kangkang pentathantana, palamaniya kangkang kalantan,
leaves.with go.out.3P.pres *here*.fronting *leaves.with carry*.3P.pres

pam komp ananganiy, wuut manthayananganiy.
men young those.tagging *male elder*.erg.tagging
...they bring them out covered with leaves, they bring them here covered with leaves, those young men, (that's how) the elders (do it).

5. WORD ORDER IN WRITTEN STYLE

An analysis by Eckert (1981) of several texts written by Wik-Mungkan people, has bearing on the subject of word order.

In Section 3, it was stated that the preferred word orders were SOV (when O is a noun) and SVO (when O is a pronoun), but that in speech there was quite a lot of freedom of order. Written texts by Wik-Mungkan people show that the preferred word order is used a much higher percentage of the time, and that the variety found in speech is not maintained to nearly the same degree in written text. To quote Eckert (1981:30): 'We found that certain combinations are not acceptable at all in written material and are nearly unreadable, apparently because of their unpredictability'.

There were some cases in written text where the object noun phrases followed the verb, but often in these cases it was amplified in the next clause or modified by a following relative clause, which, to quote Eckert (1981:31): '...may indicate a desire for cohesion by grouping the object with whatever amplifies or modifies it'. This feature is not so apparent in oral text.

Interestingly enough, the fronting and tagging devices used frequently in oral speech, were found to occur far less frequently in written material. However, when reading publicly readers will often take the liberty of adding -aniya' suffixation where they feel prominence is due to a marked theme.

6. CONCLUSION

Many factors affect word order. They interweave so that we cannot see them at times, thus it appears to be random order, but non-acceptability of some combinations shows it not to be random.

There are preferred word orders in Wik-Mungkan in evidence. The main factors causing variations are case ranking, new versus given information, and prominence given to marked themes.

NOTES

1. The author has worked on linguistic and translation work in the Wik-Mungkan language at Aurukun, North Queensland from 1967-1985 under the auspices of the Summer Institute of Linguistics. Grateful thanks is expressed to Joyce Hudson and Jenny Lee for critical comments on this paper.

   The abbreviations used in this paper are as follows:

comp	Compassionate suffix
def	definite suffix
erg	Ergative case marker
fut	future tense
inst	Instrument case marker
obj	object
p	plural
pres	present
punct	punctiliar
ref	referent case marker
s	singular
seq	sequence intonation carrier
subj	subject
1	first person
3	third person

2. S and O stand for free forms of the subject and object respectively. The free form of the subject is not obligatory (as shown by the brackets) as the verb is suffixed for subject person as well as tense.

3. The breakdown of these suffix combinations is as follows: -an, Definite suffix, which is sometimes followed by -iy, Topic suffix, and when fronting (as against tagging) occurs, also by -a', Sequence Intonation Carrier. For the purposes of this paper, these suffix combinations are simply referred to as either fronting or tagging in examples. The effect of fronting and tagging can also be achieved by the suffixation of -iya' or -a' (for fronting) and -iy (for tagging) onto demonstratives, which are also definite.

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UNTERSUCHUNGEN ZU KABARDINISCHEN FARBENBEZEICHNUNGEN

Johann Knobloch

Die mit Kollegen Stephen Wurm gemeinsam unternommenen Besuche im Kriegsgefangenenlager von Kaisersteinbruch ergaben, was meine Tätigkeit betrifft, Materialien zu nordwest- und südkaukasischen Sprachen, die erst zu einem geringen Teil ausgewertet werden konnten. So ist - in nachmaliger Zusammenarbeit mit Gerhard Deeters - ein vergleichendes kabardinisch-tscherkessisches Wörterbuch in Vorbereitung. Hier soll aber von einer in sich abgeschlossenen Untersuchung berichtet werden. Ein glücklicher Zufall führte zu einer Begegnung mit einem Naturwissenschaftler, der den Farbensinn bei den Kriegsgefangenen aus den verschiedenen Regionen untersuchte. Er stellte mir eine Farbentafel mit darauf angegebenen Schwingungszahlen zur Verfügung, so dass es mir möglich wurde, einen Informanten hinsichtlich seines Farbnamengebrauchs zu überprüfen. Hier möchte ich meine damaligen Aufzeichnungen mitteilen.

770 (schwarz) fʔətsʔáfa 'schwarzfarben'
700 (fast schwarz) šʔəχúfa 'dunkelfarben' (= синоцветный)
680 (rot) pλəžə́fa 'rotfarben'
630 (rot) pλəž 'rot'
600 (hellrot) pλəžə́fa 'rotfarben'
580 (orange) ɣwabžáfə
550 (gelb) ɣwážəfa

775 (dunkelblau) šʔəχúfa 'dunkelfarben' (= синий)
500 (grün) šʔə́χu 'dunkel'
460 (blaugrün) kúprauzəfa 'waschblaufarben'
405 (hellblau) jažáfe 'aschfarben'
480 (zyanblau) kúprauzəfa 'waschblaufarben'
405 (blauviolett) šʔəχúfa
400 (blaurosa) ɣwabžáfa

Lieber Herr Kollege Wurm: mit diesem Blatt aus unseren gemeinsamen Erkundungen möchte ich Sie aus der Ferne Ihrer alten Heimat Österreich herzlich grüßen und Ihnen für die weiteren Dezennien Ihrer Arbeit in der Wissenschaft weitere schöne Erfolge wünschen!

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BENEVOLENT INVADERS AMONG HAWAII'S ABORIGINES

Robert Langdon

In a letter published in the *Journal of the Polynesian Society* in 1954, Stephen Wurm - whom we now honour in these pages - put forward his views on what is likely to occur when two languages come into contact with each other, one being the language of the aborigines of an area, the other being that of invaders. Two phenomena were possible, he said. One was that the invaders would eventually give up their language in favour of that of the aborigines. The other was that the language of the invaders would be generally adopted. The first phenomenon was likely to happen where the aborigines were numerically much superior to the invaders and were sometimes culturally superior. The other could occur where the invaders were culturally superior and where certain other factors were at work.

As examples of the first phenomenon, Wurm cited the Norman invasion of England, the Mongol conquests of the Turkic-speaking peoples of the 13th century, and the Mongol and Manchu conquests of China in the 13th and 17th centuries respectively. In the first instance, the people of England borrowed numerous words from the Romance languages of the conquering Normans but their phonetic and grammatical structure remained unchanged. In the second case, the Mongol conquerors adopted the language of the subdued Turkish tribes in the course of one or two centuries, leaving "little more traces of their own language in the Turkic languages than a number of loanwords". And in the third case, both the Mongols and the Manchus adopted the language of the subdued Chinese, "leaving hardly any trace of their own language in Chinese" (Wurm 1954).

Conquests similar to those cited by Wurm undoubtedly occurred many times prehistorically. However, those in the category of the Mongol and Manchu conquests of China - if recognised - are unlikely to excite much interest from linguists for little can obviously be said linguistically about the language of a subjugated people that contains "hardly any trace" of the speech of the people who conquered them. What, then, about a prehistoric conquest of the Mongol/Manchu variety that is *not* generally recognised? What can be said about that? The Spanish conquest of the Hawaiian Islands in pre-Cook times is a case in point.

Undoubtedly the first thing to be said about a Spanish conquest of the Hawaiian Islands is that most present-day scholars (e.g. Kirch 1985) do not suspect such an occurrence. Therefore, the question of Spaniards having any influence on the Hawaiian language is a non-issue with them. Yet ever since Captain Cook came

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upon those islands in January 1778, some people have been disposed to believe that castaways from one or more of the lost Spanish galleons of the Acapulco/Manila trade had preceded him, and it now appears that the evidence of a single Hawaiian word, mahiole, meaning a crested feather helmet, lends powerful support to this notion. A festschrift for Stephen Wurm is therefore an appropriate place to explore this matter further for he, at least, will not be opposed, in principle, to the notion of castaway Spaniards conquering the ancient Hawaiians, and leaving only a word or two from their language to show for it.

As is well known, Captain Cook first came upon the Hawaiian Islands while sailing northward from Tahiti in his ships *Resolution* and *Discovery*. He touched at the islands of Maui and Niihau before sailing on to the American coast to search for the North-West Passage. About a year later, he returned to his Pacific landfall, calling again at Maui before anchoring at Kealakekua Bay on the western side of Hawai'i Island. Cook himself expressed the view that the Spaniards, in their crossings from the Philippines to Mexico, would soon reap some benefit from his Hawaiian discoveries. But he was convinced that no Spaniard had ever seen those islands before him. The islanders' "very great surprise" at the sight of ironwork and their "total ignorance of firearms" were proof of this, he thought (Beaglehole 1967:285-286). Some of his officers, however, were not so sure. To them it seemed likely that castaways from some Spanish ship had, in fact, been there earlier. Three items of material culture seen among the Hawaiians led them to this conclusion. They were the crested feather helmets and feather cloaks that were worn by members of the chiefly class in all the islands they visited, and some small daggers made of iron. James King, the *Resolution's* second lieutenant, thought the helmets and cloaks were "a singular deviation" from the clothing worn in other parts of Polynesia, and that they bore "an exact resemblance" to those of the Spaniards of former times. This notion prompted him to inquire whether there were "any probable grounds for such a supposition. Although he discovered nothing conclusive, he still felt that the "uncommon form of this habit" was "sufficient proof of its European origin". He added:

> We were driven, indeed, by this conclusion to a supposition of a shipwreck of some Buccaneer or Spanish ship in the neighbourhood of these islands. But when it is recollected that the course of the Spanish trade from Acapulco to the Manillas is but a few degrees to the southward of the [Hawaiian] Islands in their passage out and to the northward on their return, this supposition will not appear in the least improbable. (King 1785:137-138)

King's view on the likely origin of the Hawaiians' helmets and cloaks was the starting point for a spirited controversy that has continued, off and on, ever since. Most early writers on Hawaii tended to agree with King that some elements of Hawaiian culture were, indeed, of Spanish origin (e.g. Milet-Mureau 1807:I:121; II:41n-42n; Townsend n.d.:17). Their views seemed to be confirmed when Hawaiian oral traditions were recorded in the early 19th century telling how, several generations before Cook's arrival, some white men had come ashore at Kealakekua Bay where they were given wives and made chiefs. William Ellis, an English missionary, who spent 18 months in Hawaii in 1823-24, was told that there had been seven men. They had arrived in a painted boat, with an awning or canopy over the stern, but without mast or sails. Ultimately, they had become very powerful on the island of Hawai'i and were said to have governed it for a time. Their descendants were "distinguished by a lighter colour in the

skin" and "corresponding brown curly hair". Both they and the other islanders acknowledged their ancestry and looked on it as "by no means dishonourable" (Ellis 1831:IV:438-439).

Otto von Kotzebue, a Russian explorer, who visited Honolulu in 1824, was told that five white men had landed at Kealakekua Bay. They had been given "maidens of the highest rank" and each had been installed as the governor of an island. The helmets and short mantles that Cook and King had described had been "introduced by these white strangers". At first, only the "kings" had worn them, but by Cook's time they were also common among the chiefs. Kotzebue thought the helmets perfectly resembled those of the "chivalrous knights of yore", while the mantles, which were "most ingeniously made of feathers to supply the want of woven stuff", were a "complete representation" of the mantles worn by the same "ancient heroes". Hence, Kotzebue said, it was "sufficiently evident" that the white men who landed on Hawai'i Island were Europeans (Kotzebue 1830:II:166-168).

Histories of the Hawaiian Islands published by Jarves (1843) and Alexander (1891) referred to the Spanish connection as a virtual fact. However, early this century, a Swedish scholar, E.W. Dahlgren, published a monograph in which he emphatically rejected the theory that Spaniards had preceded Cook. After examining dozens of old charts and everything he could discover about the Spanish galleon trade, Dahlgren (1916:213) concluded that: "No historical fact proves, nor is there any sort of probability, that the Hawaiian Islands ever were visited, or even seen, by the Spaniards before their discovery by Cook in 1778". A few years later, J.F.G. Stokes, an ethnologist at Honolulu's Bernice P. Bishop Museum, published a series of papers in which he, too, strongly opposed the long-held Spanish theory (Stokes 1931, 1932, 1939). Although many of his arguments, like Dahlgren's, were little more than expressions of opinion, impossible to substantiate, the two men did have one powerful argument on which there could be no dispute. This was that although the feathered helmets of Cook's time did bear a close resemblance to those used in ancient Greece, Rome and Etruria, they were quite unlike the Spanish helmets of the 16th and 17th centuries.

The views of Dahlgren and Stokes soon won complete acceptance, and it became customary for Hawaii's historians either to ignore the pros and cons of the Spanish debate, or to dismiss the subject in a few cursory lines. J.C. Beaglehole, Cook's erudite editor, adopted the second course in an introduction to the Hakluyt Society edition of Cook's third voyage. "It is hardly necessary", he said, "to discuss the theory that [Cook] was not the first discoverer [of the Hawaiian Islands] ... the scholarship of Dahlgren and the practical inquiries of Stokes seem to remove the matter beyond doubt" (Beaglehole 1967:cxvi-cxvii).

However, the Spanish controversy was not destined simply to fade away. Even before Beaglehole had penned his pronouncement, scholars at the Bishop Museum had made a discovery that tended to controvert it. In the late 1950s, they had opened the burial casket of a deified Hawaiian chief of pre-Cook times and had there found two strikingly non-Polynesian items. One was a piece of iron embedded in a wooden handle like a chisel; the other was a length of woven cloth eight feet long by one foot wide, or 244 x 30.5 cm. The casket had once been deposited in a cave at Kealakekua Bay and was thought to be that of a chief called Lono-i-ka-makahiki, great-grandson of one, Liloa, who was estimated to have died about 1575 (Langdon 1975:347, n.48).

As the cloth in the casket could not be identified, news of its discovery was withheld while enquiries about it were made. These, however, proved fruitless, and it was not until a retired textile manufacturer, Francis B. Lothrop, took up the challenge posed by the cloth in the mid-1960s that the mystery of its

identity was solved. By a process of elimination, Lothrop established that the cloth was sailcloth. Moreover, its thread count was found to be 29 x 24 per square inch, or virtually the same as that of a piece of sailcloth recovered from the Swedish ship *Vasa*, which sank near Stockholm in 1635. Because of language difficulties in communicating with Spanish museums, Lothrop did not attempt to establish whether the Spaniards had used similar sailcloth in the 16th and 17th centuries. However, in a letter written in 1972, he said he had no doubt that the cloth from the casket was of Spanish origin, and that it had come from "one of the galleons which never completed the trip from Manila to Acapulco" (Langdon 1975:279).

Lothrop's researches swung the pendulum in the Spanish controversy firmly back to where it had been before Dahlgren and Stokes had entered the lists. Yet if the cloth from the casket was, indeed, of Spanish origin and the traditions about the Kealakekua Bay white men were true, why was it that the celebrated feather helmets did *not* resemble those of the Iberian Peninsula of the galleon era? In puzzling over this question more than a decade ago, the present writer suggested that any Spaniards cast away in Hawaii in pre-Cook times might have brought illustrated books with them containing pictures of helmeted Greeks, Romans and Etruscans and that these could have served them as models (Langdon 1975:280). However, this suggestion was scarcely convincing even to its author. A better, more plausible explanation simply had to be forthcoming.

Such an explanation has since come to light with the discovery that a passion play, in which many of the actors dress in the garb of ancient Roman soldiers, is still performed in the Philippines today. The play is performed during Holy Week on the island of Marinduque, about 150 kilometres south-east of Manila. It is part of a colourful festival called Moriones which includes a parade of the play's actors and a procession of flagellants. The play itself extends over three days. On the evening of Holy Thursday, there is a re-enactment of the Last Supper. On the morning of Good Friday, the Crucifixion is portrayed in a pageant called Kalbaryohan, and in the evening there is the Santo Entierro, or burial. A drama called salubong re-enacts the meeting of the risen Christ with his mother; and the play concludes with the pugutan, or beheading. The pugutan is based on a story about a Roman soldier called Longinus who was assigned to stand guard over Christ after his crucifixion. The story is from the apocryphal book of Nicodemus, written in the fourth century (Aluit 1969:33-38; Lardizabal and Tensuan-Leogardo 1970:118-119; Roces 1977; Sticca 1970:158; Ileto 1975:12-19).

The participants in the Moriones festival prepare for the occasion for weeks in advance, rehearsing and making their own costumes. Each costume, whether for a Roman soldier or for other characters such as Jews, includes a mask with grotesque, slightly ridiculous features. The older masks are said to be handed down from father to son, having been carved by 'unnamed artisans' from the softwood of the dapdap or coral tree that blooms at the beginning of Lent (Anonymous 1977). The newer masks are of papier-mâché. In recent times the masks have assumed such an important part in the Moriones festival that some Filipinos have come to believe that the name, Moriones, actually means masks (Aluit 1969:33). In fact, the name is a misspelling of the plural form of the Spanish word morrion, meaning an open, vizorless helmet such as that worn by the Roman soldiers. The Hawaiian word mahiole, which means precisely the same thing, is apparently a corruption of the plural form of the same word. This is strikingly evident when the two words are written together:

M O RR I O N E S
M A H I O L E

Three factors substantiate the notion that the two words are related: (1) mahiole has no cognates in other Polynesian languages; (2) the word cannot be subdivided into meaningful shorter segments, e.g. ma, hi and ole; and (3) the sequence of the vowels i and o is of very low frequency in Hawaiian, as it is in other Polynesian languages. Moreover, the sound changes needed to convert Spanish morriones into Hawaiian mahiole would have been quite natural ones in a Hawaiian context. Thus, the change from the first o of morriones to the a of mahiole is readily understandable because Hawaiian has a number of doublets containing a and o in which the pronunciation with o is preferred. A pertinent example is māhole/mōhole *(to bruise)*. The transformation from the double rr of morriones to the h of mahiole also seems reasonable because at least one comparable change is known in the Polynesian languages - maori, the term for *common, native, indigenous*, in Mangarevan, Tuamotuan, Rarotongan and New Zealand Maori has become maohi in Tahitian (Tregear 1891:212). As for the change from Spanish n to Hawaiian l, that is readily accounted for because numerous n/l doublets occur in Hawaiian as a result of local innovations (Elbert 1982:513-514). Finally, as Hawaiian has no s, the s of morriones would have been dropped automatically on being Hawaiianised.

That the Hawaiian word mahiole was derived from Spanish morriones is consistent with the fact that passion plays were introduced to the Philippines within seven years of Spanish settlement there in 1565. As the Philippines historian A.S. Riggs (1904:280) has noted, Spanish friars used the plays "as one of the first means for drawing attention to their religion". Moreover, as three Spanish galleons are known to have disappeared on the Manila/Acapulco run in the first 21 years of that trade (Langdon 1975:272), it would not have been surprising if a Spanish friar or two had ended his/their days in the Hawaiian Islands. Indeed, such a circumstance seems to be a historical necessity. Otherwise, how can one explain the fact that the Hawaiian word pono was apparently derived from Latin bono, as in pro bono publico? Besides the phonological similarity, the Latin etymology is suggested by two factors: the absence of cognates in other Polynesian languages, and the extraordinary array of abstract - and atypically Polynesian - qualities that the word denotes in Hawaiian:

> Goodness, uprightness, morality, moral qualities, correct or proper procedure, excellence, well-being, prosperity, welfare, true condition or nature, duty; moral, fitting, proper, right, just, fair, beneficial, successful, in perfect order; eased, relieved; should, ought, must, necessary. (Pukui and Elbert 1977:314)

As both mahiole and pono point strongly to Spanish clerical influence in pre-Cook Hawaii, it comes as no surprise to find that the ancient Hawaiian religion was remarkably reminiscent of Christian teachings in some ways. As J.C. Beaglehole (1967:cxliii; 1974:658-659) has noted, the Hawaiian god Lono was a god of light and peace, of the tilling of the soil, of abundance, and of the games of peace. He was a benevolent god and a healer who had once lived on earth and of whom it was prophesied that he would return to the world of men, bearing gifts. There was one season of the year when Lono was especially honoured. This was during the makihiki festival when the motto 'peace on earth and goodwill to all men' was put into practice. During this season, warfare was forbidden, hard work was in abeyance, and the islanders devoted themselves to peaceful games and sports. It was at this time that the chiefs donned their helmets and cloaks and toured the islands in clockwise processions, gathering taxes, the fruits of the soil. The symbol of Lono accompanied them. It was a

long staff with a crosspiece near the top to which banners of tapa - kapa in Hawaiian - were attached. The symbol has frequently been compared to a European ship's mast with the yard arm rigged with sail (Malo 1951:144-145; Daws 1968: 21-22; Feher 1969:112; Beaglehole 1974:658). However, a drawing done by Captain Cook's artist John Webber suggests that an apter analogy is a Christian cross, draped with cloth, as in popular portrayals of Christ's descent. (See illustrations opposite.)

The makahiki festival began each year in October or November and lasted about four months. It was therefore in full swing when Captain Cook anchored in Kealakekua Bay on 17 January 1779 after his year of exploration on America's north-west coast. Cook's reception in the bay was unlike anything he had ever experienced elsewhere in Polynesia. The Hawaiians to a man seemed to accept him as the god Lono returned to earth, and he was accorded divine honours whenever he went ashore.

Cook's death at the hands of the Hawaiians four weeks after his arrival in the bay has been the subject of many interpretations. But the notion that his death may have had something to do with the somehow-misunderstood teachings of one or more, obviously benevolent, Spanish friars who had 'invaded' the Hawaiian Islands two centuries earlier has not been one of them. A new interpretation seems to be due.

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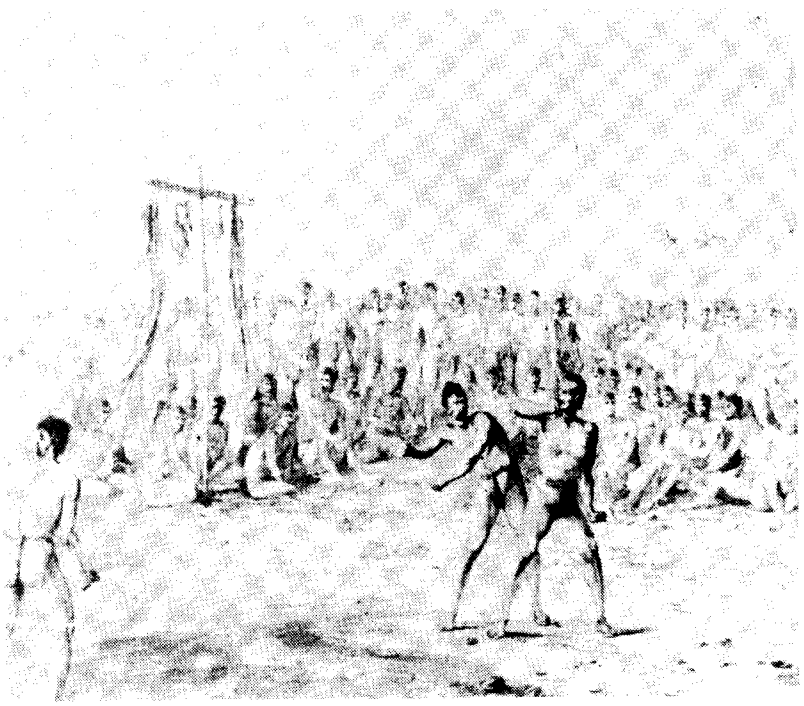
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A boxing match in Hawaii with the symbol of Lono at left. Section of a drawing by Webber. Reproduced by Beaglehole (1967:pl.67) from the original in the Bishop Museum, Honolulu.



Webber's sketch of man of the Hawaiian Islands with his helmet.



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THE PREGLOTTALISED STOPS IN BUNUN

Paul Jen-kuei Li

There are five main dialects in Bunun: Takituduh, Takibakha, Takbanuad, Takivatan and Ishbukun.[1] The first two dialects are located to the north, the third and fourth dialects in the central part, and the fifth to the south in central Taiwan. The two northern dialects differ from the others in the retention of the phonemic contrast between the alveopalatal affricate /c/ and fricative /s/, while the southern dialect differs from all the others mainly in the innovations /q/ > /χ/ and /h/ > /ʔ/.[2]

All the Bunun dialects have two voiced preglottalised stops, the bilabial [ʔb] and the dental [ʔd], but not the velar [ʔg], perhaps due to physiological reasons. These preglottalised voiced stops require an almost simultaneous closure of two points of articulation, the glottal plus another supraglottal closure. In addition, the vocal cords must vibrate immediately after the glottal closure. The two points of articulation, glottal and velar, seem to be physiologically too close to each other. This may explain why we find only [ʔb] and [ʔd], but not [ʔg] in Bunun. In fact, the same holds true not only in the related languages, Tsou and Thao (both Formosan), but also in many unrelated languages in South-east Asia such as Cambodian, Vietnamese, Li (a Kadai language in Hainan) and the Southern Min dialects spoken in Hainan.

The preglottalisation of the voiced stops appears to be phonetically stronger in the intervocalic position, e.g. [lìʔbus] *forest*, [maʔduq] *millet*, but weaker in the other positions, e.g. [ʔbanuad] *damson, plum*, [ʔdakus] *camphor laurel* in Bunun. That is why some investigators, such as Jeng (1977), generally indicate the glottal stop in the intervocalic position, e.g. [baʔbuʔ] *pig*, [sìʔdìʔ] *sheep*, but not in the word-initial or post-consonantal position, e.g. [bunbun] *banana*, [dìsdìs] *drizzle*. The preglottalisation of the bilabial voiced stop [ʔb] also appears to be stronger than that of the dental [ʔd]. Maybe that is why some of the investigators indicate the glottal stop for the former more often than for the latter.

Hereafter the two preglottalised stops will be phonemically represented as /b/ and /d/ respectively.

The preglottalised stops are retained in the syllable or word final position for some lexical forms only in the Ishbukun dialect, e.g. /χatub/ *trap*, /masubnuχ/ *angry*, /χud/ *to drink*. These final stops /-b, -d/ have been changed to the glottal stop /ʔ/ (or occasionally lost, especially in the speech of younger speakers) in all the other dialects, i.e. /qatuʔ/, /masuʔnuq/, /quʔ/ respectively.

Historically Bunun /b/ is derived from PAN *b, and /d/ from PAN *d, *D, *d' or *Z.

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As a matter of fact, the word final /-d/ has been changed to /-ʔ/ in some lexical forms even in the Ishbukun dialect:[3]

1. PHN *CuqeD > tuχuʔ *stump*; cf. Pai tjuqez, Tag tuqod *id.*
2. PFN *qeLuD > χauʔ *pillar*; cf. Sediq ʔeruc *id.*
3. PHN *Sa(n)teD > ma-satuʔ *to escort*; cf. Malay (h)antar
4. PAN *likuD > ʔikuʔ *back*
5. PAN *qan'uD > muŋ-χanuʔ *to drift*
6. PAN *paNiD > paniʔ *wing*
7. PAN *NataD > nataʔ *outside, front yard*

The final /-b/ is generally retained from Proto-Austronesian, Proto-Hesperonesian or Proto-Bunun, at least in the speech of the older speakers of Ishbukun. For example:

1. PB *kitŋab > kitŋab *to begin*
2. PB *laqaib > laχaib *to pass*
3. PHN *qaCeb > χatub *to trap*
4. PAN *Suab > si-su-suab *to yawn*
5. PB *masubnuq > masubnuχ *angry*
6. PB *ʔabnum > ʔabnum *six (people)*
7. PB *ŋabŋab > ŋabŋab *cliff*
8. PHN *qaLeb > χab *knee*; cf. Magindanaw alib *id.*
9. PB *mabɗaq > mabɗaχ *rainstorm*
10. PB *cunab > m-in-sunab *to burn a forest*

However, in the speech of younger speakers, /-b/ may be devoiced as /-p/, /-f/ or even /-t/ and similarly, /-d/ may be devoiced as /-t/ (see Li 1986). Moreover, there is no phonetic preglottalisation in these substitutions.

In the dialects in which /b/ and /d/ have been changed to /ʔ/ in the word final position, these stops are often retained in the word medial position. In other words, the inflected forms with the same stem exhibit the morphophonemic alternations b ∿ ʔ and d ∿ ʔ respectively. If /b/ or /d/ is not retained in the word medial position, it is also substituted by /ʔ/ in these dialects (the same 10 examples above are illustrated in the same order below):

(A) b ∿ ʔ (or Ø) or no alternation

1. *to begin*
   Takituduh /kitŋaʔ, kitŋab-a, kitŋab-in/[4]
   Takibakha /kitŋaʔ, kitŋab-a, kitŋab-in, kitŋaʔ-in, na kitŋaʔ-in/[5]
   Takbanuaɗ /kitŋa, kitŋab-in, kitŋaʔ-in, kitŋaʔ-an/
   Takivatan /kitŋaʔ, kitŋab-in, kitŋaʔ-in/
2. *to pass*
   Takibakha /laqaiʔ, laqaib-a, laqaiʔ-in/
   Takbanuaɗ /ʔiŋqai, laqaib-an, ʔiŋqaiʔ-in/
   Takivatan /ʔaŋqaiʔ, ʔaŋqaib-a, ʔaŋqaib-an, ʔaŋqaiʔ-in/
3. *to trap*
   Takibakha /qatuʔ, pal-qatuʔ-an-in/
   Takbanuaɗ /qatuʔ, pal-qatuʔ-i, mal-qatuʔ-in/
   Takivatan /mal-qatuʔ, mal-qatuʔ-a, mal-qatuʔ-in/
4. *to yawn*
   Takibakha /su-suaʔ, su-suaʔ-in, s-in-u-su-suaʔ-in/
   Takbanuaɗ /si-su-sua, s-in-u-suaʔ-in/
   Takivatan /su-suaʔ, su-suaʔ-in/

5. *angry*
   Takituduh, Takibakha /ma-cu?nuq/
   Takbanuad, Takivatan /ma-su?nuq/
6. *six*
   Takituduh, Takibakha, Takivatan /(?a-)?a?-num/[6]
7. *cliff*
   Takituduh, Takivatan /ŋa?ŋa?/
8. *knee*
   Takituduh, Takibakha, Takivatan /qa?/
   Takbanuad /qa/
9. *rainstorm*
   Takibakha, Takivatan /ma?ɗaq, su?ɗaq/
10. *to burn a forest*
    Takibakha /mis-cuna?, pis-cunad-i, pis-cunad-un, mis-cuna?-in/
    Takivatan /m-in-suna?, p-in-sunab-a, p-in-suna?-i, p-in-suna?-un-in/

It is interesting to note that sound change is not entirely regular. For some of the lexical items illustrated above, /b/ is retained in the word medial position in some of the dialects, but not in the others, e.g. *to begin* (No.1), *to pass* (No.2). Moreover, /-b-/ is retained in some of the inflected forms, but not in the others, even for the same item in the same dialect, e.g. /kitŋab-in/ *Begin!* but /kitŋa?-in/ *it has begun* (No.1) in both Takibakha and Takivatan. An interesting case is found in which /-d-/ instead of /-?-/ is substituted for /-b-/ in the Takibakha item *to burn a forest* (No.10). The change /b/ > /?/ has been completed in both the word medial (i.e. intervocalic) and final positions for the items *to trap* (No.3) and *to yawn* (No.4) in all dialects except Ishbukun. To make a more general statement, the items No.3-9 have all undergone the same change /b/ > /?/ in the syllable final position.

In short, the data above seems to indicate that different items may have undergone the same sound change at different rates of speed.

(B) d ∿ ?

1. *tuRad *to prop up a house*
   Takituduh /ma-tula?, tulad-in/
   Takibakha /ma-tula?, tulad-i, tulad-an-in/
   Takivatan /ma-tula?, tulad-i, tulad-an-in/
2. PB *cukud *to close (a door)*
   Takibakha /ma-cuku?, cukud-i, cukud-an-in, c-in-ukud-an/
   Takbanuad /ma-suku?, kud-i, kud-an, kud-an-in/
   Takivatan /ma-suku?, sukud-i, sukud-an-in/
3. PB *qud *to drink*
   Takibakha /qu?, qud-i, qud-a, qud-an-in/
   Takbanuad /qu?, qud-i, qud-an-in, q-in-u?-in/
   Takivatan /qu?, qud-a, qud-an-in, q-in-u?-in/
4. PB *masmud *to swallow*
   Takibakha /pasmu?, pasmud-i, pasmud-a, pasmud-un/
   Takivatan /masmu?, pasmud-i, pasmud-a, pasmud-un-in/

5. PHN *suRekuD > PB *culkud *stick*
   Takibakha /culku?, culkud-i, culkud-an/
   Takivatan /silku?, ma-silku?, ma-silkud-a, ku-silku?-in/

6. PHN *tuqeD *stump*
   Takituduh /tuqu?, ma-tuqud-i, ma-tuqud-an/
   Takivatan /tuqu?, mas-tuqu?-in/

The examples below show no alternation:

7. PB *muslud *to move over*
   Takbanuaḋ /muslu?-a/
   Takivatan /muslu?, lusku?-i/ (Note the metathesis of /l/ and /k/)
   Ishbukun /muslud, muslud-in/

8. *likuD *back*
   Takituduh /mis-hiku?-a, mis-hiku?-in/ *Look back!*

9. *Sated *to escort*
   Takituduh /ma-satu?, satu?-i, satu?-in/
   Takibakha /ma-satu?, satu?-i, satu?-un-in/
   Takbanuaḋ /ma-satu?, mi-satu?-in/
   Takivatan /ma-satu?, satu?-i, satu?-un-in/
   Ishbukun /ma-satu?, satu-a,[7] mai-satu?-in/

10. *qan'uD *to drift*
    Takituduh /muŋ-qanu?, puŋ-qanu?-a, puŋ-qanu?-i/
    Takibakha /muŋ-qanu?, muŋ-qanu?-in/
    Takbanuaḋ /muŋ-qanu?, paŋ-qanu?-i, maŋ-qanu?-in/
    Ishbukun /muŋ-χanu?, muŋ-χanu?-in/

11. *NataD *outside, courtyard*
    Takituduh /nata?, mu-nata?-a, mu-nata?-in/
    Takivatan /nata?, mu-nata?-a, nata?-in/

The above 11 lexical items are arranged in the order of increasing amount of change. It is clear that /d/ is mostly retained in the word medial position for the items No.1-6 above in all dialects (Ishbukun forms are not listed as /d/ is retained in both medial and final positions in the dialect). However, /d/ has become /ʔ/ in both medial and final positions for items No.8-11 in all Bunun dialects, including Ishbukun. Item No.7 shows a state of change somewhere in between; that is, /d/ is retained in both medial and final positions in only Ishbukun, whereas in all the other dialects /d/ has been changed to /ʔ/. Unfortunately, information for some of the lexical forms in some of the dialects is unavailable.

As in the change /b/ > /ʔ/, the change /d/ > /ʔ/ is also proceeding at different rates of speed for different lexical items in various different dialects in Bunun.

The preglottalised stops /b-, d-/ generally remain intact in the word initial position in all Bunun dialects, e.g. /bananaḋ/ *man*, /danum/ *water*. However, they have also been changed to /ʔ-/ in a few lexical forms. For instance, the variants /bitvaq/ ∿ /ʔicvaq/ *thunder* have been recorded not only among different dialects, but also between different age groups of speakers; the older Takituduh speakers of Takiqatuʔ village produce /bitvaq/ while the younger speakers in the same village produce /ʔicvaq/ (see Li 1986). The form /bitqu/ *owl* appears in Takivatan, while /ʔitχu/ appears in Ishbukun, and the form /bulalaiʔ/ *leggings* occurs in the Northern and Central dialects, whereas

/ʔulalaiʔ/ occurs in the Southern. Similarly, the variants /dicqus/ ∿ /ʔicqus/ *nit* have been recorded in the different villages of the Takituduh dialect, and the form /dalapa/ *sole of foot* appears in the Central and Southern dialects, while /ʔalapa/ appears in the Northern dialects. While Takituduh and Takibakha have the form /pidiŋ/ *cheek*, Takbanuad and Ishbukun have /piʔiŋ/, and while Takituduh has the form /ʔaʔaliŋ/ *to moan*, all the other dialects have /dadaliŋ/.

In the post-consonantal position, there are a few irregular correspondences between /d/ and /ʔ/ among Bunun dialects, as in:[8]

	{Takituduh Takibakha	{Takbanuad Takivatan	Ishbukun	
1.	pitdia	pitʔia	pitʔiaʔ	*to cook (rice)*
2.	matdaq	matʔaq	matʔaχ	*raw*
3.	maqacʔiv	maqasdiv	maχasdiv	*stinking (of urine)*
4.	pandaiʔan	panʔaiʔan	pandian	*soup*
5.	tinʔun	tinʔun	cindun	*to weave, knit, plait*

The last example above seems to show that /d/ in the Ishbukun dialect might be an innovation,[9] cf. PHN *tineʔun. That is to say, the sound change might have operated in both directions, d > ʔ and ʔ > d, although evidence for the latter change is scanty. Similarly, the Ishbukun form /ʔabnum/ *six* < *ʔa-ʔenum < PAN *ʔenem seems to indicate that the change ʔ > b has affected this particular item. However, there is plenty of evidence for the change from /b/ and /d/ to /ʔ/, but little evidence for the change in the other direction, as based on the data examined in this paper.

In summary, the preglottalised stops in Bunun are still in a state of change. The changes /b/ > /ʔ/ and /d/ > /ʔ/ have affected the syllable or word final position most, the word medial (i.e. intervocalic) position much less, and the word initial position least. Different lexical items, sometimes even different inflected forms of the same lexical items, in various Bunun dialects are proceeding at different rates of speed in undergoing these two changes. Of the two sound changes, the change /b/ > /ʔ/ is proceeding at a slightly slower rate of speed than that of /d/ > /ʔ/, at least in the word final position in the Ishbukun dialect.

Irregularities and exceptions are often found in language change. Various hypotheses can be advanced to account for these irregularities and exceptions. One viable hypothesis is the theory of lexical diffusion originally proposed by William Wang (1969), which states that sound change is phonetically abrupt, but lexically gradual. The developments of the two preglottalised stops in Bunun as examined in this paper seem to support the theory of lexical diffusion.

NOTES

[1]The data of this paper was collected with the support of the National Science Council Grant NSC73-0301-H001-04, Republic of China. The field work was done mainly between August 1983 and January 1984. I have profited from discussion with Shigeru Tsuchida, who called to my attention many of the lexical items illustrated in this paper.

[2]All Bunun dialects except Ishbukun have three vowels /i, u, a/ and the following consonants: the voiceless unaspirated stops /p, t, k, q, ʔ/, the preglottalised voiced stops /b, ɗ/, the voiceless alveopalatal fricative /s/[š], the voiceless glottal fricative /h/, the voiced labiodental fricative /v/, the voiced interdental fricative /d/[ð], the voiced lateral /l/, and the voiced nasals /m, n, ŋ/. In addition, both Takituduh and Takibakha dialects have the voiced alveopalatal affricate /c/[tš], which has been merged with /s/ in all other dialects. The Ishbukun dialect shares all the above consonants and vowels except that (1) it has the uvular fricative /X/[χ] instead of the uvular stop /q/, and (2) it tends to devoice the lateral in all positions and the voiced fricatives in the syllable final position, and (3) it has no glottal fricative [h].

[3]Abbreviations for the various levels of reconstructions are: PAN - Proto-Austronesian; PHN - Proto-Hesperonesian; PFN - Proto-Formosan; PB - Proto-Bunun. The hyphen '-' indicates morpheme boundary in the following citations.

[4]Roughly speaking, the suffix -a, -i or -in indicates 'imperative', the suffix -in or infix -in- indicates 'completive', the suffixes -an and -un indicate Locative and Referential focus respectively. See Jeng 1977:92-93 for a discussion of the grammatical functions of various affixes in Bunun.

[5]cf. the imperative form /kitŋab-in/ and the completive form /kitŋaʔ-in/ in both Takibakha and Takivatan.

[6]The parentheses indicate the optionality of the reduplication of the first syllable of the stem.

[7]There is no /ʔ/ in the word medial position in this Ishbukun form, as based on the informants in their 30s.

[8]I am grateful to Tsuchida (personal communication) for bringing this to my attention and for providing me with some of the examples.

[9]As Tsuchida (personal communication) pointed out, the nominal form /duun/ occurs in all Bunun dialects, and the verbal derivatives /kin-dun/ in the Northern and Central dialects and /ma-kin-dun/ *to make a rope or string by twining* in the Southern dialect, Ishbukun. The Ishbukun form /tindun/ may have derived from this etymon rather than from *tineʔun.

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A PHONOLOGICAL CHANGE OVER TWO GENERATIONS

Liang Min

The phonological change is comparable with changes in grammar and vocabulary, the result of continual slight changes, day by day, generation after generation. In general, phonological change is rather slow, but there are sometimes relatively rapid changes in a period. Perhaps the word "rapid" is not entirely suitable here, but, in general, a change in a sound or of a series of sounds may be completed in a period of 20 to 30 years, from beginning to end. Such a period is but a twinkling in the long river of the evolution of human beings. I have had some experience of such phonological change in my linguistic research career. Here two such cases are presented.

I am of Zhuang nationality, of Xialeng, a western suburban countryside of Nanning, Guangxi Zhuang Autonomous Region. In the speech of my native folks in their 50s, there are a series of consonant clusters, such as: pl, phl, kl, khl, ml, hl and kw, khw.

I left home for school, when I was young, and always returned home during the vacations. From the beginning of the 1950s I lived in Nanning with my parents and siblings. Nanning is a city speaking mainly Cantonese. We speak Cantonese in contact with other people, but we always talk in our mother tongue within our family and with our native folks whenever they call upon us. I have lived in Beijing with my own family since the early days of the 1960s, and I returned to Nanning almost once a year. When I meet my native folks in Beijing, we always talk in Zhuang. I did not find anything special in the native speech until 1977 when I returned to Nanning. My cousin (my uncle's son) called on me, together with his wife and their son - a boy of about 20. The mother and her child are inhabitants of our native countryside. While we were chatting, I found that all the consonant clusters had been changed into single consonants in my nephew's tongue, i.e. pl → p, phl → ph, kl and kw → k, khl and khw → kh, ml → m, but hl → l. I told my mother, my brother, my cousin and his wife about the phenomenon, but they did not believe it. My cousin and his wife debated it seriously, saying: "Could there be any different speech sound arising from a family eating every meal cooked from the same pot?" I selected several pairs of words to show the contrastive consonants and meanings, such as:

plei (31)	*a kind of plant*
pei (31)	*fat*
phla (33)	*rock hill*
pha (33)	*the cover of a cup or a pot*
phlak (55)	*vegetable*
phak (55)	*pod (of bean)*

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mle (53)	*push aside with fingers*
me (53)	*adult female, classifier of female*
mleng (31)	*insect, germ*
meng (31)	*rude and unreasonable*
hlai (31)	*long*
lai (31)	*rice water*
hlu (31)	*boat*
lu (31)	*eddy*
kwei (53)	*to kneel, kneeling*
kei (53)	*swelling*
kwa (13)	*pass through*
ka (13)	*price*

I read these words and asked for their hearing, whether each pair of these words are the same? The answer was that the words in each pair are different from each other, either in meaning, or in pronunciation to their hearing. Then I let the boy read each pair of these words, and asked him if he made any difference in the pronunciation of each word? He told us that he could only pronounce the words in each pair just the same. We repeated the test several times. The other members of my family practised it over and over again. At last they agreed that the boy's pronunciation was a bit different from ours. But they suspected that perhaps the differences were owing to the boy's bad pronunciation.

Was the simplification of the consonant clusters in my nephew's speech a kind of idiolect of his own, or is it the general trend of the regional phonological development in the dialect? In order to make it clear, I returned to my native village and made some researches on the speech of different age-brackets. As it turned out: the consonant clusters pl, phl, kl, khl, ml and hl had been reduced and simplified into p, ph, k, kh, m and l, but the consonant clusters of labialised kw and khw were preserved among people in their 30s; and all the consonant clusters (including kw and khw) had been simplified among the people under 30. This simplification is not due to the influence of Cantonese, because the kw and khw in Cantonese do not change at all (Cantonese has no consonant clusters like pl, phl). It was the result of the development of the Zhuang language itself. The process of the simplification of the consonant clusters in Xialeng Zhuang dialect might be completed in the period between two generations (the father about 50, the child about 20).

The other case arises from some researches I made on Tai in Maguan county, Yunnan Province, in 1983. Two informants from the neighbouring districts not far away, considered that their speech was the same. But I found that the contrastive vowel length, such as

$$\left\{\begin{matrix}aai\\ai\end{matrix}\right. \quad \left\{\begin{matrix}aau\\au\end{matrix}\right. \quad \left\{\begin{matrix}aam\\am\end{matrix}\right. \quad \left\{\begin{matrix}aan\\an\end{matrix}\right.$$

was systematically preserved in Mr Dong's speech, but all mixed up in Mr Wang's speech. The latter said that he had no confidence in his own pronunciation, because he had left his native village for some years. I suspected it was true, because he spoke his own dialect fluently. So that we made a special trip to visit his native village - Dapa of Muchang Commune. It was a small village of 30 or 40 families. I was told that the villagers (except for housewives) were all generated from a married couple called Wang. After the

researches I found that some of the old ones (over 50) preserved the contrastive vowel length system mentioned above, in their speech, but some of them had confused it. The following case was very interesting and convincing. We asked a school master a series of words with the contrast of aa and a, e.g.

laai (24)	*much, more*	maai (24)	*nevus, mole*
lai (24)	*flow*	mai (24)	*thread*
xaau (24)	*white*	saau (24)	*girl*
xau (24)	*horn*	sau (24)	*pillar*
xaam (44)	*speech*	haam (44)	*waste (land)*
xam (44)	*gold*	ham (44)	*chaff*
kaan (44)	*carrying pole*	faan (44)	*muntjac*
kan (44)	*handle*	fan (44)	*seed*

whether or not the pronunciation of the words in each pair were the same? After he repeated the words thoughtfully, he gave a negative answer. Then we read him some of the words and asked him to tell its meaning. Sometimes we read the word with the long vowel first, and then with the short. Sometimes we exchanged the order, but he succeeded all the time. (The people in Maguan neither use nor have seen the written language of Tai; in that case, his pronunciation could not be influenced by the written form.) The former head of the village, who was listening aside all the time, argued that the pronunciation of the words in each pair was all the same. These two men were in their 50s, and had grown up and lived in the same village together at the same time. But the opposition between aa and a was preserved in master Wang's speech and had vanished in the latter one's speech. And we found none of the people under 50 years could distinguish the words with the long and short vowels. The process of the vanishing of the distinction might be completed in a period between two generations too.

In this village we also found almost all the children under ten years had lost p, t, k endings in closed syllables; that is, all closed syllables were replaced by open syllables in the child's language. But the p, t, k endings were preserved in the adults' language. I think that this phenomenon represents another trend of the phonological development of the Tai language in the area.

There are other similar cases, but these two cases make us see the fact clearly. Here are the main points I would repeat:

(1) The process of a phonological change from a sound or a series of sounds to another form might be completed between two successive generations - a period about 20 or 30 years.

(2) The course of phonological change among the people of the same age-group in the same village may be different; the phonological change may occur in the speech of some speakers but not in that of others.

(3) If a kind of phonological change is taking place, the people in this language community are always unaware of the difference in such sounds, no matter if this change had occurred in their own speech or not. The distinctive features of these sounds are of no significance to them, and they have lost the function to distinguish the different phonemes. Such an indifferent stage to the distinctive features of a sound or a kind of sound is an indispensable stage of the phonological change from a sound or a kind of sound to another.

LANGUAGE CHANGE AND RELATIONSHIPS IN TUBETUBE AND ADJACENT LANGUAGES

David Lithgow

0. INTRODUCTION

In Wale dialect of Tubetube there is a legend that a savage pig drove all the people away to surrounding islands. Finally the pig was killed and the people returned, bringing words from all the surrounding languages with them. That is why Tubetube is a mixture of languages.

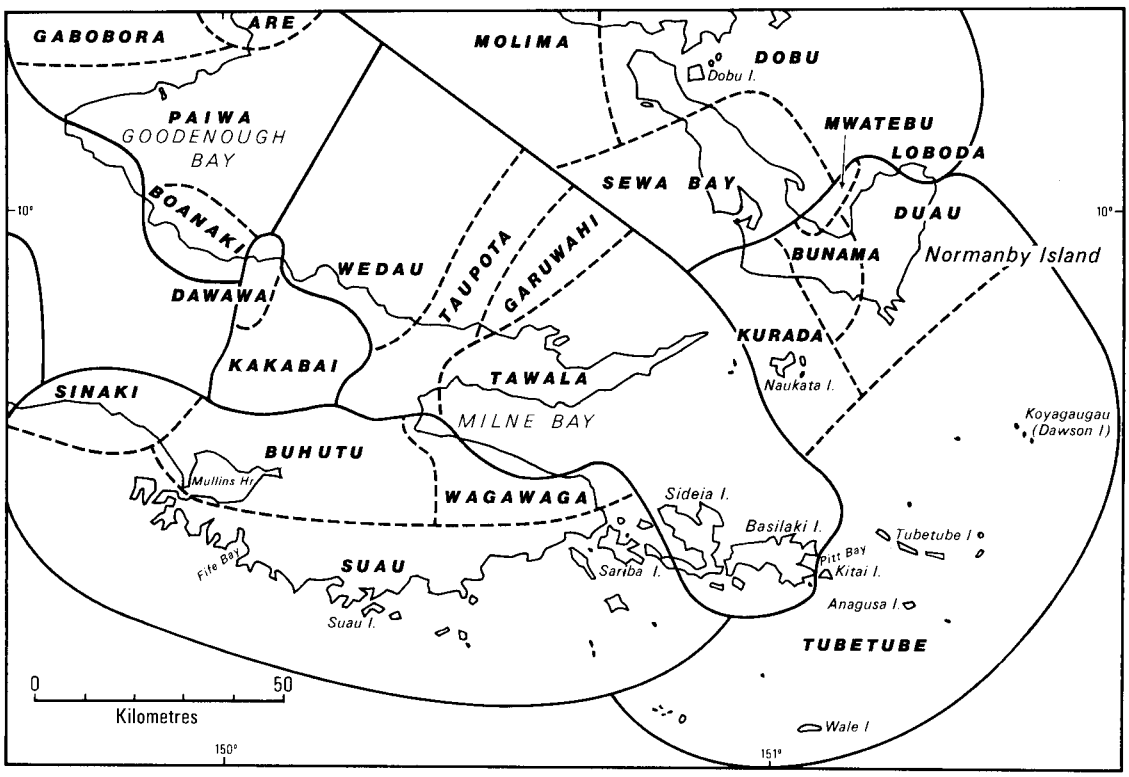
The purpose of this study is to evaluate the relationships of Tubetube and its adjacent languages, Suau, Duau, Bunama and Kurada, in the context of language change which is occurring.

1. GEOGRAPHY AND POPULATIONS

The Tubetube language is centred in the Engineer Group off the south-eastern tip of Papua. The extreme south-east of Papua is a peninsula on which the Suau language family is found. Eastwards beyond it stretches a string of islands. The first group includes tiny Samarai and Kwato, and larger Logea and Saliba. On these islands the Saliba dialect of Suau is spoken. The next two islands are large ones, Sidea and Bwasilaki, on which is spoken a dialect of Tawala, the language of East Cape. At the eastern tip of Bwasilaki near tiny Kitai Is and throughout the Engineer Group the Tubetube language is spoken. The two most distant islands of this language group are Koyagaugau (Dawson) and Wale. Koyagaugau is closer to Normanby Is, about 30 miles away to the north-east. This island really belongs to the people of Nuwakata of the Kurada language, but it has been settled by people from Tubetube. Nuwakata is an island to the south of Normanby Is. Wale is an isolated island about 40 miles south-west of the Engineer Group. It is the largest single centre of population in the Tubetube language, with some 500 people. There are two major dialects, Wale and Tubetube,[1] Wale on Wale Is, and Tubetube on all the other islands.

Tubetube people have active trading relationships with other island neighbours, especially the Duau people of Normanby Is to the north, Misima people to the east, and the Muyuw people of Woodlark Is to the distant north-west. There are many people from these three areas who have come to live with the Tubetube speaking people of the Engineer Group. Dobu people from near the western end of Normanby Is also have direct trade links with Tubetube.

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Map 1: Tubetube and adjacent languages

The Duau language is spoken on almost all of the eastern end of Normanby Is. Bunama and Kurada languages are spoken along the south-eastern coast, Kurada being west of Bunama.

The number of speakers of these languages are approximately:

Suau	6500
Tubetube	1200
Duau	6000
Bunama	1000
Kurada	1000

2. LANGUAGE CHANGE

As in the Muyuw language of Woodlark Is (Lithgow 1973:101) there is a continuous process of change in the Tubetube language. One senior man told me that the main causes of change are:

(a) word taboos after death;
(b) intermarriage with people of other languages;
(c) trade and other friendly interaction with people of other languages.

Bergsland and Vogt (1962:126) and Simons (1982:157-226) have described how word-taboo increases the rate of language change. In Tubetube when a person dies, any word which sounds like his name cannot be uttered by his friends, though close relatives are still able to say his name and words which sound like it. In Wale dialect a man gave me five examples of word replacement because of death, and indicated the sources from which the new words were derived. In Tubetube examples were found by comparing wordlists taken between 1964 and 1984. No reason was given for the word replacement in one Wale example. These examples are listed below:

English gloss	old word	similar to	name of deceased	new word	source of new word
CHANGES IN WALE:					
the top of it	kewana	Suau	Kewa	demna	alternate word in the language
move away	suwala		Suwala	tobasi	alternate word in the language
show off	paebabala		Paebabala	gagasi	Dobu
water	waila	Duau	Waila	weweli	Misima
leader	tomgamgai		Tomgamgai	baguna	Tubetube
beg	kalakim			kawanoi	Dobu
CHANGES IN TUBETUBE:					
dog	bwawa	old Duau		kedewa	Dobu/Suau
old woman	kaiyale	Duau/Dobu		keduluma	Tawala
frog	kwekwe	Duau/Dobu		pologi	English
good	namwanamwa	Kurada/Old Saliba		dewadewa	Tawala

Steve and Jerri Gunderson of the Summer Institute of Linguistics who are working on Tubetube Is report that namwanamwa *good* is still used, but only on Tubetube Is. In all other places dewadewa is used. Kedewa *dog* appears in all my wordlists, with a note that old people use the word bwawa. Gundersons report that bwawa is now commonly used. It may be that the prospect of having books published in their language is causing the Tubetube people to revive old language forms.

Dobu is a church language and trade language for the East Papua Islands, so it is a common source of new words. This list shows that new words have come into the Tubetube language from many sources including English, the language of education.

In Muyuw (Lithgow 1973:105) I found that grammatical features are also subject to change. Tubetube has a future marker which I did not detect in the data I analysed in 1972 (Lithgow 1976:470). This marker is not found in Wale dialect, and it is the same as is found in Dobu. It will be described in section 3.4.4.2.

For Saliba dialect of Suau I have widely differing data. Older wordlists obtained between 1964 and 1970 are fairly consistent in their differences from the Suau of Suau Is. New data elicited in 1984 from men aged about 20 years indicate that all the distinctive features of Saliba are being replaced by standard Suau, in the way that Sanaroa dialect of Dobu language has been almost entirely replaced by standard Dobu.[2] It seems significant that both Suau[3] and Dobu are strong church languages and trade languages, and that Dobu is the church language for Tubetube, including Wale, but Suau is the church language for Saliba.

Old and new wordlists for Suau and Duau (Guleguleu dialect) show little change. Duau seems to have exchanged a few words with Dobu (some Dobu words in the 1964 list are not in the 1983 list, and vice versa), and also with Tubetube and Suau. Bunama and Kurada both show a pattern of vocabulary replacement by Dobu words, about 6% in 18 years for Bunama, and 3% for Kurada.[4]

3. CLASSIFICATION

3.1 History

Capell (1943:49) states: "Tubetube ... in its general features shows a more archaic type than those hitherto studied. It is a meeting place of influences that affect both Suau to the west, Duau to the north, and the more easterly islands, such as Panayati (Misima lg.)."

Capell (1943:8) grouped Tubetube with Suau.

Cooper (1975:257) concluded that Kurada and Tubetube were links with Austronesian subgroups further east.

In the analysis which I did in 1972, I used grammatical data and wordlists (Lithgow 1976:447,514,520,521), and was expecting to find a high degree of similarity between Tubetube and Suau, but I did not find it. I could not find a high degree of similarity between Tubetube and any other language. From my wordlists, Tubetube shared about 50% cognates with both Suau and Duau. On displaying the grammatical data I found slightly more in common between Tubetube and Duau than between Tubetube and Suau, so I stated that:

> Tubetube is a difficult language to classify, because it has points of similarity with all of its adjacent languages - Suau, Misima, Muyuw, Duau, Tawala, and also Dobu. Its closest similarity is with Duau and Suau, in that order, so I have grouped it in the Duau Family.
>
> (Lithgow 1976:470)

Ezard (1977) compared Tubetube with Suau and the Bunama language of the Duau family, and concluded that Tubetube is more closely related to Suau. This conclusion can hardly be extended to cover the relationship with Kurada and Duau, both of which have more in common with Tubetube including 5% more shared cognates.

3.2 Present study

I have now taken fresh wordlists, and elicited grammatical data for basic sentence types for Suau (Suau Is and Saliba dialects), Tubetube (Tubetube and Wale dialects), Duau (Guleguleu dialect), Bunama and Kurada.

Where there are contrastive grammatical features I have attempted to compare them with adjacent Tawala and Misima languages. I have previously studied and am a speaker of Muyuw and Dobu languages, so I have noted similarities with these languages also.

I have done fresh cognate counts with the new wordlists, and a cognate count of 50 grammatical affixes, pronouns and function words. These lists are appended (Charts 1 and 2). Where sentence structure grammatical features are contrastive, I have listed them under the language (Suau, Tubetube or Duau) which appears to be different from the others.

The results show that all of these languages have much in common, and even the languages with low cognate percentages have significant similarity in grammar. I make little reference to Wale and Bunama grammar in this paper, because they are so similar to Tubetube and Duau grammar respectively.

In these data I see evidence that both Tubetube and Kurada have been strongly influenced by Duau, and also by Suau. Tubetube has some features which seem unique, plus features which show similarity to other surrounding languages. Suau shares several features with other mainland languages which are not found in island languages generally, including Tubetube and the Duau family. Both Suau and Tubetube have more distinct grammatical features than Duau has, which means that Duau has more in common with Tubetube and Suau than these two languages have in common with each other. These grammatical features are described in section 3.4.3.

3.3 Saliba dialect

A Saliba dialect wordlist recorded in 1971 has only 58% shared cognates with standard Suau. Saliba also substituted k for glottal stop in standard Suau.[5] Data elicited in 1983 shows very little difference between the dialects, as most of the distinctive features of Saliba have been lost.

Both old and new data have been included in the appended lists, with older forms for Saliba in a separate column, and in brackets for the other languages. Cognate counts have been done with old and new Saliba data.

Modern Saliba speech uses the Suau glottal stop instead of k, and there are 27% more words which are the same as or very similar to Suau, and 12% are less similar to Tubetube, and 9% less similar to Kurada, and 7% less similar to Duau.

In the wordlists, where two words are listed for one English gloss, knowledge about shades of meaning or frequency of use may give guidance as to which one should be used for cognate counting. In some cases the words are synonyms, like English *little* and *small*, and in other cases change is taking place. If it is not possible to determine which of two words to use for cognate counting, and one of them is a cognate, I have allotted it half of one percent. It seems that for every word elicited, we should also elicit all alternate words with frequency of use, and even then we do not overcome the problem of synonyms.

3.4 Results

3.4.1 Syllable patterns

While Suau and Duau have few syllable-final consonants they are not uncommon in Tubetube. In this Tubetube is more similar to Muyuw. Double consonants are also found, as they are in Muyuw.

Muyuw:	ivvages	*they are doing*
Wale dialect:	konna	*with him*

3.4.2 Cognate percentages

Language changes over the last 20 years make a significant difference to the cognate percentage for Saliba, but not for the other languages in this study. Using the old language data for Saliba, the cognate percentages I obtained are:

	Saliba	Tubetube	Duau	Kurada
Suau	61	41	31	36
Saliba		57	41	51
Tubetube			46	51
Duau				56

Using new language data for Saliba the results I obtained are:

	Saliba	Tubetube	Duau	Kurada
Suau	88	41	31	36
Saliba		45	34	42
Tubetube			46	51
Duau				56

The results show that Saliba used to share the greatest number of cognates with Tubetube, but now has a lower percentage than Kurada and Duau.

However the cognates for the first 50 words and the second 50 words used are not proportionate. They are as follows:

	Saliba	Tubetube	Duau	Kurada
Suau	88(47+41)	41(28+13)	31(20+11)	36(25+11)
Saliba		45(28+17)	34(21+13)	42(26+16)
Tubetube			46(27+19)	51(28+23)
Duau				56(29+27)

These figures illustrate the imprecision of cognate counts, and should caution us against rating their value too highly.

3.4.3 Pronominal forms and function words

Fifty pronominal forms and function words obtained by comparing similar clauses are listed in chart 2. Relationships are measured by giving two percent if items are identical, and one percent if they are similar but not identical. Results are as follows:

	Saliba	Wale	Tubetube	Duau	Kurada
Suau	57	41	41	33	48
Saliba		55	56	46	49
Wale			97	51	41
Tubetube				52	40
Duau					41

In current Saliba speech if k changes to Suau glottal, and there is no other change, then 6% needs to be added to the Suau/Saliba figure, and to the Saliba/Kurada figure, and 6% subtracted from the Saliba/Wale, Saliba/Tubetube and Saliba/Duau figures thus:

	Saliba	Wale	Tubetube	Duau	Kurada
Suau	63	41	41	33	48
Saliba		49	50	40	55
Wale			97	51	41
Tubetube				52	40
Duau					41

3.4.4 Other grammatical features

From an examination of basic clause and sentence constructions the following points of difference were noted. (In the illustrative examples, optional words are in brackets.)

3.4.4.1 Suau different from Tubetube and Duau

(1) Possessed kinship nouns have the same singular form for all three languages, e.g. natu-na *child-his*. However for the plural form the dominant pattern for mainland languages is a reduplication of the first syllable or the first two syllables of the stem, while island languages have a plural suffix -ao or -aho, or some similar form. Suau has forms which follow the mainland pattern, and some which follow the island pattern, while Tubetube and Duau follow only the island pattern (Lithgow 1976:468,469,478,517).

English	Suau	Tubetube	Duau
his child	natu-na	natu-na	natu-na
his children	na-natu-na	natu-na-o	natu-na-ho
	or na-natu-na-yao		
	or natu-na-yao		

(2) Suau, like Tawala, can use a verb in the stative clause *It is good.* The other two languages use the same structure as a noun phrase.

Suau	edi	numa	i-lolo
Tubetube	ali	nume	namwanamwa-na
Duau	idi	hada	bweyabweya-na
	their	*house*	*it-good-its*
	Their	*house*	*is good.*

(3) Suau, like many other mainland languages, makes a tense-related distinction in the subject prefix of the verb, by adding or incorporating the vowel e. Capell (1943:221) made this claim about it:

> Suau can make a more definite present, thus: Sing.2, 'ue; 3, ie. Plural 1 excl., 'aie; 3, se. .... There are definite rules which decide which of the two forms should be used. This is obviously the place in south-east Papua where the verbal particle is met at home. The other field of its occurrence is in the north-east coast languages of south-east Papua.

He follows this with examples from Wedau, Mukawa (Are), and Ubir. The man who gave me the Suau grammatical data said that si-lau *they go* differs from se-lau in that si-lau means they have already gone. David Wakefield in a personal communication (1983) described this feature in Miniafia, which adjoins Ubir, as tense-related and quite complex. This particle e is not found in Duau or Tubetube, but in the sentences which I elicited it occurs in at least half of the verbs in the Suau language, either in the Suau example or the Saliba example, or both.

Suau	sine	natu-na	i-e-lubi	
Tubetube	sine	natu-na	i-	sapi
Duau	wahine	natu-na	i-	sapi-ya
	woman	*child-her*	*she*-TENSE-	*hit-him*
	A woman		*hit her child*	

(4) Suau commonly employs a sentence-final question marker 'e, which is similar to the bo in mainland Tawala and Wedau.

This is not a feature of Tubetube or Duau.

Suau	'u-e-	lubi	'e
Tubetube	ku-	sapi	
Duau	ku-	sapi-ya	
	you-TENSE	*hit-him*	QUESTION
	Did you	*hit him?*	

(5) Derivational verbal prefixes: All of these languages are rich in derivational verbal prefixes which denote modes or causes of action, or reciprocity, but their occurrence is very frequent in Suau in the data I elicited, infrequent in the Tubetube data, and only moderately frequent in the Duau data. For instance in Suau, verbal particles of this nature may be introduced for continuous actions, and reduplicated. Reduplication of all or part of the verb stem in all these languages may involve or be confined to the derivational prefix, as in this Suau example, for continuous action.

English	*She roasts it*	*She keeps roasting it*
Suau	i-e-gabu	i-'ai-'ai-gabu
Tubetube	i-gabu	i-gabu-gabu
Duau	i-gabu-ya	i-gabu-gabu-ya

(6) Suau has an uninflected post-positional yai, which is used in time phrases as well as location, and is used with great frequency. I found it eight times in ten sentences in one narrative text. It is found in Muyuw, infrequently, and in very restricted semantic environments, but I have not found it in Tubetube or Duau. These two languages use locatives which inflect for person and number. Suau also has an inflected locative, but uses it infrequently. Tubetube does have an uninflected locative mena, but it is used only in restricted environments. There is often no equivalent to yai in the other two languages. Also in the phrase *what time?* Suau's word order is different from Tubetube and Duau.

Suau		huya	saha yai	'u-lau	Alotau
Tubetube	tawane	sana		ku-lau	Alotau
Duau	to	lahisa		ku-naho	Alotau
	what	*time*	*what at*	*you-go*	*Alotau*
	When did you go to Alotau?				

(7) Demonstratives: The island languages have three demonstrative words meaning *near me, near you, away from us both,* and Suau seems to lack the one meaning *near you.*

English	Suau	Tubetube	Duau	Kurada
here	ina or inata	bwaite	beka	teina
there	meta or ne'ine	bwaine	yoka	tenem
there (near you)	-	bwaimwa	benoka	teneta

(8) Suau has a verb for *want/need* while the island languages, plus Tawala, have a possessed noun.

Suau	ya-henuwa		goila
Tubetube		nuwanuwa-gu	waila
Duau		nuwanuwa-gu	bwasi
	I-want	*want-my*	*water*
	I want water.		

(9) The Suau word taba for *perhaps* is different from nuwana, the word used in the other two languages. Suau can use nuwana in the slightly different sense of *I don't think.* The Misima word is like the Suau word, but inflects: taba-na '3sg.'.

Suau	taba	nige	i-	lao-ma
Tubetube	nuwana	nige	i-la-	lao-ma
Duau	nuwana	gebu	i-	naho-ma
	perhaps	*not*	*he*-FUTURE-	*come-here*
	Perhaps he won't come.			

(10) Possessed food: The other languages use a single word for *food* in its generic sense, inflecting for the person who eats it. This same word also functions in all three languages as a possessive particle. This word does exist

in Suau, and in Cooper's data (Russell Cooper, personal communication 1985) it is used for approximately half the occurrences of *generic food*, and in the other half 'ai'ai *food* is added after it.

English	Suau	Tubetube	Duau
my food	'agu 'ai'ai	kagu	kagu
your food	'am 'ai'ai	kam	kau
his food	'ana 'ai'ai	kana	kana

(11) For *people of a place* Suau starts with the place name, and the other languages do not.

Suau		Suau	ta-tau-di
Tubetube	siya	Suau	
Duau	taudži	Suau-ho-edi	
	they	*Suau*-PL-*their*	PL-*man*-*their*
	The people of Suau		

3.4.4.2 Tubetube different from Suau and Duau

(1) The dominant word order for a transitive clause for all these languages is subject-object-verb, but Tubetube can vary this with subject-verb-object, which was the order given to me in the example below. This is the preferred word order in Muyuw.

Tubetube	tau		i- sapi	melumelu
Suau	tau	melumelu	i-e-lubi	
Duau	loheya	gwama	i- -sapi-ya	
	man	*child*	*he*-TENSE-*hit*-*him*	*child*
	A man hit a child.			

(2) The Tubetube accompanitive differs from those of Suau and Duau in four ways:

(a) the accompanitive prefix is me and not ma
(b) there is an additional word-final morpheme kava
(c) the first person singular affix is u while g is absent
(d) l replaces d/dž

The words describing one companion have minimally the accompanitive prefix and a possessed stem. For more than one companion the word is pluralised with the suffix o or ao in Tubetube, ho or aho in Duau, while Suau adds the word yao *many*.

English	Suau	Duau	Tubetube
one with me	ma-'e-gu	ma-kiha-gu	me-ka-u-kava
one with you(sg.)	ma-'e-m	ma-kiha-u	me-ka-m-kava
one with him	ma-'e-na	ma-kiha-na	me-ka-na-kava
one with us(incl.)	ma-'e-da	ma-kiha-da	me-ka-la-kava
one with us(excl.)	ma-'e-mai	ma-kiha-ma	me-ka-ma-kava
one with you(pl.)	ma-'e-mi	ma-kiha-mi	me-ka-mi-kava
one with them	ma-'e-di	ma-kiha-dži	me-ka-li-kava
many with him	ma'ena yao	makihana-ho	mekanakava-o

(3) Tubetube has an initial question word gubesi.

Tubetube	gubesi	ali	nume	namwanamwa-na
Suau		edi	numa	i-lolo
Duau		idi	hada	bweyabweya-na
	QUESTION	*their*	*house*	*it-good-its*

Is their house good?

(4) For future tense, Tubetube reduplicates the first syllable of the verb stem, as in Dobu, but in a limited environment.

Tubetube	bwaliga	i-la-	lao-ma
Suau	malaitom 'abo	i-	lao-ma
Duau	bwaliga	i-	naho-ma
	tomorrow then	*he-*FUT-	*come-here*

He will come tomorrow.

(5) In the following sentence there are two points of difference:

(a) a verb is not required in the conditional clause *if it rains*
(b) there is a final locative word mena *to*

Tubetube	tem	galewa	kabo (or na)	ta-lau	tano	mena
Suau	taba i-e-	nabu	'abo	ta-lau	'oya	
Duau	kemi i-	džohi		ta-naho	tanoha	
	if	*it-*TENSE-*rain then*	*(and)*	*we-go*	*garden*	*to*

If it rains we will go to the garden.

(6) For giving to first and second persons, Tubetube uses directional suffixes instead of person-object suffixes. These are ma 'towards speaker', and wa 'towards hearer'. This feature is shared with Misima language. These are the verbs in Tubetube:

Singular object

i-yeli-ma	*he-gives-towards speaker (to me)*
i-yeya-wa	*he-gives-towards hearer (to you)*
i-wole-na	*he-gives to-him*

Plural object

i-yeya-ma	*he-gives-towards speakers (to us* incl. or excl.*)*
i-yeya-wa	*he-gives-towards hearers (to you* pl.*)*
i-wolegi-li	*he gives to-them*

3.4.4.3 Duau different from Suau and Tubetube

(1) Duau, like Dobu and Tawala, has different forms for *to* and *from*, whereas they are the same in Suau and Tubetube. These words consist of a stem with possession suffix, and in Duau another suffix indicating *to* or *from*. The basic forms of these suffixes are wa *to* and wega *from*. In Suau the general locative yai ∿ ai follows the affixed stem and means *to* or *from*.

English	Suau	Tubetube	Duau
to me	'ali-gu yai	koli-yau	kohi-gu-wa
from me	'ali-gu yai	koli-yau	kohi-gu-wega
to you	'ali-m yai	koli-wo	kohi-u-wa
from you	'ali-m yai	koli-wo	kohi-u-wega
to him	'ali-n ai	koli-na	kohi-na
from him	'ali-n ai	koli-na	kohi-n-ega

(2) Locatives are used very infrequently in Duau. Kurada has a locative suffix -i, and employs more locatives than Duau.

Duau	igu	hada		ya-miyatoya
Kurada	yagu	vada-i		ya-miya
Suau	egu	numa	yai	ya-miya
Tubetube	yagu	nume	mena	ya-miyasiyo
	my	*house-at*	*at*	*I-sit*

I am sitting in my house.

(3) Duau, like Misima, lacks an optional purpose word after *want* for desired action.

Duau	nuwanuwa-gu		ya-naho	Samarai
Suau	ya-henuwa	(bena)	ya-lau	Samarai
Tubetube	nuwanuwa-gu	(tem)	ya-lau	Samarai
	I-want-my	*that*	*I-go*	*Samarai*

I want to go to Samarai.

(4) Duau lacks a word for *then* in clauses with a future sense. The Suau word 'abo is similar to apo in mainland Tawala, and to kabo which is optional in Tubetube.

Duau	kemi i- džohi		ta-naho
Suau	taba i-e-nabu	'abo	ta-lau
Tubetube	tem galewa	na (or kabo)	ta-lau
	if *it*-TENSE-*rain*	*then*	*we-go*

If it rains we will go.

Duau	sowasowa-gu		ya-paisewa
Suau	gonowa-gu	'abo	ya-ginauli
Tubetube	sowasowa-gu	(kabo)	ya-ginauli
	ability-my	*then*	*I-do*

I can do it.

Duau	taudži ma-kiha-da	-ho			ta-naho
Suau	isi ma-'e-da	yao		'abo	ta-lau
Tubetube	siya me-ka-la-kava-o			(kabo)	ta-lau
	they *with-company-our-friend*-PL			*then*	*we-go*

Let them go with us.

(5) The Duau morpheme for completion of an action is quite dissimilar from the others.

Duau		i-ke-kule	pwaiya
Suau		i-lau-liga	-'o
	or	i-lau-liga	-ya'o
Tubetube		i-lo-liga	-ko
	or	i- liga	-yako

she-CAUSATIVE-*cook finished*
She finished cooking it.

4. CONCLUSION

It would seem that all of the languages under discussion are now mixtures, and the sources of their historical origin have become blurred. The Suau family is a fairly closely related group, and so is the Duau family if Tubetube is excluded, but Kurada shows significant similarity with Suau, the east coast of Duau peninsula shows some Tubetube influence, and the rest of the Duau family shows strong Dobu influence. The Saliba dialect of Suau shows similarity with Tubetube, but it is declining under pressure from standard Suau.

Tubetube's situation is similar to that of another island group of trading people, the Gumasi speakers on the Amphlett Islands. I classified Gumasi as a linguistic isolate (Lithgow 1976:467). Gumasi people trade with the people of Kiriwina, Goodenough, north Fergusson (3 languages) and Dobu, and speak all their languages. The Gumasi language has points of similarity with many other languages, and close similarity to none.

Gumasi is different in that very few outsiders speak it, whereas many outsiders know and use Tubetube. It is actually a lingua franca for the south-east coast of Normanby Island from Kwanaula to Kurada.

The Tubetube people trade with Misima, Muyuw, Dobu, Duau, Tawala and Suau, and older men are fluent in most or all of these languages, and some others as well. Their language has some elements which seem unique, plus a strong mixture of Duau and Suau (the Duau being a little stronger in these data), and also some elements of Misima, Muyuw, Dobu and Tawala. Perhaps, like Gumasi, it should be classified as a linguistic isolate.

NOTES

[1]Cognate percentages between the dialects have been calculated as Wale - 92% - Tubetube - 95% - Kitai (Lithgow 1976:457), but recent investigations indicate that Kitai is now almost identical with Tubetube.

[2]In an unpublished article I have documented what is still known of the original Sanaroa dialect, and its replacement by standard Dobu.

[3]Russell Cooper (personal communication 1984) has described the opposite effect occurring at present in Fife Bay where people have standard Suau in church books, and in the past this affected their normal speech, but now in their normal speech they are using more of the distinctive features of their own dialect of Suau. This is probably because the books were produced by a different church, Kwato, and the United Church people of Fife Bay now want to show their separate identity.

[4]In a second unpublished article I attempt to measure the extent of vocabulary replacement by Dobu words in the languages of Fergusson and Normanby Islands over a period of 18 years. The results are roughly as follows:

RAPID CHANGE (up to 25% of vocabulary replacement)
Peripheral dialects of Dobu.
On Normanby Is: Mwatebu, the north coast dialects of Sewa, and the west coast dialects of Duau peninsula.
On Fergusson Is: the Sibutuya dialect of Galeya.

MODERATE CHANGE (5-10%)
On Normanby Is: the south coast dialects of Sewa, Bunama, the mountain dialects of Duau (Sigasiga and Hadibaweya).
On Fergusson Is: Bosilewa, the Basima dialect of Galeya, and Molima dialects adjacent to the Dobu language.

SLOW CHANGE (2-3%)
On Normanby Is: Kurada and the east coast of Duau peninsula.
On Fergusson Is: Kukuya, Fagululu dialect of Molima language; and I would expect Iamalele (Yamalele) and Kalokalo to be in this group.

[5]The speech of Bonalua Is which is quite close to Suau Is was recorded in about 1846-48 by MacGillivray (1852:317-330) with k present in places where Suau now has glottal stop, and in 1968 Russell Cooper's data showed that k in these words has changed to glottal stop as is found in Suau. It appears that this is a general trend which is occurring unevenly throughout the Suau family.

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APPENDIX

Chart 1 (Older word-forms are in brackets, and / denotes alternatives.)

ENGLISH	SUAU	SALIBA	TUBETUBE	GULEGULEU (DUAU)	KURADA	OLD SALIBA
hair	tala	'ulu	ito	deba	vahu	kulu
head	'ulu	deba	kulukulu	mwagu	mwagu	deba/kulu
mouth	'awa	'awa	gamwa	kahwa	'awa	kawa
nose	isu	isu	isu	isu	'abusu	isu
eye	mata	mata	mani	mata	mehe	mata
neck	gado	gado	galogalo	galotuhutohu	gadogado	gado
belly	boga	boga	diya	gamwa	diya	diya/boga
skin	'opi	'opi	kwapi	kwapi	'wapi	deni
knee	tuli	tuli	tutuli	kahetuhutuhu	'aetutuli	tuli
man	tau	tau	tau	loheya	loheya	tau
woman	sine	sine	sine	wahine	waihiu	sine
bird	manu	manu	man	manuwe	manuwe	manuwa/lolo
dog	kedewa	kedewa	kedewa (bwawa)	kedewa (bwawa)	'edewa	kedewa/wanuhe
he bites	iletai	ileta	iletai	inali	i'alahi	ikalasi
he sits	iebawa	iebawa	imiasio	imiatoi	imia	ituli
he stands	itolo	itolo	itolo	itoholo	itowolo	itolo/ietolo
he lies	i'eno	ie'eno	ikeno	ikeno	i'eno	ikeno/iekeno
he walks	ilaulau	ielau	ilau	inoho	ilau	ilau/ielau
road	dobila	dobila	kamwasa	keda	'amwaha	kamwasa/keda
stone	we'u	we'u	weku (veku)	džimwa (gaima)	ve'u	weku
big	la'ila'i	la'ila'i	lalakina	medouna	mala'ina	lakilakina
small	gagili	gagili	kikiuna	musemuse	'iu'iuna	gagili/habuluna
fire	oyagi	oyagi	mayau	kaiwe	'aiwa	mayau
smoke	gahu/'asu	'asu	bogau	kasu	mwahio	kasu
ashes	'ahu	'ahu	kau	kahu	gawala	gawala
ear	beya	beya	tena	tena	tena	beya
tongue	memena	memena	memena	memena	memena	memena
tooth	mo'a	mo'a	mwaka	tsala	sala	moka
breast	susu	susu	susu	susu	huhu	susu
hand	nima	nima	lima	nima	nima	nima
foot	'ae	'ae	kaekae	kahe	'ae	kae
sun	mahana	mahana	dabwela	sinala (suhata)	mahana	mahana
moon	navalai	nawalai	waikena	waikena	wai'ena	waikena
star	'ipola	'ipola	utu	kwadžima	'ipwala	kipwala
cloud	yada	yaloi	yaloyaloi	yaloyaloha	yaloyalovi	yaloi/yada
rain	nabu	nabu	galewa	kwesu	'wesu	nabu
water	goila	goila	waila	waila	wa'aha/bwahi	waila
root	lamu	lamlam	lamna	lamu	lamu	lamlam
leaf	lugu	lugu	liguna	nabana	lugu	lugu
egg	kasino	kasino	pou	pou	pou	pou
he eats	i'ai'ai	ie'ai	ikan	ikai	i'ai	iekai
he gives me	imosegu	imosegu	iyeyama	ihelegau	imwahegau	iehayama
he sees	ie'ita	ie'ita	igitai	igebeya	i'ita	iekita
he comes	ilaoma	ilaoma	ilauma	inahoma	ilaoma	ilaoma
one	'esega	'esega	kaigeda	kaigeda	ehebo	kaigeda/kesega
two	labu'i	labui	labui	labui (luwa)	bwau	labui
bone	siyada	siyada	tuwatuwa	luluna	luluhuna	siyada
name	esana	esana	esana	sanina	yehana	hesana/halina
fish	yama	yama	iye	iyana	yama	yama/loge
ground	tano	tano	bwatanu	baleku	bale'u	bwatano

Chart 1 (continued)

ENGLISH	SUAU	SALIBA	TUBETUBE	GULEGULEU (DUAU)	KURADA	OLD SALIBA
mountain	tupi	tupi	koya	koya	'oya	tupi
meat	anihi/hisio	buluma	buluma	hesio	esiyo	buluma
fat	momona	momona	momone	momona	momona	momona
louse	tuma	tuma	tuma	kuto	tuma	tuma
shoulder	dabayalo	dabalo	leyaleya	kahala	'alaha	dabayalo
leg	'ae	'ae	kaekae	kahe	'ae	kae
liver	'ate	'ate	kate	kate	'ate	kate
blood	'wasina	'wasina	kwasine	bweyahina	'wahina	kwasina
feather	goi	goi	daguli	dagula	dagula	
wing	bala	mabe	pepe	pepe	pepe	pepe
boy	gama	hewali	kilakai	hewali	hevahevali	hewali
girl	siu	hasala	wesala (vesala)	gumalaulau	vavahala	hasala
old man	tautaulai	taubada	taubala	tautaubada	taubada	taubada
old woman	sinesinebada	sinebada	keduluma (kaiyale)	kaihale	'aihale	sinebada
person	doga	todoga	tomo	tomotai	tomowa	tamowai
father	tama	tama	tama	tama	tama	tama
mother	sina	sina	sina	tsina	hina	sina
pig	salai	salai	polo	buluka (bawe)	maheya	puwaka
flying-fox	maliboi	maliboi	gululiya	gululiya (meboi)	gululiya	gululiya
snake	mota	mota	weso	mwata	weso	mwata
taro	'udo	'udo	weda	weda	weda	kudo/hune
brother	'ena tau	'ena doga	kanakava	tasiu	tahi	kanakaha
sister	louna	louna	duna	nuhuna	nuhuna	louna
rat	ibou	ibou	gimwau	kokolaka	siyo'i	kokolaka/gimwau
frog	sou	hakeke	pologi/kwekwe	kwekwe	'we'we	kwalukwalu
sugarcane	galu	galu	mama	tohu	gwaito	galu
yam	apoi	kaikai	kwateya	kwateya (gogoba)	'ai'ai	kwateya
banana	asai	asai	udi	hudži	bihiya	bihiya
sweet-potato	kanuwa	kanuwa	kumwala	kanukanunu	kumwala	kanuwa
axe	'ilama	'ilama	kilam	kila	'ilam	kilam
spear	'alahiya	'alahiya	wamali	kailiya (gitá)	'aliliya	pawati/gandubuli
house	numa	numa	nume	hada	vada	numa
sand	gelegele	gelegele	dekawa	kahukahu (nedžinedžila)	namonamo	nagali
wind	mana	mana	yaumai	yagila/wini	yaumai	yaumai
vine	maimaina	maina	maina	gulaha	gulawa	maimaina
seed	li'e	li'e	like	džidži	'ewana/ venuvenu	like
tobacco	kuku	kuku	saduwa	saduwa	saduwa	pwaisa
morning	malatomtom	malaitomtom	malala	gonagona	malatomtom	malatomtom
afternoon	maimailahi	meimeilahi	lolau	kasinuhanuha	mahana	madamadailaki
night	mayona	mayona	boniyai	nihuwana (boiboi)	masigili	boniyai
yesterday	lahi	lahi	laina	boi	lavi	lahi
tomorrow	malaitom	malaitom	bwaliga	gona (bwaliga)	gona	malaitom
white	posiposi	posiposi	mayamayalena	sewasewa	wa'ewa'e'ena	posiposi
black	dubaduba	dubaduba	dubaduba	dubaduba (gobugobu)	gibagiba	dubaduba
red	buyabuya	buyabuya	balabalagiana	bwehalina	hawahawali	pulupulu
many	gamagali	peina	baibaiwana	baibaiwana	bagibagili	gwauna
good	lolo	lolo	dewadewa (namwanamwa)	bwebweyana	namwanamwa	namwanamwa
bad	ba'aya	ba'aya	naenaena	galana	yababana	yababana
old	beyabeyana	beyabeyana	beyabeyana	miyamiyaina	miyamiyana	beyabeyana
new	halihaliu	halihaliu	waluwaluna	hauhauna	vauvauna	hauhau

Chart 2

ENGLISH MEANING	SUAU	SALIBA	WALI	TUBETUBE	DUAU	KURADA
my (food)	'agu	kagu	kagu	kagu	kagu	'agu
your (food)	'am	kam	kam	kam	kau	'am
his (food)	'ana	kana	kana	kana	kana	'ana
my (thing)	'egu	yogu	yagu	yagu	igu	yagu
your (thing)	'em	yom	yam	yam	imu	yam
his (thing)	'ena	iyona	ina	ina	ina	yan
I (subj.prefix)	ya	ya	ya	ya	ya	ya
you (subj.prefix)	'u	ko	ku	ku	ku	'u
he (subj.prefix)	i ∿ ie	iye	i	i	i	i
we(incl.subj.prefix)	ta	ta	ta	ta	ta	ta
we(excl.subj.prefix)	'ai	ka	ka	ka	ka	'a
you(pl.subj.prefix)	'au	kwa	kwa	kwa	wa	wa
they (subj.prefix)	si ∿ se	se	si	si	si	hi
me (obj.suffix)	gu	gau	yao	yao	gau(wa)	au
you (obj.suffix)	m	go	wo	wo	go(wa)	o
him (obj.suffix)	ø	ø	ø	ø	ya	i
us(incl.obj.suffix)	da	da	la	la	gita	ita
us(excl.obj.suffix)	mai	gai	mai	mai	mai(ya)	ai
you(pl.obj.suffix)	miu	gomiu	miu	miu	mi(ya)	omiu
them (obj.suffix)	di	di	li	li	dži(ya)	di
my (suffix)	gu	gu	gu	gu	gu	gu
your (suffix)	m	m	m	m	u	m
his (suffix)	na	na	na	na	na	na
our(incl.)(suffix)	da	da	la	la	da	da
our(excl.)(suffix)	mai	mai	mai	mai	mai	mai
your(pl.)(suffix)	miu	miu	miu	miu	miu	miu
their (suffix)	di	di	li	li	dži	di
I (free pron.)	yau	yau	yau	yau	yau	yau
you (free pron.)	'owa	kowa	kowa	kowa	kowa	'owa
he (free pron.)	iya	iya	iya	iya	tauna	yoi
we(incl.free pron.)	'ita	kita	kita	kita	kita	'ita
we(excl.free pron.)	'ai	kai	kai	kai	kai	'ai
you(pl.free pron.)	'omi	komiu	komiu	komiu	komi	'omi
they (free pron.)	isi	siya	siya	siya	taudži	hisi
here	ina	teina	bwaite	bwaite	beka	teina
there	meta	temeta	bwaine	bwaine	benoka	tenem
what?	saha	saha	tauwae	tauwae	taugwama	hava
at	yai	unai	konna	koina	kohina	-i
and	yo	yo	yo	yo	ma	yo
where?	saha yai	haedi	te- -ele	toweya	kodabwa	haidova
who?	yai	kaiteya	yaiya	yaiya	haita	yaiya
who(pl.)*?*	'aidimodi	kaiteyadi	teyanuwao	toyanuwao	haisige	yaiyadiwa
but	na	na	na	na	ma	na
then	bena	bena	tem	tem	-	-
negative	nige	nige	nige	nige	gebu ∿ geya	nige
with	ma	ma	me	me	ma	ba
inside	'alona yai	kalona mena	kalona mena	kalona mena	kalona	holanai
or	e	o	nuwana	nuwana	o	o
could	gonowa	gonowa	sowasowa	sowasowa	sowasowa	howahowanai
pl. of woman	si-sine	wai-waihiuo	sine-sineo	sine-sineo	wahi-wahine	wai-waihiu
pl. of man	ta-tau	lohe-loheyao	tomo	tomo	lohe-loheya	lohe-loheya

THE FRENCH LEGACY IN BISLAMA

John Lynch

> *Languages are contagious. ... Loan words from a foreign language usually ride in on a wave of cultural diffusion* (Bolinger 1968:90-91).

For most of this century, the British and the French jointly ruled Vanuatu — known as the New Hebrides before Independence in 1980 — as a condominium. Even before formal colonial rule, however, a form of Pacific Pidgin English was known and used by ni-Vanuatu (cf. Clark 1979). Now known as Bislama, the Vanuatu variety of Pacific Pidgin English has become the national language of the Republic.

Bislama is still very much an English-based pidgin/creole, and as such has close links with Tok Pisin and Solomon Islands Pijin. It also, however, contains some lexical items which are of French origin. This paper attempts to contribute to the social history of Bislama by examining those French loans. In particular, I will be concerned with investigating those semantic fields in which loans from French figure with some prominence. This project expands on Charpentier's (1979) similar study on this topic by expanding on his data and refining some of his categories.

1. DEFINING THE CORPUS

As with its sister dialects, Bislama — and, in particular, that variety of Bislama as spoken by urban ni-Vanuatu — is undergoing considerable lexical expansion. In such a situation, it is often difficult to determine whether a particular word or expression of foreign origin is actually *in* the language, or whether the speaker is clearly using a foreign word/expression in a Bislama sentence. To take an analogous example from Tok Pisin: if a UPNG student says

(1) mi no bin handimin asainment bilong mi
I haven't handed in my assignment

would we be justified in saying that handimin and asainment are part of the vocabulary of Tok Pisin, or are these words still clearly foreign words used in a Tok Pisin sentence? Are they, in other words, comparable to the nativised French loans *rôle* and *précis* in the English examples in (2), or are they still clearly marked as foreign, like *faute de mieux* or *acharnement* in (3)?[1]

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 411-420. *Pacific Linguistics*, C-100, 1987.
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(2) a) ... where my chosen *rôle* was that of an embittered exile, ...

b) That day, I made my last *précis* and handed over my schedules ...

(3) a) ... which I obtained second-hand, *faute de mieux*, near Victoria, ...

b) Karl had hitched their main halyards on to the windlass and was grinding at it in an *acharnement* of industry ...

To avoid this kind of problem, I have relied in this paper on published lexicographic sources only. Specifically, I have used as the major source Camden's (1977) dictionary, which contains some 3000 Bislama entries, though I have on occasions supplemented this with data from shorter lists in Guy (1974) and Charpentier (1979). Only Bislama forms of French origin actually listed in one or more of these sources have been considered in this paper, with the exception of four additional items from Crowley (1980).

There is, however, still a problem, which relates to how widespread a form is in Vanuatu. Take as an example the following entry from Camden (1977:85):

(4) pomdeter: n. A potato in some areas. Syn. poteto.

My impression is that poteto (< English *potato*) is more widespread than pomdeter (< French *pomme de terre*). I have, however, counted pomdeter as a French loan and listed it in Section 2 of this paper. Without a fairly detailed survey of regional dialects of Bislama — and my personal experience is restricted to the southern islands and, to a lesser extent, Port Vila — it is difficult to make accurate statements on the general level of acceptability of a number of 'pomdeter-like' words.

There is also the problem of sourcing when the potential French source has an English cognate.[2] In some cases, phonological considerations will disambiguate the source: thus I suggest that radyo *radio* derives from French *radio* (=/radyo/) and not English *radio* (=/reidio/), mainly because of the quality of the first vowel. In other cases, the semantics has led to a French sourcing: e.g. depo *asylum (for mentally disturbed)* derives from French *dépôt*, which includes among its meanings *temporary prison, lock-up*, a meaning not expressed by English *depot*. In still other cases — e.g., Franis *France, French*, or konyak *cognac, brandy* — neither the phonology nor the semantics can really assist: I have listed all such words below along with words which are clearly of French origin, but have marked them with an asterisk.

2. FRENCH LOANS IN BISLAMA

Identifiable French loans in Bislama are presented in this section. I have arranged the loans into semantic fields to facilitate discussion in the next section.[3]

2.1 Terms to do with food and drink

The following French loans fall into the area of food, drink, cooking, etc.

(5)	BISLAMA			FRENCH
	ariko	G	*string bean*	*haricot*
	avoka		*avocado pear*	*avocat*
	gato		*cake*	*gâteau*
	karasol[4]		*soursop*	*corossol* *custard-apple* *corossol hérissé* *soursop*
	kokot		*heavy saucepan*	*cocotte*
	*konyak		*cognac, brandy*	*cognac*
	lae		*garlic*	*l'ail*
	?laman		*lemon, lime*	*limon*
	lasup		*soup*	*la soupe*
	ligim[5]		*(European) vegetable (grown for sale)*	*légume*
	limonad		*lemonade*	*limonade*
	*obesin		*aubergine, egg-plant*	*aubergine*
	papae	G	*pawpaw, papaya*	*papaye*
	pima[6]		*chilli*	*piment*
	pistas		*peanut, small nut of any type*	*pistache*
	pomdeter		*potato*	*pomme de terre*
	salad		*lettuce, green salad vegetable, salad*	*salade*
	sitrong	TC	*lemon*	*citron*
	sobe		*ice-cream*	*sorbet*
	susu/susut		*choko*	*chouchoute*
	tabak		*tobacco*	*tabac*
	tomat		*tomato*	*tomate*

konyak *cognac, brandy* and obesin *aubergine, egg-plant* clearly derive *ultimately* from French: although the question of whether French or English was the *immediate* source is not clear, I have decided to class them as French loans here, for reasons which will become clearer in the next section. tabak *tobacco* and tomat *tomato* are clearer, since there are also synonymous Bislama forms derived from English — tabaka and tomata.

The form laman *lemon, lime* causes greater problems. It may derive either from French *limon* (=/limõ/) or English *lemon* (=/lemn̩/); in neither case, however, is the first vowel accounted for.

2.2 Terms to do with manual labour

A number of terms frequently used by mechanics, artisans, labourers, etc., have been borrowed from French and are listed below. (Terms with an exclusively maritime use are listed in 2.3).

(6)	BISLAMA		FRENCH
	bramin	*crowbar*	*barre à mine*
	bulong	*a bolt*	*boulon*
	busi	*spark-plug*	*bougie*
	busong	*cork, plug, bung*	*bouchon*

dis		*clutch (of car)*	*disque (d'embrayage)*
kale		*a chock*	*caler*
kameong		*truck*	*camion*
kaoj		*washer (for pump, light, tap)*	*caoutchouc india-rubber, elastic band*
kaojuk		*rubber, elastic*	
lakaryer	G	*quarry*	*la carrière*
lakol		*glue*	*la colle*
lapul		*light-globe*	*l'ampoule*
loto	OB	*car*	*l'auto*
manuvel		*starting-handle*	*manivelle*
masut		*distillate, diesel*	*mazout*
pyos/lapyos		*hoe, mattock, adze*	*(la) pioche*
simang	G	*cement*	*ciment*
sudarem		*weld, braze, solder*	*souder*
sude		*patch for tyre-tube*	

simang *cement* and sudarem *weld, braze, solder* both have cognate English-derived equivalents: simen and soldem. The term busong *cork, plug, bung* might well have been listed under the food-and-drink list in 2.1.

2.3 Maritime terms

Included in this list are terms for fish and marine life (some of which might also have been classified as food-and-drink terms), as well as terms used in sailing or fishing.

(7)

BISLAMA		FRENCH
arier	*go astern, reverse, retreat*	*arrière*
bondo	*hulk, moored ship used to load and unload ocean-going vessels*	*ponton*
bonit	*bonito, tuna*	*bonite*
karong	*trevally*	*carangue*
kokeas	*mussel*	*coquillage sea-shell*
laflat	*(landing-)barge*	*la plate punt, flat-bottomed fishing-boat*
los	*groper*	*loche*

2.4 Terms for clothing

The following French loans refer to items of apparel or adornment.

(8)

BISLAMA		FRENCH
kalsong	*(men's) briefs, underpants*	*caleçon*
kasi	*bra*	*cassie k.o. basket*
kaskos	*bra*	*cache-corset*

kilot	*ladies' briefs*	*culotte breeches*
klaket	*thongs*	*claquette*
pomad	*pomade, hair-oil*	*pommade*
sabat/savat	*sandals, thongs*	*savate*

2.5 Terms relating to sports, games and celebrations

A number of French loans fall into this fairly general semantic area.

(9)

BISLAMA		FRENCH
bonane	*New Year (celebrations)*	*bonne année Happy New Year*
* futbol	*football (soccer)*	*football*
kemes[7]	*fair, bazaar, fete*	*kermesse*
kitkit	*draw (football); be even, all square*	*quitte à quitte*
lafet	*feast, festival*	*la fête*
las	*ace (cards)*	*l'as*
pik	*spades (cards)*	*pique*
* sampyon	*champion, leader*	*champion*
sampyonat	*championship*	*championnat*
* sinema	*cinema*	*cinéma*

The terms futbol *football*, sampyon *champion, leader*, and sinema *cinema* could all conceivably derive from English (and futbol obviously originally does). Justifying the (immediate) French origin of futbol, Charpentier (1979:333) says that

> *aux Nouvelles-Hébrides, ce sport (angl. soccer) est traditionnellement dirigé par des Français; les Anglais s'occupant de l'athlétisme.*

Given the association with both futbol and the clear French loan sampyonat *championship*, I suggest that sampyon be treated as coming from French. Charpentier also treats sinema as a French rather than an English loan for similar reasons as he derived futbol from French:

> *A Port-Vila comme à Luganville deux cinémas existent, tous sont gérés par des Français* (1979:332).

2.6 Religious terms

The following religious terms are of French origin

(10)

BISLAMA		FRENCH
lames	*Mass*	*la messe*
le pap	*pope*	*le pape*
lukaris	*eucharist*	*l'eucharistie*
per	*father (=priest)*	*père*

2.7 Terms to do with French colonial administration

Most of the terms listed below are in the process of dying out, as the French colonial administration ceased to operate in 1980. They are included here partly for historical interest, and partly because some (e.g., Franis and lekol) are still in regular use.

(11)

	BISLAMA			FRENCH
	delegei		*(French) District Agent*	*délégué*
	depo	OB	*mental asylum*	*dépôt*
	duan		*the customs*	*douane*
	frang		*franc*	*franc*
*	Franis		*France, French*	*France*
	lekol		*(French) school*	*l'école*
	mil	OB	*1000-franc note*	*mille*
	misyu		*Monsieur* (title)	*monsieur*
	nuvelsebrid	OB	*New Hebrides*	*Nouvelles-Hébrides*
	sondam		*(French) policeman*	*gendarme*
	sontim		*gold centime*	*centime*

2.8 Names of people and places

A few names of peoples and places are of French origin.

(12)

	BISLAMA			FRENCH
	Kaledoni		*New Caledonia*	*(Nouvelle) Calédonie*
	kamarad		*Vietnamese* (address term)	*camarade comrade*
*	Kanal		*Luganville (Santo)*	*canal*
	Japon		*Japan*	*Japon*
	sinwa		*Chinese, Vietnamese*	*chinois*
*	Tongkin	OB	*Vietnam(ese)*	*Tonkin*

2.9 Interjections, insults, etc.

A few very common interjections, along with a few swear-words or insulting terms, derive from French.

(13)

BISLAMA			FRENCH
ale		*so, and so*	*allez go*
ebe		*well, oh well*	*eh bien*
longkile	TC	*'up yours!'*	*l'enculé*
me		*but*	*mais*
piteng	TC	*prostitute*	*putain*
salo	TC	*swine, filthy beast*	*salaud*
saye		*that's it, there it is*	*ça y est*
si		*yes* (to negative question or when answer 'no' is expected)	*si*

2.10 Unclassified terms

There remains a residue of terms which do not fall under any of the above classifications, and which do not admit of further sensible classification.

(14)	BISLAMA			FRENCH
	bebet		*beetle, bug, wog, weevil*	*bebête* (baby-talk for *bête animal*)
	bondi		*bandit, outlaw*	*bandit*
	glis		*slip, slide*	*glisser*
	kabine		*toilet*	*cabinet*
*	katon		*carton*	*carton*
*	kilo		*kilogram*	*kilo(gramme)*
*	kilometa		*kilometre*	*kilomètre*
*	kompen		*(electoral) campaign*	*campagne*
	kurmang	G	*sucker (of plant)*	*gourmand*
*	lita		*litre*	*litre*
*	mita		*metre*	*mètre*
	mostik		*mosquito*	*moustique*
	piko[8]		*plantation weed*	*piquant thorny*
*	potmanto	OB	*suitcase*	*portemanteau*
	puriko[9]		*zebra*	*bourricot donkey* (dial.)
	radyo		*radio*	*radio*
	rato		*razor*	*rânteau rake*
	sontimita		*centimetre*	*centimètre*
	varisel		*chickenpox*	*varicelle*

A number of these words, particularly those representing 'weights and measures', could easily derive from English, but more probably derive from French. The first vowel of kompen *campaign* suggests a French origin (< /kɑ̃paɲ/), though the second vowel suggests an English origin (< /kæmpein). mostik *mosquito* and sontimita *centimetre* have the cognate English-derived equivalents moskita and sentimita.

3. DISCUSSION

It is clear from the data presented in Section 2 that the French language has had some influence on Bislama in certain semantic areas, and one might conclude — or at least propose — that ni-Vanuatu culture and society was specifically influenced by French culture and society in (at least) these areas.

French lexical influence in some of the lexical areas listed above admits of a logical explanation. The religious terms in (10), for example, are specifically associated with Roman Catholicism, and up until Independence at least virtually all Catholic priests in the country were French. Similarly, the colonial administrative terms in (11) refer largely to items, institutions or individuals within the French colonial government system — and this may also be the explanation for at least some of the names of people and places given in (12).

The interjections and insults given in (13) could also be seen as 'natural' borrowings. Interjections often become clichés, and as such are easily assimilated; insults, especially in a colonial or plantation situation, would

be heard fairly often. Both would have been identifiable in context from the perhaps unintelligible stream of 'normal' French.

There were a considerable number of French plantation owners, mechanics, artisans and ships' captains in government service and the private sector before Independence. The close association between these men and ni-Vanuatu labourers, mechanics, artisans and ships' crew, and the introduction of new items of technology, would go some way to explaining why a considerable number of Bislama terms in these areas (cf. (6) and (7) above) derive from French.

France has a worldwide reputation for food and for *haute couture*, and it is not all that surprising to find considerable French influence on Bislama in the area of food and drink (cf. (5)) and clothing (cf. (8)). Of particular interest in the former category are terms for 'quality' or gourmet foods (possibly not commonly used by the British or the Australians), such as avoka *avocado*, gato *cake*, lae *garlic*, obesin *aubergine* and pima *chilli*; it is also not surprising to find that terms for food or items associated with food make up over 20% of the French lexical legacy in Bislama. In the category of clothing, attention should be drawn to the range of terms for underclothes (kalsong, kasi, kaskos, kilot). In this regard, one might agree with Charpentier (1979:331) in proposing a further explanation here:

> *Parfois la langue française a servi à exprimer des concepts connus en anglais, mais que les premiers missionaires anglophones, très puritains, avaient volontairement omis.*

As well as terms for underclothing, Charpentier hypothesises that nouns like konyak *cognac, brandy* and busong *cork* — *'seuls les Francais buvaient du vin'* (1979:334) — also fall into the 'voluntarily omitted' group.

We are on less sure gound when we examine the terms in (9) for sports, games and celebrations. Some, like kemes *fair, bazaar, fete* and bonane *New Year celebrations* may refer to institutions with a particularly French flavour. Others, however, are less 'natural'. In card-playing, for example, only one named denomination derives from French (las *ace*) while the others come from English (king, misis, jek); similarly, only one suit has a name of French origin (pik *spades*), the other three (hat, kalab, daeman) coming from English. I have no explanation at this stage for these facts.

This leaves the unclassified items given in (14). While specific cases (e.g., the metric terms) are clearly exceptions, it is difficult in the majority of cases to find a natural explanation for the borrowing.

What I have shown so far is that most of the Bislama vocabulary which is of French origin admits of a fairly natural social or sociolinguistic explanation. What is also of interest, however, is the small size of the French component in Bislama: Camden's dictionary contains around 3000 Bislama entries, yet I have found only just over 100 French loans — about 3% of the total. One might have expected that, with French and English being politically 'equal', and with native French-speakers clearly outnumbering native English-speakers before Independence, influence from French on Bislama might well have been greater.

Obviously, much of the vocabulary of Bislama is cognate with forms in Tok Pisin and Solomons Pijin, and comes from an earlier era before France, and French, played an important role in the then New Hebrides. However, virtually all of the modern political and economic terminology in Bislama has come from English,

indicating that English, and not French, is the prestige lexical source language for Bislama. Whether this has to do with the political attitudes of the British and the French, or the attitudes to Bislama of different missions, or the attitudes towards the British and the French held by ni-Vanuatu, I am unable to say at this stage.

NOTES

[1]The examples in (2) and (3) are taken from Erskine Childers' *The Riddle of the Sands*, first published in 1902; the loans in question are all italicised in the original.

[2]I use the term 'cognate' here merely to refer to a word which is related, either through genetic inheritance or through borrowing.

[3]The orthography follows Camden (1977), and the glosses are taken, or summarised, from there. The French source is not translated unless it varies somewhat from the meaning given for the Bislama form. Other abbreviations source forms not given by Camden: G = Guy (1974), TC = Crowley (1980). Forms marked OB by Camden refer to 'Old Bislama, not always used or known by young speakers' (1977:xvii).

[4]Charpentier gives this as korosol.

[5]Charpentier gives this as legim.

[6]Charpentier gives this as pimang.

[7]Charpentier gives this as kermes. He also includes it in the set of terms associated with the Catholic religion.

[8]There is another Bislama term piko, referring to a fresh-water fish which makes good eating, which Charpentier includes in his list of terms of French origin. I have been unable to locate the origin of this term.

[9]Charpentier is somewhat scathing about the appearance of this term in Camden's dictionary, and also terms like elefen, kamel, raeno, taega, etc. I must admit I am sympathetic to his view here.

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BASIC VOCABULARY AS A TOOL FOR CLASSIFYING PAPUAN LANGUAGES

K.A. McElhanon

1. INTRODUCTION

In the field of Papuan linguistics few men stand as tall or look as far as does Professor Stephen A. Wurm. His 1951 comparative study of the Kiwai languages of the Western Province was the first detailed study of any close-knit group of languages in what is now the country of Papua New Guinea. At that time little was known of the linguistic scene of the country, and a review of the growth of linguistic studies would reveal that Professor Wurm and his students were the main contributors to our present understanding of these languages. My personal debt to Professor Wurm for his encouragement and insightful guidance through the years is substantial, and it is with considerable esteem and gratitude that I dedicate this essay to him.

2. THE CHANGING LINGUISTIC PICTURE

When Professor Wurm began studying the languages of Melanesia, the only recognised wide-spread group of languages was the Austronesian Family (AN). All languages not identified as members of this group were given a negative classification, viz., Non-Austronesian (NAN). Professor Wurm had few peers when it came to hypothesising about putative genetic relationships, and many of those who were more conservative in this regard were frequently surprised when Professor Wurm's hypotheses were later largely confirmed.[1] An early example of such a hypothesis is his suggestion that the languages of the East New Guinea Highlands Phylum, the Huon Peninsula Group and the Dani Family of Dutch New Guinea (Irian Jaya, Indonesia) might be distantly related (Wurm 1960). Not long afterwards, he made the further suggestion that the languages of the East New Guinea Highlands Phylum might also be related to the languages of the Binandere (Morobe Province), Ok (Western Province) and Ndu (East Sepik Province) families (see Wurm 1961, 1964, 1965). Eventually he developed the hypothesis of a Central New Guinea Macro-phylum comprising ten putative phyla and an isolated family (Wurm 1971).

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3. THE TRANS-NEW GUINEA PHYLUM

All of these groups, with the exception of the Ok family of the Central and South New Guinea Phylum, were posited on the basis of lexicostatistical evidence prior to reconstruction according to the comparative method. In many cases the data were so scanty that the classifiers had to use the 'inspection method' for the recognition of putative cognates (see Gudschinsky 1956). Because lexicostatistical procedures allowed for considerable personal bias on the part of those doing the classifying, Dr C.L. Voorhoeve and I decided to pool our data and do an exploratory study in the hopes of finding a clearer basis for positing genetic relationships between two phyla within the proposed Central New Guinea Macro-phylum. The result of that study (see McElhanon and Voorhoeve 1970) was that a Trans-New Guinea Phylum was posited on the basis of 53 probable cognates out of a total of 85 compared. The name 'Trans-New Guinea Phylum' was chosen, not only because the two phyla were geographically distant from one another, but also because Voorhoeve and I felt that our comparisons had a more substantial basis than those based upon the 'inspection method' long associated with lexicostatistical studies. We also wished to provide a more definitive genetic group which could be expanded to include related languages if such relationships could be supported by evidence of similar quality. Subsequently, Professor Wurm applied these procedures to data from languages of the former Central New Guinea Macro Phylum and included the majority of these languages into an expanded Trans-New Guinea Phylum. If it were not for the excluded languages, one might have thought that the Central New Guinea Macro-Phylum had been simply renamed (Wurm 1978). The fact that subsequent research has confirmed Professor Wurm's hypotheses attests to his capacity to recognise relationships between distantly related languages.

4. AMBIGUITIES IN LEXICOSTATISTICAL STUDIES

One of the problems in applying the inspection method for recognising probable cognates was that it was dependent upon the analyst's experience, or lack thereof, and his daring in positing putative sound correspondences. This allowed for considerable variation in the methodologies used so that one could reasonably assert that given the same data, no two classifiers of NAN languages would have arrived at greatly similar classifications (see McElhanon 1971). Moreover, as one gains more experience, one recognises more sound correspondences and posits more probable cognates. Thus there are such examples as the NAN languages of the Huon Peninsula (Morobe Province) being initially classified as the Huon Phylum (McElhanon 1967). Later they were reclassified as the Huon Peninsula Stock of the Finisterre-Huon Phylum (Claassen and McElhanon 1970, McElhanon 1970), and more recently regarded as but two families of a Finisterre-Huon Stock, so labelled solely as a matter of convenience (McElhanon 1975:528). That these languages form a close-knit group is without question, but the assignment of taxonomic labels such as 'stock' (comprising two families) or 'family' (comprising two sub-families) is largely arbitrary at this stage of analysis and is not easily correlated with lexicostatistical percentages.[2] Many classifiers of languages have felt that, as a tool, lexicostatistics gives a good preliminary 'bird's-eye view', but there have always been those, including myself, who have been of the opinion that such a 'bird's-eye view' might be better defined as a 'foul squint'.

5. DIFFICULTIES WITH THE LEXICOSTATISTICAL METHOD

The difficulties in applying the lexicostatistical method as a tool for classifying the NAN languages of Papua New Guinea are many, and they begin with the collection of the non-cultural or basic word lists. In attempting to collect lists of basic vocabulary for the languages of the Huon Peninsula, I found that, of the 215 items proposed by Swadesh (1952, 1955), 75 had to be omitted for a number of reasons. Some were non-cultural in all the languages (e.g. *ice, freeze* and *snow*); while others were non-cultural in many of the languages (e.g. *fish, sea, salt,* and *swim*) and so were frequently borrowed. A large number of items were omitted because they involved repetitions of the same vernacular term (e.g. *dirty-black, far-long, near-short, feather-hair,* etc.). Moreover, a number of items were omitted either because of difficulty in elicitation, or because compounds or phrases were involved. The final diagnostic list contained only 140 items.

The first detailed study of the problems involved in constructing a satisfactory diagnostic list for NAN languages was provided by D.C. Laycock (1970). Laycock examined eight different lists which had been used in lexicostatistical studies of Papua New Guinean languages and graded a total of 357 items in terms of their individual suitability as test items. In discussing each item, Laycock drew upon his own experience in eliciting basic vocabulary items for languages in the Sepik and North Solomon provinces. His comments related primarily to difficulties which one might encounter in translating the meaning of the test item adequately, often through the medium of Tok Pisin, so that the respondent would give a word with an equivalent meaning in the target language. His conclusion was that of the 357 items he examined, one would have difficulty in compiling a diagnostic 'list of even 100 words for lexicostatistical classification in New Guinea, and that little faith should be put in detailed linguistic subgroupings arrived at by this method'. He goes on to say, 'Classification by lexical means alone is reliable enough for broad groupings, but other methods — and more intensive comparison and reconstruction — are needed before a really accurate picture of linguistic groupings in New Guinea begins to emerge' (Laycock 1970:1173).[3]

Out of his experience in eliciting basic vocabulary lists for Papua New Guinean vernaculars and extensive field work in the Buin language of south Bougainville Is., Laycock developed an interest in semantic features common to these languages (see Laycock 1975a, 1975b, 1982, 1986). His 1982 article, concerning the semantic problems of glossing a Papuan language, continues the theme he presented in the 1970 article on eliciting basic vocabulary items. He noted that there are 'areas where English breaks down as an efficient glossing language' (1982: 192). Although he focused on glossing in bilingual dictionaries, the vocabulary he cited as examples included items from the basic vocabulary diagnostic list used for lexicostatistical classifications, and so his comments are relevant for those attempting to collect such lists.

This present article builds on the base established by Laycock by adding from my own experience in collecting basic vocabulary lists in the languages of the Huon Peninsula. When collecting these lists I used the Kâte language, a Huon Peninsula language used as the lingua franca in church services, as the primary language of elicitation, supplemented by the use of Tok Pisin. Consequently, the range of semantic variation I encountered in the elicitation of the lists was greater than that I would have encountered had I used only Tok Pisin. I will also draw from my experience in comparative studies of the Huon Peninsula (HP) languages and of an in depth knowledge of the Selepet language.

6. THE VOCABULARY ITEMS OF THE SWADESH LISTS

In commenting on the elicitation of basic vocabulary items in NAN languages, I will confine myself to the words found in the standard Swadesh 100 and 215 item lists (1952, 1955) and will treat these words in alphabetical order. Those marked with an asterisk are found in the original 100 item list. Those marked with a double asterisk represent revisions to the 100 item list (Swadesh 1955). The total examined is 223.

*1. *all*: Laycock (1970:1133) is correct in noting that 'the concept of totality may merge with that of multiplicity'. Careful checking with additional respondents, however, usually permits *all* to be distinguished.

2. *and*: In HP languages juxtaposition signals co-ordination. The only word which could be glossed as *and* is a dependent form of the verb *to do* designating continuity, and in some languages these forms have alternative suffixes. The word is not satisfactory for diagnostic lists.

3. *animal*: The most generic term is that for *marsupial*.

*4. *ashes*: As noted by Laycock (1970:1134) the term generally includes only ashes which are white or grey in colour.

5. *at*: Location is indicated by post-clitics and exhibits a high degree of stability in HP languages. They are easily elicited through the use of Kâte as the lingua franca.

6. *back*: See Laycock 1970:1134.

7. *bad*: See Laycock 1970:1135.

*8. *bark*: In all cases it was recorded as *tree skin*.

9. *because*: This too is a post-clitic and must be elicited by embedding a clause in a construction such as *The rain came-because, I did not go to the garden = Because it rained, I did not go to the garden*.

*10. *belly*: The languages also have a word best glossed as *pot belly*, so if one points to a particular person's belly, care must be taken.

11. *berry*: Usually the same lexeme as *seed*.

*12. *big*: See Laycock 1970:1135.

*13. *bird*: No difficulty and highly stable.

*14. *bite*: The words for *bite, burn, give, hit,* and *see* are among a set of verbs involving zero morphemes and verb classes identified by co-occurrence with bound object pronouns. The historical development of the verbs belonging to this class is complex, and forms having little phonological similarity may be demonstrated to be cognate. For a discussion of the development of these forms in the HP languages see McElhanon 1973:43ff.

*15. *black*: All very dark colours are included with *black*.

*16. *blood*: See Laycock 1970:1136.

17. *blow*: This item is very stable and highly reliable except when used in reference to the wind.

*18. *bone*: Care should be taken not to indicate specific bones such as the shoulder blade or shin bone.

**19. *breast*: Austronesian loans are common; otherwise the item is stable and reliable.

20. *breathe*: I have found no word in any of the HP languages which could be glossed as *breathe*. The easiest to elicit is that of *out of breath, shortwinded* but the form is clearly onomatopoetic and unsuitable as a test item. The other form denotes *water vapour*, either from one's mouth or from the ground and occurs only above 1,000 meters where the air becomes sufficiently cold.

21. *brother*: The sibling terms are determined by the sex of the speaker, whether the sex of the referent is the same as or different from that of the speaker, and whether the referent is younger or older than the speaker.

*22. *burn* (vt): I have found no intransitive verb representing *burn*. See the comment under *bite*.

23. *child*: I have found no word for *child* although some languages have compounds based on the words *boy, girl, son,* or *daughter*.

**24. *claw*: No difficulties.

25. *clothing*: There is no generic term for *clothing* and the specific items of clothing often bear the term for the material from which they are made. They are also items of trade with the result that there is substantial borrowing of terminology.

*26. *cloud*: Almost all languages distinguish *cumulus* from *cumulo-nimbus*. Some also have a word for the cirrus clouds which blow across the Saruwaged Range during the dry season. When word lists are elicited during the dry season one might obtain the word for *haze*.

*27. *cold*: The word is frequently the same as that for the *night wind* which blows down the mountain slopes from the high altitudes.

*28. *come*: All languages have words for both *come from a short distance, come from afar,* and *come down*. If one elicits the word using the imperative form, the response is usually *come from a short distance*.

29. *cook* (v): See Laycock 1970:1139.

30. *count*: No difficulties.

31. *cry*: No difficulties.

32. *cut*: The languages distinguish between a chopping action, a mowing action, a sawing action, and a slicing action. Moreover, there are specialised words for *cutting off at the base, cutting off the lower branches of a tree,* and *cutting through the roots of a tree in order to fell it*.

33. *dance* (v): See Laycock 1970:1140.

34. *day*: Few of the HP languages distinguish *day* from *sun*.

*35. *die*: This word is subject to word taboo and so one often finds the respondents giving euphemisms. Furthermore, there are other words for *die* used with non-human referents.

36. *dig*: See Laycock 1970:1140.

37. *dirty*: Usually the same lexeme as that for *black*.

*38. *dog*: Onomatopoetic forms are frequently found, and dogs were part of the Vitiaz Straits trading cycle (see Harding 1967).

*39. *drink*: See the entry for *eat*.

*40. *dry*: Elicitation through Tok Pisin favours a response of *without water*. Most languages make distinctions such as *dry, seasoned* (of firewood), *dry, brittle* (of undergrowth and leaves), *dry, shriveled* (of picked fruit, parched crops), *dry, dehydrated* (of salt), *dry* (of something previously wet), *dried up* (where there was a flow of water), and *dry, evaporated* (where there was a puddle).

41. *dull*: Elicitation through Tok Pisin usually brings the response of *not sharp*, or *without teeth*, even where there is a separate lexeme.

42. *dust*: The word specifically means *airborne dust* and so is difficult to elicit. A common response is *rubbish*.

*43. *ear*: Reliable and stable.

*44. *earth*: See Laycock 1970:1141.

*45. *eat*: The word is best glossed as *consume* and includes eating, drinking, and smoking.

*46. *egg*: *Egg* is generally not distinguished from *seed, nut,* or *berry*.

47. *eight*: No languages have separate lexemes for numbers beyond *four*.

*48. *eye*: A reliable item, but it is often compounded with the root for *stone* since it is stone-shaped.

49. *fall*: The usual first response is the verb for *descend*. Most languages distinguish *fall downwards, descend* from *fall over* (of a tall object). There are onomatopoetic forms for items collapsing, detaching (of falling fruit), or crashing.

50. *far*: See Laycock 1970:1143.

*51. *fat (grease)*: Usually this is best elicited in contrast to meat.

52. *father*: Reliable and stable.

53. *fear*: Fear is a complex emotion having varying strengths. The most stable is that of fear of immediate harm; lesser degrees of fear often involve complex lexemes or idioms.

*54. *feather*: The generic meaning is included in the term for *hair*. There are specific terms such as *feathers below the eyes of parrots, neck feathers* (of a hen), *tail feathers* (of a rooster), *breast feathers,* and *twin tail feathers* of certain birds of paradise.

55. *few*: Difficult to elicit and always complex lexemes.

56. *fight* (vi): Where it occurs it consists of the verb *to hit* and a reflexive pronoun.

*57. *fire*: Easily elicited and very stable.

*58. *fish*: If the term is not borrowed from an Austronesian language, then it is usually a descriptive phrase such as *sea insect*.

59. *five*: The number *five* is usually expressed by the word for *thumb* or by a compound with the root for *hand*.

60. *float* (vi): The word is difficult to elicit and the terms are often onomatopoetic and show little stability.

61. *flow*: See Laycock 1970:1145.

62. *flower*: The term is usually easily elicited and very stable as long as one avoids the few specific terms there are, such as *banana blossom*.

*63. *fly* (vi): The verb *go* includes movement through the air as well as along the ground. There are numerous onomatopoetic forms indicating the beating of wings, depending upon whether they belong to flying foxes, insects, or particular species of birds, e.g. the hornbill.

64. *fog*: *Fog* is not distinguished from *cloud*.

*65. *foot*: Reliable and stable.

66. *four*: Only a few of the HP languages have a distinct lexeme for *four* rather than having a reduplication of that for *two*.

67. *freeze*: Although the people do encounter ice occasionally on the top of the Saruwaged Range, they have no term for *ice* nor for *freezing*.

**68. *full*: It is usually easy to elicit a term for *full*, but one should be aware that there are terms for *full to the brim*, *fully packed* and *overflowing*.

*69. *give*: See the comment under *bite*.

*70. *good*: Stable and reliable. Should one elicit the word with a verb, the respondent may, but not always, give an adverbial best glossed as *well* or *excellently*.

71. *grass*: The common types of grass used by expatriates in lawns and airstrips were imported. It remains to be seen which of the many varieties of indigenous grasses is suitable as a test item.

*72. *green*: Of the five colours in the test list, this is the most difficult to elicit. What is regarded as most accurately representing the colour *green* for an expatriate is usually on the fringe of the colour range of *green* for HP languages. The word which is most stable also means *living*. Other responses have included terms for *light aqua*, *sky-blue*, and a *grey-green*.

73. *guts*: See Laycock 1970:1148. In HP languages the term involves the root for *stomach* in a compound.

*74. *hair*: Stable and reliable. The HP languages do not distinguish *body hair* from *head hair*.

*75. *hand*: This is not terminologically distinct from *arm*.

76. *he*: See Laycock 1970:1148.

*77. *head*: Reliable and stable.

*78. *hear*: The word glossed as *to hear something* really means *to sense something* and includes the concepts of knowing, thinking, understanding, feeling, and smelling.

*79. *heart*: The term for *heart* includes the *liver*, and sometimes the *pancreas*. It can be distinguished by compounding it with that for *seed*.

80. *here*: In all the HP languages this term is the root for *this* plus the locative clitic *at* and so duplicates other items in the diagnostic list.

81. *hit*: See the comment for *bite*.

82. *hold*: In contrast to Laycock's experience, I have found this to be a stable and reliable test item which is very easy to elicit.

**83. *horn*: There are no horned animals indigenous to Papua New Guinea.

84. *how*: In all the HP languages this term is a compound based upon the root for *which*.

85. *hundred*: This does not exist as a distinct lexeme in HP languages.

86. *hunt*: Expressions for hunting are built upon the word for *forest*, e.g. *to go to the forest*.

87. *husband*: Not terminologically distinct from *man*.

*88. *I*: This is one of the most stable of all the vocabulary of Papuan languages.

89. *ice*: See the comment under *freeze*.

90. *if*: This item duplicates the clitic glossed as *because*, but with the verb in the irrealis mode.

91. *in*: Not distinguished from the lexeme for *at*.

*92. *kill*: Not distinguished from the lexeme for *hit*, except that a subsequent verb may be added to indicate that the object died.

**93. *knee*: Stable and reliable.

*94. *know*: See comment under *hear*.

95. *lake*: Due to the nature of the terrain lakes are very few. More common responses include *spring-fed pool*, *puddle*, and even *artificial pool constructed as a stratagem to attract birds during the dry season*.

96. *laugh*: Often words for *laugh* are onomatopoetic and so are not particularly stable.

*97. *leaf*: This term is stable and reliable, but one has to be careful not to record terms for specific leaves, e.g. *banana leaf*, or for leaves in the early stages of growth when special terms apply.

98. *left (side)*: Stable and reliable in the HP languages.

99. *leg*: Not terminologically distinct from *foot*.

*100. *lie* (vi): The verb *lie* is one of the existential verbs and so may be glossed by one of the forms of *to be* when it occurs with non-human referents. With human referents it means *sleep*, and any attempt to limit it to *lie*, *recline* leads to very forced expressions.

101. *live* (vi): The verb is stable and only occurs with human referents. It is, however, difficult to elicit and normally only applies to people living in a geographical location distant from the speaker.

*102. *liver*: Not terminologically distinct from *heart*.

*103. *long*: See Laycock 1970:1154.

*104. *louse*: Normally *head louse* is distinguished from *body louse* and is easier to elicit. *Body louse* is often confused with other parasitic insects found on the body.

*105. *man*: Stable and reliable.

*106. *many*: It is difficult to distinguish a term for *many* from such related terms as those for *plenty* and *numerous*.

*107. *meat (flesh)*: Since the meat is considered the part of an animal that has 'real' value, the term is occasionally confused with that for *fruit*. The term for *fruit* includes the concepts of *truth* and *right (side)*.

**108. *moon*: This term is not very stable and in many languages it is represented by an idiom with the literal meaning *eye of the place*.

109. *mother*: See Laycock 1970:1155.

*110. *mountain*: Easily elicited in the HP languages. One only has to be careful to avoid the term for *purple mountains in the distance*.

*111. *mouth*: In some languages this is not terminologically distinct from that for *tooth*.

*112. *name*: Stable and reliable.

113. *narrow*: *Narrow* of a road is distinct from *narrow* of a mountain range, and it may be confused with *overgrown*.

114. *near*: In most languages this term is related to that for *short* and so is better omitted from the test list.

115. *neck*: There is no term for the neck, but there are terms for *throat* and *nape*, with the former being the more stable of the two.

*116. *new*: This term is not very stable. Some respondents gave terms for *recent* or *strange*.

*117. *night*: Usually this designates the quality of time, viz. that when it is totally dark, rather than a period of time. It is often not terminologically distinct from that for *darkness*.

118. *nine*: See comment under *eight*.

*119. *nose*: This term is stable and widely used in metaphors, but care must be taken not to elicit the term for *pig's snout*.

*120. *not*: This term is easily elicited when a verb is negated.

121. *old*: *Old* with reference to a person's age is distinct from *old* with reference to utility. Thus the choice of terms will distinguish an elderly person from one who has lost his usefulness.

*122. *one*: The term is easily elicited but frequently it is not distinct from that for *another*.

*123. *other*: Some languages distinguish another of the same kind from another of a different kind.

*124. *person (human being)*: In the HP languages the term for *man* is unmarked and so serves to denote *people*.

125. *play*: This is best elicited with reference to children. It is not very stable.

126. *pull*: Stable and reliable.

127. *push*: This is difficult to elicit and frequent responses provide terms for *press against it, pry it away, to push it away with the back of one's hand, to knock it away,* or *to hit it and it moves away*.

*128. *rain*: Stable and reliable although care must be taken not to record terms for *mist* or *cloudburst*.

*129. *red*: See Laycock 1970:1159.

130. *right (side)*: This term includes the concepts of *truth* and *fruit*.

131. *right (correct)*: This term is not distinct from that for *right (side)*.

132. *river*: This term is not distinct from that for *water*.

*133. *road (path)*: Stable and reliable.

*134. *root*: Care should be taken to avoid recording terms for *buttress root* and *air root* such as pandanus have.

135. *rope*: Although this term is not distinct from that for *vine*, I have had no difficulty eliciting it. There is, however, interplay between the terms for *rope* and those for *road* and these are blended in the term which designates the vines by which wild game travel between trees (see McElhanon and Voorhoeve 1970:76).

136. *rotten*: See Laycock 1970:1160. Furthermore, there are variant terms depending upon the choice of referent.

**137. *round*: See Laycock 1970:1160.

138. *rub*: Because a rubbing action is usually done for a specific reason it it difficult to obtain consistant responses when one conducts a language survey. Respondents often confuse the term for *rub* with those for *wash* or *sharpen*.

139. *salt*: This term denotes locally manufactured salt and is frequently represented by a complex lexeme. Moreover it is highly unstable and subject to borrowing.

*140. *sand*: Sand is not found apart from the beach areas and so respondents usually substitute the term for *gravel*.

**141. *say*: Stable and reliable, but also irregular in a number of languages.

142. *scratch*: Stable and reliable, but care must be taken to avoid specialised terms for scraping out containers, grating food, or scratching the ground.

143. *sea*: Stable and reliable.

*144. *see*: See comment under *bite*.

*145. *seed*: Not terminologically distinct from that for *egg*.

146. *seven*: See comment under *four*.

147. *sew*: Because of the action in sewing this term is frequently not distinct from that for *stab*.

148. *sharp*: The term usually is a compound involving the term for *tooth*.

149. *shoot*: Stable and reliable.

150. *short*: Often the terms are built upon a root meaning *middle of objects which are elongated* or *remaining portion* of something which was originally longer, e.g. the butt of a cigarette. These roots, however, are quite stable and reliable.

151. *sing*: This usually involves a complex lexeme.

152. *sister*: See comment under *brother*.

*153. *sit*: I have found no lexeme in any of the HP languages which could be glossed by *sit*. *Sit down* is a compound: *descend-be situated*.

154. *six*: See comment under *four*.

*155. *skin*: Stable and reliable.

156. *sky*: Stable and reliable.

*157. *sleep*: Stable and reliable.

*158. *small*: Generally this term is easy to elicit, but some languages have plural forms of it. Moreover, there are numerous related words which collocate with particular nouns or refer to things abnormally small.

159. *smell* (vt): See comment under *hear*.

*160. *smoke*: Stable and reliable.

161. *smooth*: Elicitation of this item is difficult, and the most common responses are more general terms such as *good*, *satisfactory*, or *uneven*. Other responses included *flat* and *slippery*.

162. *snake*: See Laycock 1970:1164.

163. *snow*: Snow does not fall on the Huon Peninsula.

164. *some*: Easily elicited when the reference is to mass nouns, but the meaning includes that of *half*. When the reference is to count nouns, the response may be that for *few*.

165. *speak*: Not terminologically distinct from *say*.

166. *spear*: This is not nearly as widespread as the *bow*, which constitutes a much better diagnostic term.

167. *spit* (v): *Spittle* is more easily elicited, and in most cases the verb is derived from the noun. The spitting of betel involves two other terms: between the teeth when spitting betel juice, and blowing when spitting out the pulp. As a noun it is stable and reliable.

168. *split*: There are different terms depending upon the object one splits, and there are several onomatopoetic forms for objects which split of themselves.

169. *squeeze*: Attempts to elicit this often result in terms for *hold*, *twist*, *wring*, or *pinch*.

170. *stab*: Stable and reliable.

*171. *stand*: Stable and reliable.

*172. *star*: Stable and reliable although several languages evidence an early borrowing from Austronesian (see McElhanon and Voorhoeve 1970:84).

173. *stick*: No generic term for stick has been noted. The responses included terms for *battle stick*, *digging stick*, and *walking stick*.

*174. *stone*: Stable and reliable.

175. *straight*: The item is stable, but one must be careful not to record terms meaning *vertical* or *not deviating*.

176. *suck*: The terms are onomatopoetic but are easily elicited through demonstration.

*177. *sun*: Responses also included terms for *day* and *sunshine*.

178. *swell*: There are variant terms depending upon the cause.

*179. *swim*: People living in the hinterland have no such term.

*180. *tail*: Stable and reliable.

181. *ten*: See comment under *four*.

*182. *that*: See Laycock 1970:1166.

183. *there*: This is represented by *that* plus the clitic *at*.

184. *they*: Not terminologically distinct from *ye*.

185. *thick*: The term is difficult to elicit and is frequently derived from the term for *deep forest*.

186. *thin*: The Selepet language has eight words for *thin* depending upon the kind of referent.

187. *think*: See comment under *hear*.

*188. *this*: Stable and reliable.

*189. *thou*: Stable and reliable.

190. *three*: Some languages have the compound *one and two*.

191. *throw*: Stable and reliable.

192. *tie*: I have found no generic term. Responses include *bind up*, *bundle up*, *hitch* (an animal), and *tie with a slipknot*.

*193. *tongue*: Stable and reliable, although some forms are probably compounds of *eat* plus *flame*.

*194. *tooth*: Stable and reliable.

*195. *tree*: Stable and reliable.

196. *turn*: Difficult to elicit for some languages and responses frequently include terms for *rotate*, *turn over*, and *return*.

197. *twenty*: Literally *one man complete*. See comment under *four*.

*198. *two*: Stable and reliable, and is the basis for dual distinction in pronominal reference.

199. *vomit*: The item is stable and reliable, but it probably involves onomatopoetic forms.

*200. *walk*: Not terminologically distinct from verbs of motion.

201. *warm (hot)*: *Warm* is difficult to elicit and *hot* is not terminologically distinct from *fire*.

202. *wash*: Some languages distinguish personal washing from the washing of items. See Laycock 1970:1170.

*203. *water*: Stable and reliable.

*204. *we*: Some languages distinguish inclusive and exclusive.

205. *wet*: This is difficult to elicit, particularly through Tok Pisin where the usual response is *with water*. Other responses may include *damp*, *saturated*, *juicy*, *watery*, and even *rotten* where food which rots become watery.

*206. *what*: Stable and reliable.

207. *when*: In addition to the lexeme for *when* one may record *at which time*. Moreover, different expressions are frequently used to distinguish the past from the future.

208. *where*: This terms consists of the locative phrase *at-what*.

*209. *white*: The terms usually mean *pale*, *pastel* and occasionally are metaphorical extensions of a noun, e.g. *white cockatoo*.

*210. *who*: In all the languages the interrogative is derived from the homophonous referential pronoun by adding the agentive clitic.

211. *wide*: Usually not terminologically distinct from *big*.

212. *wife*: Not terminologically distinct from *woman*.

213. *wind*: See Laycock 1970:1171.

214. *wing*: Stable and reliable, but care must be taken not to record the terminologically distinct term for *wing of flying fox*.

215. *wipe*: Usually not distinguished from *wash*.

216. *with*: Some languages have special associative clitics which occur with kin terms.

*217. *woman*: Stable and reliable.

218. *woods*: Some languages have different terms for the forest if it is uninhabited or visible in the distance which may also be glossed as *distant (purple) mountains*.

219. *work*: In most languages the term is identical with that for *garden*.

220. *worm*: Large earthworms are often distinguished from small ones.

221. *ye*: Stable and reliable.

222. *year*: Usually identified with the word for *wet season*.

*223. *yellow*: Stable and reliable.

7. CONCLUSION

That there are substantial difficulties in attempting to use either of the standard Swadesh test lists as a basis for classifying NAN languages is obvious. Careful elicitation techniques, however, will remove much of the imprecision inherent in the vocabulary. One very helpful bit of information which assists others in using published word lists is that given by Bromley (1967) who supplied an accompanying index of reliability. I know of no one who has followed Bromley in this. What is surprising to me is that the bird's-eye view which we have obtained by classifying these languages according to the lexicostatistical method has not been proven to be so foul after all. Moreover, that Professor Wurm has been able to discern probable genetic relationships with such a high degree of accuracy is a tribute to the calibre of professionalism which he has maintained through the years.

The last chapter of the history of NAN languages, however, has not been drafted, and it is unlikely that it will be done until after extensive historical reconstruction has been carried out. That day, however, is far in the future, and for years to come one may expect that Professor Wurm's present classification will not be substantially challenged.

NOTES

1. In making this statement I clearly separate Wurm from generalists such as Loukotka (1957) and the Voegelins (1965) who have classified the NAN languages without having done fieldwork. Wurm had direct involvement through his own field studies and those of his many students.
2. See McElhanon 1971 on problems in classifying the languages of Papua New Guinea according to contemporary lexicostatistical procedures.
3. Laycock maintained this same outlook in his survey of 100 years of linguistic research (Laycock 1975c:58). See also Lynch 1981:175.

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POLICY IN FUNCTIONAL ALLOCATION OF LANGUAGES

Anton M. Moeliono

1. SOCIOLINGUISTIC FUNCTIONS OF LANGUAGE

Decisions that concern language policy (Slametmulyana 1959; Halim 1976), may be influenced by linguistic variables, but are usually largely motivated by non-linguistic ones. The motivations are political, educational, cultural, or for wider communication. Basically, such policies are formulated to deal with the sociolinguistic functions of the languages in a society with the assumption that in the modern world there are no truly monolinguistic communities. The decisions about such functions will determine what purposes the languages should or will be used for by the language communities involved.

Discussions on the dimensions of language policy are found in Kloss (1969), who discusses language corpus and status; Garvin (1973) on language allocation; Halim (1976a, 1976b) on language function and status; and Stewart's (1968) sociolinguistic typology of multilingualism. Reviewing these sources and using Stewart's language typology, policy can be discussed theoretically on three dimensions: (1) policy on national languages, (2) policy on other vernaculars, and (3) policy on foreign languages used for special purposes. The languages in each category can then be further categorised according to the functions they fulfils.

The five basic functions, with further sub-divisions are: (1) as an official language, of a country or a region; (2) as a language of wider communication, on a sub-national, national, or an international level; (3) as a language for special purposes, such as religious use or group identity; (4) as a language of education: either as a general medium of instruction, as a first medium of instruction, or as a subject to be studied: (5) as a cultural language in the fields of art, science, and technology.

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These basic functions may be used to characterise languages of the three main types as shown in the following chart:

Language typology by sociolinguistic function			
Function	Language		
	National	Regional	Foreign
1. official			
a. official state language	--	--	--
b. official regional language	--	--	--
2. wider communication			
a. sub-national level	--	--	--
b. national level	--	--	--
c. international level	--	--	--
3. special purposes			
a. religious	--	--	--
b. group identity	--	--	--
4. educational			
a. general medium of instruction	--	--	--
b. first medium of instruction	--	--	--
c. subject studied	--	--	--
5. cultural			
a. language of art	--	--	--
b. language of science and technology	--	--	--

If within one country, there is more than one native (regional) language, the columns for the several languages may show different combinations of functions. Similarly, in the case of the foreign languages in one country, separate languages may also show different combinations of functions. In Indonesia, for example, the columns for regional languages will show different functions for Javanese and Karo (a language of Sumatra), and in the case of foreign languages, different functions for English and Arabic.

Noss's (1971) discussion of language policy differentiates (1) official language policy: government recognition of language types and their uses; (2) educational policy: concerning the use of languages as media of instruction and as subjects of study at various levels of governmental and private education; and (3) general policy: unofficial agreement given by the government to the use of languages in business, mass communications, and for communication with foreigners. Noss's first two kinds of policy are already mentioned in the typology used here, and the third, even if not official, is included under the function of wider communication (4) which covers such areas as tourism, aviation, and contact with foreigners.

The first, second, and third categories have a characteristic in common, that is, once they are settled upon by the institution concerned, parliament, or the law, all that is required for their recognition is acceptance by the general public. The fourth and fifth functions, especially for written and standard languages, have the following characteristics. Language policy in these two fields often requires further planning and implementation action in the form of development and cultivation. In addition, these two functions can only be realised with active cooperation from the public, or at least from intellectuals. Finally, language policy in the fields of education and culture, at least in Indonesia, is frequently discussed at conferences and meetings on linguistic matters, and decisions in these fields are evaluated by bodies in the executive, legislative, and judicial branches of government.

The sociolinguistic functions of language are not necessarily static, but may change through time. The most obvious change in the functional allocation of languages take place when one language in a society takes over the functions of another in a major way. In an extreme case a language community may substitute another language for its mother tongue. Ferguson (1977) quotes Jones (1953) to illustrate changes in language functions which may occur. For example, in the mid 14th century, English was used in England as the language of the home, while French functioned as the language of the court and parliament and Latin was the language of education and science. In the mid 16th century, English took over all the functions of French and Latin, except in some fields of education and science where Latin still prevailed. During the reign of Queen Elizabeth I, lexical items from French and structural influence from Latin became part of the English language, with the development of the functions of the English language in various fields.

2. STATE LANGUAGE (BAHASA NEGARA), NATIONAL LANGUAGE (BAHASA KEBANGSAAN), AND OFFICIAL LANGUAGE

Many new nations face the problem of political and ethnic boundaries that do not coincide. The nation as a political and geographical entity is not always identical with the nationality as a social and cultural entity. It would be useful here to take up Fishman's suggestion (1968b) that we differentiate between 'nationism' and 'nationalism' as the distinction has to do with this type of language problems and related policy. The ideal of 'nationism' (in Fishman's terminology) is to achieve political unification, that is, to form a state or nation, which often precedes social and cultural unity. This unification or integration can be looked at as horizontal unity. The ideal of 'nationalism' is to achieve social and cultural integration. Such integration can be looked at as vertical integration. A nationality can develop through a process of fusion of several primordial ethnic groups each with its own authenticity, values, and sense of belonging.

The basic language problem of nationism is choosing an official state language and promoting its wider use, whereas the basic problem of nationalism is how to firmly establish a national language, to develop it, and to cultivate it. In nationism the first language problem is not authenticity or national identity, but efficiency. The choice of Malay and English as official languages by Malaysia in 1957, and the choice of Malay, English, Tamil, and Chinese by Singapore in 1965 are examples of solutions to languages problems in terms of policies of nationism. The national language problem in terms of nationalism is tied to the ideal of cultivation of a larger cultural or ethnic identity. The language that is idiologised becomes a symbol of unity for mobilisation of the masses and involvement and commitment of the elites (Fishman 1968a).

As an illustration of this point we may refer to Soekarno's speech of August 15, 1928 in Jakarta, one year after the founding of the *Perserikatan Nasional Indonesia* (Indonesian National Association), in which he stated that language differences between ethnic groups would not hinder unification, but the sooner Malay (Indonesian) became widespread, the sooner Indonesia would achieve independence (Schrieke (1929) in Van der Wal 1963:481). As Director of Education and Religion, Schrieke suggested in a report to Governor General De Graeff that Malay be eliminated as a required subject in the *Hollands-Inlandse School* in Java. He added that the use of Malay by the nationalists had become a way of expressing their nationalistic beliefs. In 1932 the elimination of Malay from these schools was indeed considered by the Dutch East Indies Government. It was generally supported by the *Persatoean Goeroe Hindia-Belanda* (Dutch East Indies Teacher's Association), but strongly opposed by the native press (Van der Wal 1963:482).

The third section of the Sumpah Pemuda (Youth Pledge) composed by Muhammad Yamin (Reksodipuro and Subagio 1974) at the Indonesian Youth meeting in 1928, referred to the 'bahasa persatoean' (language of unity), showing that at that time the concept of a national language was already formalised. Seventeen years later the language of unity became the language of the Indonesian state. The term 'bahasa kebangsaan' or 'bahasa nasional' (national language) is not used by either the formulators of the 1945 Constitution of the Republic of Indonesia, the 1949 Constitution of the United Republic of Indonesia, or the 1950 Provisional Constitution of the Republic of Indonesia. In the 1945 Constitution it is stated that the state language (bahasa negara) is the Indonesian language, while in the 1949 Constitution and the 1950 Constitution we find the clause: "The official language of the Republic of Indonesia is Indonesian."

In the Dutch East Indies period, the problem of Malay as an official language arose as early as 1918 when the *Volksraad* was opened by Governor General Van Limburg-Stirum in Batavia (Jakarta) (Van Heekeren 1918, Een Taalkwestie 1918). Moh. Thamrin also suggested then that the use of Malay (Indonesian) be allowed to native members of the council (Maleisch 1938). Although Malay was then recognised as the second official language, after Dutch, not many of the members used it. The problem of official language arose again at the first Indonesian Language Congress in Solo in 1938. One decision made there was to appeal to the Dutch East Indies Government to recognise Indonesian as an official language, and for Indonesian to be used as a medium of communication in all representative bodies (Lembaga Bahasa Nasional 1972). During the Japanese occupation, when the use of Dutch was not allowed and not many people understood Japanese yet, the Japanese government was forced on April 29, 1945 to recognise Indonesian as an official language (Teeuw 1961). Finally even

Lieutenant Governor General Van Mook, head of the Netherlands Indies Civil Administration, put out an announcement on November 6, 1945 to the effect that Indonesian would be the second official language in addition to Dutch in the colony.

The review of these events brings us to the conclusion that in the history of Indonesia, the functions of the national, state, and official language, although somewhat similar, can be differentiated. The national language is the language of unification. It is based on nationalism, and it can be realised before the state is formed. There can only be a state language when there is a political and geographical entity, which has a legal form. Meanwhile, the function of an official language may or may not be based on the concepts of nationalism or nationism. It may be added that national languages usually function as state and official languages, as, for example, in Indonesia, Malaysia, Singapore, and Thailand. On the other hand, official languages are not always national languages: for example English, Tamil, and Mandarin Chinese in Singapore. It may also happen that a country has no national language, as in Brunei, Switzerland, Belgium, Canada, and perhaps also the Philippines. In 1973 the Philippines rescinded the choice of Pilipino (Tagalog) as the national language. The revised constitution stated that the Philippine National Assembly must take steps to create a new national language, to be called Filipino, and which should be an amalgamation of all the Philippine languages. This decision has left a number of foremost linguists there in serious doubts as to how to proceed.

The three types of languages can also be characterised in terms of their symbolic functions. In this connection Garvin (1973) distinguishes three functions: (1) as a symbol of unity, symbolising national identity; (2) as a symbol of distinctiveness representing differentness from other languages, and (3) as a symbol of prestige, representing the prestige of the language community. State languages and official languages function as symbols of authority. National languages function as symbols of unity, distinctiveness, and prestige.

Sociolinguists have been greatly interested in describing the conditions which allowed Malay, the native language of a small percentage of the population (4.9% in comparison with 47.8% for Javanese and 14.5% for Sundanese), to become the undisputed national language. At that time there were about sixty million inhabitants in Indonesia (Van der Veur 1969:32). Three reasons have often been mentioned. First, Malay functioned as a lingua franca for intercommunication between ethnic groups at least since the beginning of this century, taking into consideration its spread through the school system and the press. It was known in various functional styles — 'pasar' Malay, both as a pidgin and a creole; the administrative Malay of the Dutch East Indies government, school Malay which was the closest to the dialect of Riau, and the Malay of the press. Second, although the number of native speakers was not as great as the number of speakers of other Indonesian languages, such as Javanese, Sundanese, or Madurese, it had a wider geographical distribution as a second language than the other languages. Third, Malay is related to other Indonesian languages and not considered a foreign language.

In addition to such sociolinguistic reasons, there was a psychological reason. Just because it was the language of a minority, and the native speakers of Malay were not politically, economically, socially, or culturally dominant at that time in comparison with other groups — even taking into account the splendour of the kingdoms of Aceh, Malaka, or Sriwijaya — the choice of Malay

as the national language did not make anyone feel they would be dominated by a more powerful group. Everybody at the 1928 meeting felt themselves equally put at a 'disadvantage' since their levels of proficiency in Malay was not as high as those in their individual mother tongues. Thus, although each group had to be willing to give in on the use of their own native language, the decision did not result in a dominant group winning out. This hypothesis is supported by cases of national language decisions in other parts of the world.

The choice of Swahili, the native language of a minority group in Tanzania, as the national language of that country is an example of a situation similar to that in Indonesia (Kelman 1971; Whiteley 1968, 1971). On the other hand, the choice of Hindi-Urdu, the language of 42% of the population of India, as the national language, has been vigorously disputed by native speakers of other languages, especially Tamil (Kelman 1971). The uncertain situation of Pilipino (Tagalog) as the national language of the Philippines today is understandable when we note that among the eight major languages of the Philippines, Tagalog is the native language of 21% of the population, Cebuano of 24.1%, Ilocano of 11.7%, and Panai-Hiligainon of 10.4% (Sibayan 1971). Cebuano and Ilocano are in competition with Tagalog. Their native speakers do not want Tagalog to 'win'. The reasoning above could also be applied to Singapore, where Malay was chosen as a national language, although it was not meant to be widely used. The function of Malay is as a ceremonial language (Kuo 1980).

The types of languages chosen as national languages or official languages may serve as the basis for a typology of nations (politico-geographic entities), illustrating the variety that may be found. Kloss (1968) identifies two main groups: (1) endoglossic nations whose official languages are native languages and (2) exoglossic nations, whose official languages originate from other language areas. Indonesia may be cited as an endoglossic nation, whereas Kenya may be considered exoglossic.

There is still one problem to be discussed in this context; i.e. how national integration can be achieved in a multilingual situation. According to Fishman (1968), there are two reasons why multilingualism need not be considered an obstacle to national integration. First, the use of different languages in everyday life need not be seen as an unusual situation. Differences in phonology, morphology, syntax, or even language code, whether used consciously or unconsciously, are often not considered as interfering with communication. As well as in Indonesia, such situations may be found in East and Central Africa where Swahili is used (Polomé 1963 quoted by Fishman), and elsewhere in South-east Asia. These differences are only divisive if there is an ideology of dividedness; conversely, if there is an ideology of unity, such differences are minimised or even considered nonexistant. Second, even recognised language differences need not be divisive in a well-established diglossic, or polyglossic situation. In a nation like Indonesia, with hundreds of languages, it would surely be impossible to carry on government administration, education, and business in a great number of different languages. Thus, there must be a division of labour between the national language and the regional languages of various ethnic groups. In a multilingual situations notes Stewart, there is a tendency for the languages used side by side to take on separate functions, so that a stable situation develops in which the languages are no longer in competition.

3. LANGUAGES OF WIDER COMMUNICATION

To describe the functions of languages of wider communication, we may start with the assumption that there are four types of communicative situation which are concentric, and which may be called primary, secondary, tertiary, and quaternary language communities. In a primary language community, often based on face-to-face communication, the language difference between speakers are personal or idiosyncratic: in the literature these differences are often called differences of idiolects. In Indonesia such a situation exists in the language communities speaking local dialects of Malay, Javanese, Sundanese, or Batak. The differences within these communities, in this classification, also include variation in patois. The secondary language community is the community of speakers who use autonomous languages which are related. That is, structurally, these languages are similar. Unlike dialects these languages are not simply sub-variants of another language. For example, Javanese, Sundanese, Madurese, and Balinese share a fairly high level of mutual intelligibility. The differences between these languages, in phonology, grammar, and lexicon, do not prevent understanding based on their common core. The tertiary language community is the multilingual community. Members who speak only one language experience difficulty in communication with other members who do not speak that same language. Such societies need languages of wider communication to communicate across the boundaries of primary and secondary language communities. In tertiary language communities, two types of language of wider communication may be distinguished: one type functions at the subnational level, the other at the national level. Examples on the subnational level are Tok Pisin and Hiri Motu in Papua New Guinea (Wurm 1968, 1974; Dutton 1976). On the national level examples are Indonesian, Swahili, and Putonghua (Chinese). The latter type of language of wider communication functions as a national language. The quarternary language community is the community whose speakers cannot inter-communicate by means of any of its idiolects, dialects, or languages. For mutual understanding an international language of wider communication is necessary. Greek Koiné, Latin, Arabic, Persian, French, Spanish, and Portuguese, — and perhaps also Putonghua, if other major Chinese languages such as Cantonese, Wu, Southern Min, Northern Min, and Hakka (Halliday et al. 1964) are not considered dialects — have been used as international languages of wider communication. But today the language which seems to be emerging as the formost world is English.

Despite the lack of an explicit official policy, there is often unofficial agreement among the authorities on the use of a language for international communication within a nation in particular areas, such as aviation, diplomacy, tourism, and business. The desire for a single international language to be used throughout the world was apparent in the atmosphere of 'progressive internationalism' after the First World War. At that time a new interest arose in artificial languages created at various periods: Esperanto (1887), Ido (1901), Interlingua (1903), Occidental (1922) and Novial (1928). It is interesting that Sapir (1931) and Jespersen (1928), as well as Guerard (1922), Shenton (1933), and Jacob (1947), launched appeals for the acceptance of international auxiliary languages as world languages. The International Auxiliary Language Association has attempted since the Second World War to create various types of international languages in the hope that one will eventually be chosen as a world language. The vocabulary is to consist of common elements of English,

French, Italian, Spanish and Portuguese. With McQuown (1964), we may say that such a language will be accepted by the world when the world is ready, regardless of imperfections still being discussed.

In addition to the language of wider communication, there is also the concept of the 'working language'. A working language is the medium which is most widely understood, and therefore most appropriate for the work of national administration or international conferences. In the United Nations, for example, English, French, Spanish, Russian, and Putonghua are official languages, but only English and French function as working languages (Kloss 1968). Similarly, although Singapore has four languages which function as official languages, only English is generally considered a working language (Kuo 1977). Working languages are characterised by two other functions: the function of advantage, which reflects the benefits of using the language, and the participatory function (Garvin 1973), which allows the language user to take part in world culture and civilisation. If the participatory function is limited in scope to the national level, a sufficiently developed national language, state language, or official language may take on this function in a multilingual society. Native speakers of Loinang in Sulawesi, for example, can participate in the political and social development of Indonesia through the medium of Indonesian.

4. LANGUAGES FOR SPECIFIC PURPOSES

Languages for special purposes are languages used in a community only in specific fields. That is, in general, they are rarely used outside of certain fields. One such field is that of religion. In Indonesia, the following languages are used as languages for specific purposes in the field of religion: (Classical) Arabic by Moslems; Latin, Greek, and Hebrew by Christians; and Sanskrit by Balinese Hindus and Buddhists. These languages have in common that they are classic, literary, and primarily written languages. People may consider such languages 'holy' because of their association with religion. As languages of religion or of holy books, they are often taught in educational institutions, especially religious ones, such as institutes of religious studies, theological schools, and seminaries. Of course, as living languages, Arabic, Greek, and Hebrew have different functions in other communities.

Another function which may be discussed under this heading is the psychological and sociological role sometimes played by a particular language in the identification of a particular social group (cf. Herman 1968). In Indonesia, in the context of a conversation, when one participant wishes to find out the background, education, or social class of another participant, he may slip in terms of reference or address from Dutch (u or ik), Chinese (owé), or Jakarta Malay (ané or enté). If the adressee replies in kind, it is as if he has shown a membership card. The psychological distance between the two participants disappears and is replaced by a feeling of solidarity (cf. Brown and Gilman 1968). The use of the English pronoun you in Indonesian conversation does not have this clear function of identification, perhaps because English is taught from junior high school everywhere in Indonesia so that it does not come to function as a symbol of any particular group, except for the fact that the user has had some secondary education.

5. LANGUAGE IN EDUCATION

Policy concerning languages to be used or taught in formal education in a multilingual society may also be seen as having three components, following the pattern of general language policy. First is the question of how the people are to learn the national language so that they will identify with their country and its culture. Second is how to maintain proficiency in their mother tongue — if they are not native speakers of the national language — so that they can appreciate the spirit of their native ethnic group and thus value their heritage. Third is how to promote the study of foreign languages which can open the doors to the worlds of international science and technology, to societies which are close to them for historical reasons, or civilisations they should know because of their importance.

The most important medium of educational policy is the school system. Through the educational system, planned and systematic training can be given. From the historical point of view, a detailed study of language policy in Indonesian education from the time the Dutch first arrived in Indonesia would be extremely interesting. A complete description of the history of this subject would be beyond the scope of this paper. Literature on educational and language policy during the Netherlands Indies government period is extensive for those who might wish to reflect on the experience of others and avoid their mistakes.

6.1 The national language

In general, we may say that language policy in new nations focuses on national languages. The strength of the national language in the educational system according to Noss (1967) depends on three variables: (1) the degree to which the use of the language is widespread throughout the country, (2) the number of native speakers of the national language and of other languages within the country and in the world, and (3) the availability of literature in the national language.

The degree to which the national language is widespread does not depend only upon the language policy. Other variables influence its spread. Among them are: (1) facilities for teaching non-native speakers, including teachers, materials, and methods; (2) motivation to learn, including economic and career incentives; (3) opportunities available for learning the language, both for children and for adults; (4) valid testing procedures on the national level to evaluate improvement in language proficiency for purposes of language planning and implementation; (5) strengthening and cultivating the national language through the mass media, including private radio stations and publishing; and (6) patterns of migration and transmigration (Gonzales 1978). The ratio between the number of speakers of the national language and speakers of other languages depends upon: (1) the rate of population growth; (2) policy toward other languages and efforts to develop regional languages as part of national policy; and (3) foreign interest, which may increase the number of speakers. Foreign interest in the language may be motivated by economic considerations or for purposes of studying source literature in the national language. The amount and types of literature in the national language depend upon (1) a general educational policy encouraging new works as well as translations; (2) a healthy book industry and libraries planned to develop interest in reading (cf. Kridalaksana 1976); and (3) policies in other fields.

For example, a trade policy facilitating the importing of books in the national language will provide healthy competition and improve the quality of domestic production.

6.2 Regional languages (vernaculars)

Language policy for the educational system of a multilingual nation must take into account many, sometimes conflicting, considerations. It is usually not problematic that the official national language will be taught as a school subject. A more difficult problem is the choice between the national language or a regional language, the first language of the students, as the language of instruction. In making this choice, the factors noted by Bowers (1968) should be noted: (1) the psychological advantages of education in the mother tongue; (2) the demands of various ethnic groups for recognition of their languages, and political repercussions in the society; (3) the costs of multiplying languages of instruction; (4) the availability of teachers able to teach in both the vernaculars and the national language; (5) the lack of teaching materials in regional languages and the impact on writing, translating, and publishing; (6) the problem of achieving a standard testing system in several languages; (7) problems arising in secondary and tertiary education if the language of instruction or language taught as a subject does not have an adequate literature or is not well developed for expressing the ideas of modern science.

The considerations above may be further elaborated as follows. The 1953 UNESCO conference on education concluded that education should be given in the mother tongue insofar as possible, on the assumption that exposure to the mother tongue as long as possible is useful for the development of intelligence, emotional growth, and socialisation of the individual. A number of studies (Prator 1950, Osterberg 1961, Macnamara 1966, Davis 1967, Rubin 1968, Engle 1975) seem to support this conclusion. In the ideal situation, we would not need to question this position, especially where the majority of the population all speak the same language. But policy-makers cannot simply set aside the constraints that force them to compromise in the implementation of ideal policies. They are faced not only with the rights of individuals, but with problems of economic feasibility and of equalising educational opportunities. Let us take note of the comments of Bull (1955) and Dakin (1968) on the UNESCO report, and apply them to the Indonesian situation.

In a multilingual community, what is best for the child psychologically may not be best for him as an adult socially, economically, and politically. And what is best for both the child and the adult may not be possible for the society which must provide a useful general education which cannot be organised and executed on an individual basis. Most modern nations today have achieved their positions through the unification of a heterogeneous language community as a more homogeneous political and economic unity (cf. Fishman 1968c). Modern education and national administration cannot easily be achieved in a highly multilingual community.

In addition to the factors mentioned by Bowers (above), we must also point out that a teacher is not necessarily qualified to teach a (regional) langu solely on the basis that he/she is a native speaker of the language. That consideration also applies to teachers of the national language. Many teachers of Indonesian are convinced that they are prepared simply because they are

Indonesians. Language policy must evaluate costs and benefits, both short-term and long-term, for the individual, the child, and the society. With these considerations in mind, we conclude that the solution to the problem of language of instruction does not lie in simply accepting or rejecting the mother tongue. The mother tongue may be used as the medium in the lower grades. What should be further investigated is how long the mother tongue should be used so that the national language can take over as the medium of instruction at the most appropriate point. If in section 6.1 above concerning the national language we suggested that multilingual stability was guaranteed as long as diglossia or polyglossia was maintained, then in the matter of language of instruction at the elementary level there need not arise any competition if the diglossic functions are maintained.

6.3 Foreign languages

The purposes of teaching and constraints which apply to policy on language of instruction in large part also apply to policy on foreign languages. We are sometimes faced with policies which are based on the prejudice that the teaching of foreign languages, such as English in Indonesia, must be provided for all secondary students for the sake of equal opportunity. All students should be provided with the same opportunities to learn English. Although this appears to be fair, it does not take into account differences in language ability among students, for English is a required subject, not an elective. In this connection, policy makers in developing nations should consider the following factors pointed out by Noss (1967), who studied the relationship between language policy and implementation.

The first factor is the attrition rate. If there are a large number of dropouts, that factor should be taken into account in planning language teaching. If a new language, for example a foreign language, must be taught to a large number of students, it is far more economical to put off that subject as long as possible. Teaching a new language from the first grade will not only spread financial resources thin, but is not a good use of time for (potential) dropouts who could be doing other subjects. Latief (1979:64) has shown that junior high school (ages 13-16) attrition is 52.4-24.5=27.9% (an initial enrolment of 1,732,776 drops to 730,345) and senior high school (ages 16-19) attrition is 24.5-11.6=12.9% (an initial enrolment of 730,345 drops to 318,331). Less than half of the high school students go on to higher education.

The second factor is the compression factor. The compression of time in language study, especially if the language is only taught as a subject and not used as a language of instruction in other subjects, is far more efficient from several points of view. In general we may say that one hundred teaching hours in three months are far more effective than one hundred hours over a whole year. In practice in Indonesian junior high schools English is taught for four hours a week for three years, in high school it is taught on the average of three and a half hours a week for three years (Latief 1979:70-71).

The third factor is the availability of teachers able to serve as model speakers. The purpose of English teaching in Indonesia schools was outlined in 1967 as emphasising the following skills, in order of importance: (1) effective reading ability; (2) ability to understand spoken English; (3) writing ability; and (4) speaking ability. The second and fourth skills require a teacher whose spoken

English can serve as a model. Providing the number of qualified teachers required for the thousands of students between 13 and 19 years of age (according to Latief's article: 6,071,209) is a serious problem, one which cannot be set with the formula that all must be provided with equal opportunity. The final results have proved to be that high school graduates have none of the skills mentioned above which are needed for higher studies.

7. LANGUAGE OF CULTURE

Languages of culture serve as means of expression in the fields of art, science, and technology. Arts which are expressed in language are vocal music, literature (prose and poetry), and theatre (modern and traditional). Film and the traditional shadow play may be considered types of theatre (Koentjaraningrat 1976). Languages of science are written modes which are used for recording research and for communication in the fields of science and technology. In Ferguson's (1962) typology, languages of science are types W_2 and W_3, differentiated from type W_0, languages usually not used for purposes of written communication, and type W_1, languages used for written communication only in everyday contexts.

Languages which function as languages of literature in Indonesia are such well-known languages as Javanese and Sundanese, as well as Indonesian. Modern Indonesian literature has been shaped by poets, writers, and dramatists of various ethnic backgrounds. Indonesian writers like Chairil Anwar, Sitor Situmorang, Ajip Rosidi, Achdiat Kartamihardja, Rendra, Soebagyo Sastrowardojo, Pramoedya Ananta Toer, I.G. Pandji Tisna, Usmar Ismail — to mention only a few — have created a literature which is on a par with world literature, as inheritors of a traditional culture and of world culture. In this way, writers have contributed to the development of Indonesian as a natural language. A language without a literature is more readily considered an artificial language.

In this connection perhaps we should re-examine the stance of the writers of the 1945 generation who wanted to cut all ties to their mother tongues, in order to create a new literature. Perhaps because Indonesian was the official language, and therefore came to be used in formal situations, it seems that when Indonesian is used as a language of culture and literature, the sayings and idioms which characterise a natural language are no longer often used. Because people want sayings and idioms, they use translated or borrowed ones, which are difficult to understand without knowing the originals. For example we may mention the new proverb Ia mendengar lonceng berbunyi, tetapi tidak tahu tempat anak loncengnya bergantung (literally: *He hears the bell ringing, but doesn't know where the clapper hangs.*) A synonymous older saying is Seperti katak mendengar guruh (*like a frog hearing thunder*). The expression menarik satu garis dengan (*take the same line as*) has the synonymous berpihak pada (*to side with*). Van Pernis (1952) has collected dozens of such examples symbolising Si Malin Kundang's denial of his ancestry. Certainly languages of culture must be firmly based in the present, and look to the future, but the past need not be rejected. It is strange to hear some people proclaim on the one hand that their cultural languages are very different from Malay, and on the other that they could never express their innermost feelings in Indonesian. Such statements reveal the prejudices of those who base their evaluations of the capabilities of the language only on their own level of ability in that language.

Languages of science and technology require special sentence constructions and vocabulary. There is an interdependence between the progress of science and the development of the language which records it, explains it, and communicates it to others. A society which does not encourage scientific development will not have a language of science; conversely the lack of a language of science will retard the growth of a new generation of scientists (cf. Nasoetion 1970, 1974 and Samsuri 1978). What are the characteristics of a language of science? Havranek (1964), a linguist of the Prague school, in discussing the characteristics of a standard language which underlie those of a language of science, concludes that the most important characteristic is its rationality. This means that it can formulate statements which are accurate, exact, and abstract. The form of such sentences reflects the objective precision of science in such a way that the parts of the sentence resemble logical propositions. Logical relations are expressed in compound sentences which show the ordered logical connection between ideas. In addition to relations of equality shown by co-ordination, relations such as cause and effect, motive and goal, parallelisms, possibility, probability, and necessity, are made explicit by sentence structures with a hierarchy of subordinate clauses. Such complex sentence structures raise the need of new conjunctions. In Indonesia, for example, a number of nouns have changed their word class to become conjunctions: sebab (*cause because*), untuk (*share, ration/for*), bagi (*part/for*), berkat (*blessing, favour/due to*). A language of science requires a unified lexicon which (1) is unambiguous, (2) captures the details of complex concepts, and (3) expresses abstract and generic concepts. Languages of science express information, where languages of literature express the imagination.

Note:

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SUBJECT IN SAMOAN

Ulrike Mosel

0. INTRODUCTION

The aim of this paper is to describe the main syntactic characteristics of Samoan case-marking patterns, the organisation of syntactic relations and the notion of subject. Most linguists who have written about Samoan recently, particularly Sandra Chung (1978), claim that Samoan shows an Ergative case-marking pattern, but has to be classified as a syntactically Accusative language which, like any other Accusative language, has the syntactic category of subject. The following analysis will show that Samoan syntax follows its own rules and that verbal clauses lack the category subject — if subject is, roughly speaking, defined as a grammaticalised topic within the clause (compare Sasse 1978, 1982; van Valin 1977).

0.1 Abbreviations

The origins of the examples are given by means of the following abbreviations:

Agafili	Agafili (1985)	Mi	Milner (1966)
Aiono	Aiono (1980)	St	Stübel (1896)
Ch	Chung (1978)	Tau	Larkin (n.d.)
F	Moyle (1981)	Olioli	Vili (1984)
Kr	Kraemer (1902/1903)		

In the interlinear morphemic translations the following abbreviations are used:

ABS	(Absolutive) the particle 'o which introduces Absolutive noun phrases under certain conditions
ANAPH	anaphoric pronoun
ART	article
uspART	unspecific article
spART	specific article
CONT	tense/aspect marker (continuous) indicating imperfective aspect

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DIR	post verbal particle indicating the direction of the action referred to by the verb
DIREC	directional case-marker
DU	dual
EMPH	emphatic particle
ERG	ergative
EXC	exclusive
FUT	verbal particle indicating future tense, or that a past event happened after some other past event
INC	inclusive
LOC	locative
PAST	past tense marker
PERF	verbal particle (tense marker) used with action verbs referring to past events and with stative verbs referring to present and past states
PL	plural
POSS	possessive marker
RELATIVE	particle introducing relative clauses
SG	singular
TR	transitive suffix
uspTA	unspecific tense/aspect marker

1. BASIC CHARACTERISTICS OF CANONICAL TRANSITIVE AND INTRANSITIVE CLAUSES

1.1 Case-marking

In canonical transitive and intransitive clauses Samoan case-marking follows the Ergative pattern, for example:

(1) Sā alu le tama
PAST *go* ART *boy*
The boy went.

(2) Sā fasi le tama e le fafine
PAST *hit* ART *boy* ERG ART *woman*
The woman hit the child. OR *The child was hit by the woman.*

The primary participant of intransitive verbs (S) and the patient of transitive verbs (O), i.e. le tama in both sentences, are unmarked or marked by 'o (ABS) and form a single morphosyntactic category, the Absolutive; whereas the agent of transitive verbs is marked by the case marker e, the Ergative marker.

In addition to the Ergative and the Absolutive, Samoan has three other cases: Locative, Directional and Possessive. A small number of prepositional constructions are, for various reasons, not considered as cases. Thus, for instance, the rule of left-dislocation cannot be applied to prepositional constructions.

Due to the limited scope of this paper, the functions of the Locative, Directional and Possessive case cannot be discussed here. Furthermore, we can only mention here that besides intransitive and transitive verbs, which enter canonical intransitive and transitive constructions respectively, Samoan has the following other subclasses of verbs:

1. semitransitive verbs
2. pseudo-transitive verbs
3. labile verbs

1.2 Agreement in number

That S and O of intransitive and transitive clauses respectively form one morphosyntactic category is also shown by agreement in number between the verb and its participants. With the overwhelming majority of nouns the contrast between singular and plural reference is only indicated by the use of different articles. The articles are:

	singular	plural
specific article	le, l-	Ø
non-specific article	se, s-	ni
emotional-diminutive article	si	nāi
quantitative-diminuative article (used with mass and abstract nouns)	sina	

(compare Pawley 1966:15, 34)

Many verbs distinguish between singular and plural forms and agree with S in the case of intransitive verbs, but with O in the case of transitive verbs, for example:

(3) 'Ua ō Ø tama
PERF *go*/-PL (spART.PL) *boy*
The boys went.

(4) 'Ua fafasi Ø teine e le tama
PERF *hit*/-PL (spART.PL) *girl* ERG spART.SG *boy*
The boy hit the girls. OR *The girls were hit by the boy.*

Surprisingly, this Ergative rule of number agreement has not been recognised in the more recent literature on Samoan syntax (Chung 1978; Cook 1978; Milner 1962, 1973, 1976; Ochs 1982). Milner, of course, notes the plural forms of transitive verbs in his dictionary (1966) and gives a number of examples. Chung claims that agreement is only triggered by subjects of intransitive verbs (1978:158), which is easily rejected by hundreds of examples in published texts (compare, for instance, Kraemer 1902/1903 vol.I fafasi (p.214, 270, 357), vol.II tatanu (p.62), tetefe (p.62), tatā (p.72), sauniuni (p.125), noanoa (p.174); Stübel 1896 faanonofo (p.171).

1.3 Grammatical indispensability

Another syntactic property which is considered as being indicative of the existence of the category of subject and its identification is the grammatical indispensability of the participant in question (Keenan 1976). In Accusative languages such as English this is the subject of intransitive or transitive clauses, i.e. S and A respectively, in typical Ergative languages like Dyirbal it is the Absolutive noun phrase which denotes the primary participant in intransitive clauses, i.e. S, and the patient in unmarked transitive clauses, i.e. O.

In Samoan canonical transitive clauses the agent expressed by the Ergative phrase is always optional, while, unless it is understood from the context, the patient is obligatory. Thus even in isolation

(5) 'Ua fasi le teine
PERF *hit*/SG ART *girl*
Someone hit the girl. OR *The girl was hit.*

is fully grammatical, whereas

(6) 'Ua fasi e le tama
PERF *hit*/SG ERG ART *boy*
The boy hit.

requires contextual information about who was hit.

Similarly, the agent of intransitive verbs denoting actions is optional, as shown by the following clauses taken from a text about how a particular kind of fishing net is made:

(7) Ona fai 'o le 'upega
then make ABS ART *net*

Ona alu lea
then go.SG *(then)*

'ua su'e mai se isi
PERF *look-for* DIR ART *someone*

na te fai-a le 'upega
3.SG uspTA *make*-TR ART *net*
Then the net is made. Someone goes for someone to make the net. *Kr II 180*

Both with fai *to make* and alu *to go*, the agent (i.e. A and S respectively) is not expressed in order not to specify by whom the action is done, whereas the unspecified patient of su'e *to look for* is denoted by se isi *someone*.

1.4 Basic word order

The basic word order of simple verbal clauses is rigidly verb initial. The sequential order of nominal participants following the verb is not determined by the role structure of the clause, but by its pragmatic structure. The participant which the speaker wants to focus as being the most important part of the new information directly follows the verb. Consider the following text, which shows that the Ergative NP as well as the Absolutive NP can be focussed.

(A youth has brought a fā'ausi, a kind of dish consisting of cooked taro grated or cut into cubes (mafu) to a woman who desires him.)

(8)a Ona toe fai atu lea 'o le fafine
then again say DIR *(then)* ABS ART *woman*
Then the woman said again:

b Se la'ula'u mai e 'oe i lo'u gutu
friend put DIR ERG *you/SG into my mouth*
Friend, you put it (the mafu*) into my mouth!*

c Ona tu'u atu lea e le tama 'o le mafu i le gutu
then put DIR *(then)* ERG ART *youth* ABS ART *cube into* ART *mouth*

o le tamaita'i
of ART *lady*
Then the boy put the cube into the mouth of the lady.

d 'ua lē 'ai-na le mafu, 'a 'ua miti-solo le lima o le
PERF *not eat*-TR ART *cube but* PERF *suck-up-and-down* ART *hand of* ART

tama e le fafine
youth ERG ART *woman*
She did not eat the cube, but kissed the hand of the youth. *Kr I 267*

In (8)b the ergative of the independent pronoun e 'oe is used in order to stress that the woman did not want to take the cube by herself, but that the youth should put it into her mouth. Correspondingly, e le tama is the focussed participant in (8)c emphasising that really the boy did what usually should have been done by the woman herself. In (8)d, however, the Absolutive noun phrase le lima o le tama *the hand of the youth* is focussed, as it contrasts with le mafu *the cube*, whereas the Ergative phrase e le fafine does not contribute to the new information given by that clause.

1.5 Conclusion

As far as canonical transitive and intransitive clauses are concerned, the participants S, A and O are characterised by the following morphosyntactic features, which are a strong evidence against the classification of S and A as the subject in Samoan. (Compare Chung 1978; Cook 1978; Ochs 1982).

1. Both S and O are expressed by noun phrases in the Absolutive case and thus contrasted with A marked by the Ergative particle e.
2. If there is agreement in number between the verb and one of its participants, this participant functions as S or O, but not as A.
3. In contextually independent, canonical transitive clauses A is optional, but O is obligatory.
4. In canonical intransitive clauses S is optional, when the verb refers to an action performed by an unspecific actor.
5. The pragmatic functions of S, A and O are not marked morphologically, but only by word order; the participant directly following the verb presents the most important one in respect to the new information to be communicated.

2. PRONOMINALISATION

One of the arguments for classifying Samoan as a syntactically Accusative language are the rules of pronominalisation. While the independent pronouns can denote all types of participants and occur in just the same positions as noun phrases, pronominalisation by proclitic pronouns is restricted to certain semantic roles and persons. If the conditions under which proclitic pronouns are permitted are not met, pronominalisation either results in zero or in independent pronouns.

As far as canonical intransitive verbs are concerned, the use of proclitic pronouns is restricted to:

1. first and second person singular, dual and plural and third person dual and plural actors or intransitive verbs denoting actions (active intransitive verbs) (cf. Chung 1978:220-223), and
2. first and second person singular, dual and plural patients (undergoers) of intransitive verbs denoting states or processes (inactive intransitive verbs) (Johnson et al n.d.:210).

	actor of intransitive active verbs	undergoer of intransitive inactive verbs
1/2SG, DU, PL	+	+
3DU, PL	+	-
3SG	-	-

\+ indicates that the use of proclitic pronouns is permitted,
\- indicates that the use of proclitic pronouns is not permitted.

Examples:

1. proclitic pronouns preceding active intransitive verbs.

1SG	'ua	'ou	alu	*I went*
	'ua	ta	alu	*I went*
2SG	'ua	'e	alu	*you went*
3SG	*'ua	ia/na	alu	*he/she/it went*
	{'ua	Ø	alu	*(he/she/it) went*}
	{'ua		alu 'o ia	*he went*}
	'ua	lā	ō	*they (two) went*
	'ua	lātou	ō	*they went*

2. proclitic pronouns preceding inactive intransitive verbs.

1SG	'ua	'ou	ma'i	*I am sick*
1DU	'ua	mā	mama'i	*we (two) are sick*
3DU	*'ua	lā	mama'i	*they (two) are sick*
	{'ua	Ø	mama'i	*they are sick*
	{'ua		mama'i ('i) lā'ua	*they (two) are sick*}

3PL	*'ua	lātou	mama'i	*they are sick*
	'ua	Ø	mama'i	*they are sick*
	'ua		mama'i ('i) lātou	*they are sick*

With canonical transitive verbs, for example, fasi *to hit*, the agent, but not the patient, can be expressed in proclitic pronouns of all persons and numbers; i.e. while the Ergative phrase may be substituted by both a proclitic or an independent pronoun, the Absolutive phrase of a canonical transitive clause can only be substituted by an independent pronoun.

(9) 'ua 'ou fasi-a le teine
PERF 1SG *hit*-TR ART *girl*
I hit the girl.

(10) 'ua na fasi-a le teine
PERF 3SG *hit*-TR ART *girl*
He/she hit the girl.

(11) 'ua lā /lātou fasi-a le teine
PERF 3DU/3PL *hit*-TR ART *girl*
They hit the girl.

(12) 'ua fasi a'u/'o ia/('i) lātou e le fafine
PERF *hit* 1SG ABS 3SG/3PL ERG ART *woman*
The woman hit me/him/her/them.

The comparison of intransitive and transitive clauses shows that the pronominalisation of Absolutive phrases varies according to their semantic role, their number and the class membership of the verb, and that, on the other hand, dual and plural Absolutive phrases denoting the actor or intransitive verbs are pronominalised in the same way as Ergative phrases.

	actor of intr.act. verbs (ABS)	undergoer of intr.inact. verbs (ABS)	actor of tr.verbs (ERG)	undergoer of tr.verbs (ABS)
1/2SG, DU, PL	+	+	+	-
3DU, PL	+	-	+	-
3SG	-	-	+	-

In the first and second person the rule of pronominalisation by proclitic pronouns applies equally to S and A, thus establishing S and A as a single syntactic category in respect to this rule. But note that this is the only rule which argues for syntactic Accusativity.

3. THE PRINCIPLES OF SYNTACTIC ORGANISATION

In order to investigate whether the morphologically recognised categories of case correlate with the syntactic organisation of a language, it has become common practice in studies to linguistic typology and syntax to examine the

rules of coreferential deletion across conjunctions, Equi-NP-deletion, relativisation and left-dislocation (Keenan 1976; Van Valin 1981). Where all such rules, or at least the majority, apply equally to S and A, but not to O, the respectice language is said to be syntactically Accusative. In syntactically Ergative languages, on the other hand, these rules select S and O as the syntactic pivot.

Thus the rule of coreferential deletion across conjunctions results in different interpretations of the sequence of a transitive plus an intransitive clause in Accusative and Ergative constructions. Imagine there would be a language written in pictograms. The following sentence

(13) 

man *hit* *woman* *and* *run*
A O (S)

would mean

(14) *The man hit the woman and (he) ran away*

if this language were a syntactically Accusative language, but

(15) *The man hit the woman and she ran away*
The woman was hit by the man and ran away

if it were a syntactically Ergative language. Many languages which are classified as Ergative languages on the basis of their morphological case-marking patterns are not ergatively organised in respect of the abovementioned rules. They may follow an Accusative pattern, or it may be the case that the operation of these rules is entirely semantically determined or that in one and the same language various syntactic processes choose different syntactic pivots (for examples see Van Valin 1981). Languages of the two latter types are syntactically neither Ergative nor Accusative.

3.1 Coreferential deletion across conjunctions

In Samoan, the rule of coreferential deletion across conjunctions is a semantically determined rule. As long as the context provides enough information to identify participants they need not be, and usually are not, expressed. In terms of S, A and O this means that this rule equally applies to S, A and O and that it can be controlled or triggered by S, A and O:

1 V_{itr} S ↓
\+ V_{itr} (S)

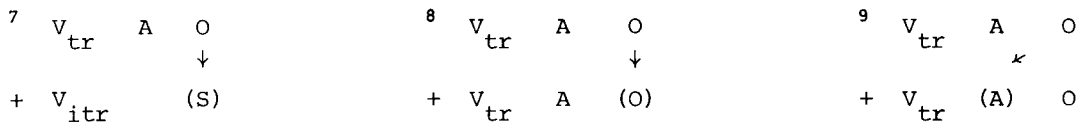
2 V_{itr} S ↓
\+ V_{tr} (O) A

3 V_{itr} S ↓
\+ V_{tr} (A) O

4 V_{tr} A O ↓
\+ V_{itr} (S)

5 V_{tr} A O ↓
\+ V_{tr} (A) O

6 V_{tr} A O ↘
\+ V_{tr} A (O)



Consider the following examples which illustrate type 2, 3, 6, 7, and 9. Further examples for the remaining cases are found in Mosel (1985:113-117).

(16) Tū atu loa lea 'o Sina
stand DIR *immediately then* ABS *Sina*

tago 'i le lupe
take-hold-of DIREC ART *pigeon*

titina
strangle

togi 'i fafo
throw DIREC *outside*
Sina stood up, took hold of the pigeon, strangled it, and then threw it outside. (cf.3) *F 102*

(17) 'ua tagi le teine
PERF *weep* ART *girl*

'ina 'ua fāifai e le tama
because PERF *insult* ERG ART *boy*
The girl is crying, because the boy insulted her. (cf.2) *Mi 55*

(18) 'A solia lenā tulafono e se tasi
if thread-on this law ERG ART *one*

e fa'asala'ina i 'aumatua e lua
uspTA *punish* LOC/DIREC *fat-pig* *two*

ma talo e mataselau
and taro uspTA *hundred*
If someone breaks this law he is fined two fat pigs and one hundred taros. (cf.6) *Kr I 40*

(19) 'Ole'ā sisi a'u 'i lugā
FUT *hoist* 1SG DIREC *up*

ona alu lea 'i lugā
then go (then) DIREC *up*

mā tūtū mai lea
1DU.EXC *stand* DIR *then*

i luga o le mauga
LOC *up* *of* ART *mountain*
I'll get hoisted up and when I go up, the two of us will stand on top of the mountain. (cf.7) *F 96*

(20) Ona 'ave lea 'o le fafine
then bring (then) ABS ART *woman*

e lona to'alua 'i lona 'āiga
ERG *her* *spouse* *to her* *family*

'ua fānau ai le tama
PERF *give-birth-to* ANAPH ART *child*
Then the woman was brought to her family by her husband and gave birth to a child there. (cf.9)

Since the rule of coreferential deletion across conjunctions applies whenever the context provides sufficient information, the English sentences

(i) *The man hit the woman and ran away.*

(ii) *The woman was hit and ran away.*

have to be translated into Samoan by

(i) Sā fasi e le tamaloa le fafine ma sā sola le tamaloa
PAST *hit* ERG ART *man* ART *woman* *and* PAST *run away* ART *man*

(ii) Sā fasi e le tamaloa le fafine ma sā sola le fafine
PAST *hit* ERG ART *man* ART *woman* *and* PAST *run away* ART *woman*

because in this case the context does not give any clues as to who ran away. Coreferential deletion across co-ordinate conjunctions is briefly mentioned by Chung (1978:30), under the heading 'Zero-Pronominalization', as an optional, unbounded rule without lexical exceptions, which in most Polynesian languages affects pronouns of any syntactic function 'though it applies most commonly to subjects and direct objects'. Being optional and unbounded, coreferential deletion across co-ordinate conjunctions is of no further interest for her investigation of the interrelation between case-marking and grammatical relations. But the fact that this rule applies to S, A and O reflects an important feature of Samoan syntax, namely the lack of a grammaticalised topic, which correlates with the absence of an antipassive construction. In general, the absence of a syntactic category to which a particular rule is restricted is important as its otherwise widespread existence and needs to be accounted for in correlation with other syntactic features.

3.2 Relativisation

There are two types of relative clauses in Samoan. The first one, henceforth called 'asyndetic relative clause', is juxtaposed to its head, while the second one, the 'syndetic relative clause', is connected to the head noun by means of the relative pronoun lē (SG), ē (PL), which agrees with the head noun in number. Both types of relative clause follow the head noun.

In contrast to asyndetic relative clauses, the syndetic ones can lack the head noun; in this case they are grammatically equivalent to a noun phrase, which is reflected by the fact that they are usually preceded by the noun phrase marker 'o, for example:

(21) 'o lē na tusia lenei tusi
ABS RELATIVE PAST *write this book*
He who has written this book. *Mi 104*

When used attributively, syndetic relative clauses do not differ structurally or semantically from asyndetic ones, so that examples of the latter type only are given here for the discussion of subjecthood in Samoan.

In asyndetic relative clauses the relativised noun is deleted or pronominalised, depending on its function in the relative clause. If the relativised noun

functions as O or S it is obligatorily deleted, but if it functions as A, it may be deleted or represented by a proclitic pronoun, for example:

1. N_{HEAD} ↘

+ V (S)

(REL)

(22) 'A'o tagata 'uma sa momoe i le fale 'ua oti 'uma lava
but people all PAST *sleep*/PL LOC ART *house* PERF *dead all* EMPH
But all the people who had slept in the house were dead. *Kr I 123*

2.a. N_{HEAD} ↘

+ V (O)

(REL)

b. N_{HEAD} ↘

+ A_{PRON} V (O)

(REL)

c. N_{HEAD} ↙

+ V (O) A_{ERG}

(REL)

(23)a '0 lana fe'au e fai i aso 'uma 'o le fa'ase'e
ABS *his business* uspTA *do* LOC *day all* ABS ART *surf*
And what he did all day was surfing. (Lit.: *his business which he did all day was surfing.*) *Kr I 269*

(24)b 'ua 'uma solo 'ua 'ou tusia
PERF *complete poems* PERF 1SG *write*
The poems which I have written are completed. *Kr I 5*

(25)c 'o le taua na si'i e lona tama i Savai'i
ABS ART *war* PAST *raise* ERG *her father* LOC/DIREC *Savai'i.*
The war which her father had provoked against Savai'i. *Kr I 197*

3.a. N_{HEAD} ↓

+ (A) V O

(REL)

b. N_{HEAD} ↓

+ A_{PRON} V O

(REL)

(26)a Fai atu loa lea 'o taulele'a sā faia le pua'a
say DIR *immediately (then)* ABS *young men* PAST *make* ART *pig*
The young men who had been attending the pig replied. *F 144*

(27)b tagi 'i le manu 'ua na 'ai laufa'i
cry DIREC ART *animal* PERF 3SG *eat banana*
...sang out at the animal eating the bananas. *F 94*

Apart from Absolutive and Ergative phrases, Directional, Locative and Possessor phrases can also be relativised and are usually referred to by a pronominal copy.

Relativisation in Samoan, like Tongan (Chung 1978:37-45), follows a different rule to that of coreferential deletion across conjunctions, in that deletion is obligatorily applied to S and O, whereas A is either deleted or pronominalised and oblique phrases are mostly pronominalised. The variability in the treatment of A and of oblique participants shows that relativisation in Samoan does not strictly follow an ergative pattern (otherwise the pronominalisation of A would be expected to be obligatory), but a pattern which in respect of its syntactic status holds a position between an ergative pattern and that of global zero-pronominalisation found with coreferential S, O and A in co-ordinate clauses.

In any case, relativisation in Samoan cannot serve as an argument in favour of regarding S, A as the primary syntactic relation, and, consequently, Samoan as a syntactically accusative language.

3.3 Left-dislocation

Left-dislocation is used here as a term for a syntactic operation by which any participant can be extracted from the clause and promoted to the left of the verb. We prefer this term here to 'topicalisation' and similar terms as describing a syntactic form without implying any function. Irrespective of its semantic function, the left-dislocated noun phrase stands in the Absolutive case and is nearly always preceded by the noun phrase marker 'o. Left-dislocated noun phrases functioning as O (i.e. the patient of transitive actions) are never referred to by pronouns in the following clause; for example:

Left-dislocated Absolutive phrases in O-function:

(28) 'O lenā papā 'ua 'ave e Nafanua
ABS *that title* PERF *take* ERG *Nafanua*
That title, however, was taken by Nafanua. *Kr I 200*

Left-dislocated Absolutive phrases in S-function:

(29) 'a'o ali'i 'ua saofa'i ma le tama'ita'i
while chief PERF *be-seated with* ART *girl*
While the chiefs were seated with the girl. *F 122*

(30) na 'o 'oe lava e te nofo i le fala i fafō
just ABS 2SG EMPH 2SG uspTA *sit* LOC ART *mat* LOC *outside*
Only you would sit outside on a mat. *Kr I 207*

Left-dislocated Ergative phrases:

(31) 'A 'o Tigilau 'ua fasi lana avā tuai
but ABS *Tigilau* PERF *hit his wife former*
But Tigilau hit his former wife. *Kr I 142*

(32) 'o le ali'i io Letufuga 'ua na fasi mai lo tatou Faleupolu!
ABS ART *chief* ABS *Letufuga* PERF 3SG *hit* DIR *our*/PL.INC *Faleupolu*
The chief Letufuga has hit (killed) our Faleupolu! *Kr I 142*

That left-dislocated third person singular participants in S-function are not referred to by a pronominal copy, corresponds to the fact that these participants cannot be pronominalised by a proclitic pronoun, but only by the independent pronoun. Accordingly, left-dislocated participants in A-function, including third person singular participants, are either referred to by a proclitic pronoun, or do not show a pronominal copy.

While with participants in S- and A-function pronominalisation and zero-representation seem to be equally frequent, left-dislocated Locative, Directional and Possessor phrases are mostly referred to by their pronominal counterparts, for example:

Left-dislocated Possessor phrase:

(33) o Toga ma Samoa e leai
ABS *Toga and Samoa* uspTA *be-absent*

ni taula o latou vaa
ART *anchor of* 3PL *boat*
The boats of the Tongans and the Samoans had no anchors. (Lit.: *the Tongans and Samoans, the anchors of their boats were absent*) *St 181*

Left-dislocated Directional phrase:

(34) 'o lenei tusi 'ua sā lava se tagata
ABS *this book* PERF *forbidden* EMPH ART *person*

e tagofua i ai
uspTA *touch* DIREC ANAPH
This book may not be touched by any person. *Kr I 5*

Left-dislocated Locative phrase:

(35) 'A'o le taeao fo'i lea
but ABS ART *morning also that*

'o lo'o gālulue ai mātua o tama
CONT *work*/PL ANAPH *parents of youth*

i le fa'atoaga
LOC ART *plantation*
That same morning the youths' parents were out working in the plantation. *F 276*

The fact that left-dislocated participants in S- and A-functions are optionally referred to by proclitic pronouns, whereas left-dislocated participants in O-function are not referred to by the corresponding independent pronoun following the verb, correlates with the rule of pronominalisation and thus would argue for S and A forming a single syntactic category, namely the category of subject. What, however, contradicts such a claim is that the left-dislocation of a participant in O-function represents the unmarked case and that left-dislocated Locative, Directional and Possessor phrases are also referred to by their respective pronominal copies.

	ABS (O)	ABS (S)	ERG (A)	LOC	DIREC	P'OR
pronominalised by	Ø	proclitic pron.	proclitic pron.	anaph. pron.	anaph. pron.	possessive pron.
		preceding the verb		following the verb		

The functions of left-dislocation will be discussed in Section 5.1.

3.4 Equi-NP-deletion

The rule of Equi-NP-deletion is defined by Chung (1978:106) as a rule 'which deletes a NP of an embedded clause (the target) under coreference with some NP of the next higher clause (the controller)'. In Samoan 'this rule applies in

certain two-clause structures in which one clause contains a verb of motion, volition, effort, force or persuasion, and the other clause is embedded directly under it' (Chung 1978:125). In other words, the matrix clause expresses that someone is voluntarily or involuntarily motivated to participate in an action that is expressed by the embedded clause. Consider, for example, the following sentence where the subordinated clause is embedded between the verb and the Absolutive phrase of the matrix clause:

(36) Ua alu atu e utu sami mai le fānau a Matatalalo
PERF *go* DIR uspTA *fill salt-water* DIR ART *off spring of Matatalalo*
The children of Matatalalo went (to the beach) to get salt water. *St 164*

Sentences of this structure are rare; usually the subordinated clause follows the matrix clause.

According to Chung (1978:128-131), the rule of Equi-NP-deletion is only applied to 'targets that are both subjects and semantic agents/experiencers', but not to 'subjects that are semantic patients' or to 'absolutive direct objects'. In the latter two instances pronominalisation has to be applied instead of Equi-NP-deletion, for example:

(37) Mātou te le'i māmana'o e maua e leoleo mātou
1PL/EXC uspTA *not want*/PL uspTA *catch* ERG *police* 1PL/EXC
We didn't want to be caught by the police. *Ch 130*

(38) Sā mātou mānana'o 'ia pa'u'ū mātou
PAST 1PL/EXC *want*/PL OPT *fall*/PL 1PL/EXC
We wanted to fall. *Ch 131*

Though Equi-NP-deletion does not generally apply to S and A, but only to agentive intransitive subjects (S_{AG}) and agentive transitive subjects (A), Chung states that its restricted applicability supports the claim that subject, i.e. S/A, 'is one of the categories central to the syntax of all Polynesian languages' (1978: 131). In contrast to Chung, we think that the applicability of this rule is solely semantically determined. If the controlling NP functions as S in the matrix clause, it optionally triggers the deletion of the coreferential agentive participant in the embedded clause.

As the intransitive matrix clause contains a verb of volition, motion, etc., whose participant is agentive, the unmarked case is represented by embedded clauses whose agent is coreferential with that of the matrix clause, irrespective of whether the agent of the embedded clause is the agent of an intransitive or transitive action:

V_{itr} (volition, motion) S_{agent} — matrix clause

\+ { V_{itr} (action) (S_{agent}) ; V_{tr} (A_{agent}) $O_{patient}$ } — embedded clause

4. SUMMARY OF THE ARGUMENTS FOR THE ABSENCE OF THE CATEGORY SUBJECT IN SIMPLE VERBAL CLAUSES

We have investigated coreferential deletion across conjunctions, relativisation, left-dislocation and Equi-NP-deletion. The rule or coreferential deletion across conjunctions is not restricted to any of the three grammatical relations which are labelled as S, A and O, but is only determined by the meaning of the clause and its context. Whenever misunderstandings are excluded by the context, any participant in S-, A-, or O-function can be omitted. Consequently, this rule does not provide any evidence of whether S, A and O constitute a hierarchy or not.

Similarly, Equi-NP-deletion does not support the claim that S/A constitutes the subject in Samoan, because it is not restricted to intransitive participants (S) and transitive agents (A), but only to intransitive agents and transitive agents, when the coreferential deletion is controlled by the agentive participant of an intransitive verb of motion or volition. Here the applicability of Equi-NP-deletion is solely determined by the semantic roles of the participants.

The rule of relativisation corresponds to the morphological Ergativity of Samoan in that the participants marked by the Absolutive (S,O) are obligatorily deleted when relativised, whereas the transitive agent may be copied by a proclitic pronoun.

Left-dislocated noun phrases can be copied by a pronoun in the clause from which they have been extracted, when they refer to an intransitive actor or undergoer (S) or to a transitive actor (A), but they must not be copied when they function as the patient of a transitive verb (O). Thus this rule selects O as a particular unmarked syntactic category and contrasts it with all other participants. Since left-dislocation of a noun phrase in O-function represents the unmarked case, it does not argue for classifying S and A as a subject.

The only rule which refers to (S) and (A) and excludes (O) is Clitic Placement (pronominalisation by proclitic pronouns). Without any restrictions, however, this rule only applies to the speech act participants, whereas with third person participants certain restrictions occur (cf. the table below).

To conclude, the coding, behaviour and control properties of S, A and O participants in Samoan clearly show that it is a role-dominated language (Foley and Van Valin 1980), in which the Absolutive constitutes the primary grammatical relation (compare Sasse 1978).

	O	S	A	
case marking: ABS (unmarked)	+	+		
indispensable	+	(+)		(+): referring only to undergoers
target and controller of coreferential deletion across conjunctions	+	+	+	
target of Equi-NP-deletion when controlled by the S of an intransitive matrix clause		(+)	+	(+): referring only to actors

	O	S	A	
obligatory deletion by relativisation	+	+		
obligatory absence of a pronominal copy when left-dislocated	+			
pronominalisation by proclitic pronouns				
1st and 2nd pers		+	+	
3rd pers du and pl		(+)	+	(+): referring only to actors
3rd pers sg			+	

5. CATEGORICAL AND THETIC STATEMENTS IN SAMOAN

5.1 Left-dislocation as a means of establishing a predication base

The fact that Samoan is a role dominated language and lacks a grammaticalised topic, a subject, within its simple verbal clauses implies that, in contrast to the average European Accusative language, Samoan verbal clauses do not show the dichotomous structure of subject and predicate. A simple verbal clause consisting of verb and noun phrases only states that there is an event or state of being, and gives information about which participants are involved and the semantic roles played by them. A simple verbal clause does not structure the information into a topic (in the sense of predication base) and a predicate. The lack of a predication base implies the lack of a predicate.

If, however, a speaker of Samoan wants to shape what he is saying into a predication base and a predicate, he can do so by left-dislocation. The left-dislocated noun phrase then functions as the predication base and the following verbal clause as the predicate. Consider the beginning of two written Samoan stories. Since the title of written stories also given some information about the story and forms part of the text, it is rendered here in capital letters.

(39) O LAU TUPUA
ABS *my* *riddle*

O au ou te nofo i totonu o pu o laau
ABS *I* *I* uspTA *stay* LOC *inside* POSS *hole* POSS *tree*
I stay in the holes of trees. *Aiono 8*

Here o au ('o a'u) constitutes the predication base about which the predication 'ou te nofo i totonu o pu o laau is made in order to help the reader to solve the riddle and identify the personalised entity referred to in the title.

(40)a O LE FALE O LO O OU NOFO AI
ABS ART *house* CONT *I* *stay* ANAPH
The house I stay in.

b O au o se tama Samoa
ABS *I* ABS uspART *boy* *Samoa*
I am a Samoan boy (equational clause)

c ou te nofo i se fale
I uspTA *stay* LOC uspART *house*
who lives in a house (relative clause)

d e fai faasamoa
uspTA *make Samoan way*
made in the Samoan way.

e 0 lenei fale
ABS *this house*
This house (left dislocated NP)

f e le tele pei o se falepalagi
uspTA *not big like* ABS uspART *European house*
is not big like a European house. (predicate) *Aiono 9*

This story starts with an equational clause made up by the subject o au and the predicate o se tama samoa, whereas the second sentence (e,f) shows a left-dislocated NP as a predication base and a verbal clause as a predicate.

Positing a NP at the beginning of a sentence as a predication base, however, is not the only function of left-dislocation, but its other functions are closely related. Left-dislocation is most frequently used to single out a participant whose involvement in an action or state is contrasted with that of another participant in some other action or state. This left-dislocated NP serves as a predication base at the same time. It differs from the preceding type of left-dislocation in that it additionally marks contrast, for example:

(41) E tofu lava le tagata ia ma lana galuega
uspTA *share* EMPH ART *person each and his work*

e oso tonu i ai i le taeao
uspTA *jump straight to* ANAPH *in* ART *morning*
Each person has his work to which he jumps straight away in the morning.

0 maua ma Sina e taea le otaota
ABS *we*/DU/EXC *and Sina* uspTA *pick up* ART *rubbish*

0 au e fafaga moa ma tamai puaa
ABS *I* uspTA *feed chicken and little pig*
I feed the chicken and the little pigs,

a o Sina e fesoasoani i lo ma tina
but ABS *Sina* uspTA *help* DIREC *our*/DU/EXC *mother*
but Sina helps our mother. *Tau 5*

A further instance of left-dislocation, related to the last one, is that of left-dislocating a participant as a means of expressing that it is just this participant which is involved in an event or state of being already known (or at least exprected to be known). In other words, such statements also show a predication base and a predicate, but focus on the predication base as giving new information, whereas the predicate is presupposed (compare Sasse 1986:77), for example:

(42) *(When the stranger took his gun and shot at me and my dog, I thought)*

o au ua oti
ABS *I* PERF *be dead*
it was me who died (but surprisingly, it was the dog) *Agafili 34*

A third type of left-dislocation is found with noun phrases referring to a point or period of time (cf. example 35). When left-dislocated these noun phrases set the temporal framework within which the statement made in the following clause holds true (cf. Chafe 1976:50). Similarly, left-dislocated Locative phrases can denote the reason for the event expressed by the following clause.

The most important point here in respect to the discussion of 'subject in Samoan' is that a highly marked construction, namely left-dislocation, is used to convey information as a statement of a subject/predicate structure, i.e. a categorical statement (Sasse 1986), whereas in the average European Accusative language it is the syntactically unmarked type of clause which is used to present a statement as categorical.

5.2 Thetic statements

As well as categorical statements, a second type of statements must be recognised, the so-called thetic statements. Logically these do not show a subject/predicate structure, though they might contain a grammatical subject and predicate. In a recent article called 'The thetic/categorical distinction revisited' Sasse (1986: 1) gives the following definition of categorical and thetic statements:

> Categorical sentences contain a predication base about which some state of affairs is predicated, while thetic sentences are simple non-predicative assertions of state of affairs.

Prototypical instances of thetic statements are impersonal expressions, such as weather expressions (*it is raining*) or presentative sentences such as *there was a man*.

> An impersonal expression like *it is raining* fails to contain a referential NP (or a pronominal copy thereof) and thus fails to tell something about an entity. The lack of reference to an entity makes it necessarily thetic. A presentative sentence such as *there was a man*, on the other hand, introduces an entity but fails to report an event about it. It is therefore inherently thetic, since for it to be a categorical statement it would have to contain a constituent referring to a state of affairs reported about the entity. (Sasse 1986:20)

But a sentence containing a referential NP and a VP can also be a thetic statement, if NP and VP are not in a logical subject-predicate relationship, but are presented as both giving new information and forming a 'compact whole' (Sasse). In English and German such thetic statements are formally distinguished from categorical statements by a different intonation pattern, and in Romance languages and Modern Greek often by subject inversion, i.e. V S — order instead of S V — order (Sasse 1986:11-34), for example:

(43) *(What's new?)* *HARRY'S coming.*
(How's the weather?) *The SUN'S shining.*
(What's wrong with you?) *My TOOTH hurts.*
(Why are you so sad?) *My DOG is sick.*

Typical domains for thetic statements are explanations, such as the above answers to questions like *What's new?, What's the matter?, What has happened?*. In narratives, thetic statements typically occur at the beginning as a means of introducing participants or 'describing the situational, local, temporal, etc. environments in which the main events are embedded' (Sasse 1986:74).

In Samoan, categorical statements are, as we have seen, expressed by left-dislocation, whereas the simple clause does not show the subject-predicate structure most common in narratives. In other words, simple clauses, as used when reporting a succession of events, look very much like thetic statements. In order to establish whether this hypothesis holds true, I discussed with informants some situations in which thetical statements are likely to occur. To avoid literal translations, I asked, for instance: 'Imagine that we are talking together, and suddenly you make a face like this, because your tooth hurts. Now, what's the Samoan question I ask you and what do you answer?'. Compare the following questions and answers with Sasse's examples (1986:13, 21, 26, 32f, 45f).

(44) 'O le ā le mea 'o tupu 'iā 'oe?
ABS ART *what* ART *thing* CONT *happen* DIREC *you*/SG
What's the matter with you? (Lit.: *what is the thing happening to you?*)

(45)a E tigā lo'u nifo
uspTA *hurt my tooth*
My tooth hurts.

(46)b 'O lea, e tigā lo'u nifo-
ABS *that* uspTA *hurt my tooth*
Well, my tooth hurts.

(47) 'O le ā lea manogi?
ABS ART *what that smell*
What is that smell?

(48)a 'Ua mū le moa
PERF *burn* ART *chicken*
The chicken was burnt.

(49)c 'O le moa 'ua mū
ABS ART *chicken* PERF *burn*
It is the chicken that has burnt.

(50) 'O le ā le mea 'e te fa'anoanoa ai?
ABS ART *what* ART *thing you*/SG uspTA *be sad* ANAPH
Why are you so sad? (Lit.: *What is the thing you are sad because of it?*)

(51)a 'O lo'o ma'i lo'u tamā
CONT *sick my father*
My father is sick.

(52) 'O le ā le mea 'ua 'e tagi ai?
ABS ART *what* ART *thing* PERF *you/SG* *cry* ANAPH
Why are you crying?

(53)a 'Ua leaga la'u pepe ta'alo
PERF *bad* *my* *baby* *play*
My doll is broken. (Lit.: *is bad*).

(54) 'O ā mai le tau?
CONT *be like what* DIR ART *weather*
How is the weather?

(55)a 'O lo'o susulu le lā
CONT *shine* ART *sun*
The sun is shining.

(56)a 'O lo'o lā le aso
CONT *sun* ART *day*
It is sunny. (Lit.: *The day is sunny*)

(57)b 'O lea e susulu le lā
ABS *that* uspTA *shine* ART *sun*
Well, the sun is shining.

(58) 'O le ā le lā mea?
ABS ART *what* ART *that over there thing*
(Lit.: *What is that thing over there?*)

'O le ā le lā mea e pisa mai?
ABS ART *what* ART *that over there thing* uspTA *make noise* DIR
What was that (noise)? (Lit.: *What is that thing over there making noise?*)

(59)d 'O le tagi a le pusi
ABS ART *cry* POSS ART *cat*
The miaowing of the cat.

(60) 'O le pusi
ABS ART *cat*
The cat.

(61) 'O le ā le lā pa'ō?
ABS ART *what* ART *that over there noise*
What's that noise?

(62)a 'O lo'o pupuna le vai
CONT *boil* ART *water*
The water is boiling.

(63)e 'O le vai vevela le lā e pupuna
ABS ART *water hot* ART *that over there* uspTA *boil*
The water is boiling. (Lit.: *That over there is the hot water which is boiling*)

Like the answers in (56a, 48a, 51a, 53a), the following example contains a thetic statement about the weather and two further thetic statements explaining why the speaker did not sleep well:

(64) 'Ou te le'i moe lelei,
I uspTA *not sleep well*

sā timu le pō ātoa
PAST *rain* ART *night complete*

'ua tutulu le taualuga
PERF *leak* ART *roof*

ma susū ai le moega
and wet ANAPH ART *bed*
I did not sleep well, it rained all night (Lit.: *the whole night rained*), *the roof was leaking and my bed got wet.*

The sentences given as typical answers to questions such as *What happened?, What's the matter?* and *What was that?* can be classified as follows:

(a)	V + ABS	(45a, 48a, 51a, 53a, 55a, 56a, 62a)
(b)	'o lea + V + ABS	(46b, 57b)
(c)	left-dislocated NP + V	(59c)
(d)	nominalised V + Possessor	(59d)
(e)	equational clause	(63e)

Sentence type (a) has the structure of the simple verbal clause which was said not to contain a subject and predicate. It thus confirms the hypothesis that that thetic statements are expressed by simple verbal clauses in Samoan.

The (b) type sentences differ from simple verbal clauses in that they are introduced by the demonstrative 'o lea, i.e.

(65) 'o le-a
ABS ART-*that*

'O lea is frequently used in conversation in order to relate what follows to the preceeding context and roughly corresponds in this function to the English particles and adverbs *well, now, then* and *thus*.

Sentences of type (c) show a left-dislocated NP in the function of a focussed subject. In example (49)c the speaker obviously presupposed that the hearer had recognised that the smell came from something burnt.

The most deviant type of sentence is (d), as found in (59)d. It recalls Duranti's example:

(66) Le aka a le tama
ART *laughter* POSS ART *guy*
(look how) the guy is laughing. OR *(look at) the guy laughing,*

which he often heard, when someone made a joke and he laughed (Duranti 1981:177). It is probable that (59)d has to be interpreted as a nominal clause consisting of a single NP whose function is to identify some entity or event given by the speech situation or the linguistic context. Another example relating to the identification of a sound is (63)e. It is an equational clause of the structure:

NP	DEM	RELATIVE CLAUSE
predicate	subject	modifying the predicate,

which is most frequently found after direct speech in narratives where it identifies the speaker, for example:

(67) '...' 'O le tala lea a le tagata
ABS ART *speech that* POSS ART *person*
'...', *said the person.* (Lit.: *That was the speech of the person*) *Olioli 1*

Being equational, this clause type does not represent a thetic, but a categorical statement. Thus in contrast to English statements about the source of or identity of a sound are often not thetic, but categorical in Samoan. They either consist of a single NP (59)d, which makes a predication about something given by the speech situation, or they are expressed by an equational clause with a demonstrative as its subject.

In texts thetic statements are said to be likely to occur as presentative expressions at the beginning (Sasse 1986:20, 73f). Traditional Samoan narratives, however, are most commonly introduced by equational clauses, for example:

(68) 'O le tala lenei 'o le tala i...
ABS ART *story this* ABS ART *story about*
This story is the story about...

or simply

(69) 'O le tala i...
ABS ART *story about*
A story about...

Modern Samoan short stories show a variety of beginnings as diverse as those of European short stories including categorical statements, left-dislocated time expressions or even direct speech (Agafili 1985:1, 23, 45). However, the stories by Sio (1984), who retells traditional stories heard from oral narrators represent an interesting case. Four out of 24 stories start with the presentative thetic expression:

(70) Sā iai X...
PAST *exist X...*
(Once) there was X,

and another four stories start with

(71) Sā mau / nofo i Y X, sā...
PAST *live/ stay in Y X,* PAST
Once there lived X in Y, who...

which also introduces the people to be talked about and, additionally, gives some background information about the place. Both types of beginnings look very similar to the corresponding English expressions and may even owe their structure to the influence of English. But within the typology of Samoan clauses their status is quite different from that of their English counterparts within English clause typology. For whereas V S represents the unmarked word order of intransitive clauses in Samoan, it is a marked word order in English which is particularly used in these presentative thetic expressions.

6. CONCLUSION

In the structure of simple verbal clauses Samoan differs considerably from European Accusative languages such as English:

1. Samoan is an Ergative language, in which the primary participant of intransitive clauses (S) and the patient NP of transitive clauses (O) form a single morphosyntactic category contrasting with the agent NP of transitive clauses (A).
2. Samoan is a role dominated language. Within simple verbal clauses it lacks a grammaticalised topic and consequently, a predication base (subject)/ predicate structure. The application of syntactic operations such as coreferential deletion across co-ordinate conjunctions and Equi-NP-deletion is semantically determined. There is no antipassive.
3. Simple verbal clauses present the unmarked clause type in narratives when reporting a sequence of events and are also used to make thetic statements, which by definition lack a predication base/predicate structure.
4. If a statement is to be presented as categorical, the participant meant as its predication base is left-dislocated.

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THE IDENTIFICATION OF LANGUAGE MIXING – WITH SPECIAL REFERENCE TO THE REEF-SANTA CRUZ SITUATION

Peter Mühlhäusler

> *The New Guinea area may offer some of the best laboratory situations in the world for the study of language mixing.* (Wurm 1982:66)

1. INTRODUCTION

The topic of language contacts and mixing is a recurrent theme in the writings of Stephen Wurm and one about which I have had many informative talks with him over the years. The immediate stimulus for this paper is a visit Stephen paid me at Oxford in February 1985. During his stay here we had the opportunity to discuss the problem of language mixing in more depth, together with many other topics in which we have a shared interest, linguistic and other. The approach taken by Stephen Wurm is reminiscent of that of another linguist who has influenced my thinking, Hugo Schuchardt. Both wish to improve the methodology provided by 'classical' comparative linguistics by paying special attention to cases where it is patently inapplicable: pidgins and creoles and languages which defy the usual methods of classification. I have often made reference to Wurm's views on pidgins and creoles (most recently in 1985a) and I shall deal here with the other languages, in particular those of the Reef-Santa Cruz group about which Stephen Wurm has written extensively over the last few years.

Apart from the descriptive concern, justified by features of these languages such as their nominal classification systems, Stephen Wurm also regards their study as beneficial to reducing the reliance on lexical evidence in reconstruction. In the languages of the Reef-Santa Cruz area, as in other areas of Melanesia, lexical borrowing 'reaches proportions ... which are unprecedented elsewhere' (Wurm 1982:89). What is needed in the study of such languages is 'a greater attention to the comparison of structural features ... along with sociolinguistic evidence.' Thus, Wurm sees the need for a widening of the linguistic basis in historical language study as well as the incorporation of language-external prerequisites to borrowing and mixing. Whilst I am in full agreement with the second point, the scope of this paper forbids me to expand upon it here. Instead, I shall examine the status of some of the linguistic/structural indicators of mixed systems.

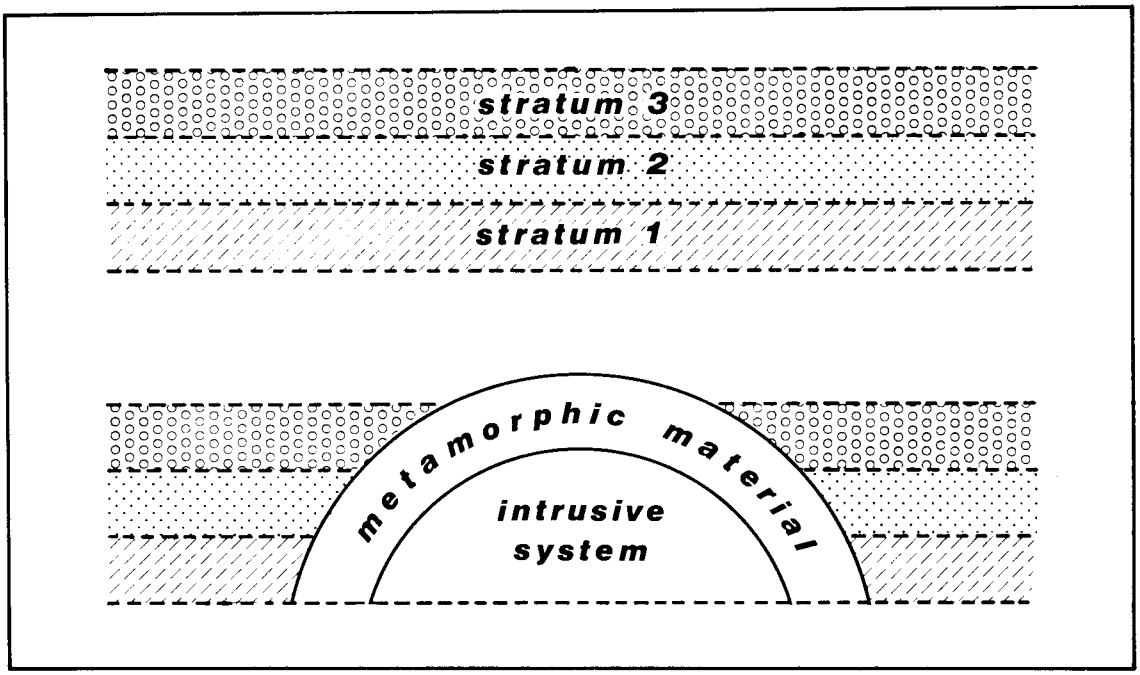
Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 481-493. *Pacific Linguistics*, C-100, 1987.
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2. ASSUMPTIONS ABOUT MIXED LANGUAGES

A number of recent studies of the state of the art in language contact linguistics (Clyne 1984, Mühlhäusler 1985b, Muysken 1984) all confirm that the research program initiated by Weinreich (1953) has still to be made sufficiently rigid to have an impact on the development of linguistic studies. What is particularly noticeable, is the absence of a unified conceptual framework[1] and procedures which, when applied to any given body of data by different researchers, will give at least similar answers.

The task facing us thus appears to be twofold (i) to put our conceptual framework in order and (ii) to develop empirically testable procedures in the area of identification of mixing. Regarding (i) it is widely held that substratum and superstratum can be neatly separated and hence identified as is suggested by the geological metaphor underlying any stratum view of mixed languages. That this is possible is questioned by Stephen Wurm, who draws attention (1982:102) to constructions in Reef-Santa Cruz languages, where we are dealing with 'coalescence of two accidentally formally similar Papuan and Austronesian suffixes into one form which now combines the function of the two originally different suffixes under one form'. Similar processes were described and classified in Edwards' study of San Andrés Creole English (1974). In the absence of any clear criteria for formal, functional and semantic similarity across systems we are left with a considerable margin for error and conflicting hypotheses. An approach to a solution would seem to be to bring together as many documented cases as possible and to formulate some inductive generalisations on their basis.

The stratum metaphor, as just noted, is deficient in precisely those cases where two strata merge without clear division lines. It also fails for another reason in that language mixing may be akin to geological metamorphosis rather than sedimentary deposits. Let me illustrate this graphically.



Whereas in the first figure the different elements contributing to the present-day system can be neatly separated and identified by usual comparative techniques, this is not possible where mixing of two or more systems results in totally new systems. It is in the area of metamorphic matter that identification procedures are needed. Implicit in my extension of the geological metaphor is the idea that the usual uniformitarian view of language development has to be supplemented by a catastrophic one. Only once the two perspectives are combined can we hope to achieve new insights into the nature of language mixing other than straight 'transfer'[2].

Having acknowledged the possibility of metamorphic processes, we should go one step further and introduce the idea of multiple (consecutive) metamorphosis where mixed systems are further mixed at a later stage when new contacts occur. Such a model would seem to be ideally suited to the phonological processes characterised by Lincoln (1978a:150) as 'being evidence for several traditions of indirect inheritance in addition to a tradition of direct inheritance'.

At present we lack procedures for separating the various strata and metamorphic layers in such complex phonological systems, though we can appeal to a number of general principles:

(i) all things being equal, i.e. without outside influence, grammatical systems tend to become more natural over time

(ii) the encounter of two full systems tends to increase the unnaturalness of the resulting new system

(iii) pidginisation and creolisation both tend to promote greater naturalness

(iv) borrowed material tends to be more prone to unsystematic behaviour and less susceptible to existing rules and regularities.

Such principles are only minimally applicable to phonemic inventories such as the ones used by Lincoln and Wurm. Their principal domain of application is phonological rules and data on variable phonetic realisation.

A second consideration in the development of an adequate conceptual framework for mixing is a clarification of the notion of 'borrowability'. We have to ask both about the theoretical limits of borrowing or mixing and the particular linguistic and sociolinguistic constraints that restrict mixing in specific instances. Cases of language shift seem to suggest that anything can be borrowed; such cases also suggest that mixed systems are inherently less stable and thus may have a lower survival rate than relatively unmixed ones. The question of what can be mixed thus has to be supplemented by asking how much mixing can take place within a given time without causing the recipient system to break down.[3] Again, one will have to appeal to factors such as linguistic naturalness, though it seems unlikely that the survival of a mixed system is conditioned by structural forces alone. What is equally necessary is the existence of clear social functions for mixing.

In this connection the notion that all languages are equal in their syncretic capacity needs to be re-examined. It would appear that the ability of languages to incorporate new material is inversely related to their structural consistency. The addition of only a few forms from outside is likely to upset a tightly structured system, whereas an already relatively 'loosely' structured language can absorb a much greater amount of 'foreign matter'.[4] This principle can be illustrated by the relatively low syncretic capacity of a highly regular

language such as Tok Pisin against the high syncretic capacity of English. One way of establishing the structural tightness of a language is to examine the dividing line between syntax (grammar) and lexicon (in the sense of the full set of irregularities). The greater the tendency of a language to grammaticalise semantic information, the smaller its ability to incorporate material from external sources.

An examination of the limits on receiving foreign material has to go hand in hand with an examination of what can be given. It should be self-evident that one can only borrow what actually exists. Most grammatical descriptions available for the Pacific areas are highly regularised and standardised and, in at least some instances, not representative of any actually used style other than that of addressing foreigners in a grammar-elicitation setting (cf. Duranti 1981). Consequently, existing written grammars and lexicons are not the best (though admittedly often the only) source of this kind of knowledge. The only remedy is to carry out fieldwork in societies where such linguistic encounters take place, paying particular attention to the many communication strategies which arise. Wurm's suggestion, to look at German bilinguals in Australia (Wurm 1978) is a good start, though his data would have to be supplemented with more dynamic data and observations on the social context of actual acts of mixing. There is a widespread belief that borrowing typically manifests itself as 'transfer' of entire linguistic signs of various components of grammar and that its effects are local, i.e. restricted to the component at which it occurs. Two views closely associated with this hypothesis are (i) that borrowing of lexical material does not affect other components and (ii) that there is a hierarchy of susceptibility to mixing among the different levels of grammar (cf. Tesch 1978). Neither of these views is supported by empirical evidence. Rather, we have fairly massive indications that borrowing in the lexicon can have far-reaching consequences for phonology and syntax[5] and that mixing at the lexical level sometimes predates and sometimes follows mixing at other levels; an interesting example of the former is the example of Kupwar village in India discussed by Gumperz and Wilson (1971). Moreover, it appears that there are considerable differences with regard to what can be mixed or borrowed at a single level. For instance, Heath (1978:105) draws the following distinction between what he refers to as 'diffusable' and 'non-diffusable' morphological categories in the languages of Arnhem Land:

DIFFUSABLE	NON-DIFFUSABLE
case affixes	independent pronouns[6]
number affix	bound pronominals
noun-class affixes	verbal inflectional affixes
diminutive affix	demonstrative stems
derivational verbal affixes	demonstrative adverbs
negative affix	
other postpositions	
inchoative verbaliser	
thematising augment	
special compound initials	

What can or cannot be borrowed depends on general principles such as syllabicity, separability, constructional opacity and several others discussed by Heath.

Similarly, general principles have also been observed by Wurm for the Reef-Santa Cruz situation. At present we are dealing with pretheoretical observations of a very promising kind. They still need to be integrated into an explicit theory of language mixing.

What distinguishes borrowing at different levels appears to be the extent to which this is a 'natural' process. Lexical borrowing together with some forms of phonetological borrowing[7] appear to be most susceptible to overt human interference: thus, speakers of many Australian Aboriginal languages were in the habit of borrowing extensively at the lexical level for taboo reasons. We could thus expect that the external nature of the linguistic contacts rather than internal structural constraints regulate the order in which mixing occurs at different levels of grammar. This seems to support Wurm's view that the question of the original nature of the Reef-Santa Cruz languages is ultimately determinable only by appealing to socio-historical evidence. At this point, however, very few reliable statements can be made about the relationship between different kinds of external contact and their structural consequences.

A third and last point I would like to mention in connection with our conceptual framework is that we have to address the question of the locus of borrowing and mixing. In particular, the frequent distinction between individual and social borrowing should be supplemented with information as to the age of the borrowing or mixing population. A considerable difference can be expected between mixed systems that develop in children growing up in a dual-lingual or bilingual environment and adults who grow up monolingually and adopt structures from another language for social or other indexical reasons. In the former case, under conditions of conflicting input, the development of a separate new system and favouring of natural outcomes is to be expected. In the second instance, the outcome is more likely to be a polysystemic, poorly integrated grammar. Again, we need both linguistic and sociohistorical information.

The above points add up to a plea for greater terminological refinement and a careful examination of the assumptions and metaphors underlying language contact studies to date.

Regarding the second part of this section, the development of identification procedures for language mixing, we are faced with the well-known problem of historical linguistics, namely that similarities between two languages can be due to any of the following:

(1) common origin

(2) one language having been influenced by the other, or vice versa

(3) pidginisation or creolisation in their past

(4) accident

(5) deliberate human intervention[8]

(6) other, as yet not well understood factors, such as learning conditions

(7) conspiracies between two or more of the above

Linguists have traditionally concentrated on establishing criteria for the first category to the virtual exclusion of all others. As a result, we have procedures such as lexicostatistics, glottochronology, internal reconstruction and the comparative method.

Within these methods we have recognition procedures for cognates.[9] More recently, research on pidgins and creoles has come up with some proposals as to the identification of pidginisation and creolisation in the history of languages. This leaves us with at least five more distinctions to be accounted for. It would certainly be dangerous to assume that whatever cannot be ascribed to pidginisation or retention of a common tradition must be the result of language mixing.

My basic hypothesis is that mixing leaves traces which are different from those associated with other factors accounting for similarity. In particular, I would dismiss an often heard assumption (repeated, for instance, in such introductory textbooks as Aitchison 1981) that language contact and mixing merely accelerate existing trends in linguistic development. Rather, it would appear that most commonly mixing results in a reduction of the regularity of linguistic systems, breaks in implicational patterns, reduced susceptibility of borrowed material to the rules of the receiving language as well as suppletive patterns. As identical results may also be the consequence of human interference and other processes, we need as much information as possible on the socio-linguistics of the contact situation. What is proposed in the following section is tentative rather than definitive.

3. THE IDENTIFICATION OF LANGUAGE MIXING IN THE REEF-SANTA CRUZ FAMILY OF LANGUAGES

That the languages of this area exhibit a significant degree of mixing is not in dispute. Equally undisputed is that Austronesian influence involved a number of languages rather than a single one and that it occurred at different points in time and possibly in different locations. We are thus concerned with consecutive mixing between two full systems rather than with creolisation involving three or more systems at a single point in time (for a discussion of this distinction see Markey 1979).

What is at issue is whether we are dealing with languages that 'were originally Papuan which had been very heavily affected and altered as a result of overwhelming Austronesian influence' (Wurm 1982:95) or whether 'the Reef-Santa Cruz languages could be classified as Austronesian — or more specifically as Oceanic languages free from the influence of other language families in the Pacific' (Lincoln 1978b:929). Wurm and Lincoln have chosen to debate this issue separately for each of the major components of grammar and I shall adhere to this format.

3.1 Phonology

The discovery of sound correspondences between the Reef-Santa Cruz languages on the one hand and Papuan or Oceanic languages on the other has been very slow. This is in part due to the very complex phonological systems but also to a concentration on surface phonological inventories. How an appeal to deeper levels of phonological representation can solve problems encountered with phonologically aberrant languages has been shown by Crowley (1976) for the Nganjaywana language of Queensland. Crowley's methodology together with those developed by Biggs (1965) and Heath (1978) for mixed languages should throw light on this area.

3.2 The lexicon

Languages such as the Reef-Santa Cruz family confirm that lexical evidence on its own is not a reliable guide to genetic affiliation, especially in instances where borrowing is institutionalised for taboo or other social reasons. However, it may well be that a closer study of the nature of lexical mixing may give clues to the direction of borrowing. The following observations have been made on the lexicon of these languages:

(i) The proportion of lexical items of Proto-Oceanic or Proto-Austronesian origin is greater in all Reef-Santa Cruz languages than the proportion which is definitely not Austronesian (cf. Wurm 1970:487ff).

(ii) There appear to be no 'whole classes of morphemes that bear no resemblance to equivalent classes in Oceanic languages' (Lincoln 1978b:961).

(iii) One can identify some formal correspondences with other Papuan languages, such as those of Rossel and Bougainville.

(iv) The fact that mixing occurs right in the lexical core suggests very close contacts. Note, however, that since these contacts occurred over a prolonged period of time, the number of subjectively foreign words (i.e. to the speakers of RSC languages) must have been much lower than is suggested by a static lexical count.

(v) The sound changes required to reconstruct Proto-Oceanic on the basis of present-day RSC data can be motivated for individual words or small groups of words only: 'Changes required for one comparison may be exactly opposed to the sound changes required for the next comparison' (Lincoln 1978b:961).

How do such observations bear on the argument and what further research is needed to settle it?

An important step yet to be taken is the reconstruction, using comparative as well as internal reconstruction, of a Proto-Reef-Santa Cruz lexicon. The aim of such a reconstruction would be to ascertain whether the Oceanic material in these languages is related in a more regular fashion than the alleged Papuan material, in which case an Oceanic origin would seem more likely.

A next step would be to use tests to determine the relative antiquity of lexical items such as those suggested by Heath (1978) and myself (Mühlhäusler 1985b). Greater antiquity is signalled, among other things, by:

(a) allomorphic specialisation, excluding surface phonological conditioning

(b) greater susceptibility to grammatical rules.

An illustration of these principles will be given using data from morphology.

A final test for the lexicon would be to appeal to universal lexical hierarchies such as the implicational scales for numbers, colours or plants (cf. Brown 1977). Thus, the fact that the numbers 'two' and 'three' but not 'one' can be related to Oceanic languages supports the thesis that the most basic element is non-Oceanic. Obviously, one would not wish to pick on such isolated cases but

rather develop a scale of 'borrowability' and 'basicness' (naturalness) of lexical items. The available Swadesh lists and their derivatives are not subtle enough for this purpose.

3.3 Morphology

That morphology can be borrowed much more freely than is assumed by most linguists has been established, beyond doubt, most recently and dramatically by Heath (1978) for the languages of Arnhem Land. Both Wurm and Lincoln have used morphological evidence in their arguments and I shall examine a small sample with reference to the above mentioned identification procedure for relative antiquity.

3.3.1 Nominal possessives

Possession marking in the Reef-Santa Cruz languages exhibits a very high degree of allomorphic specialisation, suggesting that 'the system is directly inherited' (Lincoln 1978a:149). What is at issue is whether possession marking is a continuation of an Oceanic pattern (as suspected by Lincoln) or whether it 'reflects features of semantic classifications present in the original languages of these people' (presumably Papuan) as argued by Wurm (1978:1000).

I am not sure that either writer has given compelling arguments in favour of their respective view. Claims such as 'the Reef-Santa Cruz elaborations of Type-B possessive markers resemble systems in New Hebrides and Micronesia' (Lincoln 1978a:145) can only be accepted if we have criteria for determining possible divergent developments in areas such as possession marking.

3.3.2 Other areas of morphology

Wurm (1982:92ff) lists a number of other areas of nominal and verbal morphology as reflecting a Papuan origin of these languages. Features given include:

Aŷiwo (Reefs, Aiwo)	gender system
	noun classes
	verb system
Santa Cruz	verb system
	features in the numeral system above five
	aspects of negation

Let me briefly illustrate how such data could be used to determine the direction of borrowing.

(i) As observed by Wurm (1978:979) 'the verb in Reefs is considerably simpler than the Santa Cruzan verb'. It seems possible that this is related to the fact that Reef has a higher percentage of Austronesian content in its lexicon and that the loss of morphological complexity is due to reduced susceptibility of borrowed material. If this could be demonstrated, Wurm's hypothesis would receive considerable support.

(ii) The absence of gender marking in Reefs in the third person (see Wurm 1973:977) appears to be related to the observation that the third person is signalled by an affix of Austronesian origin. Absence of gender marking in the third person with simultaneous presence of marking in the first and second persons is a highly marked phenomenon. The markedness again appears to be the result of borrowing.

I cannot deal with the other morphological categories here but hope to do so in more detail elsewhere. For the same reasons, my remarks on syntax will be very brief.

3.4 Syntax

The value of word order as an index of genetic relationships is vastly reduced by a number of considerations, including:

(i) there are no known constraints on the typological differences between genetically related languages. Thus, the same syntactic typology is as likely to be encountered with related languages as it is with unrelated ones

(ii) in the course of internal development, single languages can change dramatically in terms of their syntactic properties. This is often due to changes in the boundary between inflectional morphology and word order

(iii) most languages are typologically mixed, such mixture is not directly relatable to language mixing.

Indices of language contact in the syntactic area may be found in:

(i) typological inconsistencies, breaks in implicational universals of word order and discrepancies between morpheme and word order

(ii) non-lexical words and inflectional morphemes which are likely to reflect the order of the donor rather than the recipient language.

However, it must be emphasised that syntactic indicators are probably the weakest ones and that, in the absence of other evidence, little importance should be attached to them.

4. CONCLUSIONS

The main conclusion I have to offer is that our knowledge of language mixing is still very rudimentary. In terms of the main stages of scientific investigation of problem recognition, systematic observation and classification, theory formation and testing we have reached only the second. Stephen Wurm has done the field a great service by continually stressing the problems caused by the presence of mixed systems as well as significantly enlarging the small body of observations that had been available for the Pacific area before he began his work. Finally, he has begun to propose a number of hypotheses and proposed procedures for testing them. Such groundwork forms an excellent basis from which to proceed.

Regarding the particular problem at hand, I do not feel that it is yet possible to obtain conclusive proof either for or against a Papuan basis of the Reef-Santa Cruz languages. The data adduced by Wurm and Lincoln are open, in a number of instances, to conflicting interpretation. Whereas isolated observations may well seem to confirm one of the hypotheses, it is the overall picture and not local phenomena that count. The next steps to be taken will be:

(i) The refinement of recognition procedures for language mixing and the direction of borrowing. This methodology will have to be developed with as much comparative evidence as possible. Constraints on mixing (such as those proposed by Moravcsik 1978) as well as inductive generalisations are needed.

(ii) The work on comparative linguistics and internal reconstruction of the Reef-Santa Cruz languages begun by Wurm needs to be continued in as much detail as possible.

(iii) Comparative work with Papuan and Austronesian languages outside the Reef-Santa Cruz area is needed (e.g. with Buin, Yeletnye or Micronesian languages).

(iv) The chronology of language contacts in this area has to be established, using linguistic as well as extralinguistic evidence.

Finally, one should also make use of the uniformitarian principle and study the grammatical developments which are now taking place in the Reef-Santa Cruz languages under the impact of the official languages of the Solomon Islands, namely English and Solomon Pijin. Some of these changes have been discussed in a recent paper by Wurm on grammatical decay (1986). Stephen Wurm once referred to language mixing as 'one of the neglected fields of study in Oceanic linguistics' (1982:87). I hope that the interest he has created in it over the years among his colleagues will help to stimulate the growth and quality of work carried out within this field.

NOTES

[1]Thus, Muysken (1984:72) refers to the field as 'chaotic in that it combines concepts from different disciplines' and Mühlhäusler (1985b:53) remarks that it 'comprises a conceptual mess aggravated by a terminological mess'.

[2]The term 'transfer', adopted from contrastive linguistics, and ultimately behaviourist views of language learning, is yet another example of how terms can lead to confusion. In most instances, elements are not transferred unchanged or in their entirety from one language to another, a view which is recognised in Wurm's studies on the Reef-Santa Cruz situation. The term 'transfer' should be reserved for the small number of cases where this has occurred.

[3]The idea that such structural collapse can occur is found in some of Wurm's later writings on Tok Pisin.

[4]This principle also applies to other phenomena. Placing an additional object on Stephen Wurm's desk would hardly change its fundamental character. Adding the same object to the neat desks of other academics would upset their symmetry.

[5]That such interlevel relationships also occur in change without contact is illustrated by Blust (1977) in his discussion of a phonologically-conditioned syntactic drift in Oceanic Austronesian languages.

[6]Note, however, that the various Spanish Creoles of the Philippines have mixed pronoun systems (Frake 1971).

[7]It is for similar reasons that lexical and phonetological rather than morphosyntactic markers are typically used as indices of social group membership.

[8]An example is the relationship between English and Shelta: the structural similarities and lexical dissimilarities may be traced to deliberate lexical changes.

[9]The reliability of such procedures is not accepted by everyone. Thus Lincoln (1978b:962) asks: 'What test do we have to separate those similarities of linguistic form and structure due to genetic relation from those similarities due to chance?'

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LANGUAGE PROFICIENCY TESTS

Nguyễn Đăng Liêm

0. INTRODUCTION[1]

Foreign language instruction in the Western world in general, and in the United States in particular, is in the beginning stages of what can be viewed as a major revolution — a revolution that addresses, simultaneously and in a highly synergistic manner, the intended outcomes of language instruction, the pedagogical materials and procedures used to bring about these outcomes, and the assessment techniques most validly employed to certify their attainment. In the United States, the current situation in the field reflects a major effort on the part of the American Council on the Teaching of Foreign Languages (ACTFL), in cooperation with a large number of other language teaching organisations, colleges and universities, state departments of education, and numerous other groups and individuals, to:

(1) establish the development of true functional proficiency in the target language as a major goal of language instruction;

(2) encourage and assist curriculum planners, textbook publishers, teacher trainers, and individual instructors to become closely familiar with and adept at the development and use of teaching materials and procedures that focus directly and effectively on bringing about such proficiency on the students' part; and

(3) develop, make available, and assist in the interpretation of assessment procedures that measure in a highly reliable and valid manner the extent to which students are able to carry out real-life language-use tasks in a linguistically accurate and sociolinguistically appropriate manner across the variety of language-use situations they may be expected to encounter outside of the instructional setting itself.

The present status of — and anticipated additional near- and mid-term development within — the 'proficiency' movement (as it is now coming to be called) are well summarised in two publications: the 1982 ACTFL Foreign Language Education Service volume on *Curriculum, Competence, and the Foreign Language Teacher* (Higgs, ed. 1982), and the 1983 Winter special issue of the *Modern Language Journal* (Ervin, ed. 1983) entitled 'Methodology in Transition: The New Focus on Proficiency'. Without recounting in detail the issues raised in these and other sources, it would be emphasised that the third component — the valid *measurement* of attained proficiency — is a sine qua non for effective

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work in the other two areas, since the testing procedures adopted become in fact the operational definitions of 'proficiency' as well as the obvious major targets toward which classroom instruction and associated teaching materials would tend to be directed.

With regard to the measurement component of the proficiency movement, it is fortunately possible to state that, in the past thirty years, a number of major activities have taken place that attest to vigorous and very properly directed developmental efforts. A brief summary of this development seems appropriate here.

1. DEVELOPMENT AND EVOLVEMENT OF PROFICIENCY TESTING

In the 1950s, the U.S. Department of State identified the need to verify the foreign language skills of its employees. A needs analysis of State Department jobs at home and abroad was carried out by the Foreign Service Institute, and a series of statements of oral language proficiency was developed, as well as a procedure for conducting a face-to-face interview to elicit an appropriate sample of the candidate's speech. The interviewing and rating system was officially adopted, and prospective and current government employees have been tested for oral proficiency since that time, not only by the Foreign Service Institute, but also by other federal agencies concerned with second language training and use. The Interagency Language Roundtable (ILR), a consortium of government agencies involved in the teaching and testing of language proficiency, has continued to refine and expand the proficiency definitions and to provide even better guidelines for conducting the interview as well as for testing the examinee's other skills in listening, reading, writing and culture.

In the late 1960s, the Peace Corps turned to the Educational Testing Service (ETS) for help in developing a programme to test the oral proficiency of its trainees and volunteers. ETS' role became one of training testers at a number of in-country Peace Corps sites. In the early 1970s, the possibility of wider applications of the interview procedure in particular, and FSI testing techniques in general, came from bilingual education programmes and agencies at the municipal and state levels. ETS trained interviewers and raters for bilingual and ESL teacher certification programmes in a number of states and, in some places, also developed and operated testing programmes.

Since 1981, the American Council on the Teaching of Foreign Languages (ACTFL) and ETS have been conducting training workshops in oral proficiency testing for high school and postsecondary second language teachers. The workshops run the gamut from relatively short familiarisation sessions to four- or five-day formal training workshops.

Lasting two hours to two days, the familiarisation workshops introduce teachers to the concepts and procedures involved in oral proficiency assessment. The ACTFL/ETS scale (to be discussed later in this paper) is presented and, depending on the length of the session, teachers listen to and rate taped interviews and may also have the opportunity to conduct practice interviews. Two-day familiarisation workshops are offered at ETS several times each year through the Division of Educational Services. ACTFL and ETS can offer similar workshops at the sites of sponsoring agencies or institutions, and these workshops can be tailored to meet the particular needs of the audience.

Formal tester training workshops, which last from four to five days, have been offered several times each year since 1982-83 by ACTFL/ETS under the sponsorship of the U.S. Department of Education and the National Endowment for the Humanities. The ILR, through the Defense Language Institute/Language School Oral Interview Transfer Project, also provided advanced training to some foreign language instructors at a two-week workshop in August 1982. ILR hopes to be able to continue including representatives of the academic sector with research interest in their oral proficiency testers' training programme on a space-available basis.

In the development of effective means to measure second language skills in listening, speaking, reading and writing, and in cultural understanding, there seems to be more effort and emphasis on instruments to gauge the speaking proficiency of the student than the other aspects. The oral proficiency interview described below may provide such a means, and will offer us an opportunity to examine the various proficiency scales for the other skills as well.

2. TESTING SPEAKING PROFICIENCY

In the testing of speaking proficiency, we will discuss the oral interview and its alternative, the tape-recorded technique, as we feel that the former is probably an ideal assessment instrument for large volume languages, and the latter an alternative technique for low enrolment languages.

2.1 The oral interview

The oral interview (OI) is a testing procedure capable of measuring a wide range of speaking abilities from novice to native. In the OI, the student converses with one or two trained testers, on a variety of topics, for approximately ten to forty minutes depending on the student's proficiency level. The resulting speech sample (which may be tape-recorded for later verification) is then rated on a scale ranging from 0 (no practical ability to function in the language) to 5 (ability equivalent to that of a well-educated native speaker). 'Plus' ratings (0+, 1+, 2+, 3+ and 4+) are given to students who substantially surpass the requirements for a given level but fail to sustain performance at the next higher level. The resulting scale contains, in total, 11 ranges of overall proficiency, with each range defined in terms of functional language use. The definitions of the levels are found in Appendix A, ILR Government Definitions: Oral Proficiency. Their headings are as follows:

S-0 No Practical Proficiency

S-1 Elementary Proficiency

S-2 Limited Working Proficiency

S-3 Professional Proficiency

S-4 Distinguished Proficiency

S-5 Native or Bilingual Proficiency

These definitions illustrate the extent to which the oral interview is based on real-life linguistic needs and behaviours. While these definitions were originally designed to meet the needs for assessing fluency at the functional levels required for government service abroad, they have recently been 'expanded' at the lower levels in order to encompass learning goals that can realistically be attained in secondary school and college programmes. These definitions also underscore that the interview is a proficiency test, which compares the student's speaking ability to that of an educated native speaking using the language for real-life communication purposes, as contrasted to an achievement test, which is based on the material covered in a particular course of study.

In the last decade, the proficiency scale and the interview have attracted increasing interest within academic circles. Second language teachers at the high school and postsecondary levels realised that the scale would need some adjustment to adequately measure their students' proficiency. The lower end of the scale (0, 0+, 1, 1+) was not sensitive enough to register observable differences in proficiency among students, and the upper end of the scale would seldom be appropriate for the skill levels their students could reasonably be expected to achieve. The federally funded 'Common Yardstick Project' at ETS addressed this issue by developing additional descriptions of the oral proficiency between levels 0 and 1 and between levels 1 and 2. This expanded scale was subsequently refined by the American Council on the Teaching of Foreign Languages (ACTFL) and the ILR under a U.S. Department of Education grant. Known as the ACTFL/ETS scale (Appendix A: ACTFL/ETS Scale and the ACTFL/ETS Provisional Speaking Descriptions) or the 'academic' scale, it is currently taught at all ACTFL and ETS workshops for individuals interested in the oral testing of high school and postsecondary second language students.

2.1.1 Reliability and validity

The OI demonstrated a high degree of reliability and validity. It is reliable in that trained raters who independently rate the same live or taped interview normally assign the same rating or differ by only a 'plus' point. The OI is a face-valid test of speaking ability in that it requires candidates to speak in a realistic conversational setting. The content validity of the OI is maintained from interview to interview by having trained interviewers always test for the functions, content, and accuracy that characterise each level.

2.1.2 Usefulness

Because of its high degree of reliability and validity, the OI should be used in those situations where proficiency testing is in order, e.g., placement testing, testing prior to and after intensive language training; testing prior to and after living abroad; testing at the end of a major sequence of high school or college courses; testing for course credits awarded for proven proficiency rather than for number of credit hours taken; testing for suitable language teaching assistants.

2.1.3 Practicality

Practicality is a crucial issue in all testing. Paper-and-pencil tests are highly practical because they can be given to large numbers of students simultaneously and can be scored by a non-specialist. Unfortunately, they cannot directly measure speaking proficiency. By contrast, the OI requires trained interviewers and is both more labour-intensive and more time-consuming than paper-and-pencil tests. However, the importance of oral competence fully justifies the time and effort required to test it, for *those languages and language programmes for which the total student volume, number of qualified instructors, and other material and personnel resources are sufficient to support this type of testing on a cost-effective basis.* It is our strong concern that for a large number of uncommonly-taught languages such as Chinese, Indonesian, Tagalog, Thai, and Vietnamese (to name only a few), and for small university foreign language programmes, the relatively small number of students involved in the languages on a nationwide basis (and the associated very modest enrolments at individual institutions) will make it extremely difficult to locate individual college or university language departments, state education agencies, or even foundations or other grant-making agencies that would be willing to defray the very considerable per capita costs of training interview testers locally in these languages or, alternatively, of engaging trained outside testers to travel to and test the relatively small number of students involved. Although the economies of scale inherent in the larger-volume languages may make it financially appropriate for a department chairperson to send three or so of his or her French instructors to a week-long intensive training session, or to ask an outside tester to spend several days interviewing thirty or forty graduating Spanish majors, neither of these options is realistically available to a Chinese, Hindi, Thai, or Vietnamese programme consisting of, perhaps, two part-time instructors and a total of eleven students. As a matter of simple financial reality, it appears unfortunately the case that for those languages and programmes where numbers of both students and instructional staff fail to reach at least a break-even level in the cost-benefit equation, there is a serious risk of being unable to benefit to any significant degree from the programme and materials development, direct assessment-of-results, and other major advantages that the 'proficiency' movement is beginning to bring to the larger-volume languages.

2.2 Tape-recorded technique as an alternative to the oral interview

In order to enable the low-enrolment language programmes to benefit from the 'proficiency' movement, it is imperative to develop an alternative approach for speaking proficiency testing that should be operationally practical for use with these programmes, and at the same time, highly congruent with the regular interview-based ACTFL/ILR testing procedure with respect both to the types and degrees of language performance measured in the test and the reporting and interpretation of the results. Such a procedure utilises a tape-recorded technique to gather the students' oral production, with this speech sample being subsequently listened to, evaluated, and the results reported on the regular ACTFL/ILR scale by scorers carefully trained in the ACTFL/ILR rating scale.

In addition to permitting economically feasible speaking proficiency measurement based on the ACTFL/ILR guidelines within the context of the less commonly taught languages, this testing approach provides highly equivalent

administration conditions across test sites, as well as centralised scoring and score reporting based on student- and institution-anonymous, objective ratings — especially important in connection with the selection of applicants for intensive training programmes and for similar across-institutional measurement applications.

It is believed that this alternative approach — the (necessarily) automated securing of the speech sample, coupled with the use of trained interview raters to analyse and report the students' performance specifically in terms of the ACTFL/ILR scale — constitutes a measurement procedure that is feasible within the financial and administrative exigencies involved while in the same time providing the maximum possible congruence with the ACTFL/ILR measurement process and, by the same token, with the numerous 'proficiency' initiatives in curriculum development and other areas that are now under way for the higher-volume languages.

A number of test development activities making use of the 'semi-direct' technique — defined as actual speech production on the student's part, elicited by the tape recording or other automated means (Clark 1979) — have been carried out in, for example, the recent development of the *Test of Spoken English* (TSE) which is now being operationally administered within the TOEFL programme (Clark and Swinton 1980a,b). Another example along the same line is the *Recorded Oral Proficiency Examination* (ROPE) developed in 1979 by Pardee Lowe, Jr and Ray T. Clifford at the Language School of the Central Intelligency Agency (Lowe and Clifford 1980). The ROPE consisted of a series of tape recorded questions in the target language to which the student was asked to reply orally, also on tape, with the entirety of the student's performance subsequently rated according to the general FSI scale. A product-moment correlation of .90 was found between student scores on the ROPE and a direct FSI-type interview, indicating a very high level of concurrent validity vis-a-vis the FSI criterion measure.

A crucial project is being carried out at the Center of Applied Linguistics under the co-directorship of Dr John D.L. Clark of the Center and Dr Ying-Che Li of the University of Hawaii under a grant from the International Education Programs of the United States Department of Education. Its title is *Development, Validation, and Dissemination of a Proficiency-Based Test of Speaking Ability in Chinese and an Associated Assessment Model for Other Less Commonly Taught Languages*. Project activities include the development, trial administration, and revision of the testing procedure through direct correlation with the ACTFL/ILR interview and the establishment of scoring reliability through inter-rater reliability analyses. In addition to producing four alternate versions of a test of this type in Chinese, the project will develop and make available detailed descriptive information and guidelines on the test development process for potential use by similar development groups in other less commonly taught languages. The general principles of the Chinese proficiency test project are as follows:

(a) The basic administration technique will consist of tape-recorded questions (in Chinese) addressed to the examinee, with the examinee's responses simultaneously tape-recorded for later evaluation by trained raters. However, printed and pictorial materials are also used on a supplementary basis to provide necessary information in situations where the anticipated response calls for a display of affect (e.g., anger, doubt, hesitancy, etc.).

(b) The questions asked on the test tape reflect the general types and sequencing of questions used in the live interview, and include, for example, questions eliciting simple factual information of a biographical nature, narrative descriptions of daily or leisure time activities, hypothetical questions, questions requiring the expression of an opinion or 'taking sides' on a particular issue, and so forth.

(c) The test allows for valid and accurate assessment within approximately level 0+ through level 3+/4.

The dissemination of two types of project results is envisioned: (1) detailed printed information on the rationale for and procedures followed in developing the project tests, for use as appropriate by other groups considering the development of speaking tests in the other less commonly taught languages; and (2) the actual operational test in Chinese, for use by undergraduate and graduate language departments, intensive language training programmes abroad, and other organisations in Chinese language instruction.

3. TESTING LISTENING COMPREHENSION

The technique of testing listening comprehension described here is that of the *Chinese Proficiency Test* which was developed under a U.S. Department of Education grant and co-directed by Dr John L.D. Clark of the Center for Applied Linguistics and Dr Ying-Che Li of the University of Hawaii at Manoa. The Test is available for administration at Chinese language teaching programmes from the Center for Applied Linguistics.

Based on the Generic Guidelines of ACTFL (Appendix B), the CPT was prepared under the following general principles as guidelines to test content and format:

(a) In both of its parts to test listening comprehension and reading ability, the CPT uses multiple-choice formats that readily lend themselves to group administration.

(b) In keeping with its intended function as a measure of *generalised* language proficiency, the major focus of the test is on assessing the student's ability to function in realistic language-use situations typical of those encountered outside of the classroom setting per se, and without explicit association with particular curricula or teaching approaches. The test content allows for assessment from level 0+ to level 3+/4.

(c) The stimulus material consists of tape recorded spoken passages, including single utterances, short dialogues between two or more speakers, longer dialogues, and longer single-speaker passages. In all instances, the spoken material is reflective of actual use in conversational settings, radio broadcasts, and so forth.

(d) The recorded voices are native speakers of Chinese and include both men's and women's voices. The spoken material is delivered with natural pacing and intonation.

(e) To insure that student performance is solely a function of listening comprehension ability, answer options are printed in English (i.e., not in Chinese, which would add the potentially confounding factor of reading ability).

(f) For ease in handling and administering the test materials on-site, both portions of the CPT (listening and reading) are printed within a single booklet. The listening portion of the test is supplemented by a master test tape that presents the test stimuli and also automatically time pauses for examinee reponse. For test administration, the test tape programme is either distributed to individual booth positions in a language laboratory or played aloud in a regular classroom setting.

(g) A total length of 150 questions includes 60 listening comprehensions and 90 reading proficiency questions.

The CPT kit includes an administrator's guide, a test booklet and tape, a computer answer sheet, and a student's information sheet for continued research purposes. The listening comprehension portion of the test takes 35 minutes, and the reading portion 85 minutes for the actual testing time, including instructions.

4. TESTING READING PROFICIENCY

The technique of testing reading proficiency described here is that of the *Chinese Proficiency Test* whose listening comprehension portion was discussed above, and the *Reading Proficiency Test in Vietnamese* (RPTV) developed by the author under a U.S. Department of Education grant, 1985. The RPTV is being field-tested for norming purposes.

Besides the general principles as guidelines to test and content format discussed in the section above on testing listening comprehension, one should add that the stimulus material for the RPTV consists of printed Vietnamese texts drawn or adapted from real-life sources including, at the simplest level, typical street or store-front signs, and increasing in complexity to include representative excerpts from newspapers, magazine articles, general literature and expository writing typical of that encountered by the average educated Vietnamese speaker. Texts requiring specialised subject matter were not presented. Test questions in the RPTV deal with the factual content of the text or with straightforward inferences based on the text, as opposed to allusions, literary references, interpretations of styles, etc. The present format of the RPTV being field-tested includes 108 questions. The final version of the test is expected to have approximately 80 questions, and will take one and a half hours of testing.

In the preparation of the RPTV, the author benefited a great deal from the *Item-Writing Suggestions* designed for the Chinese Proficiency Test Project at the Center for Applied Linguistics (Appendix C). Following the RPTV, the author intends to prepare a listening comprehension and speaking proficiency test according to the Chinese test format.

Along the line of efforts to develop proficiency tests in low enrolment languages, one could mention the *Tagalog Proficiency Test* developed by Dr Teresita V. Ramos under a U.S. Department of Education grant, 1983.

5. TESTING WRITING PROFICIENCY AND TESTING CULTURAL SENSITIVITY

Although the Generic Guidelines of the American Council on the Teaching of Foreign Languages include sections of writing proficiency and cultural sensitivity, and although the preparation to assess these linguistic and cultural skills in large volume languages may be taking place, we believe that the efforts along that line for low enrolment languages such as Vietnamese might not be financially justifiable.

6. A FINAL NOTE ON THE ACTFL GENERIC GUIDELINES

The generic guidelines for proficiency testing put out by the American Council on the Teaching of Foreign Languages aim at generalities across languages. It is up to the teachers of individual languages to prepare their language-specific guidelines. The author is aware of the work by the Chinese teachers in the United States along this line. Their work was discussed at the annual ACTFL conference in Chicago in November, 1984 where a draft was circulated.

NOTE

[1]This paper was presented as the keynote speech at the Annual Conference of the Applied Linguistics Association of Australia in Brisbane, 25th to 29th August, 1985. It was prepared when the author was a Visiting Fellow in the Department of Linguistics, Research School of Pacific Studies, The Australian National University, in July-August, 1985.

APPENDIX A

CORRESPONDENCE BETWEEN ILR AND ACTFL/ETS SPEAKING PROFICIENCY SCALES

ILR SCALE	ACTFL/ETS SCALE
5 native or bilingual proficiency	
4 +	
4 distinguished proficiency	superior
3 +	
3 professional proficiency	
2 +	advanced plus
2 limited working proficiency	advanced
1 +	intermediate—high
1 elementary proficiency	intermediate—mid
	intermediate—low
0 +	novice—high
0 no practical proficiency	novice—mid
	novice—low

The Foreign Service Institute (FSI) has been using an oral proficiency test for over 25 years; this test has been endorsed by the Interagency Language Roundtable (ILR), an unofficial colloquium of approximately thirty government agencies involved in foreign language teaching. The ILR test is well recognized within and outside the federal government as a yardstick of foreign language competence.

The ILR oral proficiency scale covers the full spectrum of speaking ability, from Level 0 (no functional ability) to Level 5 (ability equivalent to that of an educated native speaker). Levels 0-4 feature a plus-point rating for examinees who substantially surpass the requirements for a given level but fail to sustain performance at the next higher level.

The ILR scale makes provision for five definable ranges of proficiency between Levels 0 and 2; 0, 0 +, 1, 1 +, and 2. These ranges are so broad in scope that students could make considerable progress within a semester or a year and still not reach a new rating. In order for the scale to be usable in traditional academic settings, more subdivisions were required at the lower end of the scale to measure student progress. This need was addressed by Educational Testing Service in a project funded by the U.S. Department of Education.

The outcome of this project was the defining of three proficiency ranges betweem Level 0 and Level 1 and three ranges between Level 1 and Level 2, without altering the definition of a given level of proficiency. A new nomenclature was also devised to replace the numerical one. Since nearly all professional requirements for use of a foreign language can be satisfied by persons with Level 3 proficiency, it was proposed by ETS that all candidates rated above the equivalent of an ILR 2 + be given a rating of "Superior."

ILR GOVERNMENT DEFINITIONS: ORAL PROFICIENCY

NO PRACTICAL PROFICIENCY

S-0 Uses a few isolated words and phrases which have no practical application. Unable to participate even in a very simple conversation.

ELEMENTARY PROFICIENCY

S-1 Able to satisfy routine travel needs and minimum courtesy requirements. Can ask and answer questions on very familiar topics; within the scope of very limited language experience can understand simple questions and statements, allowing for slowed speech, repetition or paraphrase; speaking vocabulary inadequate to express anything but the most elementary needs; errors in pronunciation and grammar are frequent, but can be understood by a native speaker used to dealing with foreigners attempting to speak the language; while topics which are "very familiar" and elementary needs vary considerably from individual to individual, any person at the S-1 level should be able to order a simple meal, ask for shelter or lodging, ask and give simple directions, make purchases, and tell time.

LIMITED WORKING PROFICIENCY

S-2 Able to satisfy routine social demands and limited work requirements. Can handle with confidence but not with facility most social situations including introductions and casual conversations about current events, as well as work, family, and autobiographical information; can handle limited work requirements, needing help in handling any complications or difficulties; can get the gist of most conversations on non-technical subjects (i.e., topics which require no specialized knowledge) and has a speaking vocabulary sufficient to respond simply with some circumlocutions; accent, though often quite faulty, is intelligible; can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar.

PROFESSIONAL PROFICIENCY

S-3 Able to speak the language with sufficient structural accuracy and vocabulary to participate effectively in most formal and informal conversations on practical, social, and professional topics. Can discuss particular interests and special fields of competence with reasonable ease; comprehension is quite complete for a normal rate of speech; vocabulary is broad enough so that the speaker rarely has to grope for a word; accent may be obviously foreign; control of grammar good; errors never interfere with understanding and rarely disturb the native speaker.

DISTINGUISHED PROFICIENCY

S-4 Able to use the language fluently and accurately on all levels normally pertinent to professional needs. Can understand and participate in any conversation within the range of own personal and professional experience with a high degree of fluency and precision of vocabulary; would rarely be taken for a native speaker, but can respond appropriately even in unfamiliar situations; errors of pronunciation and grammar quite rare; can handle informal interpreting from and into the language.

NATIVE OR BILINGUAL PROFICIENCY

S-5 Speaking proficiency equivalent to that of an educated native speaker. Has complete fluency in the language such that speech on all levels is *fully* accepted by educated native speakers in all of its features, including breadth of vocabulary and idiom, colloquialisms, and pertinent cultural references.

THE ACTFL/ETS PROVISIONAL SPEAKING DESCRIPTIONS

NOVICE—LOW

Unable to function in the spoken language. Oral production is limited to occasional isolated words. Essentially no communicative ability.

NOVICE—MID

Able to operate only in a very limited capacity within very predictable areas of need. Vocabulary limited to that necessary to express simple elementary needs and basic courtesy formulae. Syntax is fragmented, inflections and word endings frequently omitted, confused or distorted and the majority of utterances consist of isolated words or short formulae. Utterances rarely consist of more than two or three words and are marked by frequent long pauses and repetition of an interlocutor's words. Pronunciation is frequently unintelligible and is strongly influenced by first language. Can be understood only with difficulty, even by persons such as teachers who are used to speaking with nonnative speakers or interactions where the context strongly supports the utterance.

NOVICE—HIGH

Able to satisfy immediate needs using learned utterances. There is no real autonomy of expression, although there may be some emerging signs of spontaneity and flexibility. There is a slight increase in utterance length but frequent long pauses and repetition of interlocutor's words still occur. Can ask questions or make statements with reasonable accuracy only where this involves short memorized utterances or formulae. Most utterances are telegraphic and word endings are often omitted, confused, or distorted. Vocabulary is limited to areas of immediate survival needs. Can differentiate most phonemes when produced in isolation but when they are combined in words or groups of words, errors are frequent and, even with repetition, may severely inhibit communication even with persons used to dealing with such learners. Little development in stress and intonation is evident.

INTERMEDIATE—LOW

Able to satisfy basic survival needs and minimum courtesy requirements. In areas of immediate need or on very familiar topics, can ask and answer simple questions, initiate and respond to simple statements, and maintain very simple face-to-face conversations. When asked to do so, is able to formulate some questions with limited constructions and much inaccuracy. Almost every utterance contains fractured syntax and other grammatical errors. Vocabulary inadequate to express anything but the most elementary needs. Strong interference from L_1 occurs in articulation, stress, and intonation. Misunderstandings frequently arise from limited vocabulary and grammar and erroneous phonology but, with repetition, can generally be understood by native speakers in regular contact with foreigners attempting to speak their language. Little precision in information conveyed owing to tentative state of grammatical development and little or no use of modifiers.

INTERMEDIATE—MID

Able to satisfy some survival needs and some limited social demands. Some evidence of grammatical accuracy in basic constructions, e.g., subject-verb agreement, noun-adjective agreement, some notion of inflection. Vocabulary permits discussion of topics beyond basic survival needs, e.g., personal history, leisure-time activities. Is able to formulate some questions when asked to do so.

INTERMEDIATE—HIGH

Able to satisfy most survival needs and limited social demands. Developing flexibility in a range of circumstances beyond immediate survival needs. Shows some spontaneity in language production but fluency is very uneven. Can initiate and sustain a general conversation but has little understanding of the social conventions of conversation. Limited vocabulary range necessitates much hesitation and circumlocution. The commoner tense forms occur but errors are frequent in formation and selection. Can use most question forms. While some word order is established, errors still occur in more complex patterns. Cannot sustain coherent structures in longer utterances or unfamiliar situations. Ability to describe and give precise information is limited. Aware of basic cohesive features (e.g., pronouns, verb inflections), but many are unreliable, especially if less immediate in reference. Extended discourse is largely a series of short, discrete utterances. Articulation is comprehensible to native speakers used to dealing with foreigners, and can combine most phonemes with reasonable comprehensibility, but still has difficulty in producing certain sounds, in certain positions, or in certain combinations, and speech will usually be labored. Still has to repeat utterances frequently to be understood by the general public. Able to produce some narration in either past or future.

ADVANCED

Able to satisfy routine social demands and limited work requirements. Can handle with confidence but not with facility most social situations including introductions and casual conversations about current events, as well as work, family, and autobiographical information; can handle limited work requirements, needing help in handling any complications or difficulties. Has a speaking vocabulary sufficient to respond simply with some circumlocutions; accent, though often quite faulty, is intelligible; can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar.

ADVANCED PLUS

Able to satisfy most work requirements and show some ability to communicate on concrete topics relating to particular interests and special fields of competence. Often shows remarkable fluency and ease of speech, but under tension or pressure language may break down. Generally strong in either grammar or vocabulary, but not in both. Weaknesses or unevenness in one of the foregoing or in pronunciation result in occasional miscommunication. Areas of weakness range from simple construction such as plurals, articles, prepositions, and negatives to more complex structures such as tense usage, passive constructions, word order, and relative clauses. Normally controls general vocabulary with some groping for everyday vocabulary still evident.

SUPERIOR

Able to speak the language with sufficient structural accuracy and vocabulary to participate effectively in most formal and informal conversations on practical, social, and professional topics. Can discuss particular interests and special fields of competence with reasonable ease. Vocabulary is broad enough that the speaker rarely has to grope for a word; accent may be obviously foreign; control of grammar good; errors virtually never interfere with understanding and rarely disturb the native speaker.

APPENDIX B

ACTFL PROFICIENCY GUIDELINES

The 1986 proficiency guidelines represent a hierarchy of global characterizations of integrated performance in speaking, listening, reading and writing. Each description is a representative, not an exhaustive, sample of a particular range of ability, and each level subsumes all previous levels, moving from simple to complex in an "all-before-and-more" fashion.

Because these guidelines identify stages of proficiency, as opposed to achievement, they are not intended to measure what an individual has achieved through specific classroom instruction but rather to allow assessment of what an individual can and cannot do, regardless of where, when, or how the language has been learned or acquired; thus, the words "learned" and "acquired" are used in the broadest sense. These guidelines are not based on a particular linguistic theory or pedagogical method, since the guidelines are proficiency-based, as opposed to achievement-based, and are intended to be used for global assessment.

The 1986 guidelines should not be considered the definitive version, since the construction and utilization of language proficiency guidelines is a dynamic, interactive process. The academic sector, like the government sector, will continue to refine and update the criteria periodically to reflect the needs of the users and the advances of the profession. In this vein, ACTFL owes a continuing debt to the creators of the 1982 provisional proficiency guidelines and, of course, to the members of the Interagency Language Roundtable Testing Committee, the creators of the government's Language Skill Level Descriptions.

ACTFL would like to thank the following individuals for their contributions on this current guidelines project:

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Irene Thompson
A. Ronald Walton

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Generic Descriptions–Speaking

Novice The Novice level is characterized by the ability to communicate minimally with learned material.

Novice-Low Oral production consists of isolated words and perhaps a few high-frequency phrases. Essentially no functional communicative ability.

Novice-Mid Oral production continues to consist of isolated words and learned phrases within very predictable areas of need, although quality is increased. Vocabulary is sufficient only for handling simple, elementary needs and expressing basic courtesies. Utterances rarely consist of more than two or three words and show frequent long pauses and repetition of interlocutor's words. Speaker may have some difficulty producing even the simplest utterances. Some Novice-Mid speakers will be understood only with great difficulty.

Novice-High Able to satisfy partially the requirements of basic communicative exchanges by relying heavily on learned utterances but occasionally expanding these through simple recombinations of their elements. Can ask questions or make statements involving learned material. Shows signs of spontaneity although this falls short of real autonomy of expression. Speech continues to consist of learned utterances rather than of personalized, situationally adapted ones. Vocabulary centers on areas such as basic objects, places, and most common kinship terms. Pronunciation may still be strongly influenced by first language. Errors are frequent and, in spite of repetition, some Novice-High speakers will have difficulty being understood even by sympathetic interlocutors.

Intermediate The Intermediate level is characterized by the speaker's ability to:
—create with the language by combining and recombining learned elements, though primarily in a reactive mode;
—initiate, minimally sustain, and close in a simple way basic communicative tasks; and
—ask and answer questions.

Intermediate-Low Able to handle successfully a limited number of interactive, task-oriented and social situations. Can ask and answer questions, initiate and respond to simple statements and maintain face-to-face conversation, although in a highly restricted manner and with much linguistic inaccuracy. Within these limitations, can perform such tasks as introducing self, ordering a meal, asking directions, and making purchases. Vocabulary is adequate to express only the most elementary needs. Strong interference from native language may occur. Misunderstandings frequently arise, but with repetition, the Intermediate-Low speaker can generally be understood by sympathetic interlocutors.

Intermediate-Mid Able to handle successfully a variety of uncomplicated, basic and communicative tasks and social situations. Can talk simply about self and family members. Can ask and answer questions and participate in simple conversations on topics beyond the most immediate needs; e.g., personal history and leisure time activities. Utterance length increases slightly, but speech may continue to be characterized by frequent long pauses, since the smooth incorporation of even basic conversational strategies is often hindered as the speaker struggles to create appropriate language forms. Pronunciation may continue to be strongly influenced by first language and fluency may still be strained. Although misunderstandings still arise, the Intermediate-Mid speaker can generally be understood by sympathetic interlocutors.

Intermediate-High Able to handle successfully most uncomplicated communicative tasks and social situations. Can initiate, sustain, and close a general conversation with a number of strategies appropriate to a range of circumstances and topics, but errors are evident. Limited vocabulary still necessitates hesitation and may bring about slightly unexpected circumlocution. There is emerging evidence of connected discourse, particularly for simple narration and/or description. The Intermediate-High speaker can generally by understood even by interlocutors not accustomed to dealing with speakers at this level, but repetition may still be required.

Advanced The Advanced level is characterized by the speaker's ability to:
—converse in a clearly participatory fashion;
—initiate, sustain, and bring to closure a wide variety of communicative tasks, including those that require an increased ability to convey meaning with diverse language strategies due to a complication or an unforeseen turn of events;
—satisfy the requirements of school and work situations; and
—narrate and describe with paragraph-length connected discourse.

Advanced	Able to satisfy the requirements of everyday situations and routine school and work requirements. Can handle with confidence but not with facility complicated tasks and social situations, such as elaborating, complaining, and apologizing. Can narrate and describe with some details, linking sentences together smoothly. Can communicate facts and talk casually about topics of current public and personal interest, using general vocabulary. Shortcomings can often be smoothed over by communicative strategies, such as pause fillers, stalling devices, and different rates of speech. Circumlocution which arises from vocabulary or syntactic limitations very often is quite successful, though some groping for words may still be evident. The Advanced-level speaker can be understood without difficulty by native interlocutors.
Advanced-Plus	Able to satisfy the requirements of a broad variety of everyday, school, and work situations. Can discuss concrete topics relating to particular interests and special fields of competence. There is emerging evidence of ability to support opinions, explain in detail, and hypothesize. The Advanced-Plus speaker often shows a well developed ability to compensate for an imperfect grasp of some forms with confident use of communicative strategies, such as paraphrasing and circumlocution. Differentiated vocabulary and intonation are effectively used to communicate fine shades of meaning. The Advanced-Plus speaker often shows remarkable fluency and ease of speech but under the demands of Superior-level, complex tasks, language may break down or prove inadequate.
Superior	The Superior level is characterized by the speaker's ability to: —participate effectively in most formal and informal conversations on practical, social, professional, and abstract topics; and —support opinions and hypothesize using native-like discourse strategies.
Superior	Able to speak the language with sufficient accuracy to participate effectively in most formal and informal conversations on practical, social, professional, and abstract topics. Can discuss special fields of competence and interest with ease. Can support opinions and hypothesize, but may not be able to tailor language to audience or discuss in depth highly abstract or unfamiliar topics. Usually the Superior level speaker is only partially familiar with regional or other dialectical variants. The Superior level speaker commands a wide variety of interactive strategies and shows good awareness of discourse strategies. The latter involves the ability to distinguish main ideas from supporting information through syntactic, lexical and suprasegmental features (pitch, stress, intonation). Sporadic errors may occur, particularly in low-frequency structures and some complex high-frequency structures more common to formal writing, but no patterns of error are evident. Errors do not disturb the native speaker or interfere with communication.

Generic Descriptions–Listening

These guidelines assume that all listening tasks take place in an authentic environment at a normal rate of speech using standard or near-standard norms.

Novice-Low	Understanding is limited to occasional isolated words, such as cognates, borrowed words, and high-frequency social conventions. Essentially no ability to comprehend even short utterances.
Novice-Mid	Able to understand some short, learned utterances, particularly where context strongly supports understanding and speech is clearly audible. Comprehends some words and phrases from simple questions, statements, high-frequency commands and courtesy formulae about topics that refer to basic personal information or the immediate physical setting. The listener requires long pauses for assimilation and periodically requests repetition and/or a slower rate of speech.
Novice-High	Able to understand short, learned utterances and some sentence-length utterances, particularly where context strongly supports understanding and speech is clearly audible. Comprehends words and phrases from simple questions, statements, high-frequency commands and courtesy formulae. May require repetition, rephrasing and/or a slowed rate of speech for comprehension.
Intermediate-Low	Able to understand sentence-length utterances which consist of recombinations of learned elements in a limited number of content areas, particularly if strongly supported by the situational context. Content refers to basic personal background and needs, social conventions and routine tasks, such as getting meals and receiving simple instructions and directions. Listening tasks pertain primarily to spontaneous face-to-face conversations. Understanding is often uneven; repetition and rewording may be necessary. Misunderstandings in both main ideas and details arise frequently.

Intermediate-Mid	Able to understand sentence-length utterances which consist of recombinations of learned utterances on a variety of topics. Content continues to refer primarily to basic personal background and needs, social conventions and somewhat more complex tasks, such as lodging, transportation, and shopping. Additional content areas include some personal interests and activities, and a greater diversity of instructions and directions. Listening tasks not only pertain to spontaneous face-to-face conversations but also to short routine telephone conversations and some deliberate speech, such as simple announcements and reports over the media. Understanding continues to be uneven.
Intermediate-High	Able to sustain understanding over longer stretches of connected discourse on a number of topics pertaining to different times and places; however, understanding is inconsistent due to failure to grasp main ideas and/or details. Thus, while topics do not differ significantly from those of an Advanced level listener, comprehension is less in quantity and poorer in quality.
Advanced	Able to understand main ideas and most details of connected discourse on a variety of topics beyond the immediacy of the situation. Comprehension may be uneven due to a variety of linguistic and extralinguistic factors, among which topic familiarity is very prominent. These texts frequently involve description and narration in different time frames or aspects, such as present, nonpast, habitual, or imperfective. Texts may include interviews, short lectures on familiar topics, and news items and reports primarily dealing with factual information. Listener is aware of cohesive devices but may not be able to use them to follow the sequence of thought in an oral text.
Advanced-Plus	Able to understand the main ideas of most speech in a standard dialect; however, the listener may not be able to sustain comprehension in extended discourse which is propositionally and linguistically complex. Listener shows an emerging awareness of culturally implied meanings beyond the surface meanings of the text but may fail to grasp sociocultural nuances of the message.
Superior	Able to understand the main ideas of all speech in a standard dialect, including technical discussion in a field of specialization. Can follow the essentials of extended discourse which is propositionally and linguistically complex, as in academic/professional settings, in lectures, speeches, and reports. Listener shows some appreciation of aesthetic norms of target language, of idioms, colloquialisms, and register shifting. Able to make inferences within the cultural framework of the target language. Understanding is aided by an awareness of the underlying organizational structure of the oral text and includes sensitivity for its social and cultural references and its affective overtones. Rarely misunderstands but may not understand excessively rapid, highly colloquial speech or speech that has strong cultural references.
Distinguished	Able to understand all forms and styles of speech pertinent to personal, social and professional needs tailored to different audiences. Shows strong sensitivity to social and cultural references and aesthetic norms by processing language from within the cultural framework. Texts include theater plays, screen productions, editorials, symposia, academic debates, public policy statements, literary readings, and most jokes and puns. May have difficulty with some dialects and slang.

Generic Descriptions–Reading

These guidelines assume all reading texts to be authentic and legible.

Novice-Low	Able occasionally to identify isolated words and/or major phrases when strongly supported by context.
Novice-Mid	Able to recognize the symbols of an alphabetic and/or syllabic writing system and/or a limited number of characters in a system that uses characters. The reader can identify an increasing number of highly contextualized words and/or phrases including cognates and borrowed words, where appropriate. Material understood rarely exceeds a single phrase at a time, and rereading may be required.
Novice-High	Has sufficient control of the writing system to interpret written language in areas of practical need. Where vocabulary has been learned, can read for instructional and directional purposes standardized messages, phrases or expressions, such as some items on menus, schedules, timetables, maps, and signs. At times, but not on a consistent basis, the Novice-High level reader may be able to derive meaning from material at a slightly higher level where context and/or extralinguistic background knowledge are supportive.

Intermediate-Low	Able to understand main ideas and/or some facts from the simplest connected texts dealing with basic personal and social needs. Such texts are linguistically noncomplex and have a clear underlying internal structure, for example chronological sequencing. They impart basic information about which the reader has to make only minimal suppositions or to which the reader brings personal interest and/or knowledge. Examples include messages with social purposes or information for the widest possible audience, such as public announcements and short, straightforward instructions dealing with public life. Some misunderstandings will occur.
Intermediate-Mid	Able to read consistently with increased understanding simple connected texts dealing with a variety of basic and social needs. Such texts are still linguistically noncomplex and have a clear underlying internal structure. They impart basic information about which the reader has to make minimal suppositions and to which the reader brings personal interest and/or knowledge. Examples may include short, straightforward descriptions of persons, places, and things written for a wide audience.
Intermediate—High	Able to read consistently with full understanding simple connected texts dealing with basic personal and social needs about which the reader has personal interest and/or knowledge. Can get some main ideas and information from texts at the next higher level featuring description and narration. Structural complexity may interfere with comprehension; for example, basic grammatical relations may be misinterpreted and temporal references may rely primarily on lexical items. Has some difficulty with the cohesive factors in discourse, such as matching pronouns with referents. While texts do not differ significantly from those at the Advanced level, comprehension is less consistent. May have to read material several times for understanding.
Advanced	Able to read somewhat longer prose of several paragraphs in length, particularly if presented with a clear underlying structure. The prose is predominantly in familar sentence patterns. Reader gets the main ideas and facts and misses some details. Comprehension derives not only from situational and subject matter knowledge but from increasing control of the language. Texts at this level include descriptions and narrations such as simple short stories, news items, bibliographical information, social notices, personal correspondence, routinized business letters and simple technical material written for the general reader.
Advanced-Plus	Able to follow essential points of written discourse at the Superior level in areas of special interest or knowledge. Able to understand parts of texts which are conceptually abstract and linguistically complex, and/or texts which treat unfamiliar topics and situations, as well as some texts which involve aspects of target-language culture. Able to comprehend the facts to make appropriate inferences. An emerging awareness of the aesthetic properties of language and of its literary styles permits comprehension of a wider variety of texts, including literary. Misunderstandings may occur.
Superior	Able to read with almost complete comprehension and at normal speed expository prose on unfamiliar subjects and a variety of literary texts. Reading ability is not dependent on subject matter knowledge, although the reader is not expected to comprehend thoroughly texts which are highly dependent on knowledge of the target culture. Reads easily for pleasure. Superior-level texts feature hypotheses, argumentation and supported opinions and include grammatical patterns and vocabulary ordinarily encountered in academic/professional reading. At this level, due to the control of general vocabulary and structure, the reader is almost always able to match the meanings derived from extralinguistic knowledge with meanings derived from knowledge of the language, allowing for smooth and efficient reading of diverse texts. Occasional misunderstandings may still occur; for example, the reader may experience some difficulty with unusually complex structures and low-frequency idioms. At the Superior level the reader can match strategies, top-down or bottom-up, which are most appropriate to the text. (Top-down strategies rely on real-world knowledge and prediction based on genre and organizational scheme of the text. Bottom-up strategies rely on actual linguistic knowledge.) Material at this level will include a variety of literary texts, editorials, correspondence, general reports and technical material in professional fields. Rereading is rarely necessary, and misreading is rare.
Distinguished	Able to read fluently and accurately most styles and forms of the language pertinent to academic and professional needs. Able to relate inferences in the text to real-world knowledge and understand almost all sociolinguistic and cultural references by processing language from within the cultural framework. Able to understand a writer's use of nuance and subtlety. Can readily follow unpredictable turns of thought and author intent in such materials as sophisticated editorials, specialized journal articles, and literary texts such as novels, plays, poems, as well as in any subject matter area directed to the general reader.

Generic Descriptions–Writing

Novice-Low	Able to form some letters in an alphabetic system. In languages whose writing systems use syllabaries or characters, writer is able to both copy and produce the basic strokes. Can produce romanization of isolated characters, where applicable.

Novice-Mid	Able to copy or transcribe familiar words or phrases and reproduce some from memory. No practical communicative writing skills.
Novice-High	Able to write simple fixed expressions and limited memorized material and some recombinations thereof. Can supply information on simple forms and documents. Can write names, numbers, dates, own nationality, and other simple autobiographical information as well as some short phrases and simple lists. Can write all the symbols in an alpahbetic or syllabic system or 50-100 characters or compounds in a character writing system. Spelling and representation of symbols (letters, syllables, characters) may be partially correct.
Intermediate-Low	Able to meet limited practical writing needs. Can write short messages, postcards, and take down simple notes, such as telephone messages. Can create statements or questions within the scope of limited language experience. Material produced consists of recombinations of learned vocabulary and structures into simple sentences on very familiar topics. Language is inadequate to express in writing anything but elementary needs. Frequent errors in grammar, vocabulary, punctuation, spelling and in formation of nonalphabetic symbols, but writing can be understood by natives used to the writing of nonnatives.
Intermediate-Mid	Able to meet a number of practical writing needs. Can write short, simple letters. Content involves personal preferences, daily routine, everyday events, and other topics grounded in personal experience. Can express present time or at least one other time frame or aspect consistently, e.g., nonpast, habitual, imperfective. Evidence of control of the syntax of noncomplex sentences and basic inflectional morphology, such as declensions and conjugation. Writing tends to be a loose collection of sentences or sentence fragments on a given topic and provides little evidence of conscious organization. Can be understood by natives used to the writing of nonnatives.
Intermediate-High	Able to meet most practical writing needs and limited social demands. Can take notes in some detail on familiar topics and respond in writing to personal questions. Can write simple letters, brief synopses and paraphrases, summaries of biographical data, work and school experience. In those languages relying primarily on content words and time expressions to express time, tense, or aspect, some precision is displayed; where tense and/or aspect is expressed through verbal inflection, forms are produced rather consistently, but not always accurately. An ability to describe and narrate in paragraphs is emerging. Rarely uses basic cohesive elements, such as pronominal substitutions or synonyms in written discourse. Writing, though faulty, is generally comprehensible to natives used to the writing of nonnatives.
Advanced	Able to write routine social correspondence and join sentences in simple discourse of at least several paragraphs in length on familiar topics. Can write simple social correspondence, take notes, write cohesive summaries and resumes, as well as narratives and descriptions of a factual nature. Has sufficient writing vocabulary to express self simply with some circumlocution. May still make errors in punctuation, spelling, or the formation of nonalphabetic symbols. Good control of the morphology and the most frequently used syntactic structures, e.g., common word order patterns, coordination, subordination, but makes frequent errors in producing complex sentences. Uses a limited number of cohesive devices, such as pronouns, accurately. Writing may resemble literal translations from the native language, but a sense of organization (rhetorical structure) is emerging. Writing is understandable to natives not used to the writing of nonnatives.
Advanced-Plus	Able to write about a variety of topics with significant precision and in detail. Can write most social and informal business correspondence. Can describe and narrate personal experiences fully but has difficulty supporting points of view in written discourse. Can write about the concrete aspects of topics relating to particular interests and special fields of competence. Often shows remarkable fluency and ease of expression, but under time constraints and pressure writing may be inaccurate. Generally strong in either grammar or vocabulary, but not in both. Weakness and unevenness in one of the foregoing or in spelling or character writing formation may result in occasional miscommunication. Some misuse of vocabulary may still be evident. Style may still be obviously foreign.
Superior	Able to express self effectively in most formal and informal writing on practical, social and professional topics. Can write most types of correspondence, such as memos as well as social and business letters, and short research papers and statements of position in areas of special interest or in special fields. Good control of a full range of structures, spelling or nonalphabetic symbol production, and a wide general vocabulary allow the writer to hypothesize and present arguments or points of view accurately and effectively. An underlying organization, such as chronological ordering, logical ordering, cause and effect, comparison, and thematic development is strongly evident, although not thoroughly executed and/or not totally reflecting target language patterns. Although sensitive to differences in formal and informal style, still may not tailor writing precisely to a variety of purposes and/or readers. Errors in writing rarely disturb natives or cause miscommunication.

APPENDIX C

CHINESE PROFICIENCY TEST PROJECT
CENTER FOR APPLIED LINGUISTICS

ITEM-WRITING SUGGESTIONS

(1) Items should not be answerable on the basis of outside knowledge.

"Outside knowledge" may be considered any information which the student brings to the test from some other source and which permits him or her to answer one or more questions correctly without necessarily having comprehended the test materials on which the questions are based.

Although proper selection of the test paper also involves the problem of outside knowledge, each item should also be examined with this possibility in mind.

(2) Test questions should not hinge on a memory capacity beyond that expected of an average native speaker of the language.

This is a potential problem with listening comprehension passages, especially those involving chronological information (e.g., days of the weeks and/or hours during which a shop is open; travel schedules), statistical data (e.g., discussions of inflation rates, population densities, etc.), or other series of verbal or numerical "facts". Test questions based on this type of material should be carefully prepared to bear on the total thrust of the passage, not on specific detailed points.

To guard against the problem of "memory load", it would be useful to have native speakers listen to (not read) the passage in question and attempt to answer the items. Items for which native speakers have difficulty remembering the necessary information should be revised or rejected.

(3) The number of questions on a given passage should be carefully correlated with the length of the passage and its linguistic content.

If a rather long passage is accompanied by only one or two questions, this is inefficient of testing time since it is necessary for the student to read (or listen to) a large amount of material in order to answer a relatively small number of questions. If, on the other hand, a relatively large number of items are written on a short passage, it is likely that at least some of these items will have overlapping content or will test some small detail of the passage that is really "not worth testing" from the viewpoint of general comprehension.

It is not possible to give an overall rule for the number of items for a given passage length, since passages vary in the "richness" of their content and in the extent to which meaningful questions can be posed on this content. In general, it is desirable to ask as many questions about a given passage as possible, but at the same time to avoid basing questions on points that are not clearly emphasized in the passage.

In general, it is better to make up a test consisting of several shorter passages and the associated items than to have only a few long passages, each with a large number of items. This will avoid penalizing students who for some reason are not well attuned to the material presented in a particular passage and will also permit a wider and more representative sampling of passage types and content.

(4) The written options should be as short as possible while at the same time conveying the necessary information.

Experienced item writers are often able to reduce the answer options to single words or short phrases, as, for example, this question from a French listening comprehension test:

> "Comment vont vos amis à Paris?"
> ("How are your friends in Paris doing?")
>
> (A) Immediately.
> (B) Yes, thanks.
> (C) Very well.
> (D) Two or three.

Since overall testing time is limited, the use of short options allows the student to work more efficiently and the test to contain relatively more questions than would otherwise be the case. (Other things being equal, the more total items in a given test, the higher the test reliability.)

For listening comprehension items especially (where the available response time is fixed by the tape), the written options should be very short and easy to read and understand.

(5) The incorrect options ("distracters") should be designed to appeal to the student who has only partially understood the stimulus material or who has gained an erroneous impression of its meaning.

This is a major consideration in effective item writing. While the correct option (the "key") should be obviously correct to students who fully understand the language material presented (and, correspondingly, each of the distracters obviously *wrong* to persons who completely comprehend the material), students whose control of the language is at a lower level (i.e., who don't quite catch all of the relevant linguistic information in a given utterance or passage) should be tempted into choosing one or another of the incorrect options.

In the example above, students who can understand the full linguistic content of this utterance can immediately identify (C) as the only possible answer. Students who understand only certain parts of the utterance (or "mishear" parts of the utterance) should be led into choosing one of the other options. For example, students who don't quite catch the meaning of "Comment" and interpret it as "Combien" ("how many") may think that the question is "How many friends to you have in Paris?" and thus choose (D). Mishearing as "Quand vont vos amis à Paris?" ("When are your friends going to Paris?") would make (A) the most plausible answer.

(6) All of the item options should be equally specific or equally general.

Assume, for example, that the following question is asked on a listening comprehension or reading passage:

> What is the man describing?
>
> (A) The weather.
> (B) Clothes.
> (C) His visit to a national shrine.
> (D) Sports.

The fact that alternative (C) is so much more specifically oriented than the other three options is a clear suggestion to the student that this must be the

proper answer. This item flaw could be corrected by having (C) at the same level of generality as the other options:

(A) The weather.
(B) Clothes.
(C) A visit.
(D) Sports.

Alternatively, the three distracters could be made more complex:

(A) Recent meteorological conditions in the area.
(B) His preferences in clothing styles.
(C) His visit to a national shrine.
(D) The latest college basketball scores.

(7) The options should be grammatically parallel.

A well thought out and properly focused item can usually be phrased in such a way that all of its options are semantically and grammatically quite similar. Especially to be avoided is the so-called "mixed salad" — an item for which the options might be something like the following:

(A) went to the bank
(B) and Alice were there
(C) was puzzled
(D) has blue eyes and brown hair

Generally, "mixed salad" options are the result of what is known as an "undirected stem", that is, a stimulus question that fails to properly delimit the item's field of discourse. For the preceding item, such an "undirected stem" might have been:

According to the passage, George

(A) went to the bank
(B) and Alice were there
(C) was puzzled
(D) has blue eyes and brown hair

Even if the stimulus is in the form of a complete question, it can still be very undirected, as shown in the rewritten version below:

According to the passage, what is said about George?

(A) He went to the bank.
(B) He and Alice were there.
(C) He was puzzled.
(D) He has blue eyes and brown hair.

These problems can be largely avoided by making sure that the item stem asks a specific, targeted question, and that each of the options is a possible response to that question. For example:

According to the passage, where did George go?

(A) To the bank.
(B) To visit Alice.
(C) To the novelty store.
(D) To get his hair cut.

(8) In item sets (passages on which two or more items are written), the phrasing of one item should not give any clues about the correct answer for the other item(s).

The two items below violate this principle:

(Reading passage not shown.)

Who went to the beach?

(A) Mr. Smith
(B) Mr. and Mrs. Jones
(C) The Jones' daughter
(D) Mr. Smith's friend

What did Mr. and Mrs. Jones build in the sand?

(A) A medieval castle
(B) A dam
(C) A walled city
(D) A fort

Students who were not able to answer the first question on the basis of the passage could easily guess the correct answer after reading the stem for the second question.

(9) It is desirable to include, for both listening and reading comprehension, at least some questions that deal with the overall tone of the passage (ironic, skeptical, factual, etc.) as well as with direct inferences that could be made on the basis of the passage.

Questions that deal with other than straight "facts" about the passage must be carefully checked to insure that only one option can be considered correct, and that the correct answer is readily apparent (i.e., that there is no debate among native speakers as to what the true "tone" of the passage is or what will in fact happen next, etc.).

(10) Items should not contain "paired" options.

Option sequences such as the following should be avoided:

(A) hot
(B) friendly
(C) absent
(D) cold

In the absence of any real knowledge about the passage, the student would probably think that it had something to do with the temperature, since two of the four options involve the concept of "temperature". The four options should either deal with the same general concept or, as is appropriate in some instances, present two separate pairs, as for example:

(A) hot
(B) friendly
(C) unfriendly
(D) cold

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THE ORIGIN OF MONOSYLLABIC ROOTS IN EASTERN PAMA-NYUNGAN

Geoffrey N. O'Grady

The purpose of this paper is to demonstrate that the Pama-Nyungan sources of most monosyllabic roots in eastern Australian languages are *disyllabic*.[1] The mechanisms involved in the majority of instances are either (a) syncope of the rhotic continuant *r or (b) vocalic apocope, which in turn triggers the deletion of the second member of a preceding consonant cluster. Only (a) will be treated in detail here.

In submitting this report, I would like to pay tribute to Professor Wurm as a repeated source of inspiration, encouragement and support over the years. Were it not for his efforts, in fact, I could well not have gained entry to academe. To him, as well as to Dr Capell, I owe my introduction to general linguistics. To Stephen I am also deeply indebted for the challenging way in which he introduced me to Finno-Ugric linguistics — initially in the form of rigorous drills in spoken Hungarian. These were conducted during lunch hours at the University of Sydney through most of 1956. In addition, he provided guidance to me in the compilation of a dictionary of Nyangumarta as spoken at Wallal between 1949 and 1955. This is still ongoing.

Dixon (1980:172) ascribes a monosyllabic origin to widely attested disyllabic roots in Australia such as *pinang *'ear'*, *pula *'two'* and *jarrang *'thigh; limb of tree'*. He cites monosyllabic shapes such as Wargamay ngaa *'not'* and wii *'sun'* (< *"fire"*) as continuing monosyllabic forms from an early Australian epoch. Merlan (1979) pursues this line of enquiry further.

The position taken here, however, is that *within the rubric of Pama-Nyungan*, modern forms such as PIN pina and MKU pina.rr *'ear'* reflect ancestral disyllabics, and that certain monosyllabic verbals and particles and most monosyllabic nominals evolved from disyllabics through syncope and apocope.

*marang *'hand'* and *jaarang *'mouth'*

The study of reflexes of Capell's (1956) Common Australian root *marang *'hand'* shows that across the continent the vast majority of daughter languages preserve the *r. Only after extensive search does monosyllabic MA appear for *'hand'* in a small number of eastern languages such as Curr's (1887:III:220) 'Murrumningama' (apparently Barunggam of south-eastern Queensland),[2] and in the Champion Bay area in the West.

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In the case of PNPN *jaarang *'mouth'*,[3] on the other hand, the majority of daughter languages have lost the *r. The modern reflex in these is thus monosyllabic jaa or thaa. Reconstruction hinges on the survival of such diagnostic forms as Hale's PP *jaara, above; GID jeeyang, WAA jeeng *'mouth'*; NYA W jara$_1$ *'pouch of kangaroo'*; and the BAY doublet thara *'burrow'*/thaa *'mouth'*. Exemplification of more typical reflexes of the two roots is provided in the following:

	*marang	*jaarang
PIN	mara	jaa
GAW	MARRA	TĀ
WJK	MARH-RA	DTA ∿ DA
GUP	mar'.yu+N[4]	dhaa
LRD	mari.ya[5]	--
UMP[6]	ma'a (PP *mara)	--
MGU	mara	thaa
DJA[7]	--	jaa[8]

In light of these and other similar examples, we hypothesise that ancestral Pama-Nyungan *r usually survived in intervocalic position following short V_1, while after long V_1 the deletion of *r was extensive, though not universal, across Pama-Nyungan.

Wargamay ngaa *'not'*

WRG ngaa *'not'* (Dixon 1981:82) would appear at first blush to be an extremely unlikely starting point for a cognate search across Pama-Nyungan. Whether comparison be made with DYI kulu, YDN nguju, PP *kari ≈ (> WMK ke', JKY kari) or UMP ngampa *'not'*, or further afield with NYA munu, WLB lawa, PIN wiya, GID yakam *'not'*, or with the LRD verbal suffix +jarri 'negative non-future', the result is always the same: not a single plausible cognate appears. Yet at least seven of the ten etyma cited, including WRG ngaa itself, have cognates in widely separated parts of the Pama-Nyungan speech-area. How could this be?

Part of the answer to the above apparent paradox lies in Dixon (1980:2), where he quite correctly and realistically estimates the number of entries in the lexicon of each Australian language as being 'at least 10,000'.[9] This being the case, a given protolanguage such as PNPN would also have had 10,000 or more lexical entries. What appears in the above profusion of unrelated negative particles is simply evidence of the richness of PNPN's lexicon, in which the existence of synonyms must have been commonplace. The PNPN age of the majority of these forms is attested, for example, in NYA +kurlu 'PRIVATIVE' and WLB +kurlu 'PROPRIETIVE' alongside DYI kulu (ancestral *kUrlu); in BAY, THL ngulha and BRD nguja *'no'* (and, conceivably, LRD ngutha.l *'dishonest...'*) alongside YDN nguju (*ngUlya); and in GUP yaka[10] and GAW YAKKO *'not, no'* alongside GID yakam (*yakum).

The second part of the answer to the paradox posed by the use of entirely different roots (in this instance, for 'not') in different languages of the same family lies in the sweeping semantic and grammatical changes which many elements undergo — witness DYI kulu *'not'* vs. WLB +kurlu 'PROPRIETIVE'! Were

it not for the mediating role of NYA +kurlu 'PRIVATIVE', one would be hard put to justify a claim of cognation between the DYI and WLB forms.

In the case of *ngUlya, a search for a reflex in WJK/VAS under 'not' or 'no' would prove entirely fruitless. One might never think to turn to 'empty', even if the latter meaning might seem a quite plausible outgrowth from 'not'.[11] Yet the isolating of VAS NGUL-YA.P *'empty'* was achieved quite painlessly, in fact. This was due to the total conservatism[12] exhibited in the descent of Proto-Nyungic *mulya *'nose'* in WJK MUL-YA *'nose'*, as well as of phonologically comparable forms. Thus it was hypothesised that any reflex of PNPN *ngUlya in WJK/VAS would probably appear in Moore's system of transcription as NGUL-YA (...), so that the search immediately narrowed to p.67 of his work. Here just two entries came into focus: WJK NGUL-YA *'edible root ...'* and VAS NGUL-YA.P *'empty'*. The first of these was rejected as a reflex on the basis of this writer's unawareness[13] of any way in which 'edible root' could conceivably be linked semantically to 'not'. The second was judged to be a true reflex, except for its -P. The latter is one of several dozen semantically empty Pama-Nyungan suffixes and is not an impediment to the identification of cognates. O'Grady (1966) discusses and lists 31 of them; Hale (1974) cites a WLB suffix, +ju, as being used to lengthen a word 'for stylistic euphony'; and Wordick (1982) uses the extremely felicitous term 'contentless suffix' to identify and describe them. In many instances their history is quite shallow, even though the roots which are extended by them may be of (Nuclear) Pama-Nyungan age.

Pama-Nyungan cognate search is thus above all *phonologically* motivated. Knowledge of salient sound shifts (as well as of remanent segments, as in VAS NGUL-YA.P), the isolating of instances of stem accretion, the identification of loans and the uncovering of patterns of analogical change all contribute towards the eventual sifting out of genetically related forms. Questions of semantics are raised *only after phonology-based identification of potential cognates has been carried out*. In this way we are inevitably confronted with the necessity to make a judgment as to whether, for example, a negative particle could have evolved into a word for 'edible root'.

The third and final part of the answer to the aforementioned paradox lies in the fact that potential reflexes may simply not appear in the available data bases of certain daughter languages, even with greatly altered form, function and/or meaning. This is because the lexicographer may hitherto not have come across a particular form, or because a former entry in the lexicon may have entirely disappeared from the language. Thus, for whichever of these two reasons, while PNPN *ngUlya has attested reflexes in BAY and VAS, it is not represented, for example, in NYA, WLB, PIN, GAW or PNK. That is, it was already archaic in Proto-Desert Nyungic. It still survives, however, far to the north-east as YDN nguju.[14] Reflexes of PNPN *mayi *'vegetable food'*, on the other hand, have been supplanted in BAY and WJK/VAS, but appear as lexical centrepieces in the five Desert Nyungic languages named above, as well as in YDN. This partially random survivability of given ancestral lexical items is part and parcel of language evolution around the globe. But it is accentuated — or gives the impression of being accentuated — in the case of Pama-Nyungan languages, whose databases are generally more restricted than, say, those of Hungarian, Finnish or Estonian.

In light of the earlier discussion of *marang and *jaarang, we can confidently predict that a Pama-Nyungan language which preserves intervocalic *r[15] would have nga(a)ra or wa(a)ra (with or without contentless suffix) as a cognate of

WRG ngaa. This is in fact the case in DYI ngara *'couldn't'*, as well as in WRG itself, in ngaara *'can't do (despite trying)'*. With these forms, compare WRG jaa *'jaw'* (< *jaarang) and mala *'hand'* (< *mara < *marang).

With regard to Lardil, available cognates indicate that in the Tangkic Subfamily of Pama-Nyungan ancestral intervocalic *r generally survives. Consider, for example, Proto Pama-Nyungan *mAra 'HYPOTHETICAL', reflected in LRD mara(ka) ∿ ma 'ABORTIVE; CONSEQUENTIAL FALSITY'; WIR mara.ny.ji, NGI +ma 'COUNTERFACTUAL'; YUL, PIN verbal suffix +mara and NYA /+ma/ +ma ≈ 'IRREALIS'; GAW +MA 'CONDITIONAL, POTENTIAL'; GUP +miri.w 'PRIVATIVE (with nouns), NEGATIVE COMMAND (with verbs)'.[16] Note also PPN *waara *'face'* (O'Grady 1979), whose reflexes include LRD kara[17] 'QUESTION PARTICLE'; WGK, ARB wara *'who' ("(which) face?")*; PP *waari(.na) *'who'* (> UMP waa'i, WMK wee'); and WIR waa, GUM waa.n *'face'*.[18]

In view of this and other evidence we conclude that a LRD cognate of WRG ngaa would have the shape nga(a)ra. Our prediction that such a form *could* appear in LRD is borne out in the transitive verb ngara *'to stop, halt'*. One surmises that from a semantic point of view this could possibly be a cognate of WRG ngaa. We need more than vague surmises, however. What we need, in fact, are rigorous objective criteria to enable us to justify a strong negative or positive assertion of cognation. Central to our methodology, in point of fact, is the criterion of *independent corroboration* in languages of the world — especially in other Pama-Nyungan languages. We need further evidence of a totally independent nature which corroborates a suspected semantic association or, better still, a suspected semantic development.

In the case of WRG ngaa/LRD ngara, such evidence is forthcoming from *two* independent sources — the roots *ngalku and *ngampa. The first of these is represented in MKU walki *'no'* (Breen 1981:232), which compares well phonologically with WLB walku[19] *'empty'* (cited above), UMP walki+L+ *'to stop, prevent'* and GIP NGALKOO *'no'*. The second appears in MKU ngampi[20] *'no'*, UMP ngampa *'no, not'*, YIM ngampa *'unawares, secretly ...'* and GYA ngampa *'not seeing or noticing ...; absence'*. With these forms compare NYA W ngampa.pi+L+ and YUL ngampa.pu+NG+ *'to prevent, stop, block'*.

Evidence for a Pama-Nyungan semantic connection between 'not' and 'prevent' thus stems from three separate cognate sets reflecting the roots *ngaara, *ngalku and *ngampa. The question of the direction of semantic evolution in each of the three is not easy to resolve, and will not be pursued here. The excellent study of semantic change by Wilkins (1981) promises to advance our understanding considerably. In the case of *ngaara, some preliminary clues emerge from reflexes in far-distant southern reaches of the Pama-Nyungan realm. These include VAS NGERA *'to lie'*, PNK NGARRA *'error, deception, falsehood ...'* and ADN ngara+wangka+ , WEM ngaroe.mangala *'to tell lies'*. The relationship with 'not' is apparently mediated via 'to assert something with *negative* truth value'. The etymology earlier proposed for LRD ngutha.l *'dishonest ...'* lends credibility to this claim.

Further plausible reflexes of *ngaara are PIN ngara+Y+ *'to stand, wait, be'* (where 'stop' is semantically shifted to 'stand') and UMP nga'a+Ø+ *'to enter'* (Hale 1976c).

Kala Lagaw Ya MA *'spider'*

In the Torres Strait context, where linguistic diffusion is intense, we hypothesise that KLY MA *'spider'* is an old inherited Pama-Nyungan form. MIR SEBER *'spider'*, representing a totally different linguistic tradition, lends credibility to this claim. We therefore seek potential cognates on the Australian mainland having the shape ma(a)ra. PIN mara.pul+pa *'spider'* immediately comes into focus, along with GYA mara.kal *'spider shell'*, mala.l *'spider'*; YDN mala.rA *'spider web'*; and NGI mara.mara.kaN+, NGR mara *'spider'*. Donaldson (1980:38) mentions the claim by a NGI speaker that the NGI form is etymologically 'all hands'. If this is correct, as it could well be, then we are dealing with further reflexes of *marang, discussed earlier. A word of caution is in order, however: the lexicons of 40 further Pama-Nyungan languages show not a glimmer of a connection between 'spider' and 'hand'. WJK KARA, GUP, gaarr (and, for example, MAU karr!) represent a widely attested 'spider' etymon showing no evidence whatever of a semantic connection with 'hand'. Rather, it appears in UMP as kaatha[21] *'spider'* and reconstructs to PNPN *kaarra *'spider'*. Ultimate relationship, in turn, almost certainly exists, again not with 'hand' but with 'to tie' (cf. "to weave a web") — witness PIT karra, PP *kaja+L+[1] and infixed PNYY *karr.p.i+ *'to tie'*. We therefore posit three further PNPN starred forms — *mara *'spider'*, *kaarra *'spider'* and *karra+ *'to tie; to spin (a web)'*.

Kala Lagaw Ya IA ya *'throat; word, speech, talk'*

A further eastern Pama-Nyungan monosyllabic root is exemplified in KLY IA ya *'throat; word ...'*, KAB YA+ *'speak, tell'* and MDI ya.rna *'speak'*. No monosyllabic ya(a) counterpart is in evidence in Nyungo-Yuulngic, but PIN yara is *'story; place ...'* and GUP yara.ŋu *'not taboo, profane'*. On this evidence, we posit PNPN *yaara *'speech, story'*.

Kala Lagaw Ya ZA za *'thing, object'*

The KLY root ZA za *'thing ...'* has cognates elsewhere in Pama-Nyungan with narrower referent ranges: NYA W jara$_2$ *'handle of shield'*; GUP dhaara.k *'spear with no blade'*; LRD thara.n *'coolamon type'*; YDN jari.n *'straight woomera'*; and WEM jaroem *'throwing spear'*. KLY appears to be the language which continues the ancestral semantic tradition, and we accordingly reconstruct Proto Pama-Nyugan *jarum *'thing, object'*.[22]

Ngiyambaa WI wii *'fire'*

A widely attested root in eastern Pama-Nyungan is exemplified in NGI WI /wiiN+/ wii, GRN winy *'fire, firewood'*; WRG wii *'sun'*; and DHR WE *'fire'* (note also GAL wiyi *'fire'*). Another root, /nyud ∿ nyid/ nyuda appears in LRD for *'fire, firewood'*, while the verb wii+ is *'to scrape, trim (e.g., boomerang)'*. We take it that apart from LRD nyuda, all of these forms are etyma of a single Proto Pama-Nyungan root having to do with the friction of wood rubbed against wood in the generation of fire. Making fire (by fire saw or fire drill) is the POTENTIAL counterpart of ACTUAL fire. As for the shape of the root in question,

this is reconstructed on the evidence of languages from north, north-west and south-east Australia: GUP wiriny.tju+N *'to scrape, shave, plane, smoothe, level'*; NYA W wiriny.pi+L+ *'to walk or run across-wind, setting fire to country with torch of flaming spinifex'*; DJA wiriny *'hot coals'*. The ancestral Pama-Nyungan form, then, was *wiiriny *'scraping or rubbing action'*. Further reflexes include NYA S wiri.rr *'scratch marks where something has climbed tree'* (author's emphasis); NYA W wiri.rr.pi+L+ *'make a scratch on, scrape; strike it — as match'*;[23] MNN wiriny *'star' ("campfire on high")*; and YUL wii.rl, PIN wii.rl+pa *'star'*, with contentless suffix .rl.

Further examples of the loss of intervocalic *r in eastern Pama-Nyungan are documented below. No attempt has been made to provide an exhaustive listing.

PNPN *kaarang *'nasal passage'*. PIN kara.makarr+pa *'nasal passage ...'*; KLY KARA.B(U) koeraa.bu *'nostrils'*; PP *kaara *'nose'* (> WMK kaa'); 'Lake Hindmarsh' KAA, 'Mordiyallook' KAANG *'nose'* (Curr 1887).

PNPN *kiirang *'ant'*. YIM kiira *'ant'*; GYA kira.kira *'black ant'*; possibly WLB kiri.pi.ka+NG+ *'to crawl, creep'*; KAB KIN /king/*'ant (pismire)'*; KAT kiiny *'ant'*.

PNPN *kIri$_1$ *'heart'*. PIN kiri.kiri *'small organ about the centre of body, near heart'*[24]; WJK GIRI.JIT *'sparks'* (a metaphoric development); NGI /kii.N+/ kii, WRJ kii.ny *'heart'*.[25]

PPN *kIri$_2$ *'urine'*. LRD kiri Vtr *'to wash'*; KLY I.L *'gall-bladder and bile'*; WEM kir *'urine'*, kiri.jila *'to urinate'*; DJA kire(.nyi) *'urine'*; possibly WJK KILLI.N *'pudenda'*; NGI K kii.l, T kii.liN+ *'urine'*; GID, BNJ kii.l *'middle'*.[26]

PNPN *ngAra+ (verb of perception). WEM ngara.ngara.nta *'sniff ... of dogs'*, ngaru.pa Vtr *'to smell'*; DIY ngara *'hear, listen ...'*; NGI ngaa+ *'see'*.

PPN *nguru *'dark'*. LRD nguwa *'dark (as in cave)'*; YDN nguru.lU *'shade (of a bushy plant)'*; YIM nguu.l *'shadow, darkness'*; GID nguu *'dark (of hole, cave)'*, nguu.ny *'soot'*.

PNPN *+nguru 'ELATIVE'. NYA +ngurlu ∿ +ngu, YUL, PIN, NMA +nguru 'ELATIVE'; KLY +NGU +ngu 'ELATIVE'.

PNPN *ngurung *'face, forehead'*. PIN nguru *'sky'*, nguru.rr+pa *'middle'*; WRG nguru *'nose'*; PIT ngurlu, KAT ngulu *'forehead'*; KAB NU /nguu/, BAY nguu *'face'*; GID ngulung *'in front, ahead'*.

PNPN *pAra+ *'jump'*. PM *para+RU *'jump'* (> WRY, THR para+RU); YUW paa+Y *'jump'*. These forms are conceivably related in turn to LRD bira *'come, arrive ... rise'*.

PNPN *puru *'aimlessly, casually; only'*. NYA W puru *'aimlessly; just, only'*; WJK +BRU *'don't'* (as verb suffix), 'PRIVATIVE' (as noun suffix); DYI +pu *'only'*; GID +pu *'merely, only ...'*, muu *'merely, casually'*.

PNPN *tuuram ∿ *tuurang *'smoke'*. NYA W tuyi, GUP duwa.rr, 'Jervis Bay' TOOROO.R *'smoke'*; KLY TU thu, GID juum, BRP DOONG *'smoke'*; possibly PIN tuu *'fire coals'* and PNK YO *'flame'*.

PPN *waara *'face'*. WLB wara.rra *'cliff'*; WEM wara *'to walk, come' ('face' > 'face towards' > 'come')*; WIR waa, GUM waa.n *'face'*. Probably also NYA wara.rr+karri+Y+ and NGI, KAT wara *'stand'* (for further reflexes, see infra).

PNPN *wIri+ *'sit, stay'*. DJA wiri.pa *'stay, remain'*; NGI wii+ *'sit'*; possibly LRD kara.rr *'sitting; being; waiting'*.

PNPN *wuuru *'leaf'*. PM *wuru *'tree'* (> WRY, THR wuru); YIM wuuru.y *'soft middle part of palm leaf'*; KLY WU *'yellow, sere leaf'*.

In western Pama-Nyungan (Nyungic), the loss of intervocalic *r also occurs, but in contexts other than those which apply in the east. Apart from a solitary example, *r-deletion occurs in NYA only in the final syllable of trisyllabic or longer forms (but not in trisyllabic nominals). Thus pre-NYA *kankara+ngu *'from above'* appears as kankara+ngu in modern NYA, but pre-NYA *kankara *'above'* is truncated to kanka. In pre-NYA verbal forms with *#ra 'PURPOSIVE/BENEFACTIVE', *r is normally deleted in the modern language, as in:

	*kampa+rna+rna+ngku#ra	*'I cook(ed) it for you* SG'
(1) Intervocalic *r-del	*kampa rna rna ngku a	
(2) Vowel cluster reduction	*kampa rna rna ngk a	
(3) *k-del (in +ngk(V) suffixes)	kampa rna rna ng a	
	kamparnarnanga	

In a solitary disyllabic root where *both* ancestral syllables contained *r, the rhotic of the second syllable was deleted: thus PDNY *rara *'swollen'* > PIN, ANT rara, but NYA W raa.

In YIN and KUR, intervocalic *r which occurred between identical vowels in the final syllable of trisyllabics was deleted. Thus PNG *parru.ru *'kneecap, pestle'* > YIN parru.u; PPN *yAlyu *'flame'* > PNG *yalhu.ru *'tongue'* > YIN yathu.u *'tongue'*;[27] and PNG *marrka.ra *'younger brother'* > YIN marra.a.

In WIR, waa *'face'* was noted earlier as descending from PPN *waara; WIR maa *'vegetable food'* has cognates in WJK MARYN, NYU mereny (and, probably, THR warany+ma) *'vegetable food'*; GUP mara.nhu *'food ...'*; and YIM maaraa.rr *'clothes (European)'*. These forms are reflexes of PNPN *maara *'belongings, possessions'*.

A detailed exposition on the evolution of eastern monosyllabic roots from disyllabics through vocalic apocope must wait for the future. By way of illustrating the two principal patterns, we cite just two of many relevant examples. In the first, the second vowel of a *CVCV-type root is deleted; and in the second, V_2 *and* the second member of a preceding consonant cluster are deleted in roots of the shape *CVCCV.

A search throughout Pama-Nyungan for cognates of KAB WIL /wiil/ *'name'* reveals WJK WELLE *'dream'* and UMS ngiili *'name'*. On this basis we reconstruct PNPN *ngiili *'name'*.[28]

The second pattern is exemplified in NGI thun *'tail'*, whose cognates include NGL jurnku *'back, spine'* and GUP dhungu.rr.k *'back of neck'*. In the east, a doublet appears in GID junka.rr *'penis'* and jun *'tail ...'*. These forms reconstruct to PNPN *jurnka *'hind part'*.

NOTES

[1]Communalects drawn on for examples are identified as follows:
ADN Atnyamathanha; ANT Antikirrinya; ARB Arabana; BAY Bayungu;
BNJ Bandjalang; BRD Burduna; BRP Birpai; DHR Dharawal; DIY Diyari;
DJA Djadjala; DYI Dyirbal; GAL Galali; GAW Gawurna; GID Gidabal;
GIP Gippsland; GLB Galbu; GRN Gurnditj; GUM Gumbaynggir; GUP Gupapuyngu;
GYA Kuku-Yalanji; JKY Jabugay; KAB Gabi; KAT Gadhang; KLY Kala Lagaw Ya;
KNJ Kaantju; KUR Kurrama; LRD Lardil; MAU Maung; MDI Madhi-Madhi;
MGU Margany and Gunya; MIR Miriam; MKU Mayi-Kulan; MNN Northern Mangarla;
NGI Ngiyambaa (K Keewong, T Trida); NGL Ngarla; NGR Southern Ngarigo;
NMA Ngarluma; NYA Nyangumarta (S Strelley, W Wallal); NYU Nyungar;
PIN Pintupi; PIT Pitta-Pitta; PNK Pankarla; THL Dhalandji; THR Thargari;
UMP, UMS (two dialects of Umpila); URA Uradhi; VAS Vasse dialect of
Nyungar (Wardandi); WAA Waalubal; WEM Wemba-Wemba; WGK Wangkangurru;
WIR Wirangu; WJK Wadjuk dialect of Nyungar; WLB Warlpiri; WMK Wik-Mungkan;
WRA Warburton Ranges; WRG Wargamay; WRJ Wiradjuri; WRN Warnman;
WRY Warriyangka (Warienga); YDN Yidiny; YIM Guugu Yimidhirr;
YIN Yindjibarndi; YNW Yinwum; YUL Yurlbaridja; YUW Yuwaaliyaay.

Postulated ancestor languages are:
PK Proto-Kanyara; PM Proto-Mantharta; PNG Proto-Ngayarda;
PDNY Proto-Desert Nyungic; PNY Proto-Nyungic; PNYY Proto-Nyungo-Yuulngic;
PP Proto-Pamic; PNPN Proto Nuclear Pama-Nyungan; PPN Proto-Pama-Nyungan.

Conventions followed are:

*	Proto-form
+	Internal morpheme boundary
#	External morpheme boundary
.	Former morpheme boundary
/ /	Underlying Representation
___	Surface Representation
'...',	as in *'merely, only ...'*: Only the focal portion of a lengthy gloss is cited (' ' identifies actual glosses).
"..."	as in *"flame-coloured"*: A hypothetical but plausible meaning is suggested as a bridge linking an ancestral and a modern referent (as, in the present example, between PPN *yAlyu *'flame'* and Warlpiri yalyu *'blood'*).
Starred form cited partially in upper case (as in *ngUlya):	No data to hand from any language which is diagnostic for a given feature (as, in this example, the length of V_1).
Reflex cited entirely in upper case:	An early, usually nineteenth century, source is being drawn on (as in KLY IA *'throat ...'* (Ray 1907)).
Reflex cited entirely in lower case:	A relatively recent, 'post-phonemic', source is being drawn on (as in KLY ya *'throat ...'* (Bani and Bani 1975)).

Data sources not accounted for in the Bibliography embody part of the writer's research.

[2]In one or two others such as Yukambal (op. cit. p.294), metathesis has bled intervocalic *r-deletion, so that *marang > *mara > *rama > YAMA. With this reflex compare WLB yama *'... shady place'* with widely diffused WJK MY-A *'house ...'*, from Proto-Nyungic *maya *'humpy, shelter'*.

[3]Cf. Hale's (1976a, c) Proto-Pamic *jaara *'mouth'* (> KNJ thaa'a, WMK thaa' and YNW +atra).

[4] *'To be poised to throw'*.

[5] *'To catch in the hand'*. For *'mouth'*, LRD has leman.

[6] For *'mouth'*, UMP has kaama.

[7] For *'hand'*, DJA has manya, with which cf. BAY manya.rr.ka *'hand'*.

[8] DJA jaa is *'ground, earth'*, in which the semantic development was *'mouth, entrance'* > *'burrow, hole in the ground'* > *'ground'*. Compare WLB rraku *'hole in the ground'*, from PNPN *taakun *'ground'*, and note BAY thara, above.

[9] Probably involving two to three thousand roots and affixes.

[10] In Margu, a non-Pama-Nyungan language, yaku is *'no'* (Capell, p.c.).

[11] WLB walku *'empty'* and GIP NGALKOO, MKU walki *'no'* (< *ngalku) corroborate this.

[12] See Heath (1979:412) and Hercus (1979:637-638).

[13] Our unawareness is not necessarily shared by the native speaker. Many 'implausible' semantic changes will no doubt be validated in time by those with a deep knowledge of traditional Australian *Weltanschauungen*.

[14] It should be pointed out that our scanning of lexicons for cognates normally encompasses only five to fifteen per cent of the 160 Pama-Nyungan tongues. There could therefore exist — and almost certainly do exist — reflexes of *ngUlya in many intervening languages such as Wangkangurru and Agwamin.

[15] And which has not undergone, for example, Initial-Deletion.

[16] A shift of *a to i adjacent to *r is documented for GUP. Compare, for example, GUP ŋar'.yu+N ∿ ŋir'yu+N *'to breathe'* with PIN ngaany+pa *'panting'*, NMA ngayiny *'breath'*, PK *ngaany.ka+Y+ *'to breathe'*, KLY NGA.NA ngoe.na *'breath'*, LRD ngawi.di *'breathe'*, GID ngaany.pi.rr *'yawn'*, DIY ngara(ngara) *'breath'* and NYA ranga.ranga.pi+L+ *'to pant — as a dog'* < *ngaara(ny) *'breath'*. (For the NYA metathesis, note NYA ngaru *'beach'* vs. GUP raŋi *'beach'*, WRN langa *'ground, earth'* and PNK YANGA.RA *'broad, wide'*, reflecting PNYY *rangu *'sandy expanse'*). Reflexes of PNPN *wAra *'other'* include NYA wari.ny, GLB wari.pu, GUP wiri.pu and KLY WAR(A) wara.

[17] For *w- > LRD k-, cf. PPN *walngka+ *'to speak'*, whose reflexes include PIN wangka+Y+ and LRD /kang/ kangka *'to speak'*, and WRG walngka *'air in lungs'*. See also LRD kara.rr, infra.

[18] Further reflexes of *waara are cited elsewhere herein.

[19] Note that there is no compelling reason for us to attribute the identity or near-identity in form to diffusion: MKU, WLB, UMP and GIP, like many Pama-Nyungan languages, continue ancestral clustering and other patterns with what seems at times to be amazing conservatism. With regard to the *lk cluster, note the descent of ancestral *kalka in UMP kalka *'spear'* (PP *kalka), MKU kalka *'spear'* and WJK KALGA *'crook used for pulling down Banksia ...'*, as also of PNPN *kaalka+ *'to fall'*, reflected in URA algha, WMK keek+ *'to fall, die'* and UMP aalka+ *'to rise, run a banker — as river'* and aalka.n.ji *'high tide'* (< PP *kaalka+ *'to fall'*) as well as in MKU kalka, GUP galki+rri *'to fall'*.

[20] The -i poses a problem which remains to be dealt with.

[21]For the shift of intervocalic *rr to j in the north-east (and south-west), compare WJK IJA+, NYA wirri+R+, WLB yirra+L+ and PP *ngiija+ (from PNPN *ngiirra+ *'to put'*). In KLY, moreover, the second person plural pronoun went from *nyurra to *nyirra to *nyitha to modern NITA nitha.

[22]*'Tree'* was probably also part of the referent range of *jarum.

[23]NYA wika (wi.ka?) may be a further reflex. Note, however, WRA wika.rru *'messenger'*, with which there may be semantic connection via *'smoke signal'*.

[24]The frequent documentation of cognates in PIN rather than, say, in WRN or BAY is probably a function of the larger data base available for the former.

[25]Donaldson (1980:32-36). PNPN *tUku *'heart'* is still more widely reflected.

[26]Semantic association between *'urine'* and *'middle'* is confirmed in BAY kumpu *'urine'*, kumpu.tharri *'middle'*, as well as in other roots.

[27]Compare ADN yalhu, PNK YALLU *'flame'*; WLB yalyu *'blood' ("flame-coloured")*; and LRD /yalulu/ yalu.l *'flame; light'*.

[28]LRD /ngirni/ ngirne *'skin ...'* appears to be a further cognate, though with problematic rn in place of l. The likelihood of cognation is enhanced by the appearance of the highly marked ngi syllable in LRD, which dovetails with PNPN *ngii-.

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THE 'REGISTER-LANGUAGE' STRUCTURE OF NAVAJO

Richard S. Pittman

Since Eugénie Henderson's 1952 'The main features of Cambodian pronunciation' article, linguists have been observing that comparisons of voice register phenomena of Asian languages with vowel harmony systems of Africa and elsewhere lead to insights of great generality and interest for linguistic description. Up to now, however, they have not looked at languages of the Americas from the 'register language' perspective.

In the years immediately preceding his untimely death in 1939, Edward Sapir had done voluminous work on Navajo and had communicated the results well to his students and colleagues. In 1943 one of them, Harry Hoijer, published a lucid piece, 'Pitch accent in Apachean languages', followed in 1945 by *Navaho phonology*. In October of the same year, Zellig Harris reviewed the phonology book and presented his own analysis.

Though I was but a beginner in linguistics at the time Hoijer's 'Pitch accent' article appeared, the data which he presented in support of a four-toneme analysis seemed to me to support much better a two-toneme system. I wrote Hoijer to that effect. He kindly replied that he had considered my solution but rejected it for reasons he could not subsequently remember.

Harris's article, two years later, eloquently clinched the two-tone argument. 'We may reduce the number of tonemes from four to two without complicating the statement of their distribution. Since the rising and falling tones occur only on VV (including V: which are now analyzed as a sequence of two like vowels), we may analyze ǎi as àí, ê: as éè, and so on, while ái becomes áí, and à: becomes àà. Whereas previously the second vowels of clusters had no tone, now no vowel occurs but with a toneme' (242). In other words, long vowels are interpreted as sequences of two identical vowels and the rising and falling tonemes, which occur only on long vowels and two-vowel clusters, are interpreted as low-high and high-low sequences of two tones.

The Navajo themselves embraced the two term system so completely that no-one would now dream of reverting to the four-toneme view. All this is now history. No revision of the conclusions is required or proposed.

What is still lacking, however, because voice register theory had not even been born in the mid-forties, is an observation that the two tones of Navajo reflect the widespread two-register pattern so common in other parts of the world.

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Though the parallels between Navajo and numerous two-register languages of South, East, and South-east Asia are appreciable, these might still be considered insufficient to classify Navajo as a register language, were it not for the elegant description Hoijer provides of what he calls 'morphophonemic rules', but which I prefer to classify as 'register harmony' rules. To do this it will be necessary to quote a fair bit from his 'Pitch accent' article, but the illustrations can be omitted since they are available in his original.

'Every syllable in an Apachean utterance has a toneme; or, to put it another way, there are no syllables of which the tones are indeterminate or non-phonemic. However, the same thing cannot be said of Apachean morphemes. Morphemes, with respect to tone alone, may be divided into two basic classes: toneless or neutral-toned morphemes, and morphemes possessing inherent (fixed high or low) tones. Since each syllable in an Apachean utterance is made up of one or more morphemes, it is clear that the toneme of a syllable is determined by the tonal characteristics of its constituent morphemes' (39). In other words, every syllable of an Apachean utterance is phonemically high or low. But every morpheme in Apache is inherently high, inherently low, or inherently neutral. The actual phonetic realisation of each syllable is determined by the 'dominance' (register harmony) rules relating its constituent morpheme pitches to one another in sequence.

Following, are the rules:

1. 'A syllable composed of a single neutral-toned morpheme ordinarily takes the low tone.' This can be illustrated by using the Hockett convention of braces { } to enclose morphemic writing and brackets to enclose phonetic writing. CV (with no diacritic) will illustrate a neutral tone morpheme or syllable, CV́ a high-toned one, and CV̀ a low-toned one.

So {CV} (any neutral tone morpheme) is phonetically realised as [CV̀] (a low tone syllable), except that:

a. {CV} + {ń} (a high tone syllabic n) becomes [CV́ń], and

b. {ni} (a neutral tone morpheme meaning 'completion') becomes high before a non-final syllable beginning with d.

That is to say, in our terminology, a single, high-toned syllabic n dominates a preceding neutral-tone morpheme making the neutral tone high, and an initial /d/ of a pre-final syllable likewise dominates a preceding neutral tone morpheme, making it high.

2. 'A syllable composed of two neutral-toned morphemes always takes the low tone.' So {CV} + {VC} become [CV̀C].

3. 'Syllables composed of one or more neutral-toned morphemes plus one which possesses an inherent tone always take the tone of the inherent-toned morpheme.'

4. 'When a syllable is composed of two or more inherent-toned morphemes having the same tone, its tone, of course, is the same as that of its constituent morphemes.'

5. 'When a syllable is made up of inherent-toned morphemes possessing different tones, the tone of the syllable is always inflected (i.e. high-low or low-high). The syllable tone is falling if the high-toned morpheme precedes the low-toned morpheme, rising if these positions are reversed' (40).

It will be noted, as a consequence, that 'syllables with inflected tones are always morphologically complex (i.e. composed of at least two morphemes), whereas low- and high-toned syllables may be either simple or complex' (41).

Though much of what Hoijer wrote may now seem standard and self-evident, it was by no means so widely transparent at the time he wrote it. His fundamental distinction between syllable tones and morpheme tones, for example, flew in the face of phonetic descriptions as practiced by many at that time (and by some even now).

His identification of neutral-toned morphemes as distinct from those with inherent high or low tones was also crucial. Without it his description would have been opaque. With it the description is not only comprehensive and coherent but also completely consistent with the obligations which devolve upon those who seek to describe register languages.

It is a pleasure to point out that, with Hoijer's register harmony rules so succinctly specified, historical and comparative studies of Athapascan have become possible on a sound basis, at least as far as the Navajo data are concerned. Without such rules, even accurate specifications of the phoneme inventories of cognate languages prove inadequate for satisfactory historical reconstructions.

And, finally, his work points the way to unambiguous inclusion of Apachean languages in the large typological group of Asian and African register languages.

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SUBSTRATUM INFLUENCES IN BASILECTAL SINGAPORE ENGLISH

John Platt

There has been a good deal of controversy in recent years about whether certain linguistic features which are apparent in the English of non-native speakers can be traced to the influence of the background languages or are due mainly to universal learning strategies; cf., for example, James 1980, Richards, ed. 1974, Wardhaugh 1970. This controversy has appeared not only with regard to English language acquisition as such but also in discussion about the 'New Englishes', i.e. the developing new varieties of English which are spoken in various parts of the world.

Most of the New Englishes developed in territories under British or American colonial rule and later on in the new nations which were established in the ex-colonies, e.g. Singapore, Ghana, Nigeria. The emergence of new varieties has occurred particularly in nations where the English language still plays an important part either as a unifying quasi 'national language' or as a functionally important language used in addition to one or more local languages. Typically, the new varieties started to develop through formal education in English, which was available to a section of the community, and in this way they could be considered as examples of large scale language acquisition. However, unlike the more or less transient interlanguages of foreign language learners, these varieties were often used by their learners for a number of everyday communicative functions, causing massive fossilisation of certain linguistic features which eventually became stabilised forms in the new variety or at least in its more colloquial subvarieties.

In nations where a New English has many functions and where there is extensive English-medium education, the new variety will develop into a speech continuum (Platt 1975) from an acrolect spoken by those of higher education and generally used for formal functions to a basilect spoken by those of lower education and often also used by more educated speakers as their colloquial style. It is this latter subvariety which exhibits the greatest number of those features which are usually labelled by prescriptive language teachers as 'deviations' or 'sub-standard' and which cause this subvariety to be at times erroneously referred to as 'pidgin' or 'patois'. Although basilects of the New Englishes may differ considerably from Standard British or American English, and even from their own acrolects, a definite system can be observed in the choice and arrangement of their linguistic features.

A New English basilect which is widely used within its community is Basilectal Singapore English, also referred to at times as Colloquial Singapore English, as it is used by even highly educated speakers as a colloquial style within the family and with friends. It has been denounced, often fiercely, by education authorities, but nevertheless it exists - and prospers - and the writer has frequently observed its use by the very people who so fiercely denounce it.

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Unlike those areas where an English-based pidgin existed well before a New English began to develop through education, e.g. parts of West Africa, there was practically no pidgin English used in Singapore. The language of wider communication among the various Chinese dialect groups was Hokkien and in certain areas, e.g. eating establishments, Cantonese. The overall inter-group lingua franca between Chinese, Malays, Indians and even Europeans was Bazaar Malay, a pidginised form of Malay. Local languages, or rather languages spoken locally, were the Southern Chinese dialects (Hokkien, Teochew, Cantonese, Hainanese and Hakka), Malay, Dravidian languages (mainly Tamil) and to a lesser extent other Indian languages, e.g. Punjabi, Sindhi, Hindi (Platt and Weber 1980).

To return to the controversy referred to earlier concerning language specific influences versus universal strategies, it must be stressed that by examining here the influences of the various background languages on a subvariety of a New English I do not, by implication, reject hypotheses of universal strategies or tendencies in language acquisition. On the contrary, I have stated elsewhere (Platt, Weber and Ho 1984) that linguistic features in the New Englishes show evidence of:

(1) language universal learning strategies;
(2) language specific influences; and
(3) at times, a definite reinforcement of (2) on (1).

Some examples of (3) would be the non-realisation of the English copula BE and noun plural marking in a number of New Englishes. By looking at substratum influences in Basilectal Singapore English, I am thus deliberately concentrating on (2) above but I shall by no means lose sight of (3) which I believe to be quite a powerful factor in language acquisition.

In multi-ethnic nations such as Singapore, one would expect that a decisive factor concerning substratum influences would be the relative number of speakers of the 'local' languages. Speakers of the various Chinese dialects make up a large part of the Singapore population, more than 76%, the remainder consisting of approximately 15% Malays, 6% Indians and 2% others. Of the Chinese, the dominant dialect group is Hokkien (approximately 42%), the remainder being approximately: Teochew 22%, Cantonese 17%, others 19% (figures calculated from Khoo 1981).

It can be seen fairly clearly, and examples for this will be given later, that Southern Chinese dialects had the greatest substratum influence on Basilectal Singapore English, with Hokkien and Cantonese providing the largest number of loanwords and calques. The influence of Mandarin, which is now widely taught as a second language in schools, must be considered slight, particularly in lexical items. Fewer than 1% of Singaporeans are native speakers of Mandarin. Furthermore, Basilectal Singapore English was developing long before the current 'Speak More Mandarin' campaign and it was used by Singaporeans who attended English-medium schools in the period before Mandarin was taught as a second language (Platt and Weber 1980).

It is, of course, not only the proportion of speakers of a particular local language or dialect which is significant but also which group had the greatest access to English-medium education at the time when Singapore English began to develop. In the early stages of English-medium education, a large section of the student population were sons (and later also daughters) of Peranakan Chinese: the Straits-born Chinese who spoke Baba Malay, a type of creole arising from a fusion of Malay and the Southern Chinese dialects, particularly Hokkien (Lim 1981). Whilst other sectors of the Chinese population emphasised

links with China, many Peranakan or 'Baba Chinese' had British leanings and in addition to Baba Malay began to use English, i.e. an embryonic type of Singapore English, in their homes. Thus the Malay influence which can be noticed in Basilectal Singapore English would often be due to the Baba Malay of the Peranakan and also, to some extent, to the common lingua franca, Bazaar Malay, rather than to Bahasa Melayu, the Malay spoken by Singapore's Malay population. Very few Singapore Malays had access to English-medium education during the colonial era when Singapore English was developing and even now they are the one sector of the community where even English-medium educated speakers prefer to use Malay rather than English in more informal domains, e.g. shopping, family, friendship (Platt, in press).

The predominant Indian language in Singapore is Tamil, a Dravidian language. In 1970, two out of every three Indians in Singapore were Tamil, with Malayalis making up 12% and Punjabis 8.4% (Chang 1976). There has been less substratum influence from Indian languages in a direct way, i.e. there are relatively few loan words and calques. This is not surprising. Apart from being a numerically smaller group, many Indians had, unlike the majority of Chinese, considered Singapore only as their second home, a place to work and make money. Even some Indian men who were born in Singapore went back to India to get married and sometimes left their families behind in India until their sons were old enough to join them in the business. This pattern has, of course, been changing and there are members of Indian families in Singapore, notably Christian Indians, who acquired English at an early stage and who now use it as their home language. Most of the influence of Indian languages on Basilectal Singapore English, in fact on the whole Singapore English speech continuum, has been complex and rather indirect. The colonial administration imported English-speaking Indians from India and Ceylon, e.g. Jaffna Tamils, to serve in government offices and as teachers in English-medium schools. The English of these teachers, i.e. a type of Indian English, had a definite influence on the structure and development of Singapore English. This influence is sometimes difficult to define as certain linguistic patterns which are apparent in both Indian English and Singapore English may be seen as due to universal learning strategies. However, they may also be seen either as second-hand influences of Indian languages via the Indian English of early teachers or as a reinforcement of the universal patterns by Indian language influences.

I have so far discussed these substratum influences in Basilectal Singapore English as if they were discrete and isolatable. In reality, of course, these various influences often merge to create a unique pattern or, at times, combine to reinforce possible universal learning strategies. My exemplifications will be from various areas of Basilectal Singapore English. A number of these phenomena have been discussed in greater detail elsewhere, e.g. Platt 1977 and 1979, Platt and Weber 1980. For convenience sake, I shall use Dialects for Southern Chinese dialects and BSE for Basilectal Singapore English.

1. Four very noticeable characteristics of BSE are the treatment of the final consonants, final consonant cluster reduction, shortening of long vowels and monophthong realisation of R.P. diphthongs.

In BSE there is usually variation between unreleased final consonants and replacement of consonants by glottal stops, e.g.

Pi(k) me a(t) seven.
Pi' me a(t) seven.
Pi' me a' seven.
'Pick me up at seven.'

' signifies glottal stop, ( ) signifies unreleased consonant.

As a rule, speakers of BSE delete at least one consonant in a final three consonant cluster and variably delete two and even three consonants, e.g.

my paren(t)s, paren(ts)
dialec(t)s, dialec(ts), diale(cts)

Reduction of two consonant clusters to one consonant is high - over 90% (Platt and Weber 1980:50), e.g.

[dɔʔ] *don't*

It appears that final consonant cluster reduction may be considered as one of many verbal strategies found in the New Englishes but it is obviously reinforced because such clusters do not occur in the Dialects, Malay or Tamil. The substratum influence can be seen even more strongly in the treatment of the final single consonant. There is a limited occurrence of consonants in final position in the Dialects. If they do occur, they are often unreleased and at times occur as glottal stops. In Malay, final k is realised as a glottal stop, e.g. [anaʔ] anak *child*.

There is a tendency in many of the New Englishes to shorten long vowels and to treat as monophthongs some vowels which appear as diphthongs in R.P., e.g. (Platt, Weber and Ho 1984:31-37):

[so:] [so·] [sɔ] for *so*
[se:] [sɛ:] [sɛ·] [sɛ] for *say*

The tendency is more noticeable in the basilectal subvarieties. In BSE, the occurrence of short monophthongs in such words as *so, don't, say, take, lane* is high.

The general tendency seems to be reinforced by substratum influences, particularly from the Dialects. In Hokkien, for example, the surnames Ho and Tay are pronounced [hɔ] and [tɛ] respectively.

2. A tendency which can be observed in many of the New Englishes is the non-marking of nouns for plural (Platt, Weber and Ho 1984:46-49), particularly if the plural meaning is obvious from the context. This tendency is strong in BSE, e.g.

I go(t) four brother, two sister.
I have job. Tuition to small ki(d).
All my frien(d) all say ...
You like orchid ah?

An analysis of the speech of 50 Singaporeans of different social and educational backgrounds (Ho 1981:71) showed that the mean score for noun plural marking by speakers of BSE with an educational level below 4th year at secondary school was only 40%.

A reinforcement of what may well be a universal learning strategy has occurred because neither in the Dialects nor in Malay is the plural expressed by affixation. In the Dialects, one form of the noun usually expresses either singular or plural. Plurality is inferred from the context, e.g. Hokkien:

Gua lang si chhâi-hông
we BE tailor
We are tailors.

In Malay, plurality is marked by reduplication, e.g. bunga-bunga *flowers* only if the noun is not preceded by a quantifier, e.g. tiga bunga *three flowers*, or if it cannot be implied from the context. Bazaar Malay does not reduplicate nouns for plural and uses numerals and quantifiers only where necessary, e.g.

Saya mau beli pisang.
I want to buy bananas.

3. Variable non-realisation of *BE* is typical for many of the New Englishes, particularly in colloquial speech (Platt, Weber and Ho 1984:78-79). This general tendency can also be observed in BSE, e.g.

This here coffee house - very dirty.
My sister - staff nurse.
His paren(ts) - from China, y'know.

It can be seen that the system in the variable use or non-use of *BE* is governed to a great extent by substratum influences. For example, in the Dialects, the copula is usually not used before adjectives (strictly speaking they are a type of verbal) except for emphasis (Platt 1979):

Goá chin hó (Hokkien)
Ngo hóu hóu (Cantonese)
I very well
I'm very well.

Neither is it in Malay:

Rumahku besar sekali
house-my very big
My house is very big.

or in Bazaar Malay:

Saya punya ruma banya besa
I poss. *house very big*
My house is very big.

or in Tamil:

Iṇṇe sa:ppadu ṉelleḍu
this food good
This food is good.

Although there are copula-less constructions in the Dialects before Predicate Nominals, it is quite common for the copula to be used, e.g.

I sǐ Málaî lâng (Hokkien)
He is Malay (or a Malay)

Copula use is less frequent in Malay:

Dia orang Melayu
he person Malay
He is a Malay.

Before locatives, 'situational' verbs are often used in the Dialects and Bazaar Malay may use ada *there is*:

Saya punya bini (ada) dalam rumah
my poss. *wife (is) in house*
My wife is in the house.

Investigation of variable realisation of *BE* (Platt and Weber 1980:64) in different environments showed that with speakers of BSE there was only a 63% occurrence of *BE* before predicate adjectives but an 80% occurrence before predicate nominals.

4. The variable non-marking of verbs for past tense, which can be noticed in quite a number of the basilectal subvarieties of the New Englishes, is also apparent in BSE, e.g.

Oh, I see him las(t) wee(k).
He ta(ke) Chinese a(t) school. (meaning *He studied Chinese at school.*)
After some time he make some money, he try bring my mum over (from China).

This phenomenon can be traced essentially to two basic tendencies which are reinforced by substratum influences. One is the consonant cluster reduction already mentioned and the other is the fact that the Dialects and Malay have an aspect system rather than a tense system. The verb form is unmarked for tense and can be used to refer to actions or states in the past as well as the present. Frequently, adverbs or adverbial expressions indicate the time, e.g. in Bazaar Malay:

Ini pagi saya beli ikan
this morning I buy fish
This morning I bought fish.

in Malay:

Pagi ini saya (mem)beli ikan
morning this I buy fish
This morning I bought fish.

Completed action is indicated in Hokkien by adding liáu *finished, already*:

Goá chiàh pá liáu
I eat full already
I've eaten.

and in Baba Malay (Lim 1981:79) and Bazaar Malay by suda(h):

Gua suda makan (Baba Malay)
Saya suda makan (Bazaar Malay)
I finished eat
I have eaten.

This influence is evident in BSE, e.g.

You take makan already? (meaning *Have you eaten?*)
My boss come ba(ck) already. (meaning *My boss has returned.*)

in situations where in Standard British English no *already* would be used.

5. A feature of BSE is the use of 'serial verbs', e.g. (Platt, Weber and Ho 1983a:33):

The teacher to(ld) me say: "I canno(t) gi(ve) you alone go home.

These constructions are common in situations where direction of movement is involved (Platt, Weber and Ho 1983b), e.g.

Tha(t) boo(k) on the TV, ta(ke) come here!
(Father telling his son to fetch the book)

We have a lo(t). Ta(ke) go la!
(Housewife urging a friend to take home some mangoes)

Give him bring go la!
(Nurse speaking to the clerk who is to hand over a file to the tamby, the office messenger, who is to take it to the doctor)

In the Dialects, the direction of movement in relation to the speaker and the addressee is indicated by the addition of an obligatory verb, e.g. in Hokkien khì for an action away from the speaker and lâi for an action towards the speaker. These may, for example, combine with gîa *bring* or *take*:

gîa khì!
Take (an object) there! (literally *bring/take go*)

gîa lâi!
Bring (an object) here! (literally *bring/take come*)

The use in the Dialects of the same verb for direction towards or away from the speaker, e.g. Hokkien gîa, has strongly influenced BSE usage in regard to verbs of movement, e.g.

They bring you to certain places. (talking about a bus tour)
OK, OK, I take for you, I take for you! (meaning *I'll get them for you*)

Serial verb constructions are also used in Bazaar Malay, e.g.

Lu misti kasi tau sama dia
you must give know with him
You must tell him.

6. The influence of the Dialects on BSE is also evident in a number of loan words and expressions, e.g.

Don't kaypoh *my business!* kaypoh Hokkien for *busybody*
'Don't stick your nose into my affairs!'

A lot of Ang Mos *going to tha(t) supermarke(t).*
ang mo kui, Hokkien *red haired devil*, a term for Europeans;

and calques such as:

eat snake (meaning *to shirk duty*) Hokkien chiáh chôa
catch no ball (meaning *I don't understand*) Hokkien liáh bô kîu

The influence of the Dialects is also evident in widely used expressions such as:

Last time (for *previously, in the past*) Hokkien téng pái *previous time, last time*

Last time can buy for $2 - now cannot already.
'Previously one could buy this for $2 but now one can't any more.'

Similarly the use of *wait* in:

Wait I return the book to you.
Better book now, wait got no more sea(ts) in the plane.

reflects the use of tan in local colloquial Hokkien (Platt 1984:111-112).

7. BSE also has a number of loan words and expressions from Malay, sometimes with semantic modification, e.g.

makan *food* (Standard Malay makanan)
bodoh *stupid*, kacho (kacau) *disturb*, hantam *beat*, e.g. *Wait I properly hantam you!*

rojak, originally a salad of mixed vegetables and/or fruit, is also used for *mix-up* or *mess*:
Rojak la! (meaning *What a mess!*)

kampong (Standard Malay spelling kampung), originally *village* or *settlement* is used in Singapore for a village-like settlement of small separate houses:

I stay in kampong near Changi, y'know.
'I lived in a kampong near Changi.'

ulu, in Malay *upstream, upper part of a river, rural area,* in BSE *outer area away from main business and shopping areas, a place where there isn't much going on:*

Cause this is qui(te) an ulu area, y'know.

8. In the more established varieties of English, intonation can be used for emphasis or to express the attitude of the speaker to the other person, the situation or the topic. Some languages, on the other hand, make extensive use of 'discourse particles', usually one syllable words which have no separate meaning as such but whose function is to convey the attitude of the speaker. Some of these particles are carried over into informal speech in a number of the New Englishes (Platt, Weber and Ho 1984:142). BSE makes extensive use of particles from the Southern Chinese dialects. Some of these particles have different functions according to differences in tone and length, e.g.

PERSUASION	lah with a fall in pitch *Come with us lah!*
ANNOYANCE	lah with a rise in pitch *Wrong lah! Tsch! Write again here!*
STRONG OBJECTION	lah with a sharper fall in pitch A: *Shall we discuss this now?* B: *No lah! So late already.*
DISPLEASURE	ah with a sharp rise in pitch *Never listen ah!*
SURPRISE	ah with a slight fall in pitch *He won ah! ('He won, did he?')*
YES/NO QUESTIONS	ah with a fall in pitch *This belongs to him ah?*

Influences of the background languages are, of course, not confined only to BSE but can be observed to some extent throughout the Singapore English speech continuum. However, whilst the acrolect and the mesolects show even more strongly a merger of substratum influences, e.g. the unique form of the Singapore English accent of all younger English-medium educated Singaporeans, the merger is also evident in many areas of BSE. Nevertheless, discrete background language influences are more noticeable here, particularly at the lower end.

BSE is in many ways a typical basilectal subvariety of a New English showing, on the one hand, strong substratum influences but also displaying general tendencies which it shares with other New English basilects. These tendencies are either reinforced by the substratum influences or modified by them.

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DUTCH WORDS OF INDONESIAN ORIGIN

Edgar C. Polomé

The string of islands stretching from the straits of Malacca to Papua New Guinea have been under Dutch influence and control for about three and a half centuries ever since the first Dutch fleet under Cornelius de Houtman appeared off Bantam on 22 June 1596, and Dutch power was solidly established on Java with the building of a fort at Djakarta and the foundation of Batavia by Jan Pietersz. Coen in 1619. Under the rule of the governor-generals sent by the *Verenigde Oostindische Maatschappij* to its distant possessions, a prosperous trade with the homeland developed, and many Dutchmen came and served for a lifelong career in Indonesia. The numerous contacts between these expatriates and the local population as well as their role in the development of the country are reflected by the considerable impact of Dutch on the Indonesian language, but what did they bring home from their long stay in the islands which would constitute a permanent part of the Dutch language?

When one takes into account the terms that belong to the West-European common stock of exotic vocabulary to which an Indonesian origin is usually assigned, there remain precious few words, some of them designating typical local features - a special type of garment or canoe, plants or animals, and what not - others reflecting characteristic colonial colloquialisms such as nicknames for newly arrived Europeans or old-timers, 'picturesque' terms for attitudes, feelings, actions, used to add local colour to current speech. It is striking, for example, how some of the latter parallel the Swahili words that Belgians living in pre-Indépendence Congo resorted to spruce up their conversation: thus, Du. balken *turn over* (from Malay balik *backside*) compares with Katanga French pinduler *turn over* (from Swahili pindu[l]a *reverse, overturn*).

Obviously the situation that obtains here is that of a society in which the dominant elite group lives basically aloof from the local population, restricting its social contacts with it to the essential needs of business and administration. This has been critically illustrated in Dutch literature by such works as the *Max Havelaar* (1860) of Eduard Douwes Dekker, better known under his nom de plume Multatuli, although one should avoid hasty generalisations: especially in later years, considerable efforts were indeed made in education, social work, public health and other services which led to considerable improvement of the situations described by Multatuli and brought the Dutch working in Indonesia much closer to the local population. Several authors born in Indonesia were active in the Low Countries before World War II and especially after the transfer of power to the Indonesian Republic in September 1949, e.g. Jan Fabricius, a journalist and playwright of the older generation, C. Edgar du Perron, whose

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reminiscence of youth in Indonesia dominate the autobiographical *Country of origin* (*Het land van herkomst*, 1935), or, more recently, the novelist Hella Haasse. The presence in the Netherlands of tens of thousands of Indonesian immigrants also contributed to a greater awareness of their problems, and in recent years, hitherto unknown Indonesian loanwords have become quite common in the Dutch press, e.g. Du. adat in the meaning *lifestyle, people's habits* - a term that ultimately goes back to Arabic ʿādā(t) *custom, habit*, and is also borrowed in Hindi-Urdu with the same meaning. The new appreciation of Indonesian cultural values at the turn of the 20th century was similarly responsible for the spread of the term batik from Javanese 'mbatik *writing, drawing*. Batik is recorded in the 1880 edition of the *Encyclopaedia Britannica*, but only appears in current usage in Britain in 1905 (OED Suppl. 64a), being introduced into England by way of Holland. Similarly, the term came from Dutch into German (Kluge 1975:56) and French (Bloch and von Wartburg 1950:60) around 1900; in the latter case, the event is even connected with the success of the Indonesian display and dance performances at the Paris World Fair of 1900!

Focusing on the internationally widespread terms assumed to be of Indonesian origin in Dutch we can list: the bird names kasuaris *cassowary*, kaketoe *cockatoo* and lorre *lory*; plant products like guttapercha, kapok, rotting *rattan*, sago, mangostan *mangosteen* and the fruit of the Durio tree; objects like kris *creese* and pampoesje *(Turkish) slipper*; a word for *banana* - pisang; the designation of a large anthropoid ape - orang-oetang; the name of a fabric - gingang *gingham*; and a natural phenomenon - moesson *monsoon*. Examining them closer, we can make the following remarks:

(1) Du. kasuaris, E cassowary, G Kasuar, Fr. casoar, Ital., Span. casuario, all go back to Malay kasuwari (Indonesian kesuari), but ultimately the term may derive from a non-Malayo-Polynesian language of western New Guinea or the Moluccas, the area to which the bird is indigenous (Gamillscheg 1969:196).

(2) Du. kaketoe, E cockatoo, G Kakadu, Fr. cacatoès, Ital. cacatùa, Span. cacatúa, Port. cacatua, all derive ultimately from Malay kakatuwa (Indonesian kakatua) designating a parrot from the Moluccas. There has been some disagreement as to the origin of this term, the first part of which some considered as reflecting Malay kakak *brother*, whereas the second one (tuwa) meant *old*, the bird being nicknamed *old brother*. As R. Loewe (1933:120-130) has shown, it seems preferable to consider kaka as onomatopoeic. However, Corominas and Pascual (1980:1,720) refer to a statement of G. Viana in *Revista Lusitana*, vol. 11, p.245, according to which the Malay term originally designates a kind of tongs ('especie de tenaza'), so that the bird would have been called after its beak!

(3) Du. lorre, E lory, G. Lori, Fr. lori, Span., Ital. loro, Port. louro, are usually all considered as coming from Malay luri, a kind of Moluccan parrot. Corominas and Pascual (1980:1,696-697), however, reject this view as far as the Spanish term is concerned because, already in 1550, F. de Oviedo mentions in his description of the conquest of New Grenada (= Colombia) that the natives call a kind of parrot smaller than a macaw loros. This is confirmed by linguistic data supplied in the 17th century about the Carib dialects in which the term appears either as loro or noro; besides, the Malay term always appears with a final -i. It seems advisable, accordingly, not to relate the Italian and Portuguese terms to Malay luri either.

(4) Du. guttapercha, E gutta percha, G Guttapercha, etc. is usually interpreted as a reflex of Malay getah *gum* and perca, the tree yielding the juice from which the gum derives. It has been assumed that this tree was named after Percha, the old name of Sumatra (Kluge 1975:278), but this remains doubtful (Corominas and Pascual 1980:3,292).

(5) The term kapok, found in most West-European languages, represents Malay kapoq (Indonesian kapuk) *cotton*.

(6) Du. rotting, E rattan, Fr. rotin are adaptations or variants of an earlier rotang (cf. G Rotang) from Malay rotan, applying to the switches or sticks made from the *calamus rotang* (Malay rotan derives presumably from raut *pare, trim, strip*; Onions 1966:741).

(7) Sago is a technical term for the starchy foodstuff derived from the soft inside of the trunk of some palm trees, which seems to have found its way into the European languages (Du., E sago, G Sago, Fr. sagou, etc.) via Portuguese, which took it directly from Malay sagu.

(8) Du. mangostan (also current in Afrikaans (Boshoff and Nienaber 1967:409)), designating the fruit of the East Indian tree *Garcinia Mangostana* (E mangasteen, Fr. mangostan, Span. mangostán) comes from Malay manggistan (now manggis) through Portuguese mangostão (Corominas and Pascual 1980:3,812).

(9) Du., Afrikaans doerian, E durian, Fr. dourian, durian, Ital. durión(e) (prickly fruit of *Durio zibethinus*), from Malay durian (derived from duri *thorn, prickle*), in most languages through the intermediary of Portuguese duriaõ (Battisti and Alessio 1975:2,1404).

(10) Du. kris, E creese, kris, G Kris, Fr. criss, Span., Port. cris, Ital. kris, all derive from Malay k(i)ris, designating a (poisoned) dagger.

(11) The case of Du. pampoesje *(Turkish) slipper* is more complex: it is assumed that it came into Dutch via Javanese pampus in the 17th century (van Haeringen 1936:124) or was at least influenced by this term (de Vries 1971:504). The ultimate source is, however, Persian pāpuš - whence Arabic bāpuš, borrowed in French around 1670 as babouche (Gamillscheg 1969:68), and hence in Spanish as babucha (Corominas and Pascual 1980:1,444) and presumably also in Italian as babbùccia (Cortelazzo and Zolli 1983:1,98). A direct borrowing from Persian is preserved dialectally in Portuguese papús; the Persian term itself means *foot covering*, from Pers. pā *foot* and a verb meaning *to cover*.

(12) Du. pisang is directly borrowed from Malay pisang *plantain*, and is itself the source of G Pisang and Swed. pisang (Hellquist 1948:764).

(13) Orang-oetang, which has become the common European designation (E orang-outang, G Orang-Utan) for the long-armed man-like arboreal ape of Borneo and Sumatra, was first recorded by the Dutch East Indian zoologist J. Bontius in 1631: the name is based on the Europeans' erroneous application to the animal of Malay orang (h)utan, literally *man of the forest*, used to designate the wild tribes living in the woods. Accordingly, in this case also, Dutch appears to be the channel through which the term was brought to the other European languages, e.g. in 1669 to German, in 1699 to English, in 1707 to French.

(14) Du. gingang from Malay ginggang (Indonesian genggang) *striped* is similarly considered as the probable immediate source of E gingham (Onions 1966:398) and G Gingang. Fr. guingan appears for the first time in Savary's *Dictionnaire universel* in 1723, and in 1770, G. Raynal describes it as a white cotton fabric from India (Bloch and von Wartburg 1950:297). The French term, however, is apparently borrowed from Portuguese where gingão must have occurred before 1485 when Gonzalo de Baeza took it over in Spanish in an entry in his accounts (Corominas and Pascual 1980:3,268). The Portuguese term became very frequently used after the middle of the 16th century and always referred to cotton goods from the East Indies; it came undoubtedly from Malay like the later Dutch borrowing.

(15) There are a number of problems connected with the last term in this series, Du. moesson: it has been considered as borrowed from French mousson (documented since 1649) because it appears in a 1691 nautical work as mousòn - a synonym of passaat *favourable wind*, blowing fairly continuously from the same direction and making the passage (to India) easier (Franck and van Wijk 1912:437); the founder of the Cape colony, Jan van Riebeeck, uses moisson, mousson in his *Dagverhaal* (1652-1662; Boshoff and Nienaber 1967:428). This makes it indeed implausible to derive Du. moesson directly from Malay musim, though, perhaps, it may have come into Dutch from Port. mouçã̃o, since the Portuguese appear to have been the first to apply this originally Arabic term for *set time or period, season* (Arab. mausim from the root w-s-m *reckon, calculate*) to the regular winds blowing in definite seasons in the Indian Ocean. However, as early as 1596, the traveller J.H. van Linschoten mentions Du. monssoyn, monssoen, with -n- as in Port. monçã̃o and the other West-European languages (G Monsun, E monsoon, Ital. monsone, Span. monzón). While the substitution of the common Portuguese feminine ending -ã̃o for Arabic -īm is obviously responsible for the forms in -on of the other languages (Corominas and Pascual 1981:4,133), the origin of the form -n- remains disputed: for Kluge (1975:486), Port. -ou- has been misread as -on-, which is rather unconvincing since monçã̃o appears and prevails in the oldest documents; perhaps the influence of an Oriental language is responsible for the -n-, about which Vercoullie (1925:229) refers to Javanese mongso?

If in the case of the term for *monsoon* it is reasonably clear that Portuguese has been the major intermediary through which it has penetrated into most of the West European languages, it is often rather difficult to indicate which precise routes the borrowings from the 'East Indies' have followed for other words. Thus, E kapok, introduced about 1750 under the form capoc, could come from French (1691, capok), or Dutch (kapok, common in the 17th century, imported in South Africa where it came to mean *snow*; Boshoff and Nienaber 1967:336). Modifications and adaptations may provide some hints: thus, Du. rotting *rattan* substituted the common Dutch ending -ing for Malay [aŋ], but Afrikaans maintained the 17th century form rottang (van Riebeeck: rottangh; Bosman and Nienaber 1967:553), reflecting more closely Malay rotan. English has a variant rotang which was presumably taken over from Dutch: it first appears as rota in a 1598 translation of van Linschoten (OED 2580 [806a]; the form rattan seems to have been introduced about 1660 (Samuel Pepys mentions a rattan switch in 1660 in his diary and calls it rattoon; OED 2421 [171a]).

In other cases, it is difficult to establish whether a term is actually originally Indonesian: thus, Du. bamboe, E bamboo, G Bambus, Fr. bambou, Span. bambú, Port. bambu, Ital. bambù, is usually considered as a word of Malay origin, bambu, taken over from Sumatra and Java by the Portuguese at the end of the 16th century (de Vries 1971:29; Kluge 1975:47); the final -s which occurs

in some languages (including Du. bamboes) is ascribable to the epenthesis of an original plural ending. Gamillscheg (1969:78) already pointed out that the Malay term was not properly documented; moreover, in its earliest Portuguese attestations the word appears as mambu (1563, 1578), and the alternation m-/b- at the word-initial remains unexplained. Recently, it has rather been assigned an Indian origin: reference is made to Kannada bambu, bombu, and it is pointed out that the plant is referred to as early as 1585 by Father Sassetti, Italian missionary in India (Cortelazzo and Zolli 1983:1,109-110). On the other hand, the term already appears in Portuguese in 1516, but it is also listed as vambó in a Catalonian inventory of 1489 so that it may have come to Spain through Arabic (bambūh) before the Portuguese could bring it from India (Corominas and Pascual 1980:1,484).

Turning to the strictly Dutch loanwords from Indonesia, let us first examine those that deal with 'realia':

(1) Plants and vegetable products:

(a) Du. arenpalm (a kind of palm tree): the first part of this compound has been explained as a loan from Javanese (aren *containing sugar*; Vercoullie 1925: 15);

(b) Du. klapperboom, Afrikaans klapper *coconut tree*: the first element of this compound is an adaptation by folk etymology of Malay pohon kelapa *coconut palm* (Franck and van Wijk 1912:312);

(c) Du. pinang = Malay pinang *betel nut*.

(2) Textiles:

(a) Du. baadje, Afrikaans baadjie (a kind of upper garment), from Malay baju (still spelled badjoe in Dutch in the early 18th century) *kind of shirt with white and blue stripes*. The term appears already in Kiliaen (1599 [1777]:29) as baeyken, glossed 'leuis vestis' (light garment); van Riebeeck (1652-1662) has baytjens, baeytjes, i.e. Du. baaitje - a blend with Du. baai *woollen fabric for underwear* (from OFr. baie; Vercoullie 1925:17; Boshoff and Nienaber 1967: 146).

(b) Du. slendang = Malay səlendang (long shoulder sash worn by Indonesian women; Vercoullie 1925:314).

(3) Animals:

(a) Du. karbouw = Malay kerbau *(water) buffalo*;

(b) Du., Afrikaans kaalkop *a kind of fish: Lates calcarifer*, seems to be an adaptation by folk etymology of Malay ikan kakap (in which ikan means *fish*; Boshoff and Nienaber 1967:316).

(4) Nautical terminology:

(a) Du. sent (bracing girding and shaping the shell of a ship under construction), from Malay senta (Franck and van Wijk 1912:607); de Vries (1971:638), however, derives it from French ceint *girded*, which is less plausible as Fr. c(e)intrer applies essentially to the bending and shaping of the rib-like frames.

(b) Du. prauw (flatbottomed Indonesian boat), from Malay perahu.

(c) Du. pitsaar (signal for a captain to come on board the admiral ship for consultation), from Malay bicara *consultation; council gathering* (Vercoullie 1925:264). The term also existed in Afrikaans where it is now obsolete: pitsjaring meant *ship's council; deliberation* (Boshoff and Nienaber 1967:503). Not related is Afrik. pitso *meeting* (especially of Africans): it derives from southern Sotho, Tswana pitso, northern Sotho pitšo *(popular) assembly*.

(d) Du. banjir *flood* = Javanese (Vercoullie 1925:22).

(e) Du. sjappetouwer *ruffian, hooligan* is actually a term from the sailors' language which originally designated uncouth, vulgar people; it actually reflects Malay siapa tau *who knows (it)? do I know (it)?* and occurs already in 1702 under the form sappetau(svaarder) (van Haeringen 1936:151).

With this last term we practically have already entered the domain of the colloquialisms imported from Indonesia: a number of these terms developed at an early date after the establishment of the Dutch trading centres in the south-east Asian islands and were introduced by them in their new colony at the Cape in South Africa. Such are, for example:

(a) Du. baar *newcomer*, applying to a person recently arrived in Indonesia, from Malay beharu (Indonesian baru) *new* - hence, Afrikaans baar *inexperienced, green* (Boshoff and Nienaber 1967:147). The fuller Malay expression orang beharu (Indonesian orang baru) *new man* also occurs in the older language: Du. orimbaar, with prothetic n- norenbaar.

(b) Parallel to Malay orang beharu for newcomers, orang lama (datang) *man who arrived long ago* was used for old-timers: it appears in 17th century Dutch as oorlam, but also applies more specifically to an experienced sailor. Already documented in van Riebeeck's *Dagverhaal* (1652-1662) as orangh lammen, it survives in Afrikaans oorlams with the meaning *sharp, skilled* (Boshoff and Nienaber 1967:466).

(c) Du. banjer *show-off, braggart*, shorter for banjerheer *great lord*, in which the first element is assumed to reflect a loanword banje(r) *much* from Malay banya(k) *much, many*, which yielded the common Afrikaans adjective and adverb baie *many, much, very*. There was, however, an older term baanderheer in Dutch, which designated a nobleman fighting under his own banner: it appears in Middle Dutch as banerheer, a form still mentioned by Kiliaen (1599 [1777]:1,34) besides banderheer, glossed 'baro, dynastes, satrapes'. Obviously, contamination by the Malay loan has affected this inherited term (de Vries 1971:29).

(d) Du. bakkeleien *fight*, Afrikaans baklei *quarrel, fight* from Malay barkalahi, bakalahi *scuffle, wrangle*.

(e) Du., Afrikaans pienter *canny, smart, quick*, from Javanese pinter *sharp, intelligent*.

(f) Du. soebatten, Afrikaans soebat *beseech flatteringly* actually means *act like Malays who always say* sobat, i.e. *friend*, from Arabic ṣuḥbat *friendship*; the term appears for the first time in H.T. Colenbrander's *Dagh-Register*, a diary held in Batavia in 1636-1637 (Boshoff and Nienaber 1967:603).

(g) Du. piekeren *rack one's brains*, Afrikaans pieker *overwork, strain, concern (oneself about something)*, from Javanese/Malay pikir *ponder(ing)* (a loan from Arabic fikr *thought, reflection*; Boshoff and Nienaber 1967:497).

Attested only in Dutch are the following:

(1) balken *turn over*, connected with Malay balik *back side* by Vercoullie (1925: 21);

(2) gladakker *crock, screw*, a derogatory designation for an old worn-out horse derived from Malay gladag with the Dutch suffix -er: the full Malay expression jaran gladag originally indicates a pack animal (de Vries 1971:110); a folk etymology connected the first part of the term with Du. glad *smooth, slippery* and led to the development of the meaning *cunning, shrewd person.*

(3) oorkrab (a kind of ornament worn on the ears by Javanese), from Malay krabu, the local name for the same (Vercoullie 1925:251).

(4) soesa(h), soeza *ado, fuss* from Malay susah.

(5) negerij *village* (also applying to a small, isolated compound), from Malay negeri *town, village*, itself from Sanskrit nagari *town*. The term was borrowed from Dutch into English, but E negery applied to a negro village (OED 1910 [79b]).

(6) kee *a Chinese*, from Indonesian singkeh, applied to a Chinese recently arrived from China.

One could investigate also the words of Malay origin that occur in Afrikaans, but not in Dutch, such as doerias *flowered or striped fabric* (Boshoff and Nienaber 1967:202), but this would lead to questions beyond the scope of this preliminary survey essentially limited to Dutch proper. Anyhow, in the case just quoted, complications become immediately apparent through the fact that doria, dorea are attested at an early date in English, but appear to be borrowed from Hindi doriyā *striped (stuff)* (OED 788 [604b]). Restricted as it is, the vocabulary examined here gives a clear indication of the areas in which borrowing took place and illustrates the usage common to most Europeans in their colonies to share a largely international vocabulary to designate new exotic goods and artifacts as well as animals and plants from the territories they deal with. Only a few terms are specific to the language of a definite colonial nation when they indicate things restricted essentially to the area in which the relevant expatriates are active, and to these, a few colloquialisms alluding to conditions of life in the new country may be added as well as items used in conversation to give local colour to current speech.

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A YAGARIA FAIRYTALE

G.L. Renck

The following story, in the Move dialect of the Yagaria language, was tape-recorded, amongst other texts, on 12 May 1970, by S.A. Wurm and the present writer at Kiseveloka, in the Yagaria Census Division, Lufa District, Eastern Highlands Province, Papua New Guinea.

The speaker, who was then in his 60s, and died a few years later, is Foveno, of Kigimu village, one of the settlements of the Move clan. (For settlements in the Kiseveloka area, cf. Smith 1981.)

After the recording was done at night in the little assembly house of the village, one of the reels of the Uher taperecorder was damaged, and could not be used any more. That night, considerable time was spent in the village rest house, to turn an empty Milo tin around, reeling the tape on to that tin. Thus the fairytales left Kiseveloka the next morning, wrapped around an empty Milo tin.

The original tape is kept in the Linguistics Department, Research School of Pacific Studies, Australian National University, Canberra. The whereabouts of the Milo tin are unknown.

This is the first time that any of the texts then recorded is published in print. For smoother reading, the Yagaria text and its accompanying line-by-line English glossing is complemented by a translation which has undergone some editing. Some unnecessary repetitions occurring in the vernacular narrative have been eliminated, and some of the redundancy of the Yagaria sentence structure has been reduced which, if retained in the translation, would have resulted in a rather clumsy style. Otherwise, the translation tries to preserve as much as possible of the dramatic drive of the original narrator as it is reflected in the Yagaria wording.

For some years, the editor of *Pacific Linguistics* has been requesting the present writer to prepare a diglot edition of Yagaria texts. There has never been enough time to fulfil that request. It is hoped, however, that this small contribution to the Festschrift honouring Professor Wurm will be a first step towards the preparation of the requested collection of Yagaria texts.

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 553-563. *Pacific Linguistics*, C-100, 1987.
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FOVENO'S TALE

Da'anae' beitala'e: Abade'ago' hida'a elida'a pateda'e.
How did two (people) live? Thus: they were getting only girls.

Elida'a pateleda'a nagi beitala'e. Vegano bogo elida'a
Getting them, they lived on. Not a single boy they

ateda'a beida'a, beitala'ama' beitala'ama' beitala'ama',
had, and they lived on and on and on,

veale velatabo. Beige beigeleda'a,
both, the man and his wife. They lived on and on,

tagetamo havigeleda'a: Heipa gava' hisu'e?
and they were thinking: 'What shall we do?'

higeleda'a, abadelu'agoboko' elita'a patolo'avao!
they said, 'we have only a bunch of girls, indeed!

Hileda'a teimutavitibo bumusopamo gate elida'a,
Thus speaking, they swept the dust from their seats,

elemida'a yagou' hibeleda'a beida'e.
threw it down below, and sat there.

Beida'agani a'ivitibo hagotubo bogo hagona
While they were sitting, from in there a yam plant sprouted

gina heitele. Heima' gena.
and started to grow. It grew up, indeed.

Ago' gina no'heima' nalobo yava hibeleda'a,
While it was growing, they put a pole there,

beida'agani'a gina heina heina heina
and while they sat, it kept growing and growing and growing,

laga'amo aomo aomo heimabobo,
developing one fruit above the other,

lekaona lekaona lekaona,
and he, bending his fingers, counted, and counted, and counted,

heina heina su holona, nalo'
and when it was fully developed, there

fili' huna eimabobo, elina heina
(the seeds) came off, and he took them up

eimutavibo hatagu huna elina soko hulona,
to his seat, cleaned them and put them in order,

vese huna hematidamo elina heina
and carefully took banana leaves up

yakei bololona beidigani, -
and covered the seeds with them, and while he was sitting, -

elina heina nalobo nahagotu' lagamo heina
he had taken up there those yam seeds

bololona gipa'alobo hematidamo
and had put them at his doorway,[1] *and with banana leaves*

eina ganibololona beidigani, -
he had wrapped them completely, and while he was sitting there,

navitibo eiyamo yaga' hulo,
from in there feet were stretching out,

anitamo yaga' hulo himabobo,
and hands were stretching out,

mademo agona beigani beigani,
and while this man was watching, sitting and sitting,

yalemo folo' eilida ida ida
men were coming forth, and that went on and on,

su hemabobo mage nosimabo:
until they all had appeared, and he said:

Abadeyuvamagamo hemeti nalaganamo!
'Now this is the end of having just girls!

Gukelavobo dagaea elida hakologumagio!
With complete body dress I shall indeed dress (them)!'

Nagi gekolabo hugo hanamo hugo
And then, making leg bracelets and (arm) bracelets,

badobo hugo: Huka beite'! hulona,
and making aprons, he said: 'Stay here!' And saying that,

mademo seida hanamo himagani, nagi hona bapalubo himagani,
this man made seida *fibre bracelets, and made rattan belts,*

nagi halivuli himagani;
and made weaponry;

nagi nagifode gafode elina: Hoho! Haha!
and when bringing all these things, he exclaimed: 'Hoho! Haha!'

huna bololona, gagaemo naa'ina elisapagi, elisapagi,
and said: 'You shall take that one, you shall take,

elisapagi, elisapagi! Hubololona: Navekalo' beisapagi,
you shall take, you shall take!' Then he said: 'You shall live with that one,

beisapagi! anitamo lekaona, lekaona,
you shall live!' and at his fingers, he counted, counted,

lekaona, lekaona; elina gana'alo' hubololona elemina
counted, counted; and by the time he had gone down

nagi buga eipaluetatobo:
right over to the lastborn, saying:

Gagaea henaga'ameto' navekalo'ina beisapagi!
'You shall live with that man right at the end!'

Hubololona elina su hobololona: Heipie? himana, nagi:
he finished by saying: 'Is that it?' and said:

Heine. Nosimabobo madema' elina polotibolona:
'That is it.' And this man burst forth (singing):

Avinalolo elemie de buga ve'a aga ve'a,
'Yam seed went down, and there is that man, that man,

avinalolo elemie de buga ve'a aga ve'a,
yam seed went down, and there is that man, that man,

avinalolo elemie de buga ve'a aga ve'a.
yam seed went down, and there is that man, that man.'[2]

Elida tata eitelemabobo,
And as they (the men) were joining in,

Ahii! Vae! Avo gagaekago' beikahebo
'Ahii! Vae! Father, when you are on your own,

nahuka no'asapa' yokemo hanegi!
you never sing a song as you are really singing now!'

hileda maabadeyuva, Yahouvuvuvu! hilida heidamana.
said the girls, and: 'Yahouvuvuvu!' they yelled, coming up.

Haga vekamo beidue! Haga vekamo beidumagada
'A Haga *man*[3] *am I! And as I am a* Haga *man,*

dagaedimo huma' yokemo lafou' halelita
I myself sing the song that gets you excited,

heita ne'amae! himabobo,
so that you are coming up!' he said, (and they replied:)

Ahii, nahapanatiebo heita opae!
'Ahii! Because you are singing like that, we are coming up!'

Hileda emida eda beidamabobo,
As they said that, they sat down, (but he said:)

Elemita lapeimutalo' hagi! hulona:
'Go down and rest on your beds!' and:

Avinalolo elemie de buga ve'a aga ve'a,
'Yam seed went down, and there is that man, that man,

avinalolo elemie de buga ve'a aga ve'a,
yam seed went down, and there is that man, that man,

avinalolo elemie de buga ve'a aga ve'a.
yam seed went down, and there is that man, that man.'

Nahuna himabobo halapa abadeyuvamo:
As he was thus singing, there were again the girls:

Yahouvuvuvu! hilida heida eda
'Yahouvuvuvu!' they yelled, coming up, and,

mayobo beleda ne'elida: Avo, avo avotimaga,
squeezing into that house, said: 'Father, father, our father,

yale'e' hugese' gata' beika hanagate' hunegi,
we indeed think that you are singing as if together with people,

na gagaekagobo hapa' yokemabo nosigio!
but it is really so that you are singing the song on your own!'

hida mane. Dagaedigo' Haga vemada beida humane!
they said. 'I on my own, the Haga *man, am here, singing!'*

huna. Nahuo! hileda, nagi: Ahiie! Hohoho! hida
he said. 'Do so!' they said, and saying: 'Ahiie! Hohoho!'

elemida peimutalo' beiteleda,
they went down, and while they were on their beds,

nagi a'ilotibo hetibolona:
from (up) there it was rising:

Avinalolo elemie de buga ve'a aga ve'a,
'Yam seed went down, and there is that man, that man,

avinalolo elemie de buga ve'a aga ve'a,
yam seed went down, and there is that man, that man,

avinalolo elemie de buga ve'a aga ve'a.
yam seed went down, and there is that man, that man.'

Himabobo abadeyuva: Yahouvuvuvu! hilida
While he was singing, the girls yelled: 'Yahouvuvuvu! *and,*

heida eda: Mavo avo, maleivuna leivunanatimaga!
coming up, (they said:) 'Father, father, you, our anus, our anus!

Nagi nage'alotise' nosue huka hugo!
But you say: I am singing like that!'

hida mamana. Haga vemada dagaedigo' nosue!
they said. 'The Haga *man, I myself, am singing!'*

madema' de. Ohuo! hileda: Avo, avonatimaga,
this man said. 'Ohuo!' *they said: 'Father, our father,*

legi' beika hanegio!
indeed you are here singing!'

Hileda ida elemida beileda,
They said that, and went down, and sat there,

nahida beige, beige, beigegeda,
and thus sat, and sat, and sat;

nagi: Nana nanamo elita va'ae, himana.
and then he said: 'That is for you to carry.' (And they said:)

Nana nanamo'ago' elita tolopagata hei'ina,
'We should take just that completely as our possession:

nagi elita beigogupanama' himagio! hileda hamabo.
Now he says indeed that we should take it and be with it!' they said.

Da'anamo hiio hane. Naepahe' aepa, hileda.
'It is as if he says: Do so! There is the reason for it', they said.

Nagi: Hava'a beleleta beidio! huna,
But (he said): 'Just wait and stay!' he said,

Dagaemo bogo dapinamo eliloda bolodumagada,
'I have one unfinished job which I started and left,

bogo nagi yao enemena ugo ogodagi.
and once now I shall go to the forest wilderness and surely come back.'

Hulona una yaogayagatibo honamo lagougo
He said so, and went, and from the forest, he cut rattan,

seida hakeigo huna elilina
and he tore off seida *fibre, and gathered it together,*

no'emabobo pagaea maabadeyuvamo heida:
and while he was coming back, these girls went up (saying):

Heipa gava' gava' huna beidimapiti' agona,
'How did he, from where he sat, look,

nagi nagava' gava' higata, lagaea gava' gava' nosipagata,
so that, doing likewise, we, acting in the same manner,

bogo agogupe'? hileda, heida ago' dugu dugunama'
shall see something!' Speaking thus, they went up quickly,

heima' eleda, heida manavibo elida galu' hima' eleda,
and coming up, they went in there and untied (the knots),

hematidamo elida valida, foloke' elimanamo
pulled off the banana leaves, undid (the door),

hatagatu hida teledida heida, nagi:
opened it and put it aside, went in, and:

Ayo! agamana: Ahiie! Manavibana hava'a lunamo!
'Ayo!' they gazed: 'Ahiie! In here is something!

Ayee! Agomagono! Maabadeyuvama'
Ayee! *We are looking at it!' And of these girls*

hava'amo yuke himabonava:
each one was just scratching herself (with excitement),

Na'avinagava nanati'ine! hulona, hava'a
(saying:) 'In there, that is ours indeed!' each one said, and just

yuke, yuke, yuke himabonava, nagi:
scratched, and scratched, and scratched, and:

Naveneviti'alo'ina beigesu'ama'namo hime! hulona nosimabobo:
'With the men from in there shall we stay!' each one said, and:

Ahii! Vemo davatapao! hulona.
'Ahii! Man, you did find me!' each one said.

Navitibo aona galogalupaona notolona:
But from in there, each (man) pushed through and took off:

Valii! higani halolina, valii! higani
'Valii!' he shouted, flying away, and 'valii!' he shouted,

halolina, valii! higani halema', valii!
flying away, and 'valii!' he shouted, flying off, and 'valii!'

higani halema', begae yaovinaga
he shouted, flying off. Far away to the forest wilderness

Henagalukayagamo halelida, elida heimabona ema
of Henagalu *they flew, taking off, and there,*

yao vemapi namavayamo givi
forest dwellers, namavaya *birds, and* kivi *birds,*

gavale elida elemimabona.
and kavale *birds they became, as they went down there.*

Mademo agisogovema' lagalaga
(In the meantime,) this man had an itchy feeling

lagalaga higani, dugu dugunama' heina ona ona ona agemana:
befalling him, and running, he came up, up, up, and saw:

Gitamo ago' hatalaga hudigani heina agemana,
The door was torn apart, and he went in and saw:

yo'avibo bogo a'hanodima' gena,
In his house, there was nothing,

gitoti' gea' ae: Lapagaea lama'ago' beidagada
and from the doorway, he called: 'Are you all well,

ovie? Himana: E'e, lagaemo a'heidupa'
as I am coming?' And they replied: 'No, we did not go up there;

boupatilo' legi' beidupao! hileda. Ehehe! hulona.
where we were before, we are indeed staying yet', they said. 'Ehehe!' he said.

Nagi mademabo: Manamanamo dagaea uda eliloda eliloda
Then this man said: 'These things, I went and gathered them together,

no'ogatapi lapagaea hoasima' gava' hamagio!
and while I was coming back, you acted very badly indeed!'

Hulona seida hanamo gutagemo
He said that, and the seida *fibre bracelets, and the netbags,*

eli'ama' eli'ama'namo elina odima'na
all the things he had gathered and he had brought,

taga tagu huna halimo gaona, gaona, gaona
he tore up, and in the fire, he burned, burned, burned it,

nosimabobo, maabadeyuva: Heipa gava' gava' hisune?
and while he did so, the girls said: 'What shall we, shall we do?'

higeteda: Valii! higani a'ilo' halolina,
When saying that, each one shouted: 'Valii!' and flew there,

a'ilo' heina biga gopameba' elo huna,
went up over there, and became a kopamena[4] *plant,*

aoleve' galeve' hime':
and while attaching herself, lining up, each one said:

Gagaea datolona imana agodugo ago!
'You see that he has left me and is gone!'

Hulona biga haveva yavalo',
Saying that, she went up into the haveva *tree*

hanena yavalo', aoleve' galeve',
and into the hanena *tree, attaching herself, lining up,*

aoleve' galeve', aoleve' galeve': Ovuo!
attaching herself, lining up, attaching herself, lining up: Ovuo!

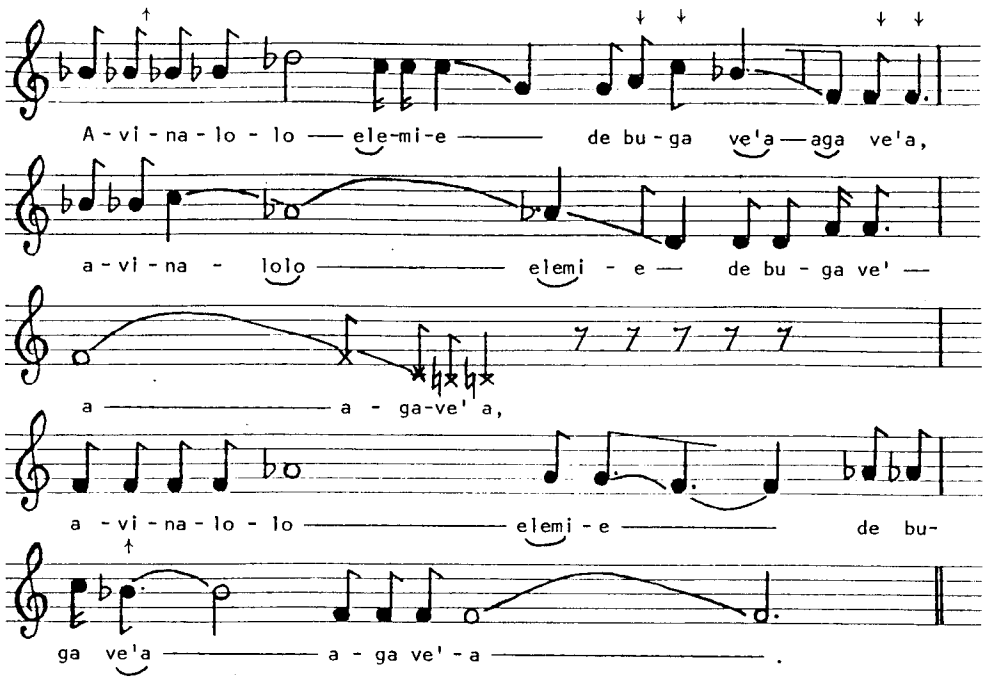
Gagaea hapa' gava' huka vemo haveiloka oka
When you act as you do, pursue a man and come (back),

magavabo hapane: Haveina tegani
this is what you achieve: One chases him away,

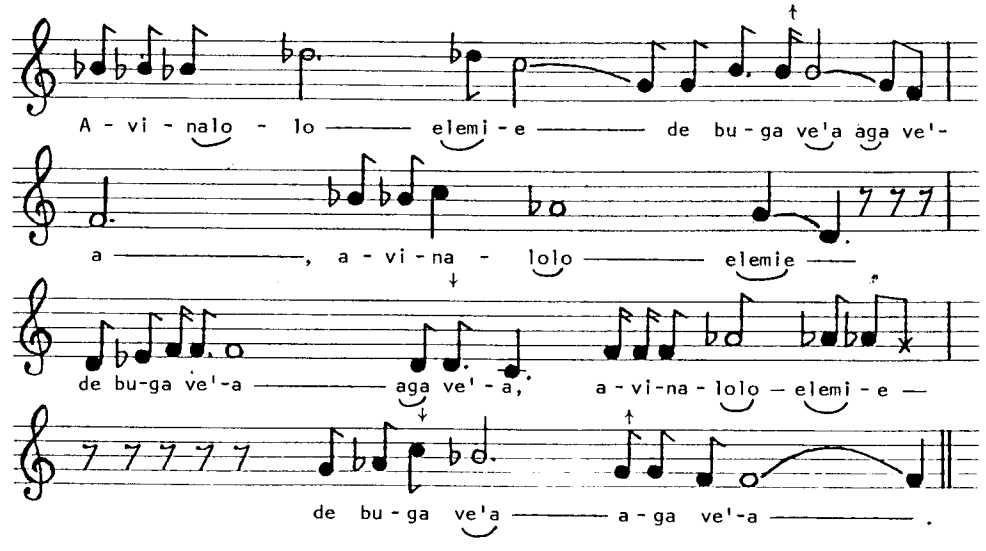
ulona olona, huda beleke' hue.
and he roams around, that is what I am making clear by telling.

Leginae.
The End.

First singing



Second singing



The melody of the song occurring in the story was transcribed by K.P. Brenner, of Göttingen, whose assistance is gratefully acknowledged.

TRANSLATION

Once there was a man and his wife. They were having only girls and did not get a single boy. For a long time, the man and his wife lived thus, and considering their situation, they said: "What shall we do? Really, we have only a number of girls!" Then, from the place where they used to sit, they swept the dust and placed it on the ground, and they sat down and waited.

While they were waiting, a yam plant sprouted from the dust and started to grow. They put a pole by the plant, and while they sat there, the yam was climbing up the pole and started to bear fruit, one after the other. The man counted the fruit, bending his fingers. He counted and counted, and when the seeds ripened and came off, he collected them and brought them up to where he sat, wrapped them carefully with banana leaves, and put them by his genitals. As he was sitting there, feet were stretching out from inside the wrapping, and hands were stretching out, and while the man was sitting and watching, men appeared from in there. That went on and on until they all had appeared, and then he said: "Now this is the end of having only girls! These I shall truly dress!" And, getting leg bracelets and arm bracelets and aprons, he said: "Stay here!" Then he brought seida fibre bracelets and rattan belts and weapons.

When he had brought these things, he exclaimed: "Hoho! Haha!" Then he said to each of the men in turn: "You shall take that girl, you shall take that one, you shall take that one!" and so on. After that, he said, thinking of the girls: "You shall live with that one, you shall live with that one!" and so on, and while he said so, he bent his fingers, counting the men and the girls. When he had gone right down to the lastborn, saying: "You shall live with that very last man!" he finally said: "Is that it?" and replied: "Yes, that is it."

After saying so, that man burst forth, singing:

"Yam seed went down, and turned into that man, that man!
Yam seed went down, and turned into that man, that man!
Yam seed went down, and turned into that man, that man!"

As he sang, the men were joining in, so that the girls, hearing it, came up and said: "Ahii! Vae! Father, you are indeed singing forcefully, as you never do when you are on your own!" "Yahouvuvuvu!" they yelled as they came and said that. "I am a Haga man", he replied, "truly on my own I am singing the song which excited you so that you came!" "Ahii!" they said, "yes, indeed we came up, because you are singing like that!" As they said that, they sat down, but he said: "Go down and rest on your beds!" And after they left, he started to sing again:

"Yam seed went down, and turned into that man, that man!
Yam seed went down, and turned into that man, that man!
Yam seed went down, and turned into that man, that man!"

When he was singing like that, the girls, coming up again, yelled: "Yahouvuvuvu!" and squeezing into that house, they said: "Father, father, our father, it really sounds as if you were singing with a big crowd of people, but now you are really singing all on your own!" "I am here, the Haga man, singing all on my own!" he said, and they replied: "Yes, do so!" and while they were wondering and saying: "Ahiie!" and: "Hohoho!" they went down. But as soon as they were on their beds, from over there the song rose:

"Yam seed went down, and turned into that man, that man!
Yam seed went down, and turned into that man, that man!
Yam seed went down, and turned into that man, that man!"

As he was singing, the girls, coming up, yelled: "Yahouvuvuvu!" and said: "Father, father, you, our anus, our anus! Why is it that you keep saying: I am singing like that?" "I, the Haga man, am singing on my own!" the man said. "Ohuo!" they said, "Father, our father, truly you are singing here!" Saying that, they went outside, and sat there; they sat and sat and sat.

Then the man said to the men: "Here is what you carry!" But the girls, hearing that, said: "Now he really wants us to take possession of something and hold it. It sounds as if he said so. Here we have reason to do so!" But he, speaking to the men, said: "Just wait and stay! I have one job which I left incomplete. I shall just go to the forest, and be back soon." Thus speaking, he went to the forest and cut rattan and collected seida fibre, and came back with it.

While he was still on the way, the girls went up and said: "Which direction did he look from where he sat? If we do it the same way, we shall see something, too!" Saying so, they quickly ran up, untied the rope, pulled off the banana leaves, undid the door, opened it and put the door planks aside, went in, and, gazing, they said: "Ayo!" and continued: "Ahiie! In here is something! Ayee! We can see it now!" Each of the girls started scratching herself with excitement, and exclaimed: "In there, that is truly for us!" And each one scratched and scratched and scratched and said: "With the men from in there shall we stay!" And each one said: "Ahii! Man, you did find me!"

But from in there, the men, one by one, pushed outward and took off. "Valii!" one shouted, flying away, and "Valii!" the next one shouted, flying away; "Valii!" another one shouted, flying off, and "Valii!" the next one shouted and flew away. Far away to the wild forest of Henagalu they flew, and there they stayed as forest dwellers, as namavaya birds and kivi birds and kavale birds.

While this happened, the man, on his way back, had a foreboding occur to him. So he came running up, up, and up, and saw that the door was torn apart. When he went into the house he saw that it was completely empty. From the doorway, he called, "I am coming, are you all well?" The girls replied: "Nothing happened. We did not go up there, but are still staying where we were before." "Ehehe!" said the man. Then he continued: "I went and prepared all these things, and while I was bringing them here, you acted very badly indeed!" When he said that, he tore up the seida fibre bracelets and the netbags he had brought, and burned them in the fire.

When he did so, the girls said: "What, what shall we do?" And saying that, each of them shouted: "Valii!" and flew up, went over there in a tree, and became a kopamena plant. As they were attaching themselves there in a row, each one said: "You see that he has left me and disappeared!" Speaking thus, the first one went up into the haveva tree and into the hanena tree and attached herself first in the row, and the next one attached herself in the row, and another one attached herself in the row: Ovuo!

When you act as you do, and return from pursuing a man, this is what you will have achieved: He got chased away and roams around. That is what I explain by telling this story.

This is the end.

NOTES

[1]This seems to refer to the man's anus or genitals.

[2]In the song, vocabulary from neighbouring languages appears to be used; according to informants, avi means *yam* in Kamano, whereas avina in Keiagana and Yate means *seeds*.

[3]This is a clan name. The present Haga clan lives in the Kami-Kuluka area, not far from the Lutheran Church centre Rongo. The Haga people often appear in old tales from the Filigano (Move) area. That fact seems to reflect settlement situations of former times.

[4]Parasitic plant, growing on trees, shaped like a large cucumber or oblong pumpkin, with a few lanciform leaves at one end.

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EAST UVEAN, NUCLEAR POLYNESIAN?

REFLECTIONS ON THE METHODOLOGICAL ADEQUACY OF THE TREE MODEL IN POLYNESIA

Karl H. Rensch

The question whether East Uvean (EUV), the language of Wallis Island, is a member of the Tongic or the Nuclear Polynesian subgroup has been a contested issue ever since linguists attempted family tree model relationships between Polynesian languages. Elbert (1953) subgroups EUV with Tongan (TON), as the two languages basically show the same reflexes for Proto-Polynesian *h, *r and *?. The phonological irregularities are in his opinion the result of Samoan influence. Dyen (1965, 1982) goes one step further: he considers EUV to be a dialect of Tongan. Not only do the two languages share the highest percentage of basic vocabulary of all Polynesian languages, EUV and TON are also mutually intelligible. Biggs (1980) following Pawley (1966) classifies EUV as a Nuclear Polynesian language on the basis of phonological evidence. The similarity between the two languages is explained as the result of massive borrowing by EUV from TON.

The contradictory analyses reflect methodological difficulties of applying the family tree model in Polynesia. Unlike a mathematical theorem the tree model is context dependent. It requires a specific setting in which certain geographical and sociocultural conditions are met. In Europe and Asia, for example, speech communities could branch away from each other without ever getting into contact again. Natural boundaries, geographical distance and the emergence of political states would limit or prevent communication, lead to linguistic separation and result in the development of distinct languages. The Indo-European languages are a case in point.

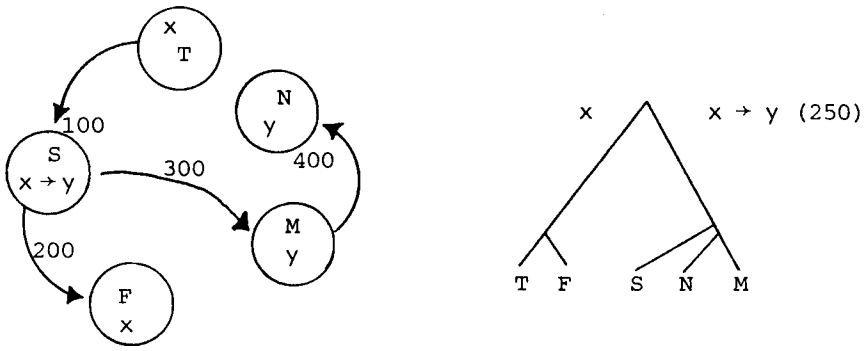
In the Pacific, however, the situation is quite different. Human existence is restricted to a few small islands. Although separated by wide stretches of water, these islands do not provide the same conditions for isolation and separation that large continents do. For the skilled Pacific seafarers of old the ocean was a challenge never an obstacle. It provided the opportunity to sail to islands beyond the horizon. Taking into account not only the deliberate expeditions of exploration, but also the many cases in which islands were reached and settled through unintended drift voyages, one can assume that bidirectional contact with neighbouring archipelagoes and probably one-directional contact with islands further apart never ceased to exist in the Pacific.[1]

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 565-581. *Pacific Linguistics*, C-100, 1987.
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A second factor incongruous with the assumptions underlying the family tree model is the linguistic vulnerability of small speech communities as we find them in the Pacific. They are more likely to be affected by external influences, such as the arrival of a boatload of foreign people, than a large speech community which, safeguarded by a greater number of speakers, is linguistically more stable and develops according to its own dynamics. The possible linguistic consequences of small population movements in the early stages of the settlement of an uninhabited island can be inferred from the following figures.[2] Assuming a steady 20% population increase per generation (25 years), a handful of people arriving on an uninhabited island in the Pacific would grow into a population of

6 in 1 generation
31 in 10 generations
192 in 20 generations
1187 in 30 generations
7350 in 40 generations.

Furthermore we have to keep in mind that a linguistic tree model is a purely typological construct with no explanatory power as far as historical events are concerned.[3] A simple example suffices to prove the point. The figure below represents the following historical situation: In the year 100 some people leave island T to go to island S. In 200 some people leave island S to go to F, etc. A sound change x → y occurring on island S in 250 would affect the languages S, M and N. T and F would preserve x if there was no further contact with S, N and M. In a tree model the situation would be represented in the following way:



The 'splitting' into x-preserving and y languages is not paralleled by an historical event of migration, and F people did not break away from T people, as one might be tempted to conclude from the diagram.

In Polynesia the linguistic situation and relationship between languages is best described in terms of a network model, which unlike the tree model does not treat language contact as an interference phenomenon disturbing the neat growth of subbranches. On the contrary, a network model incorporates contact between its members as a basic tenet in its theory and adjusts its methodological approach in accordance with the extralinguistic facts.

Instead of dividing languages into subgroups and putting permanent labels on them, a far more flexible assessment of the linguistic realities becomes possible. Innovations originating in one location can spread through the network, reaching some languages while missing others: their impact may differ from case to case. Languages form subsets with respect to whatever linguistic feature or features one chooses as a grouping criterion. No longer does one have to resort

to borrowing in order to account for divergence from the expected 'subgroup' pattern. Variation is the result of network relations: non-uniformity as well as uniformity can be accommodated and reconciled with the realities of Pacific history and geography.

In the following I shall discuss some of the methodological problems of the family tree model by closely examining one piece of evidence that has been used in the EUV subgrouping controversy, the development of *h.

While Nuclear Polynesian languages change *h to Ø and the Tongan subgroup preserves *h, EUV seems to be inconsistent. In some cases h is preserved, e.g. higoa from *hiŋoa (TON hingoa, Samoan igoa), in others *h becomes Ø, e.g. foe from *fohe (SAM foe, TON fohe).

Which is the genuine EUV development and how can one account for the double reflexes? The comparative-historical method leaves us few options. If we hypothesise that preservation of *h is the genuine EUV development, we have to explain the Ø forms as borrowings from a neighbouring language: say Samoan or East Futunan. If we argue, as Biggs (1980) does, that h → Ø is the inherited reflex we have to assume that the h forms are borrowed from an h-preserving language, which in this case could only be Tongan.

The shortcomings of the traditional methodology are not related to the initial hypothesis: they manifest themselves in either approach. I have chosen to review Biggs' position not only because his article is the most recent publication on the topic, but also because it is based on verifiable data. Biggs has compiled a checklist of 46 Proto-Polynesian forms containing *h.[4] He sets out to prove that there are two different strata in EUV, a directly inherited one showing h → Ø and an indirectly inherited one showing preservation of h.

An h occurring in modern EUV is no proof that we are dealing with *h, as *s also yields h in EUV (likewise in Tongan). We have to rely on cognates from Nuclear Polynesian languages to establish whether an EUV h is descendant from *h or *s. A correspondence set EUV h - NP Ø permits us to reconstruct *h whereas EUV h - NP s points to *s. To be on the safe side the EUV checklist should not contain any forms which contain an s-reflex in one of the NP languages. I assume that Biggs has applied this selection criterion when he drew up the following list; at least, that is how I understand his remark, "Table 3 lists 47 PPN words[5] with *h (none of which have doublets in *s)".

Reflections of PPN *h in EUV (from Biggs 1980:126-127)

PROTO-POLYNESIAN	TONGAN	EAST UVEAN	
*fiha *how many*	fiha		fia
*fiho *froth*	fiho	fiho	
*fohe *paddle*	fohe		foe
*fohi *to peel*	fohi	fohi	
*fuhi *to join*	fuhi *bunch*	fuhi *bunch*	
*hai *who?*	hai		ai
*hakau *coral reef*	hakau	hakau	
*hake *up, upwards*	hake + *go up*	hake *go up*	ake *up*
*haku *swordfish, garfish*	haku	haku *a fish*	aku *a fish*
*hala *road*	hala		ala
*hama *outrigger*	hama	hama	ama
*haŋa *turn or face towards*	hanga		aga/'i

PROTO-POLYNESIAN	TONGAN	EAST UVEAN	
*haŋafulu *ten*	hongofulu	hogofulu	
*hau *needle*	hau *thin spear*	hau	
*ha?u *come*	ha'u		a'u
*hifo *downwards*	hifo + *go down*	hifo *go down*	ifo
*hiŋoa *name*	hingoa	higoa	
*hoŋe *famine*	honge	hoge	
*huru *enter*	huu	huu	ulu
*hisi *strip, peel*	hihi *gouge out*	hihi *peel*	ihi *split*
*haa *what?*	haa[6]		aa
*hapi *fish sp.*	hapi		api
*haukafa *lash up a canoe*	haukafa	haukafa	
*haŋa *span*	hanga	haga	
*heke *mount*	heka	heka	eke *lift*
*hoŋohoŋo *nettle sp.*	hongohongo	hogohogo	
*horu *disturbed, of water*	hou	hou	
*hu?a *high, of tide*	hu'a	hu'a	
*hulufe *fern sp.*	hulufe	hulufe	
*huu *take refuge*	huu/fanga *refuge*		uu *hide*
*kaiha?a *steal*	kaiha'a	kaiha'a	
*kakaha *to burn*	kakaha	kakaha	
*kanahe *mullet*	kanahe	kanahe	
*kauhala *roadside*	kauhala		kauala
*kauhaŋa *groin*	kauhanga		kauaga
*kau?ahe *jaw*	kau'ahe	kauahe	
*loholoho *coconut spathe*	loholoho	loholoho	
*lohu *fruit-picking pole*	lohu		lou
*mahu *abundance*	mahumahu	mahumahu	maumau *waste*
*mohe *sleep*	mohe		moe
*pihi *spurt, flow*	pihi	pihi	pii
*?uha *rain*	'uha		'ua
*?uhila *lightning*	'uhila	'uhila	
*tahi *sea*	tahi		tai
*tahina *younger sibling*	tehina	tehina	
*wahe *divide*	wahe	vahe	vae

Checking through the words in Biggs' list one by one, we find a number of cases where in at least one Nuclear Polynesian language the cognate form shows an s-reflex. These words are potentially controversial and should not be used as evidence for the development of *h in EUV.

*kakaha *burn, burning*
SAM 'a'asa *red hot, fiercely hot* (MLR)

*loholoho *coconut spathe*
SAM losoloso *flower cluster, i.e. spadix of coconut tree* (MLR)
REN gosogoso *bunch or cluster, as of coconuts* (EBT)

*fuhi *to join*
SAM fusi *bundle, to bind* (MLR)
TUV fusi *to unite, to join together* (BSR)

*haŋa *span*
EFU saga 'mesure qu'on fait avec le pouce et le grand doigt en les écartant' (GRZ)
and possibly also
SAM saga *flipper of a turtle* and
TUV haga/saga *beam (in a roof)* (BSR)

*haku *swordfish, garfish*
SAM has a'u *fish, Strongylura sp.* and sa'u in the compounded forms
sa'ula *name given to swordfish and sawfish* and
sa'ulele *kind of fish* (MLR)

*kanahe *mullet*
TUV kanase *Crenimugil crenilabis, Mugil cephalus* (BSR)

*hulufe *fern sp.*
TUV sulufe *a fern, Nephrolepsis hirsutula* (BSR)

*kaiha?a *to steal*
TUV kaisoa *to steal* (BSR)
SAM soa'ai (metathesis) *to steal food* (MLR)
EUV has a doublet kaiha'a/kaisa'a both meaning *to steal* (RNS)

*horu *disturbed (of water)*
SAM sou *(of sea) rough* (MLR)

*hu?a *high, of tide*
SAM sua *(of the tide) rise, flow* (MLR)
TUV sua *high (of the tide)* (BSR)
EFU sua le tai 'marée haute', but also
ua le tai 'haute marée' (GRZ)

A further complication arises with the EUV doublets in Biggs' checklist. Starting off with the assumption that h is the indirectly inherited reflex in EUV one has to conclude that ama ← *hama *outrigger* is the genuine EUV form which continued to survive in spite of the presence of the borrowed TON form hama, also meaning outrigger.

Linguistic reality, however, seems to be a trifle more complex than it might appear from the data presented. Consulting not only Churchward's dictionary but also 19th century sources, I found that the h/Ø doublets listed for EUV *also exist in Tongan.*

*fohe *paddle*
TON fohe *paddle*
foeluolua (in rowing a kalia) *to use two oars, one end to each of two persons rowing.* The oars used are also called foe luolua. (CHW)
EUV foe 'rame, aviron pagaie'; no doublets.

*wahe *divide, divisions*
TON vahe *to separate, to divide out, to portion* (CHW)
vae *to pull apart lengthwise; (in general) to divide or separate in two* (CHW)
EUV vahe('i) 'diviser, séparer, partager'
vae, vaevae, vavae 'diviser, partager'
*h doubtful because of SAM/TUV vase *to draw a line*; SAM vasega *section, division* (VIO). The 1979 PNP wordlist lists *wase in addition to *wahe.

*huu *take refuge*
TON huu/fanga *to take refuge, find shelter*
u'anga *shelter, what shelters* (CHW)
u *to be sheltered*
EUV hufaga 'protecteur, protectrice' (BAT)
u 'être abrité' (BAT)

*hake *up, upwards*
TON hake *up, upwards, to go up, to rise* (has a doublet in ake) (CHW)
ake (probably cognate with hake) *to swell up, develop a swelling; to rise (especially a wave rising out of a calm sea), to spring up, to develop, or revive; to recover, come to; to return to land, come or go ashore* (also hake) (CHW)
EUV hake 'monter, croître, s'élever; faire des progrès'
ake, akeake 'monter, s'élever, se relever; en haut' (BAT)

*mahu *abundance*
TON mahumahu *plentiful*
maumau *to be broken, damaged, spoilt, worn out, wasted* (CHW)
EUV mahu 'abondance, fertilité'
maumau 'détruire, gâter, endommager' (BAT)
There are semantic difficulties to link mahu and maumau. The PNP wordlist of 1979 has separate entries for *mahu *abundance, abundant* and *maumau *wasted.*

*pihi *spurt, flow*
TON pihi *to splash, fly up, as spray does; to squirt*
pi v.t. *to throw or dash or splash water* (CHW)
EUV pihi, pipihi 'jaillir, éclabousser'
pi, pipi 'jeter de l'eau dessus' (BAT)
*h doubtful because SAM pisi 'éclabousser *(to splash with water)*' (VIO) and TUV pisi *to splash, to spray, to squirt* (BSR)

*hisi *strip, peel*
TON hihi *to scoop out; to open with a knife and detach the flesh* (CHW)
ihi *to peel* (BKR)
EUV hihi 'découper quelque chose en tranches horizontales; détacher la noix de coco'
ihi 'fendre, couper' (BAT)
The reconstruction of the Proto-Polynesian etymon is problematic. The 1979 edition of the PPN wordlist contains *hisi as well as *sisi *strip, peel.*

*huru *enter*
TON hu *to worship, to pray; to enter within* (CHW)
ulu 'entrer dans, se joindre à'
ulusino 'entrer dans le corps, posséder (possession du diable)' (TFD)
EUV hu 'entrer en se baissant, sortir en se baissant; s'abaisser, s'humilier'
ulu 'entrer dans, pénétrer' (BAT)
TON/EUV ulu is not only a doublet with respect to *h but also with respect to *r which is normally lost in TON, cf. *fara *pandanus*, TON fa, but SAM fala.

hifo *downwards*
TON hifo *downwards, down*
ifo in ifo-lelei *to taste good*

EUV hifo, hifohifo, hihifo 'descendre'
ifolelei 'descendre bien; avoir bon goût (en parlant de la nourriture); en bas' (BAT)

*haŋa *turn or face downwards*
TON hanga *turn (so as to face in a certain direction)*
hangai, 'i he hangai ki *in place opposite to (or facing)*
angai-kava *the two persons who sit on either side of the kava bowl to assist the person who is making the kava* (CHW)
agai 'vis-à-vis, en face de, changer du vent ou d'une tempête' (TFD)
EUV haga 'être tourné vers, être dirigé vers'
aga 'être dirigé vers'
agai 'vis-à-vis, à l'opposé' (BAT)
*h doubtful because of SAM aga *face in direction of* and saga *face (towards)*;
TUV aga/saga *to turn around so as to face in a particular direction.*

*hama *outrigger*
TON hama *outrigger*
ama *windward side (of a canoe or small boat)* corruption of hama (*outrigger*), it being the practice to sail with the outrigger on the windward side (CHW)
EUV hama 'balancier de pirogue; seconde pirogue servant de balancier'
ama 'balancier d'une pirogue, son côté gauche' (BAT)

*ha'u *come*
TON ha'u *come*
a'u *to arrive; to reach or extend to*
EUV ha'u 'venir'
a'u 'atteindre, parvenir à'
*h doubtful because of TUV sau/hau *to come* and SAM sau *to come*

*mohe *sleep*
TON mohe *sleep*
moemoegamalie 'dormir sans avoir préparé ce qu'il y a à faire' (TFG)
moemoepo *to assassinate; to murder on the sly, as one asleep* (BKR)
moeaki variant of moheaki *to sleep in readiness for work or a meeting, etc. on the following day* (CHW)
moeekina/moheekina (same meaning as moeaki) (CHW)
EUV moe, moemoe, momoe 'dormir'
moeaki 'samedi, veille, vigile, faire la veille'; no doublets (CHW)

*hala
TON hala *road*
ala seems to occur in some compounded place names: Ala/ki/siale, Ala/tonu, Ala/loa, Ala/folau (Gifford 1923)
EUV ala *road*
hala in place names like Hala/mai/tai and Hala/kilikili (Burrows 1937)

*tahi *sea*
TON tahi *sea, seawater*
taitai *brackish* (CHW); 'être salé par la mer' (TFD)
taiala *steep rocky place near the sea* (CHW)
EUV tai *sea, seawater*
taitai 'être mouillé par l'eau salée' (BAT)
There are no doublets in EUV.

How can the Tongan doublets be accounted for? Some cases clearly belong to the category of doubtful *h ancestry, as evidenced by the s-reflex cognates in a Nuclear Polynesian language. For the rest of the doublets the deviant Ø variants would have to be explained as borrowings, if one were to apply the same logic as before. But where did Tongan borrow from? From Samoan? Or from EUV, in a tit for tat exchange whereby EUV borrowed Tongan h and Tongan borrowed EUV Ø?

When we eliminate from the original checklist the doubtful *h proto-forms and the inconclusive EUV/TON doublets we are left with 13 cases where EUV shows an h reflex, and six cases where EUV and TON differ:

PPN	EUV
*fiho *froth*	fiho
*fohi *to peel*	fohi
*hakau *coral reef*	hakau
*haŋafulu *ten*	hogofulu
*hau *needle*	hau
*hiŋoa *name*	hingoa
*hoŋe *famine*	honge
*haukafa *lash up a canoe*	haukafa
*heke *mount*	heka
*hoŋohoŋo *nettle sp.*	hongohongo
*kau?ahe *jaw*	kauahe
*?uhila *lightning*	'uhila
*tahina *younger sibling*	tehina
*fiha *how many?*	fia
*hai *who?*	ai
*hapi *fish sp.*	api
*haa *what?*	aa
*lohu *fruit-picking pole*	lou
*uha *rain*	ua

*kauhala *roadside* and *kauhana *groin* have been omitted here as they are compounds of *hala and *haŋa.

Biggs' position has been outlined before. He now argues that he can identify h → Ø as the inherited EUV reflex on the evidence of lexical items belonging to the basic vocabulary.

> Which is the borrowed reflex and which the directly inherited? This is decided by an appeal to the concept of basic vocabulary. Of the meanings represented by the 47 items five are found in Swadesh's 200 word list of basic vocabulary. They are *road, sea, rain, what, who?* All reflect h as zero. This is a strong indication that loss of *h is the directly inherited EUV reflex, with retention of *h indicating borrowed words.
>
> (Biggs 1980:119)

Biggs' argument that recourse to the basic vocabulary will help us to identify the inherited reflex seems at first glance an appealing and elegant way to solve the problem of the deviant reflexes. That words belonging to the basic vocabulary are less likely to be replaced by borrowings from another language is one of the principles on which lexicostatistics and glottochronology are based. To apply this axiom, however, in the domain of diachronic phonology raises a few questions which need further discussion.

Firstly there is the question of what constitutes basic vocabulary. I cannot accept without comment that Swadesh's 200 word list should be used to decide what is and what is not basic vocabulary. The list was intended to establish a corpus of basic words which are not culture specific and are likely to be found in a large number of languages all over the world. To qualify for Swadesh's list a word had to be basic *and* comparable. A word like hakau *reef* is as basic in the maritime environment of the Pacific as the word hala *road*. The former is not contained in the list because, unlike the latter, it denotes a phenomenon which can only be found in tropical waters. As we are not concerned with comparability beyond the confines of the South Pacific, I consider words like ʔuhila *lightning*, hingoa *name* and hau *needle* to be as basic as *road, sea, rain, what?* and *who?*

But there is another difficulty of a methodological nature. In lexicostatistic theory the resistance of the basic vocabulary to change is understood to mean resistance of a lexical item to replacement by one from a foreign language. Common sense and linguistic intuition tell us that language users are unlikely to give up a frequently employed word of their own language and replace it by a borrowed form from a foreign language. As far as the basic vocabulary is concerned, the resistance to borrowing finds its ready explanation in

(a) the lack of motivation for borrowing. Languages normally borrow only to compensate for lexical deficiencies.

(b) a psychological aversion to abandoning the familiar in exchange for the foreign, a reaction which manifests itself in many other spheres of human behaviour.

It is important to point out that the term 'borrowing' is used in a very specific way by Biggs if he claims that EUV has borrowed from TON on a massive scale. Borrowing takes place within a set of cognates, i.e. EUV is supposed to have 'borrowed' the TON word hingoa while it gave up its own form igoa (ŋ spelled ng in TON, g in EUV). The difference between igoa and hingoa is minimal: presence or absence of h; and both Tongans and Uveans are of course aware that these forms are cognates. There is absolutely no barrier of foreignness which they have to overcome when using one or the other form. Under the given circumstances the 'basic' vocabulary can hardly be said to have any special immunity to 'borrowing'. Consequently, the idea that its phonology is indicative of the directly inherited stratum of EUV must be regarded with a fair amount of scepticism, if not rejected outright.

If borrowing and basic vocabulary are of little explanatory value, how else can we account for the double reflexes in EUV? Going back first to the unresolved problem of the TON/EUV doublets we can hypothesise, without having to invoke an oriental bazaar situation, that whatever the reason is for their occurrence in TON, that must also be the reason for their existence in EUV. They are obviously the result of linguistic trends or forces which were not restricted to one language, but spread through a wider network of Polynesian languages. This is confirmed by the occurrence of doublets in Niuean (NIU), a language said to belong to the Tongic subgroup.

Niuean doublets h/Ø (McE)

haloka	aloka	*to talk*
hiloa	iloa	*I don't know*
hinafi	inafi	*scale of fish*
holo *to grind, grate*	olo	*to smoothen*
hola *to flee, escape*	ola	*life*

fuhi	fui	*bunch, cluster*
kakaha	kakā	*red hot*
pihi	pī	*to sprinkle, splash*
hafangi	afangi	*to remove*
hafua	afua	*to be fine*
hafule	afule	*to clear dead leaves from a plant*

In order to identify the linguistic forces we have to look at the phonological system as a whole. There is evidence that the development of proto *h cannot be treated as an isolated phenomenon, but that it must be seen as the result of a structural change which included and affected proto *s at the same time.

It is typical for all modern Polynesian languages that the phonological opposition which existed in the proto-language between h and s has been abolished. Either s survived or h, but never both in the same language. In theory the phoneme reduction could have been achieved in four different ways:

(1) *h → s
*s → s

(2) *h → Ø Samoan type
*s → s

(3) *h → h Tongan type
*s → h

(4) *h → h
*s → Ø

On articulatory grounds, the strategies (2) and (3) seem to be more natural than (1). Strategy (4) would be plausible if we assumed an intermediate stage h: s → h → Ø, but we would be unable to explain why *h did not take part in the change. Furthermore, there is empirical evidence from a variety of languages that the changes h → Ø and s → h are not uncommon (e.g. French and Castilian Spanish).

Tongan, Niuean and East Uvean choose strategy (3), changing *s → h, to rid themselves of the s - h opposition. The majority of the Polynesian languages, however, achieved the same goal by following strategy (2), i.e. h → Ø.

The existence of alternative strategies must have been known throughout the network. In Samoan, for example, doublets of the Ø/s type are indirect witnesses of an earlier h/s variation reflecting strategy (3), s → h. When strategy (2) gained ground the h-form changed to Ø together with *h.

ao/sao *collect*[7]
satia 'être mangé, déchiré', atia 'rongé, piqué des vers' (VIO)
aga/(saga) fa'asaga *face in the direction of*
i'u *end; tail of a fish/* si'u *tail of a land animal*
ui *dark* usi *greenish blue*
olo *rub* solo *wipe, dry*
ao *daylight/* aso *day*
a'u *fish (Strongylura sp.), with long snout/* sa'u- as in sa'ula and sa'ulele *swordfish* and *sawfish*
o'a *husk a coconut/* so'a *spike, transfix*
ola *live* sola *escape (with one's life)*
ulu *go in, enter*
sulu *put in, insert*

In TON, EUV and NIU application of the alternative strategy h → Ø led to the emergence of the h/Ø doublets listed above. There are cases in Tongan and EUV where secondary h (from *s) has taken part in the h → Ø change, thus forming second generation doublets paralleling the Samoan examples. The application of the h → Ø strategy was obviously an option which must have existed over a substantial period of time.

TON umu - humu
umu *the name of a fish* (BAK, RAB)
humu *the name of a fish* (BAK, RAB)
EFU sumu 'poisson' (GRZ)
SAM sumu *name given to triggerfishes of the genera Balistes and Balistapus* (MLR)
EUV humu *generic term for Balistidae* (Rensch 1983)

TON amusi - hamusi
amusi v.t. *to cut, cut down,* hiapo *only* (CHW)
hamusi v.t.exec. of hamu v.t. *to take or seize by force, to snatch or snatch away, to wrench or wrench away* (CHW)
EUV amusi 'tirer'
hamusi 'arracher, tirer avec précipitation' (BAT)
EFU samuti 'ôter, arracher, ravir, enlever avec violence' (GRZ)

TON ua - hua
ua v.t. *to wedge up or lever up;* n. *lever*
hua v.t. *to root or rummage about in; to lift up or turn out or over, as in trying to find something; to search through, or turn over the pages of* (CHW)
EUV ua, uaaki, uaua 'soulever, remuer une grosse masse; lever avec un levier' (BAT)
SAM sua *lever up, uproot, dig up* (MLR)

TON afu - hafu
afu v.i. *(of waves, rain, etc.) to send out fine spray, to fall or be dispersed in the form of fine spray* (CHW)
hafu v.i. *to trickle down, run down; to dribble;* n. *small waterfall* (CHW)
EUV hafu 'couler, dégoutter' (BAT)
afu 'rejaillir, tomber en rosée' (BAT)
EFU afuafu 'petite pluie fine' (GRZ)
safu 'dégoutter' (GRZ)
SAM afu *sweat, perspire; waterfall* (MLR)

TON ope - hope
ope v.i. *to jut out; to overlap or project beyond the edge; to hang over* (CHW)
ope 'dépasser les bornes, être répandu' (TFD)
hope v.i. *to project* (CGW)
hopehope 'avancer, se dit d'une chose qui dépasse le niveau' (FTD)
SAM sope *a lock of hair left longer than the rest* (VIO)
ope, opeope 'déborder, en parlant d'un liquide' (VIO)

TON afe - hafe
afe in afekafu *to carry by means of a strap or rope*
afe in afekafu *to wind something round, or round and round* (afekafekafu) *the body as a covering, or to be wound thus around the body* (CHW)

hafe v.i. *to carry by means of a strap or rope, etc., across the shoulder (as one carries a haversack)* (CHW)
EFU safe 'mettre en bandoulière; suspendre un objet quelconque de manière à ce que les bouts pendent en bas, sans être liés' (GRZ)

TON ila - hila
ila v.i. *to be awake*; mata-ila a.v.i. *perpetually gazing and behaving in an obstinate way*
hila v.i. *to glance, to turn the eyes* (CHW)
EUV hila, hilahila, hihila 'regarder de côté et d'autre sans tourner la tête' (BAT)
SAM (sila) silasila *see, watch* (MLR)

TON ui - uhi
'ui *comparatively light in colour: of coconuts or the skin of natives*
'uhi in pa'uhi'uhi *black and shiny, glossy: of the hair* and faka'uhi *to polish the outside of a newly made canoe* (CHW)
EUV 'ui 'vert bleu'
'uhi 'de couleur foncé tirant sur le noir ou sur le bleu' (BAT)
SAM ui *dark (of plants and animals)*
usi *greenish blue (of plants and animals)* (MLR)
EFU niu ui 'espèce de cocotier'
'usi 'noir foncé' (GRZ)

TON amanaki - hamanaki
amanaki, amaamanaki *to expect* (RAB)
hamanaki *to expect* (RAB)
EFU amanaki 'espérer, s'attendre à'
samanakina, samasamanakina 'présumer, conjecturer, s'attendre à' (GRZ)
SAM amana'i 'patienter, supporter' (VIO)
EUV 'amanaki 's'attendre à, espérer' (BAT)

EUV oga - hoga
hoga 'individu, personne'
oga 'même sens que hoga et plus usité' (BAT)
SAM soga 'espèce de page, qui fait le sens gêne. Il est dispensé des précautions qu'exige le paia' (VIO)
soga'imiti 1) *young men who have recently been tattooed*
2) *term of derision for a youth who is putting on airs* (MLR)

EUV epo - hepo
epo 'lécher, geste comique'
hepo 'lécher' (s'emploie pour la nourriture)
EFU epo 'lécher, tirer la langue'
sepo 'lécher (pour la nourriture seulement)' (GRZ)
TON hepo or hepohepo v.i. *to eat or drink with a sucking noise*

It remains a matter of conjecture why a particular strategy was more successful in one language than another. EUV seems to be a case where the secondary strategy, the change h → Ø, not only led to variation but actually resulted in permanent change in some words. Network contacts with languages using strategy (2) (Futuna, Tokelau)[8] may be the reason for the relative success of h → Ø. Recurrent exposure to Ø forms kept the option for h → Ø strategy open and provided favourable conditions for the change to gain ground, but as the structural pressure was lacking - the *h/*s problem had been dealt with by strategy (3) - it failed to gather sufficient momentum.

The two sound changes s → h and h → Ø, although generated by the same structural force and aimed at the same target, differ in their effect on the respective phonologies. Change of *h → Ø always means total loss of h in SAM and EFU; h leaves no traces, not even residue forms in doublets; whereas in languages changing *s → h, s is not categorically eliminated from the sound inventory, as evidenced by the following doublets and the many foreign loanwords in Tongan.

TON sago 'comme hago' (TFD)
hago 'adj. éléve au-dessus' (TFD)

TON halulu *to exhibit displeasure at one on the look out for food*
salulu *to be angry with one who is on the look out for food* (RAB)

TON samusamu *thievish, in the habit of stealing or taking things without asking*
hamu *to take or seize by force, to snatch or snatch away ...*; also hamuhamu (CHW)

TON sani *to keep clean and tidy*
hani *to remove all the leaves* (CHW)

TON sao *pleasing, agreeing with what is right and just*
hao *pleasing; agreeable to truth and justice* (RAB)

TON saumi *to reward* (RAB), *to prepare, to get ready* (CHW)
haumi *to prepare beforehand, the forecast* (RAB)

TON helehelenga *to happen by an off-chance*; same as seleselenga (CHW)

TON sipa, sipesipa 'chose qui est coupé de travers, en biais, de forme non carrée; v. aller de travers, chanceler' (TFD)
hipa, hipehipa adv. et v. 'de travers, chanceler' (TFD)

TON soni *to stab*
honi'i (CHW), hohoni (BAK) *to make small incisions*

TON sosa'a 'importun, ennuyeux; voir hoha'a'
hoha'a 'inquiet, empressé, affairé, tracassé, en peine' (TFD)

TON sosogi *to sniff*
hogi *to smell, to sniff* (BAK)

This raises interesting questions for those who explain the phonological inconsistencies as borrowings. Are h-forms excluded from later borrowings once the language has changed h → Ø and, can a language only borrow h if h is already part of its sound inventory?

If, as Biggs claims, EUV changed h → Ø, we would have expected total loss of h as in the other languages. However h from *s was not affected by *h → Ø. One would have to posit that loss of *h occurred at a time when *s was still intact. But this would mean that EUV underwent two diametrically opposed sound changes, first abolition of *h and then creation of a secondary h from s. On the evidence provided by the treatment of *h in Nuclear Polynesian languages this is highly improbable.

CONCLUSION

In my view the basic assumptions underlying the family tree model are inconsistent with the geographical and demographic conditions in the Pacific and with our knowledge of the population movements and cultural contacts in that area. The inadequacy of the tree model becomes apparent when one tries to assign EUV to a subgroup. It would be more productive to describe the relationship of EUV with other Polynesian languages in terms of a network model.

EUV has been part of network through which it was linked with languages which in the case of proto *h/*s, chose different strategies to abolish the phonological opposition. Within a network, linguistic forces causing change or innovations can spread from language to language. The response to a force does not have to be identical everywhere. Alternative solutions may be found in the same language.[9] As far as phonology is concerned variation is not necessarily the result of lexical borrowing, but can be due to exposure to a different solution through network contact. Languages sharing certain linguistic properties form subsets. Depending on the kind of criteria one chooses a language may be a member of more than one subset. Subsets reflect network relations, which unlike off-branched subgroups can be reconciled with the extralinguistic facts and conditions one encounters in a given area.

NOTES

[1]There is archeological evidence that even far-flung islands like the Marquesas maintained contact with the rest of Polynesia after they had been settled by migrations from the West, probably Samoa.

> On s'accorde généralement à penser, après les travaux du Suggs et de Sinoto aux Marquises, que cet archipel fut le premier à être colonisé en Polynésie orientale, et par les Polynésiens occidentaux, des Samoans probablement. Il serait cependent imprudent, ici encore, d'imaginer qu'au cours du peuplement du Pacifique oriental qui suivit cette première implantation ces nouveaux Polynésiens aient été définitivement isolés de l'ensemble du monde océanien. Tout semble indiquer, du contraire, que les Polynésiens orientaux étaient en relation, par chaînons interposés, avec le reste du monde Pacifique. (Garanger 1974:14)

Tonga's tradition of long-distance exchange of goods with occupants of other Pacific islands is described in Kirch 1984.

[2]A. Sharp (1957:57) works on a more conservative growth rate of 10 per cent. In Wallis and Futuna the growth rate has been 3% p.a. since 1974, which means that the population will double in less than 24 years (Collier 1981:20).

[3]cf. Biggs' warning (1972:143):

> It should be emphasized that linguistic subgrouping is concerned with the internal relationship of *languages* in a language family. Inferences as to migrations, first settlements, homelands, cultural affiliations and so on should be drawn from such data with caution, and a full awareness of the limited application of linguistic conclusions to such problems.

[4]Biggs also discusses the reflexes of *r in EUV and TON. He considers EUV l the inherited reflex and Ø a borrowing from TON. In the context of this paper we cannot deal with this issue, but it appears that it is as problematic to use the reflexes of *r for subgrouping purposes as it is to use those of *h; cf. the following doublets from TON: 'ao *front*, 'alo regal for *abdomen, stomach*; 'aofi *sole*, 'alofi *ceremonial* kava *ring*; fa *pandanus*, falahola *pandanus with very small fruit, Pandanus odoratissimus*; malama *to shine*, maama *light*; maa *fermented plantain or banana*, malamala (RAB) *sour*; ma'ui *to live*, ma'uli *to practice midwifery*; mio *to twist*, milo *to twist, turn*; Mulikeu, Muikeu, placenames; mui *back, later*, mulituku *last item, concluding song, dance, speech or ceremony, etc.*; aa *to heat leaves over fire*, lala *to cook slightly*; iiki *small*, likiliki (RAB) *small divisions of land*; ofa *a measure of the arms extended*, lofa *to fly with extended wings* (RAB); lato *(of a grave) completely filled and covered with a mound of sand*, ato *(of work) complete, completed*; valu 'gratter (terme de plaisanterie)', vau, vavau 'râcler, ratisser' (TFD); o'i *mash*, lo'i *food cooked in coconut cream*; ua *two*, luolua (RAB) *two small canoes lashed together.*

[5]The list contains only 46 words!

[6]Biggs represents long vowels by a double letter; haa = hā in Churchward's notation.

[7]Most examples are from Milner 1964:38f.

[8]Burrows (1936:56) found evidence for an established trade of bonito hooks between Futuna and Wallis and comments that voyages of Futunans to and from Wallis Island were too easy and too frequent to be memorable.

In 1852 in the wake of a devastating cyclone, 500 Tokelauans left their homes and settled on Wallis. At the time the Wallisian population was estimated at 3300 (Collier 1980:4).

[9]Harlow (1982:99) regards all phonological changes in individual Polynesian languages as spontaneous.

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A CONTACT-INDUCED MORPHOSYNTACTIC CHANGE IN THE BEL LANGUAGES OF PAPUA NEW GUINEA

M.D. Ross

1. INTRODUCTION

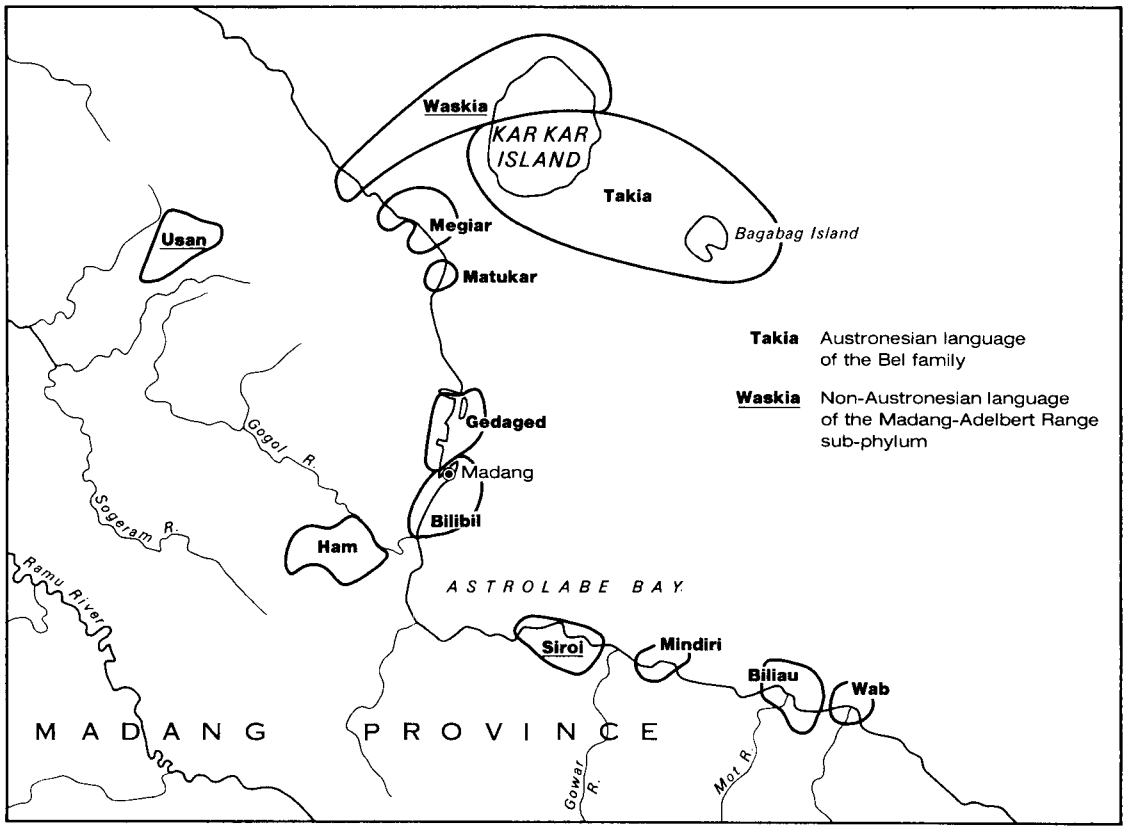
There is general agreement among students of the prehistory of New Guinea languages that contact between languages has been an important factor in language change on that island.[1] With the exception of Dutton's (1982) study of lexical change in certain languages of south-east Papua, however, little work has been done on change in individual languages, and in this context this short paper describes a contact-induced morphosyntactic change which has occurred in one small group of languages.

This group is the Bel family of Austronesian (AN) languages, spoken in scattered coastal villages north-west and south-east of the town of Madang on the north coast of mainland Papua New Guinea and on the offshore volcanic islands of Karkar and Bagabag (see Map 1).[2] In approximate order from north-west to south-east the Bel languages are Takia, Megiar, Matukar, Gedaged, Bilibil, Ham, Mindiri, Biliau and Wab. This paper is mainly concerned with the first five of these, but Takia and Megiar are so closely related that it is redundant to quote data from both, and no further reference will be made to Megiar. The only available descriptions of Bel morphosyntax are Dempwolff's (n.d.) Gedaged grammar and brief but useful outlines of the grammars of Takia by Rehburg and Tuominen (1978) and of Ham (also known as Dami) by Elliott (1979). Other data are from my fieldnotes.

All of the Bel languages are contiguous with non-Austronesian (NAN) languages, and it is the contention of this paper that bilingualism in a Bel communalect and a neighbouring NAN communalect is the context of contact-induced change in Bel languages. Except for those contiguous with Biliau and Wab, the NAN neighbours of the present-day Bel languages belong to the Madang-Adelbert Range subphylum of Trans-New Guinea phylum languages.[3] Most of the languages of this subphylum are not well known, but are represented here by Waskia, Siroi and Usan, for which descriptive materials are available.[4]

I have chosen to adopt (from Thomason 1986) the term *contact-induced* change, rather than a label such as *interference* (Weinreich 1963:1), *transfer* (Weinreich 1963:30-48), *transference* (Clyne 1967:ch.3; Ross 1985) or *diffusion* (Heath 1978; Foley 1986), for two sets of reasons.

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Map 1: Locations of Bel languages, Waskia, Usan and Siroi

Firstly, whilst it may be appropriate to regard the occasional or temporary effects of language A on language B within a bilingual speaker's repertoire as an obstruction ('interference') of B by A or as the transfer(ence) or diffusion of a feature from A to B, this is not an appropriate way to view a change which results in the integration of a new feature into B. This phenomenon is better conceived as a change in language B - albeit a change which may make B more similar to A.

Secondly, by focusing attention on change in language B, we can avoid some of the more unfortunate implications of the metaphor *mixed language*. One of these implications is that the outcome of 'mixing' two languages A and B is a brand new language C. However, although 'mixing' may entail a period of very rapid and radical change, the outcome is still a continuation of the tradition of B, not a new language.[5] Another implication is that the outcome is a mixture of features from A and B - but in fact the outcome of 'mixing' may be a language rather different from A or B (as Mühlhäusler 1985:53 points out), and yet still a continuation of the tradition of B. The paradigm of contact-induced changes given by Ross (1985) views morphosyntactic changes in terms of three dichotomies. A change is:

(a) morphological or syntactic;

(b) replacive (replacing an existing item or feature with another item or feature) and/or neologistic (adding an item or feature to the existing repertoire);

(c) morphosemantic (both the form and meaning of a language A item become a part of language B) or semantic (the meaning and/or function of a language B item changes under the influence of its counterpart in language A).[6]

The change described below is clearly semantic (not morphosemantic), and the result could only very loosely be described as a 'mixture' of languages: it is rather different from the putative former state of either A or B.

2. SENTENCE-MEDIAL VERB FORMS IN BEL LANGUAGES

Although they are AN, the Bel languages have a number of features which are attributable to changes induced by contact with NAN languages. Like most languages of the NAN Trans-New Guinea phylum, their basic clause order is verb-final, a possessor noun phrase precedes the possessed, and peripheral relationships are marked with cliticised postpositions (whereas the majority of Oceanic AN languages - and their ancestor Proto-Oceanic - have verb-medial clause order, a postposed possessor, and prepositional morphemes; Ross 1986). However, these NAN features are also found in Oceanic AN languages in other parts of Papua New Guinea, not because they are inherited from a common ancestor but as the result of parallel contact-induced change in different areas of the country.[7]

The feature which will be briefly described here is the presence in Takia, Matukar, Gedaged and Bilibil of a contrast between sentence-medial and sentence-final verb forms - a contrast which is apparently found in only one other Oceanic AN language,[8] but which is very common among the languages of the Trans-New Guinea phylum, as is liberally illustrated by Longacre (1972). Sentence-medially, dependent verb forms are used to make 'chains' of clauses, the relationship between which has been termed *cosubordinate* by Olson (1981) and by Foley and Van Valin (1984:242-244; 256-263) and *coordinate-dependent* by Foley (1986:175-198). A coordinate-dependent relationship between two clauses is one in which neither clause is subordinate to the other (i.e. embedded in it) but one clause (normally the first) is dependent on the other in that the verb phrase of the independent clause supplies information (e.g. person and number of subject, tense) valid for both the dependent and the independent clause.

In the Takia examples below, the last item of the first clause is a verbal enclitic which indicates that clause's dependency on the following clause, and the latter's clause-final verbal enclitic contains information which applies to both clauses:

(1) iŋ i-marsi-go fud i-ani-a
D:3S S:3S-*sit*-M:R *banana* S:3S-*eat*-F:PAST[9]
He sat and ate a banana.

(2) iŋ i-marsi-pe fud i-ani-wa
D:3S S:3S-*sit*-M:I *banana* S:3S-*eat*-F:FUT
He will sit and eat a banana.

In (1) and (2), the sentence-medial enclitics g[o][10] 'realis' and -p[e] 'irrealis' are dependent on the sentence-final enclitics -[y]a 'past' and -wa 'future' for their tense. That the dependent verbal enclitics do not distinguish tense is clear from (3) and (4), which both have the dependent verbal enclitic -go 'realis', but differ in their sentence-final tense marking:

(3) iŋ fud ta i-ani-du-go ŋai you ŋa-luk-a
D:3S *banana a* S:3S-*eat*-SIM-M:R D:1S *water* S:1S-*drink*-F:PAST
He ate a banana and I drank water.

(4) iŋ fud ta i-ani-du-go ŋai you ŋa-luk-da
D:3S *banana a* S:3S-*eat*-SIM-M:R D:1S *water* S:1S-*drink*-F:PRES
He is eating a banana and I am drinking water.

In (3) and (4), the slot between the verb stem (-ani- *eat*) and the sentence-medial enclitic (-go 'realis') is occupied by the enclitic -du-, which here indicates the time relation between the two clauses, namely that the events of the two clauses occur simultaneously. This enclitic -du- may also occur with sentence-medial -p[e] 'irrealis', giving (with morphophonemic change) the sequence -do-p below:

(5) iŋ fud ta i-ani-do-p ŋai you ŋa-luk-a
D:3S *banana a* S:3S-*eat*-SIM-M:I D:1S *water* S:1S-*drink*-F:FUT[11]
He ate a banana and I drank water.

Other enclitics filling this slot in Takia are -gu-, indicating a sequential time relation between clauses (*and then*), and -na-, indicating the duration of the first event *until* the occurrence of a second event:[12]

(6) iŋ fud ta i-ani-gu-g oŋ u-ag-i-a
D:3S *banana a* S:3S-*eat*-SEQ-M:R D:2S S:2S-*call*-O:3S-F:PAST
He ate a banana and then you called him.

(7) ŋai ŋ-ani-gu-p panu na ŋ-au-wa
D:1S S:1S-*eat*-SEQ-M:I *village* POSTP S:1S-*go*-F:FUT
I shall eat and then go home.

(8) tamol di-ani-na-g i-sida-ya
man S:3P-*eat*-DUR-M:R S:3S-*enough*-F:PAST
The men ate until they were full.

(9) id t-au-na-p panu na t-ilasa-wa
D:1IP S:1IP-*go*-DUR-M:I *village* POSTP S:1IP-*arrive*-F:FUT
We shall walk until we arrive home.

Preceding a sentence-medial enclitic, then, the morphemes -du-, -gu- and -na- show the time relation between the two clauses. However, it appears that this is (or was) not their primary function. When such a morpheme occupies the corresponding slot before a sentence-*final* enclitic, it functions as an aspect-marker:

(10) Meit nal pempem iŋ sa-n wog lo i-sida-na-ya
Mait day every D:3S CL-P:3S *canoe* POSTP S:3S-*board*-DUR-F:PAST
Mait used to board his canoe every day.

The portion of Takia verb morphology illustrated above may be summarised as follows:

(11) Sentence-medial verb:

$$\text{S: + STEM + } \left\{\begin{array}{l}\text{-Ø- unmarked}\\ \text{-du- simultaneous}\\ \text{-gu- sequential}\\ \text{-na- durative}\end{array}\right\} + \left\{\begin{array}{l}\text{-g[o] realis}\\ \text{-p[e] irrealis}\end{array}\right\}$$

Sentence-final verb:

$$\text{S: + STEM + } \left\{\begin{array}{l}\text{-Ø- unmarked}\\ \text{-na- durative}\end{array}\right\} + \left\{\begin{array}{l}\text{-da present}\\ \text{-[y]a past}\\ \text{-wa future}\end{array}\right\}$$

Lack of space prevents full illustration of the corresponding morphological systems in Gedaged, Bilibil and Matukar, but these languages have systems similar to Takia. The parts of the Gedaged system which correspond to the partial Takia system in (11) are as follows:

(12) GEDAGED

Sentence-medial verb:

$$\text{S: + STEM + } \left\{\begin{array}{l}\text{-Ø- unmarked}\\ \text{-me- simultaneous}\\ \text{-la- sequential}\end{array}\right\} + \left\{\begin{array}{l}\text{-g[e,a,Ø] realis}\\ \text{-p[e,a,Ø] irrealis}\end{array}\right\}$$

Sentence-final verb:

$$\text{S: + STEM + Ø + } \left\{\begin{array}{l}\text{-Ø, -e unmarked}\\ \text{-lak past}\\ \text{-[w]oi future}\end{array}\right\}$$

Gedaged differs from Takia in using an auxiliary verb, -me (with its own subject pronominal prefix), to mark continuative aspect in a sentence-final verb phrase:

(13) pain i mot-oi di-e di-me
woman D:3P *snake*-POSTP S:3P-*fear* S:3P-CONT
Women fear snakes.

(14) Dubig ina-n wako-lak i-du-sa i-me
Dubig CL-S:3S *canoe*-POSTP S:3S-*go-up* S:3S-CONT
Dubig is boarding his canoe.

Significantly the auxiliary verb -me 'continuative' of sentence-final verb phrases and the time-relation marker -me- 'simultaneous' of sentence-medial verbs are identical in form. The latter often has the force of *while*, as in:

(15) o u-se-me-g u-nasi-lak[13]
D:2S S:2S-*come*-SIM-M:R S:2S-*see*-F:PAST
While you were coming, you saw.

and the similarity of form and meaning suggests strongly that these two morphemes have the same historical source, i.e. that -me- 'simultaneous' is descended from the auxiliary verb -me 'continuative' where the latter has become trapped between a verb stem and a sentence-medial enclitic. The probable historical source of Gedaged -me is Proto-Oceanic (POC) *mai *come*. POC *lako *go* seems to have had a similar history, giving rise to Gedaged -la- 'sequential' and -lak 'past'. The one difference between the reflexes of POC *mai and POC *lako is that Gedaged

-me 'continuative' is still an auxiliary verb, whereas -lak 'past' has become an enclitic. However, the latter is almost certainly descended from a pre-Gedaged auxiliary verb *-lak 'perfective', forming a morpheme-category with -me 'continuative'.

The parts of the Bilibil and Matukar systems which correspond to the Takia morphemes in (11) are:

(16) BILIBIL

Sentence-medial verb:

$$\text{S: + STEM + } \begin{Bmatrix} \text{-Ø- unmarked} \\ \text{-da simultaneous} \end{Bmatrix} + \begin{Bmatrix} \text{-g[a] realis} \\ \text{-p irrealis} \end{Bmatrix}$$

Sentence-final verb:

$$\text{S: + STEM + } \begin{Bmatrix} \text{-Ø- unmarked} \\ \text{-de- continuative} \end{Bmatrix} + \begin{Bmatrix} \text{-Ø unmarked} \\ \text{-wi future} \end{Bmatrix}$$

(17) MATUKAR

Sentence-medial verb:

$$\text{S: + STEM + } \begin{Bmatrix} \text{-Ø- unmarked} \\ \text{-al- sequential} \end{Bmatrix} + \begin{Bmatrix} \text{-do realis} \\ \text{-p irrealis} \end{Bmatrix}$$

Sentence-final verb:

$$\text{S: + STEM + (-al- perfective) + } \begin{Bmatrix} \text{-[ŋ]e non-future} \\ \text{-[a]go present} \\ \text{-b[a] future} \end{Bmatrix}$$

A comparison of the partial systems in (11), (12), (16) and (17) above reveals several facts. Firstly, the four languages have structurally similar systems, except that Gedaged sentence-final forms have no aspect-marking enclitics. Secondly, the pairs Takia -na- *until* 'time relation/durative', Gedaged -me- 'simultaneous'/-me 'continuative' and -la- 'sequential'/-lak 'past', Bilibil -da- 'simultaneous'/-de- 'continuative', and Matukar -al- 'sequential/perfective' all indicate that the time relation morphemes of sentence-medial dependent verbs are derived historically from aspect-marking morphemes. Thirdly, there are a number of evident cognate sets among the four systems. Of these sets, two will concern us here, namely the two dependent verbal enclitics occurring phrase-finally on sentence-medial forms:

(18) Realis:

Takia	-g[o]
Gedaged	-g[e,a,Ø]
Bilibil	-g[a]

Irrealis:

Takia	-p[e]
Gedaged	-p[e,a,Ø]
Bilibil	-p
Matukar	-p

As I will show below, external evidence suggests that these sets reflect proto-forms *-ga and *-pe. Final vowel loss and vowel changes are recent local occurrences.

The proto-language in which *-ga and *-pe first occurred as sentence-medial dependent verbal enclitics was probably Proto-Bel, the language ancestral to all the Bel languages. Evidence for this lies in the facts that two other Bel languages, Mindiri and Ham, also have enclitics reflecting *-pe, and Ham has an enclitic reflecting *-ga. Neither Mindiri nor Ham has dependent verb forms sentence-medially. However, the Mindiri future-marker is -p (e.g. mata-p *will die*), whilst Ham[14] has two present-tense markers -p (e.g. i-pare-p *he is standing*) and -k (e.g. i-bodo-k *he is sitting*). It is probable that these have arisen through the reinterpretation of sentence-medial dependent verb forms as independent forms: a similar reinterpretation has partially occurred in Gedaged, where one form of polite imperative is the irrealis dependent form:

(19) u-mais-pa
S:2S-*get up*-M:I
(Please) get up!

(20) ta-mado-p
S:1IP-*stay*-M:I
Let us stay.

3. COMPARATIVE PERSPECTIVE

The functions which in the Bel languages are performed by sentence-medial dependent verb forms are generally served in Oceanic AN languages by parataxis or by coordinating conjunctions. In Kairiru of the Schouten group (see Map 2), for example, parataxis occurs:

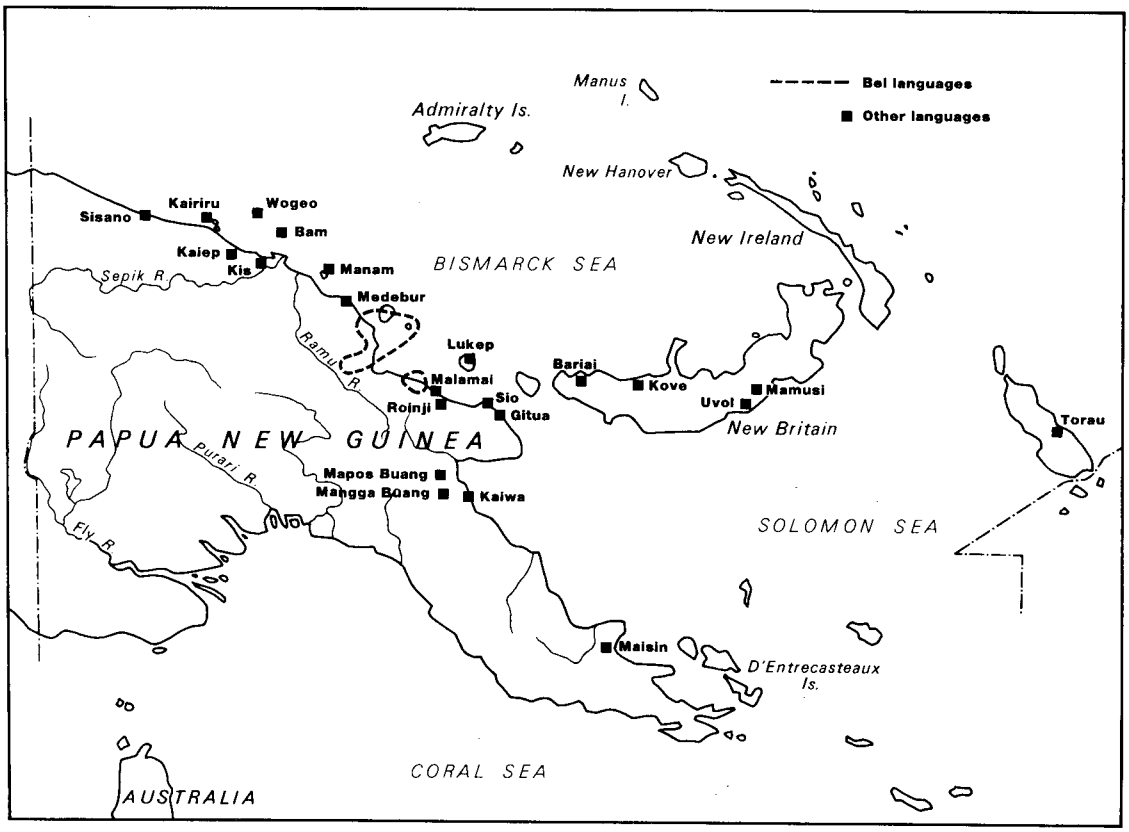
(21) ei o-mo u a-kan kyau yan u-ni
D:3S S:3S-*sit* *banana* S:3S-*eat* D:1S *water* S:1S-*drink*
He sat eating a banana (and) I drank water.

(22) ei o-mo u a-kan a-uon yan e-ini
D:3S S:3S-*sit* *banana* S:3S-*eat* S:3S-*finish* *water* S:3S-*drink*
He ate a banana, and then drank water.

Note that in (22), as quite commonly in AN languages of Papua New Guinea and in Tok Pisin, a form of the verb *finish* is used to indicate perfectivity and hence sequence. In Roinji, 40 kilometres south-east of Wab (the easternmost Bel language) and perhaps the closest external relative of the Bel languages, a coordinating conjunction is used:

(23) Abetaŋ ɣaŋ saula-no na ŋa ŋa-ɣaŋ gui
Abetang eat banana-P:3S CONJ D:1S S:1S-*eat yam*
Abetang ate banana and I ate yam.

We may be reasonably certain that in some AN language ancestral to Proto-Bel, parataxis and coordination were used as they are in (21) to (23). As I noted above, sentence-medial dependent verb forms are very rare among Oceanic AN languages, but common among the NAN languages of Papua New Guinea. It would therefore be foolhardy not to attribute the Bel languages' coordinate-dependent sentence structure, as well as their verb-final clause order, preposed possessor, and postpositions, to change induced by contact with NAN languages. However, as I will show below, the coordinate-dependent structure of the Bel languages is



Map 2: Locations of languages outside the Madang area

rather unlike the equivalent structures in nearby NAN languages. The change which is manifest in the Bel languages is a semantic change, i.e. the function of certain inherited morphemes has changed under NAN influence: the coordinate-dependent structure in the Bel languages represents the adaptation of inherited AN morphology to an NAN syntactic strategy.

The systems of verbal morphology which mark sentence-medial verbs in the Bel languages and in neighbouring NAN languages are quite different not only in their forms but also in the structure of their paradigms. If we list for the Bel languages the features which are marked on sentence-medial verb forms and those for which they are dependent on a following sentence-final verb, we get the following arrangement:

(24) PREFIX: person and number of subject

ENCLITIC: time relation with following clause (simultaneous/sequential, etc.)
mood (realis/irrealis)

DEPENDENT ON SENTENCE-FINAL VERB FOR: tense

But if we tabulate the corresponding arrangement of features in Waskia,[15] the NAN language spoken on Karkar Island alongside Takia, we find that the dominant distinction in the Waskia sentence-medial verb system is not of time relation (simultaneous/sequential) or of mood (realis/irrealis), but of switch reference.

Like many Trans-New Guinea phylum languages (Foley 1986:183-194) - but unlike the Bel languages - Waskia distinguishes in its sentence-medial verb between cases where the subject of the following clause remains the same and cases where a different subject occurs. Indeed, sentence-medial *dependent* verb forms occur in Waskia only when the subjects of two or more successive clauses are the same and the events of the two clauses are simultaneous; when the subjects are different and/or the time relation is sequential, the sentence-medial form is morphologically the same as a sentence-final form but has an additional enclitic.

For dependent verb forms, the Waskia arrangement corresponding to (24) is thus as follows:

(25) PREFIX: (none)

ENCLITIC: (none)

DEPENDENT ON SENTENCE-FINAL VERB FOR: tense and mood
person and number of subject

Such forms, consisting only of a verb stem, are illustrated by kami *cook* and baga *stay* below, dependent for tense/mood and subject marking on sentence-final na-em *I drank*:

(26) ane na kami baga yu na-em
D:1S *food cook stay water drink*-PAST.S:1S
While I was cooking the food, I drank some water.

The corresponding arrangement with other (independent) verbs occurring sentence-medially is set out below:

(27) PREFIX: (none)

ENCLITIC: tense and mood
person and number of subject
time relation with following clause (simultaneous/sequential, etc.)

(NOT DEPENDENT ON SENTENCE-FINAL VERB)

Waskia verb morphology may be summarised as follows:

(28) Sentence-medial verb:

STEM ONLY same subject/simultaneous

STEM + TENSE/MOOD.S: + { -Ø same subject/unmarked
-ale same subject/sequential
-se different subject }

Sentence-final verb:

STEM + TENSE/MOOD.S:

The enclitics in (28) are illustrated in the following examples:

(29) ane Madaŋ me-sam-ale Suaruni name-sam
D:1S *Madang leave*-PRES.S:1S-SS.SEQ *Karkar go*-PRES.S:1S
I am leaving Madang and going to Karkar Island.

(30) nu lage se nama bager-am-se ane kasili arig-em
D:3S *road* POSTP *go* *stay*-PAST.S:3S-DS D:1S *snake* *see*-PAST.S:1S
As he was going along the road, I saw a snake.

(31) ane ulaŋ kai-em-se ni na-em
D:1S *yam* *cook*-PAST.S:1S-DS D:2S *eat*-PAST.S:2S
I cooked the yam but you ate it.

As these examples show, the distinction which dominates the Waskia sentence-medial verb system is the same-/different-subject contrast. The time relation distinction between simultaneity and sequence is neutralised when the subject of the following clause is different, and the mood distinction between realis and irrealis is marked only when the sentence-medial verb is an independent form.

The corresponding systems in Siroi and Usan differ in certain respects from the Waskia system but are also dominated by the same-/different-subject distinction. The Siroi and Usan systems resemble the Waskia in having a dependent verb form unmarked for person and number of the subject, which is used when the subjects of two successive clauses are the same. However, the dependent form in both languages is marked by an enclitic (Siroi -a, -mba; Usan -ub, -ab, -âb, -et, -at, -ot, etc.):

(32) SIROI
sai-k-a kile kil-mba wande ŋgule-niŋg-ig
cut-CM-DEP *now* *take*-DEP *house roof*-O:3P-IP.S:1P
We cut (the rafters) and now collected them and roofed the houses.

(33) USAN
yâr-ab qoasi-qoasi qur big-âr
come-SS *miss*.SS-*miss*.SS *money put*-IMP.S:P
Come, pass me and deposit your money.

The Siroi system is similar to the Waskia in that independent verbs are used sentence-medially not only when the subject of the following clause is different but also in certain cases when the subject is the same. These cases occur when the time relation between the two clauses is of significance, i.e. not only for sequential events (as in Waskia), but also for a durative/punctiliar *(while)* relation. When an independent verb is used sentence-medially, it is followed by the connective sulumba if the subject is to remain unchanged and by le if a different subject follows:

(34) Banis-ŋge piro-k-a min-na sulumba nu guaze ande
Banz-POSTP *work*-CM-DEP *be*-PAST.S:3S SS D:3S *sickness one*
puro-na
arrive-PAST.S:3S
While he was working at Banz he became ill.

(35) mb-una le Mayak kusna-wen
ascend-PAST.S:3S DS *Mayak* *ask*-PAST.S:1S
He came up and I asked Mayak.

Siroi sulumba and le are roughly similar in function to Waskia -ale and -se. Note that the choice of connective in Siroi is determined exclusively by the same-/different-subject distinction, not by time relation or any other criterion.

The Usan system is even more clearly dominated by the same-/different-subject distinction. The unmarked dependent verb seems to be the usual choice wherever the subject of the following clause is the same. However, unlike Waskia and Siroi (but like many other Trans-New Guinea phylum languages), Usan has a set of dependent verbs which mark the person and number of their subject and are used when the following subject is different. They depend, however, on the sentence-final verb for tense and mood. For example:

(36) worom is-a ginam âib is-omei
sun go.down-S:3S.DS *place big go.down*-S:1S.FAR PAST
The sun went down and I went down to town.

Where the need to mark a sequential time relation arises, the sentence-medial verb may be followed by wogub and/or ugâb, the same subject forms of the verbs *cease*, *leave* and *finish*[16] (Reesink 1983a):

(37) qoren su-âb [wog-ub] [ne] nâgsiorubour
post cut-SS *[cease*-SS*] [and] erect*.FUT.S:3P[17]
After they have cut the posts, they will erect them.

Square brackets in (37) indicate omissible items.

If we take it that Waskia, Siroi and Usan are similar to the NAN language(s) responsible for the contact-induced change in Proto-Bel from parataxis or co-ordination to a coordinate-dependent structure with sentence-medial dependent verb forms, then we may venture to enumerate certain probable features of that language (or those languages). Firstly, the most important distinction made in its sentence-medial forms was the same-/different-subject distinction, i.e. whether the subject of the following clause was the same or different. Secondly, there was an unaffixed or minimally affixed dependent verb form, unmarked for tense, mood, or the person and number of its subject (for all of which it was dependent on the verb of the next or a later clause), and used in at least some cases where the subject of the following clause remained unchanged. Thirdly, the distinction in time relation between simultaneity and sequence was (optionally?) marked after the sentence-medial verb[18] (by an enclitic or a separate item), but was not an integral part of the verbal morphology and was of far less importance than the same-/different-subject distinction.

Whilst the Bel languages also have a coordinate-dependent structure with sentence-medial dependent verb forms, the most important distinction made among these is between realis and irrealis mood. There is no formal same-/different-subject distinction, since sentence-medial forms in Bel languages always have a prefix marking the person and number of their subject, and depend on a following verb only for their tense. The second-most important - and frequently marked - distinction is between simultaneity and sequence, marked in the Bel languages by a morpheme which is an integral part of the verbal morphology.

4. DISCUSSION AND CONCLUSIONS

It is now clear that although Takia, Gedaged, Bilibil and Matukar share with their NAN neighbours the very un-AN strategy of a coordinate-dependent relationship between clauses, marked by sentence-medial dependent verb forms, nevertheless there is a significant difference between the system in the Bel languages, dominated as it is by the realis/irrealis distinction, and the NAN system,

dominated by the same-/different-subject distinction. The question which remains is: How did the Proto-Bel coordinate-dependent structure develop?

This question requires an answer which is part morphosyntactic and part sociolinguistic. We need to know the ancestral sources of the morphosyntax of Bel sentence-medial verbs, and the changes which have given rise to present-day morphosyntax - and we need to know under what sociolinguistic conditions such changes could take place.

Some clues to the morphosyntactic part of the answer were given in section 2. It was noted there that some (at least) of the time relation morphemes of sentence-medial dependent verbs in Bel languages are derived historically from aspect-marking morphemes. It is not difficult to see how this occurred. In example (8), repeated below, the sentence-medial verb di-ani-na-g contains the morpheme -na- marking the 'until' time relation:

(8) tamol di-ani-na-g i-sida-ya
man S:3P-*eat*-DUR-M:R S:3S-*enough*-F:PAST
The men ate until they were full.

In a sentence-final verb, -na- marks the durative aspect, so that the form di-ani-na-ya (S:3P-*eat*-DUR-F:PAST) means *they used to eat/were eating/continued to eat*. If we set on one side the difference between sentence-medial -g and sentence-final -ya, we can see that a sentence like (8) could well have arisen from the reinterpretation of a coordinate sentence with the sense of *The men continued to eat and they were full*, i.e. -na- was originally a durative aspect marker sentence-medially as well as sentence-finally.

In Gedaged (section 2), the time relation morphemes -me- 'simultaneous' and -la- are similarly derived from the same sources as the aspect-marking auxiliary verb -me 'continuative' and the tense marker -lak 'past', and these in their turn reflect the POC verbs *mai *come* and *lako *go*. Although it is more common for aspect-markers in Oceanic AN languages to precede the verb stem than to follow it, it is probable that other aspect- and tense-marking enclitics (and thence also time relation enclitics) in the Bel languages also have verbal origins, and that their post-verbal position is attributable to the fact that an auxiliary verb follows the main verb in strictly verb-final clause order (as is also illustrated in example (22)).

The pertinent point here is that the morphological material of the Bel languages' verb forms is AN in origin, and not borrowed from an NAN source. Indeed, the fact that Bel dependent verbs, unlike their NAN counterparts, are prefixed to mark the person and number of their subject is clearly of AN origin, since almost all Oceanic AN languages in Papua New Guinea (and many outside it) have proclitic or prefixed subject pronoun forms, and the Bel subject pronominal prefixes have ample cognates in AN languages outside the Bel group. It is beyond the scope of this paper to document this cognacy fully, and examples must suffice. However, the cognacy of the Gedaged/Bilibil, Mindiri, Roinji, Sio (north coast of Huon Peninsula) and Bariai (north-west New Britain) sets is self-evident:

(38)

	Gedaged/Bilibil	Mindiri	Roinji	Sio	Bariai
S:1S	ŋa-	ŋa-	ŋa-	na-	na-
S:2S	u-	ku-	u-	ku-	Ø-
S:3S	i-	Ø-	Ø-	i-	i-
S:1EP	a-	ka-	ba-	ka-	a-
S:1IP	ta-	ta-	ta-	ta-	ta-
S:2P	a-	ka-	a-	ka-	a-
S:3P	di-	di-	di-	si-	ti-

The morphemes which distinguish the sentence-medial verb forms of the Bel languages from sentence-final forms are reflexes of Proto-Bel *-ga 'realis' and *-pe 'irrealis'. These forms, too, have AN antecedents in what were evidently coordinating conjunctions. Cognates of *-ga are found in scattered languages of the North New Guinea cluster[19] to which the Bel family belongs (see Map 2 for locations):

(39) Sisano ka
Sio ga
Bariai ga
Kove ɣa
Mapos Buang g

All of these function as the conjunction *and* in a coordinate noun phrase, as in Sisano ami lapi ka ur *sweet potato, sago and banana.* All except Sisano ka also function as a coordinating conjunction between clauses, as in:

(40) BARIAI

Siko i-ma-mado ga i-an-ian pud
Siko S:3S-RD-*sit* CONJ S:3S-RD-*eat banana*
Siko was sitting and eating a banana.

The cognate set in (39) thus indicates that the chain of communalects ancestral to the North New Guinea cluster of languages had a coordinating conjunction *ga, from which Proto-Bel *-ga is also descended.

Cognates of Proto-Bel *-pe are also found in various parts of the North New Guinea cluster:[20]

(41) Wogeo be
Manam be
Medebur be
Lukep in-be
Malalamai be
Gitua ve
Bariai be
Kaiwa be
Mangga Buang be
Mapos Buang b
Uvol pe
Mamusi ve

This set allows the inference that the North New Guinea chain also had a coordinating conjunction *be, similar in function to *ga, since the items in (41) all occur as coordinating conjunctions, either in coordinate noun phrases or as a clause coordinator. The only language to reflect both *ga and *be is Bariai, where be has adversative force *(but)* as a clause coordinator, whilst ga is neutral *(and)*.

The derivation of the Proto-Bel verbal enclitics *-ga and *-pe from the earlier coordinating conjunctions *ga and *be presents us with the most striking of the functional changes which occurred in the development of Proto-Bel sentence-medial verb forms. Again, however, it is not difficult to see something of how this reinterpretation occurred. Lichtenberk (1983:522-526) reports that Manam be is cliticised to the verb of the preceding clause:

(42) tamoata boro di-tao-taon-i-be aine rega di-ʔoto-ʔoto
man pig S:3P-RD-*hunt*-O:3S-CONJ *woman firewood* S:3P-RD-*break*
The men were hunting the pig and the women were gathering firewood.
(= While the men were hunting the pig, the women were gathering firewood.)

and the most likely explanation of the *forms* of the sentence-medial clitics in Proto-Bel is that the conjunctions *ga and *be became cliticised to the noun phrase in a manner similar to Manam. This interpretation accords with the fact that reflexes of the Proto-Bel verbal enclitics *-ga and *-pe are always the last element of the verb phrase, and that their cliticisation has trapped - in Gedaged at least - earlier auxiliary verbs, resulting in their reinterpretation as time relation enclitics. It also leaves us with two difficulties, however, one phonological and the other semantic.

The phonological difficulty lies in the fact that the consonant of cliticised *be has undergone devoicing, resulting in *-pe, whereas no devoicing has occurred with *ga. However, diachronic phonological theory offers a possible explanation of this. As Foley (1977) shows, consonants with the same manner of articulation do not undergo a change simultaneously, but in sequence. The devoicing of [b] will always precede the devoicing of [g], resulting, if devoicing is interrupted before it has affected all voiced stops, in [p] and [g].

The semantic difficulty consists in the reinterpretation of one conjunction, *ga, as a realis marker and the other, *be, as an irrealis marker. We may infer that the former was used to connect realis clauses and the latter irrealis, but I have found no data which confirm this.

Despite these difficulties, however, the similarity in form between the two reconstructible conjunctions and the two sentence-medial verbal morphemes, and the clause-final position of the latter, points clearly to the reinterpretation of conjunctions as the source of the Proto-Bel sentence-medial verbal morpheme.

I will turn now to the sociolinguistic conditions under which the reinterpretation I have just described may have taken place.

Thomason (1986) distinguishes two kinds of contact-induced change, for which she uses the traditional names *borrowing* and *substratum*. Borrowing is "the incorporation of foreign features into a group's native language", and the first borrowings to occur are always of lexical items, although in circumstances of intense cultural pressure, phonological, syntactic, and even morphological borrowing may also occur. Substratum interference, on the other hand, "results from imperfect group learning during language shift", and first affects phonology and syntax, then morphology, and finally lexis.

Since the case of the Bel languages entails syntactic - rather than lexical - change, it *looks* like a case of substratum interference, i.e. of the imperfect learning of an AN language by a group of NAN speakers. However, this leaves two unanswered questions. First, why should NAN speakers learn the language(s) of small coastal and island populations? And second, if the contact-induced changes in the Bel languages were due to imperfect learning by NAN speakers, what happened to the original AN speakers? It seems rather that we must postulate a situation in which AN speakers of a language ancestral to Proto-Bel became bilingual in a NAN language, presumably because most of the area around them, then as now, was occupied by NAN speakers. They became so at home in the NAN language (and isolated from speakers of closely related AN communalects)[21] that there occurred a reinterpretation and adaptation of the AN morphosyntactic system of their own language in the direction of some of the strategies of the NAN language.

If these people were so much at home in the language of their neighbours, it behoves us to ask what we mean by 'their own language'. The major reason for the maintenance of a language in this kind of situation is that one's 'own' language is the one which serves as an emblem of group identity. Under Thomason's classification, the scenario I have just described is sociolinguistically one of 'borrowing' - and yet it is syntax, not lexicon - which has passed into the borrowing language. The reason why borrowing did not begin with lexicon is that it is precisely the *words* of the language which are perceived by its speakers as its substance and therefore as the emblem of identity. Adaptive changes in morphosyntax, on the other hand, occur unconsciously and hence have no emblematic significance.

On this interpretation, the Bel case is by no means unique in the literature. The situation described by Gumperz and Wilson (1971) at Kupwar in India also entails syntactic adaptation without extensive borrowing of lexicon, again because the latter marks ethnic identity. The difference between the Kupwar and Bel situations is that Kupwar lies on the border between three languages all of which have large populations of speakers, and syntactic adaptation has been mutual, whereas Proto-Bel was apparently a small language surrounded by NAN languages, and syntactic adaptation seems to have been one-way only.

Thomason is right in insisting that different kinds of contact-induced change be recognised, and that these be classified sociolinguistically. However, the Bel case suggests that a successful classification will need to be multidimensional and to take account of other factors which cut across the borrowing/substratum contrast. One of these factors consists in the differing social functions which languages are perceived by their speakers to serve.

NOTES

[1]See for example Capell (1976), Dutton (1976), Lynch (1981:109-111), Foley (1986: 209-214, 263-268, 281-283).

[2]The relationship of the Bel languages to other Austronesian languages of Papua New Guinea is described in Ross (1986).

[3]See Wurm and Hattori (1981:map 7).

[4]Data for Waskia are from Ross with Paol (1978), for Siroi from Wells (1979), and for Usan (also known as Wanuma) from Reesink (1983a and 1983b).

[5]Note that contact-induced language change, however radical, is not the same phenomenon as the rise of a pidgin, which arguably *is* a new language. Contact-induced change occurs in situations of bilingualism, whereas a pidgin arises from a minimum of three unstable linguistic systems (Whinnom 1971; Mühlhäusler 1985:60-61). It is unfortunate that the terms 'pidginisation' and 'creolisation' have on occasion both been applied to contact-induced language change.

[6]The terms 'morphosemantic' and 'semantic' are adopted from Clyne (1967:ch.3). Heath (1978) uses 'direct' and 'indirect' in the same senses.

[7]Verb-final clause order, a preposed possessor and cliticised postpositions are also found in the Schouten languages (Medebur, Manam, Bam, Wogeo, Kis, Kaiep and Kairiru), in most of the 60 or so languages of the Papuan Tip cluster of south-east and central Papua, and in Torau on the east coast of Bougainville island. These are all Oceanic Austronesian languages.

[8]This language is Maisin, long regarded as an unclassifiable 'mixed' language (see, for example, Capell 1976), but demonstrably an Austronesian language of the Papuan Tip cluster which has undergone changes induced by contact with NAN languages. Maisin sentence-medial and -final verb forms and cosubordinate structures are described by Ross (1984).

[9]Abbreviations used in glosses are:

1,2,3	first, second, third person
1E	first person non-singular exclusive
1I	first person non-singular inclusive
CONJ	conjunction
CONT	continuative
CL	classifier
CM	class marker
D:	disjunctive pronoun
DEP	dependent
DS	different subject following
DUR	durative
F:	sentence-final verbal enclitic
FUT	future
I	irrealis
IMP	imperative
IP	immediate past
M:	sentence-medial verbal enclitic
O:	object pronominal enclitic
P	plural
P:	possessive pronominal suffix
PF	perfective
POSTP	postposition
PRES	present
PUNC	punctiliar
R	realis
RD	reduplication
S:	subject pronominal prefix/suffix
S	singular
SS	same subject following
SEQ	sequential (... *and then*)
SIM	simultaneous
TM	topic marker

[10]Square brackets surround segments which are present in some environments, absent in others, e.g. -g[o] occurs as both -go and -g. Where two segments within square brackets are separated by a comma, either may occur, e.g. -p[a,e] occurs as both -pa and -pe.

[11]The form -a is here the morphophonemic variant of -wa 'future' (cf. example (2)) when the latter follows a consonant, not the enclitic -a 'past' (examples (1) and (3)).

[12]Examples (8) and (9) are from Rehburg and Tuominen 1978.

[13]Example from Dempwolff n.d.:42.

[14]Ham examples here are from Elliott 1979.

[15]The analysis of Waskia verbal morphology implicit in the following comments is somewhat different from that presented in Ross with Paol (1978) and has benefited from the comments of Reesink (1978, 1983a).

[16]The form wogub may follow any sentence-medial verb, but ugâb follows only a same-subject sentence-medial verb.

[17]Reesink (1983a) does not segment this verb form into constituent morphemes.

[18]The time relation distinction is not obviously marked in present-day Siroi. However, Reesink (1983a) points out that the same-subject connective sulumba is evidently derived from sulu- *finish* + -mba DEP. This was presumably once a marker of sequence, corresponding exactly to Usan wogub and ugâb. That is, Siroi once marked sequence in the same way as Usan.

[19]See Ross 1986 for a definition of this grouping.

[20]Cognates of the items in (41) are also found in languages of the Papuan Tip and Admiralties clusters, indicating that *be 'coordinating conjunction' is of POC antiquity.

[21]Laycock (1979:94, 97) draws attention to the fact that isolation from monolingual communities speaking the same language is an essential condition for (what I have called) contact-induced change.

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LATIVE AND TRANSLATIVE IN UNGARINYIN

Alan Rumsey

The substantive point of this paper is to show how a concrete, local case, the Ungarinyin lative, has developed a secondary, grammatical function as the marker of certain kinds of intransitive subjects,[1] and may be developing tertiary, textual functions as a kind of 'paragraph marker'. I will compare two possible interpretations of this functional partition, one of which posits formal homophony between two or more distinct cases, and the other of which posits two or more related functions for a single case. I will argue in favour of the latter approach.

Ungarinyin is an Australian Aboriginal language, originally spoken in the central part of the Kimberley district of Western Australia.[2] There are currently about 200 speakers, mostly at Mowanjum, near Derby.

Case relations in Ungarinyin are signalled in two ways: by postpositions and by verbal cross reference. The following example illustrates the latter:

(1) yilala gad andoni
children leave 3PL.OBJ.-3SG.(m)SUBJ.-*act upon*-PAST
he left the children

Neither the word order nor the form of the noun phrase by itself provides any indication of whether the children are doing the leaving or being left. Instead, the agent-patient relations for the clause are signalled, as in most of the non-Pama-Nyungan languages of northern Australia, by gender- and number-specific pronominal prefixes on the verb. Most Ungarinyin verbs are phrasal, consisting of a non-finite verbal word followed by an inflected auxiliary. In this example, the auxiliary is a transitive one, the pronominal prefixes of which specify third person plural object and third person singular subject.

Examples (2) and (3) illustrate the other way in which case relations are signalled in Ungarinyin: by nominal postposition.

(2) Wiyidngu andumarn Wera-yu
man's name 3PL.OBJ.-3SG.SUBJ.-*act upon*-PRES. man's name-LATIVE
Wiyidngu takes them to Wera.

(3) jowad awani Garnan-garnan-ju
hop 3SG.(m)SUBJ.-*fall*-PAST place name-LATIVE
He hopped down as far as Garnan-garnan.

In (2), Wera, the man to whom Wiyidngu takes the things, is marked with one of the eight Ungarinyin case postpositions, the lative, which has two allomorphs:

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-yu after vowels and -ju after consonants. The local meaning of the lative can be glossed as *motion to* or *as far as.*[3] Example (3) shows the lative serving a similar local function in a clause where the verb is intransitive.

The formal difference between these two methods of case marking - verbal cross reference and nominal postposition - nicely reflects a functional hierarchy: the grammatical, or syntactic case relations are shown by the former method, and local or other 'concrete' relations by the latter. In general these two case-marking methods in Ungarinyin are mutually exclusive: cross-referenced NPs do not occur with (non-zero) case postpositions.

There is just one exception. One of the eight case postpositions - the lative one exemplified in (2) and (3) - sometimes occurs on cross-referenced NPs. Examples are given in (4)-(7), which show this postposition on intransitive subjects.

(4) abuwun-ju durlwurrangga
harpoon-LATIVE *break* 3SG.(m)SUBJ.-*go*-PAST
The harpoon broke.

(5) ngabun-ju rdol wangga
water-LATIVE *burst forth* w-class SUBJ.-*go*-PAST
The water burst forth.

(6) ngiyamad-ju barij wi
my kidney(s)-LATIVE *rise* w-class SUBJ.-*be*-PRES.
My kidney rises. (idiom for *I'm delighted*)

(7) ngala-yu juwarra burrinyi
animals-LATIVE *come out* 3PL.SUBJ.-*be*-PAST
The animals popped out (of the white egret's burst stomach).

In examples such as these, the -yu ∿ -ju postposition seems not to have its usual local meaning. What meaning does it have? A clue is perhaps provided by one of the other non-local uses of this case - in inchoative and factitive constructions, as illustrated by (8)-(10).

(8) burradi malwa-yu minyi
their livers m class-*bad*-LATIVE m class SUBJ.-*be*-PAST
Their livers become upset.

(9) warndij woni ala-yu
make w class OBJ.-3SG.SUBJ.-*act on*-PAST *his home*-LATIVE
He made it (the rock, mentioned in the previous clause) *into his home.*

(10) ngala-yu warndij irriwingga
bird-LATIVE *make* 3SG.(m)SUBJ.-DEF.SUBJ.-*act on*-REFL.-PAST
The one I was talking about made himself into a bird.

Example (8) is a standard Ungarinyin inchoative clause, which uses the verb root /y_2i/ *to be* in construction with a lative-marked complement NP which specifies what the referent of the subject NP has *become*.

Examples (9) and (10) are factitive clauses, with the verbal particle warndij plus the auxiliary verb /w_1u/, and a lative-marked, complement NP which specifies what the referent of the object NP is being made into. Although -yu ∿ -ju

cannot be said to be serving a 'local' case function here, its use in these constructions can be understood as a kind of "grammatical metaphor" (Halliday 1985: ch.10) which is based on its local sense. If the process of becoming something, or being made into something is metaphorically constructed as a kind of *movement* to that new state of being, a local case which normally marks the terminus of motion will be an appropriate case for marking the NP which specifies what the thing has *become*, or been *made into*. (Note in this regard that the use of the English preposition *into* to mark factitive complements suggests a similar metaphoric construction.)

This use of the lative postposition in inchoative and factitive constructions seems to provide a synchronic clue, and has perhaps been the diachronic pathway, to its use on intransitive subjects, such as those in (4)-(7). For one thing they have in common semantically is that the referent of the lative-marked NP undergoes a change of state as a result of the action described by the verb. So a local, lative case is being used in certain environments as what Hjelmslev (1935) calls a *translative* case - one which marks a change of state.[4]

In all attested uses of the lative on intransitive subjects in my texts, it seems to serve this translative function rather than the more concrete lative one found elsewhere.

Given this range of functions served by a single postposition, what are we to make of the relationship here between form and function? One possibility would be to say that the Ungarinyin lative and translative are simply two different cases, with homophonous case forms. This would appear justified on formal grounds as well as functional ones, since the lative and translative postpositions occur in morphosyntactically distinct environments - the latter on NPs which are cross-referenced on the verb as intransitive subjects (which are usually clause initial, as in examples (4)-(7)) and on non-cross-referenced, complement NPs in construction with certain specific verbs in inchoative and factitive clauses, and the former on other non-cross-referenced NPs. Similar formal criteria - co-occurrence with transitive versus intransitive verbs, for instance - are often taken by Australianists nowadays as evidence for distinguishing between ergative and instrumental 'cases' where the desinences themselves are identical, as they often are in Australian languages (see, e.g. Dixon 1972:93-95; 1980:303; Haviland 1979:47-48; Crowley 1981:165; Breen 1981: 307) - this in contrast to an earlier tradition in which one spoke of a single 'operative' case (Capell 1956:63-65). In order to be consistent with the more recent view of the ergative and instrumental, one would seem to have to take a 'one form - two case' approach to the Ungarinyin lative and translative.

Another approach - which I prefer - is to take these morphosyntactic criteria as evidence for a distinction, not between cases, but between functions served by a single case. This is the approach propounded by Kuryłowicz (1960[1949]), who developed rigorous criteria for distinguishing between primary and secondary case functions. In common with most case theorists (cf. Foley and van Valin 1984:77-80), Kuryłowicz distinguished between grammatical or core 'syntactic' cases and concrete 'adverbial' ones. He then went on to show how a grammatical case could serve secondary, adverbial functions and vice versa. For instance, the accusative case in ancient Indo-European languages was a syntactic case which served such secondary functions in specific environments. When used in its primary function - to mark the direct object of a transitive verb - it subcategorised the verb only for transitivity. But accusative-marked nouns could also occur with some intransitive verbs, where it subcategorised the verb, not syntactically, but semantically: 'accusative of goal' with verbs of motion;

'accusative of temporal extension' with durative verbs, etc. Conversely, the primarily adverbial instrumental case developed various secondary syntactic functions. In Slavic languages, for example, it is occasionally used to mark a direct object, but only with verbs of particular semantic classes: verbs of shaking, brandishing, etc. In this secondary, grammatical function, the instrumental loses its usual semantic content and becomes what Kuryłowicz calls a "combinatory variant" of the accusative.

This is comparable to what happens with the Ungarinyin lative. When used on intransitive subjects it becomes, as it were, a combinatory variant of -Ø, the usual postposition for all grammatical cases in Ungarinyin. When used in this way, the -yu ∿ -ju postposition loses its local case content, but subcategorises the verb semantically in a way that the zero postposition does not. Thus there is good evidence here as in the Indo-European example for distinguishing between primary 'adverbial' functions and secondary, grammatical or syntactic ones served by a single case.

Before I can say why I favour doing so, I must say something more about a feature of Kuryłowicz's approach which I do *not* consider to be an advantage: the categorical dichotomy he sets up between syntax and semantics (which has of course also been a prominent feature of some more recent theories of grammar). For Kuryłowicz, the 'transitivity' for which the verb is subcategorised by the use of the accusative case, and the 'direct object' relation signalled by the latter are purely formal, semantically empty categories. When one considers the range of processes and relations predicated by a single class of formally 'transitive' verbs or clause types in a given language (e.g. English *I like it* versus *It pleases me*) such a view may well seem justified. But we now know through the work of Hopper and Thompson (1980), and an independent, interestingly convergent study by Tsunoda (1981), that there are good cross-linguistic grounds for regarding some uses of grammatically 'transitive' categories as more basic or central than others. Where alternative formulations are available, clauses such as *I like it* and *It pleases me* can now both be regarded as 'incongruent' (in the sense of Halliday 1985: ch.10) relative to such 'cardinal transitive' clauses as *I ate it up*. The choice between *I like it* and *It pleases me* is a *meaningful* choice, partly because the source of my pleasure is being treated like a canonical 'patient' or 'goal' in the first clause and like a canonical 'agent' or 'actor' in the second. Both are instances of what Halliday (1985: ch.10) calls "grammatical metaphor", a notion which I find especially useful in combination with a theory such as that of Hopper and Thompson, which provides a solid empirical basis for determining (where alternative constructions are available within a given language) which are the relatively 'congruent' formal-functional alignments upon which the 'metaphorical' ones are based.

From this point of view it is no longer necessary or appropriate to regard syntax as semantically empty: the accusative case has a meaning in 'cardinal transitive' clauses which - while not invariant across its range of uses in formally transitive clauses - nonetheless provides a kind of prototype in relation to which the other, less congruent uses can be understood.

But Kuryłowicz's categorical dichotomy between syntax and semantics seems to me not to be a logically necessary feature of his approach to case. Indeed, the main reason why I favour the latter over the 'homophonous form' approach is that it encourages us to ask why some *particular* range of syntactic and local or adverbial functions should be realised by a common form - a question which leads straight to considerations of semantic relatedness. Such relatedness seems patent with respect to at least some of Kuryłowicz's own examples, viz. the

'accusative of goal' with intransitive verbs in some Indo-European languages, or the secondary, grammatical use of the instrumental to mark the agent of a passive verb. It seems equally obvious that there is a semantic basis for the widespread conflation of instrumental and ergative in Australian languages. And it is just by distinguishing - as per Kuryłowicz - between primary and secondary functions that we can, I think, show the semantic link between lative and translative in Ungarinyin.

So far, I have discussed the use of lative, or what we could now call lative-translative -yu ∿ -ju on intransitive subjects and on non-cross-referenced NPs which are 'adverbial' adjuncts in Kuryłowicz's sense. The same postposition also occurs on NPs which are transitive subjects or objects. There are not enough examples of this in my texts[5] for me to be as clear about its function as I am regarding intransitive subjects (which is why I have not brought it into the discussion thus far) but it does seem clear that: 1) it never serves a lative function; 2) in at least some such cases, it is serving neither of the two functions discussed above. Example (11) shows -yu on a transitive subject - a first person singular pronoun the referent of which is neither the terminus of any actual movement nor the undergoer of any change of state.

(11) nyangan-nga gadug winyo amerera
you-only cut w class OBJ.-*act on*-IMP. M.SUBJ.-*say*-PAST-1SG.D.B.
"You cut it (my hair)" he said to me.

ngin-ju gadug wungoninangga
I-LATIVE *cut* w-class OBJ.-1SG.SUBJ.-*act on*-PAST-3SG.D.B.
So I cut it for him.

The 'lative' postposition here seems to be serving neither its primary, local function nor its secondary, syntactic one, but rather a tertiary, textual function. The referent of ngin here is not the terminus of any movement within the narrated event, but ngin *is* the terminus of a certain movement in the flow of discourse. This is an excerpt from a story about a European who abandoned his family and has been living by himself in the bush. The first line of (11) is the last line of a conversation between that man and Alanbara, the teller of the story, who had found the man. It seems that ngin in the next line is marked with the lative postposition in order to signal a shift from the reporting of that conversation to a narrative focus on Alanbara, and his role in bringing the man back to town. Some of my Ngarinyin teachers (including Alanbara), when trying to gloss the sense of -yu ∿ -ju in instances like this have made use of spatial metaphors: *it comes over to me now*, etc.

Example (12) shows -ju on a transitive object, where it seems to serve the same textual function.

(12) ni wurra mungonyirri ngin, garri, nguma,jamayendu mejerri-nga, jirri nyaali arda-ya burdu
I'm thinking about those two stone axes, the little one and the big one.

aw wurlan-ju gana wara wanyumarn
oh word-LATIVE *that get* w-class OBJ.-1PL.EXCL.SUBJ.-*take*-PRES.
So then we receive the news.

As in example (11), the 'lative' marker here occurs on the first word of a clause which begins what we might call a new narrative 'paragraph'. The speaker has been talking about events and thoughts which are quite unrelated to the

'news' in question, except that the axes presumably belonged to the man about whom they got the news (that he was being sought by the police).

The 'lative' postposition seems also to serve this textual function on some words which are not cross referenced NPs. Perhaps the most common usage of this kind is on the w-class anaphoric pronoun di. Ungarinyin expressions referring to time and to language or speech are generally of the w-class, so di without an accompanying head noun can mean something like English *then* or *at this/that point in the narrative*. Often it is used in that way, with the -yu postposition, at the beginning of new narrative episodes or expositional 'paragraphs', as in the last line of example (13):

(13) ngayag ngunumangalu bolijman-gu-nga
He asked me about the policeman.

aga buluba nyinani
"Oh, he was looking for you" [said by Alanbara in reply]

amini yej-ju debarr angga,
completely laugh-LATIVE *die* 3SG(m)SUBJ.-*go*-PAST
He altogether died laughing.

yej-ju debarr urrangga amini
laugh-LATIVE *die* 3SG(m)SUBJ.-DEF.SUBJ.-*go*-PAST *completely*
The one I was talking about died laughing, totally.

a a i orait ama
"O.K., he's all right" he said.

di-yu anjaburan nyinayirri yaminggi amerera
then-LATIVE *what time* 2SG.SUBJ.-*go*-CONT. *west* 3SG(m)SUBJ.-*say*-PAST-1SG.D.
So then he asked me "when are you travelling westward?"

Example (13) above is an excerpt from the same story by Alanbara from which (11) and (12) are taken. The fugitive has established contact with Alanbara and has been telling him about how he has been living off the land, wearing nothing but a naga or *cockrag*, and starting his campfires with a fire drill. They share food together. After the exchange about the policeman (in the first five lines of (13), the fugitive changes the subject, and foreshadows the end of his exile in the bush, when he asks Alanbara what time he is leaving. (The answer is "next month", whereupon the fugitive arranges to go with him.) It is at just such junctures that one often hears di-yu, with the lative postposition, as the last line of (13).

The relationship between this textual use of the lative and its local function is similar to the relationship between what Halliday (1985:305; see also Halliday and Hasan 1976:238-271) calls 'internal' and 'external' conjunction, the former referring to the unfolding of the discourse itself and the latter to relationships among processes or events referred to in the discourse.[6] The lative in this textual function is partially complementary to another Ungarinyin discourse device, the 'definite subject' marker which is exemplified in (10) and (13) (line 4) above, which can be used for reverting to an old discourse topic, as opposed to introducing a new one.

Unlike the distinction between lative and translative uses of -yu ∿ -ju, the distinction between its 'internal', textual functions and its 'external' lative ones may not be a categorical one. It may be that its function is always purely textual when it occurs on NPs which are cross-referenced as transitive subjects or objects as in (11) and (12), but it also seems to serve this textual function

on some non-cross-referenced words, as in (13), where it occurs not only on di, but also on a word which is not even a noun - the verbal particle yej *to laugh.*[7] And on some (trans)lative-marked intransitive subjects, the postposition is perhaps simultaneously indicating a change of state in the referent and of focus in the discourse. This may be true of (7), for example, where the animals, who had previously disappeared as participants in the narrated event when they were eaten by the greedy white egret, suddenly reappear as participants at the same time he perishes with a burst stomach. Such simultaneity of internal and external function is sometimes also found with English conjunctions (Halliday and Hasan 1976:245).

If the translative use of the lative is to be understood as a kind of grammatical metaphor, this 'internal' use is understandable as a kind of *textual* metaphor, whereby the 'space' in which the discourse unfolds is treated like the space in which the narrated events take place. The systematic relationships among all these functions are better thought about by eschewing notions of homophony (which is too easily assumed to be accidental homophony) and treating them as realised by a single case category.

NOTES

[1]The terms 'intransitive subject', 'transitive subject', and 'object' are used here in a language-specific way to refer to NPs which are cross-referenced by pronominal prefixes within three form/order classes on the Ungarinyin verb, as per Rumsey 1982:74-122.

[2]For further details concerning Ungarinyin grammar, and glossing conventions and abbreviations used here, see Rumsey 1982. The spelling of Ungarinyin examples in this paper is in practical orthography, as per Blake 1981.

[3]Ungarinyin also has an allative case category indicating *motion towards*, and a dative case with some local functions which partly overlap with those of the allative and lative. For details, see Rumsey 1982:63-69. That discussion partly anticipates the present analysis of the Ungarinyin lative, but is superceded by it in some details - especially with respect to the *textual* functions of the lative.

[4]The attribution of a 'change of state' is probably not all that these translative-marked intransitive subjects have in common semantically. There is probably also an attribution of lack of control by the referent over the process in question. All are semantic 'patients', which would canonically take 'objective inflection' in a split-S marking language such as the Siouxan, Caddoan, and Muskogean ones discussed in Merlan 1985. But the objectively-inflecting class of verbs in those languages tends also to include 'stative' ones, which do *not* take translative-marked subjects in Ungarinyin.

[5]I have found elicited sentences to be unreliable as a source of data on the translative and textual functions of -yu ∿ -ju, so further elucidation of the matter will have to await the availability of more text material.

[6]See Rumsey 1982:130-131 for another Ungarinyin form which has both internal and external functions.

[7]The speaker of (13), Alanbara, comes from the extreme eastern reaches of Ngarinyin country, and is a native speaker of the Guwij or Orla dialect, which may differ from Mowanjum Ungarinyin (see Rumsey 1982:vii-viii) in the extent of internal textual use of -yu ∿ -ju. Alanbara in particular is probably the

most extravagant user of it among the 20-30 people from whom I have texts. But at least *some* of the textual uses are widespread. For instance di-yu as used in (13) is pervasive in all the narrative discourse I have recorded, regardless of dialect.

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SPREADING THE WORD:
FIJIAN MISSIONARIES IN THE NEW GUINEA ISLANDS

Jeff Siegel

1. INTRODUCTION

Tok Pisin has a small number of words which are thought to be of Polynesian or Fijian origin (Mihalic 1971). It is generally believed that these words were introduced by Fijian and Samoan missionaries from the Methodist Missionary Society, who worked in the New Guinea Islands starting in 1875. For example, both Mühlhäusler (1978) and Mosel (1980) both mention the influence of these missionaries on Tok Pisin, as do much earlier sources, such as the *Rabaul Times* (13/3/1931):

> From the Samoan we have **malolo** (to rest), and from the Fijian the Methodist missionaries brought us **lotu** (the Christian religion), and **Marama**, which designates a white woman.

The specific area in which the missionaries worked was in the Bismarck Archipelago around Rabaul, where the languages of the Patpatar-Tolai subgroup are spoken—the Gazelle Peninsula of New Britain, the nearby islands of Watom and the Duke of York group, and southern New Ireland. Before the missionaries arrived, the people of this area had already come into extended contact with outsiders, such as European whalers and traders. Beginning in 1879, large numbers went to Samoa as plantation labourers and later returned, bringing with them a knowledge of pidgin English (Mühlhäusler 1978, 1979; Mosel 1979, 1980).

Therefore, contacts with other sources besides the missionaries may have resulted in certain words coming into Tok Pisin and some Patpatar-Tolai languages. Mühlhäusler (1978:91) has already shown that the use of many of the Polynesian words (such as **malolo**) may have been spread by labourers returning from Samoa, rather than by the missionaries. This leaves words of supposed Fijian origin.

The purpose of this short study is to clarify to what extent contact with Fijian has actually influenced Tok Pisin and one language of the Patpatar-Tolai subgroup, Tolai (also known as Kuanua and by the name of one of its dialects, Raluana). The study first describes contact between New Guinea Islanders and Fijians. Then, it examines supposed Fijian words in Tok Pisin to see if they actually come from Fijian, and discusses other possible lexical influences from Fijian. Next it deals with Fijian loan words found in published materials on Tolai. The study ends with some speculations about how Tok Pisin was influenced indirectly by Fijian.

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2. CONTACT BETWEEN FIJIANS AND NEW GUINEA ISLANDERS

It is well known that Fijian missionaries worked in the New Guinea Islands, but just how many worked there has not been documented. In addition, it is not so well known that hundreds of New Guinea Islanders were taken to Fiji as plantation labourers in the 1880s. The statistics of these two aspects of contact are described here.

2.1 Missionaries from Fiji in the New Guinea Islands

The first of the Pacific Islander Methodist missionaries to the New Guinea Islands arrived on Duke of York island in 1875. They comprised three single men and six married couples from Fiji and two couples from Samoa. Seven more Fijian men arrived the next year. By 1877 there were seven mission stations on Duke of York, eleven on the Gazelle Peninsula of New Britain, and five on New Ireland (Danks 1914).

In 1878, eight men, seven women, and eight children from Fiji and one man from Tonga left Fiji for the New Guinea Islands (CSO 1546/1878).[1] In 1882 permission was given by the Fiji government for twelve more married men and their families to leave as missionaries (CSO 2828/1882).

In January 1888, it was reported that a total of 33 Fijian missionaries, 20 of them married, were still in the New Guinea Islands, and that since 1878 the following had returned to Fiji: 23 men, 12 of them with wives and children, and seven widows.[2]

Later figures are more sketchy. A list from the Native Office shows that from 1891 to 1902 a total of 91 men, 38 women, and 14 children went from Fiji to the New Guinea Islands as missionaries.[3] Another list in the same file shows an additional four men before 1910. Therefore, if the earlier figures are added, the total number of adults who went from Fiji to the New Guinea Islands from 1875 to 1910 was approximately 158 men and 77 women.[4]

Therefore, there was a substantial number of Fijian missionaries living in villages in the Patpatar-Tolai language area for over 35 years. Their status in the villages as teachers made it quite likely that words which they introduced would become accepted (see Reed 1943:278 quoted in Mühlhäusler 1978:112n).

In addition, two of the early European missionaries who worked in the New Guinea Islands knew the Fijian language—George Brown, who went with the first group in 1875, and Benjamin Danks, who arrived in 1878. Both men also learned the Duke of York language and produced religious materials in it (as well as a dictionary and grammar), and Danks also made the first scripture translations into Tolai in 1885 (Mosel 1979:168). They used Fijian books as a basis for readers and other materials in these languages (Danks 1933:219, 225), and it seems certain that they used some Fijian words when there were no local equivalents.

2.2 Labourers from the New Guinea Islands in Fiji

Fiji took part in the Pacific labour trade along with Samoa and Queensland from 1864 until 1911. The New Guinea Islands were an important recruiting area for Fiji for only a three-year-period from 1882 to 1884. During this time 1,518

New Guinea Islanders became indentured labourers in Fiji. (See Siegel 1985 for details.) The numbers from the different islands are shown in Table 1:

Table 1: Contract labourers in Fiji from the New Guinea Islands

	1882	1883	1884	TOTAL
Bougainville	15	5	92	112
Buka	209	93	105	407
Nissan			60	60
Kilinailau	31			31
New Ireland		212	181	393
New Hanover		110	1	111
Simberi			36	36
Lihir			8	8
New Britain	178	127	6	311
Duke of York	33			33
Watom	1	15		16
TOTAL	467	562	489	1518

Many of these labourers died on the plantations. In fact, in 1882 the death rate among the New Guinea Islanders on plantations in the Rewa area was 54 per cent (CSO 1482/1882). However, there is evidence that approximately half of the total number of New Guinea Islanders who went to Fiji eventually returned home. The figures for the numbers returned from 1886 to mid-1888 are given in Table 2 (based on CSO 3295/1888):

Table 2: New Guinea Islands labourers returned from Fiji

Bougainville and Buka	260
Nissan	30
Kilinailau	7
New Ireland	203
New Hanover	83
Simberi	18
Lihir	2
New Britain	170
Duke of York	24
Watom	10
TOTAL	807

As Fijian or Pidgin Fijian was the language used on Fiji's plantations (Siegel 1982), it is possible that the returned labourers also introduced some Fijian words into the New Guinea Islands, or at least helped to establish the use of some of the words introduced by the missionaries.

3. FIJIAN WORDS IN TOK PISIN

The following are Tok Pisin words which Mihalic (1971) gives in his dictionary as being of Fijian origin:

dinau	*debt*
kanaka	*native*
laplap	*loincloth*
lotu	*(Christian) worship*
talatala	*a Protestant (preacher)*
taro	*the taro, a species of Colocasia*

However, three of these words are not found in Fijian: **kanaka** is most probably from Hawaiian, **laplap** from the Samoan **lavalava** (Mühlhäusler 1979:193) (the Fijian is **isulu**), and **taro** from Samoan (Fijian **dalo**). Two of the others are almost certainly from Fijian: **dinau** and **talatala** (Fijian **italatala**).

Mühlhäusler (1978:91) notes that the word **lotu** was 'brought to the Duke of York and Blanche Bay area by Fijian missionaries in the 1880s'. Although **lotu** is found in Fijian, it is also found in Tongan and Samoan, and therefore may have been first introduced by returning labourers.

There are several words such as **lotu** which occur in different indigenous Pacific languages as well as in Tok Pisin and other varieties of Melanesian Pidgin English (Vanuatu Bislama and Solomon Islands Pijin). These words for newly introduced customs, animals, and objects may have been spread by traders, returning plantation labourers, and also missionaries. Some of these 'pan-Pacific' items are shown in Table 3 below (those no longer in use are marked with an asterisk):

Table 3: Pan-Pacific words in Tok Pisin and other languages

English	Samoan	Tongan	Fijian	Tok Pisin	Bislama	Pijin
worship	lotu	lotu	lotu	lotu	-	lotu
sheet metal	-	kapa	kava	kapa	kava	kapa
cat	pusi	pusi	pusi/vusi	pusi	puskat	pusikat
duck	pato	pato	pato	pato	(dakdak)	(dakdak)
bull, cow	pulumakau*	pulumakau*	bulumakau	bulmakau	bulamakao*	bulumakao
turkey	pīpī	pīpī	pipi*	pipi	pipi*	-
warship	-	manuoa	manuā	manua	manowo*	-

Two of these, **lotu** and **pipi** *turkey*, probably origianted in Tonga and/or Samoa.[5] The word **pato** *duck* appears to be of Portuguese origin and, like *piccaninny* and *savvy*, it may have been part of a Nautical Jargon which was spread around the world (see Clark 1979). The words of English origin, **kapa** from *copper*, **pusi** from *pussy*, **bulumakau** from *bull and cow*[6] and **manua** from *man-of-war*, may also have been spread by sailors and early traders.

Therefore, these words in Tok Pisin have a number of possible sources: visiting sailors, traders, Fijian missionaries, and returned labourers from either Samoa or Fiji. There is one word in the animal category, however, which appears to be imported from Fiji: this is Tok Pisin **me** or **meme** *goat* (Fijian **mē**). The word

in Samoan is **oti** and in Tongan **kosi**. The other varieties of Melanesian Pidgin English also have different forms: Bislama **nani** and Pijin **nanikot**.

There are many other words in Tok Pisin which are widespread in Oceanic languages, including Fijian. The languages of the Patpatar-Tolai subgroup, especially Tolai, are the most likely source for these words, as shown by Mosel (1980), but contact with Fijian may have reinforced their use. Some of these words (along with a possible donor language or dialect as listed by Mosel) are given in Table 4:

Table 4: Tok Pisin words possibly reinforced by Fijian

Tok Pisin	English	NGI languages	Fijian
bembe	*butterfly*	Tolai: bebe	bebe
kuka	*crab*	Tolai: kuka	kuka
lang	*fly*	Mioko: lang	lago
liklik	*small*	Mioko: liklik	lekaleka
mal	*loin covering*	Tolai: mal	malo
malumalu, malmalum	*soft*	Molot: malumalum	malumalumu
muli	*citrus*	Tolai: muli	moli
susu	*breast, milk*	Pala: susu	sucu
tambu	*forbidden, sacred*	Tolai: tabu	tabu
tumbuna	*ancestor, grandparent*	Tolai: tubu-na	tubu-na

There are other Tok Pisin words not listed by Mosel that could also have been reinforced by Fijian, or perhaps were taken directly from it. These include: **bilo** *half coconut shell*, now obsolete (listed in Mühlhäusler 1979:225), and **taunam** *mosquito net* (Fijian **taunamu**), said by Mihalic (1971) to come from an unspecified New Ireland language. This word is also found in Gela and Arosi (Solomons) and in Mota (Vanuatu). It could actually be a loan from Fijian in these languages as many of their speakers worked in Fiji. The other word, **bilo**, is an entry in Lanyon-Orgill's Raluana (Tolai) dictionary (1960), but it could also be a loan from Fijian, as it is marked as being restricted only to New Britain dialects.

Three other words quite widespread in Oceanic languages are: **sangana** *thigh, groin* (Fijian **saga-na** *his thigh*); **salat** *stinging nettle plant* (Fijian **salato** *nettle tree*); and **talinga** *mushroom* (Fijian **daliga**).

In summary, many Tok Pisin lexical items correspond to Fijian ones, but they also may have been derived from other contacts. Only the following items can be said with any certainty to have come into Tok Pisin solely as the result of contact between New Guinea Islanders and Fijians:

dinau	*debt*
marama	*missionary's wife*
me(me)	*goat*
talatala	*missionary teacher*

Of these, **marama** and **talatala** are no longer in use. Therefore, the individual contribution of Fijian to present-day Tok Pisin appears to be a mere two words.

4. FIJIAN WORDS IN TOLAI

The contribution of Fijian to Tolai, however, is greater. Lanyon-Orgill (1960) notes that several words in Raluana (Tolai) are from Fijian. These words and his definitions are as follows (note also that he generally uses Fijian orthography):

Tolai		Fijian
buketevatu	n. *dropsy;* adj. *dropsical*	buketevatu
karavau	*cow or bull*	karavau*
marama	*lady*	marama
matanitu	*kingdom, rule, government* (?)	matanitū
pakamau	*marriage, wedding*	vakamau
radi	*queen*	radi
talatala	*white missionary, minister*	italatala
timo	*pumpkin*	timo *Cucumis acidus (Cucurbitaceae)*
viti	*Fiji*	viti
vitvit	*teacher* (perhaps from *Fiji*?)	
votovoto	*wages, salary*	ivotavota *share*
vukavuka	*person with leprosy*	vukavuka *leprosy*
vuravura	*the world, earth*	vuravura
waqa	*canoe, outrigger canoe*	waqa

Other Tolai words probably from Fijian have been mentioned above: bilo *cup* and me *goat*, which Lanyon-Orgill also marks as 'an introduced word'.[7]

Some pan-Pacific items (see Table 3) are also found in Tolai: lotu *(Christian) religion*, kapa *sheet metal*, puti *cat*, pato *duck*, and bulumakau *cattle*, marked by Lanyon-Orgill as 'introduced from Tonga'. Mosel (1979:173) says that puti, pato, and bulumakau are loan words in Tolai from Tok Pisin, but these and the other pan-Pacific words in Tolai could result from a number of sources, including contact with Fijians.

Mosel (1979:175) lists seven Fijian loan words in Tolai, all used by the churches:

dinau	*debt*
lotu	*church*
matanitu	*government*
kalou	*God*
marama	*minister's wife*
talatala	*minister*
tui	*king*

She says that the first three are used by both Catholics and Methodists, but the last four are used by Methodists only.[8]

The large proportion of the Fijian loans in Tolai associated with religion and Bible translation is evidence of the importance of the missionaries in introducing Fijian words into the New Guinea Islands.

5. CONCLUSION

Although the number of Fijian loans in Tolai is still not very large, it is greater than the number in Tok Pisin. In addition, all the Fijian words in Tok Pisin are also found in Tolai, and are associated with the churches. These

facts imply that the Fijian words in Tok Pisin were indeed introduced by the missionaries but that they came into the language via Tolai. Of course, this is difficult to substantiate, but it is in accordance with other sociolinguistic facts.

First, although the missionaries first communicated with the local population in a form of pidgin English (Danks 1914:514), it appears that they soon learned and used the local languages, and that they had some negative attitudes towards pidgin. Second, Tolai was made the church lingua franca in 1896 and was understood in the Duke of York islands and southern New Ireland (Mosel 1979: 168). Third, the Tolai themselves had negative attitudes towards pidgin and avoided speaking it (Mosel 1979:163).

Finally, examples given by Mosel show that other words used first by missionaries in Tolai later came into Tok Pisin. One is the **pekato**, introduced by the Catholics to mean *sin* (Mosel 1979:170). Another is Tok Pisin **matmat** *cemetery*:

> **Matmat** is shortened from Duke of York **tama na matmat** or Tolai **pia na matmat**, both lit. *place for the dead*, which themselves were probably an invention of the foreign missionaries. The natives did not know cemeteries before, and, though reduplication is a device to derive nouns from verbs, it is unlikely that **tama na matmat** and **pia na matmat** were invented by natives, because in both languages the noun derived from **mat** *to die* is **minat** meaning *death* and *corpse*.

In conclusion, Fijian missionaries did spread the word to the New Guinea Islands, but they did so mainly through Tolai and other local languages, and not through Tok Pisin. Therefore, the Fijian contributions to Tok Pisin are very minor ones, and second-hand.

NOTES

[1]Sources from the Fijian Colonial Secretary's Office official correspondence (in the National Archives of Fiji) are hereafter abbreviated CSO, followed by minute paper number and year.

[2]Letter from J. Rooney, in Methodist Missionary Society of Australasia records, Fiji District (hereafter abbreviated MMSA), correspondence, file F/3/(b) in the National Archives of Fiji.

[3]MMSA miscellaneous papers M/28.

[4]A total of 67 men, 40 women, and 14 children also went to Papua, the British part of New Guinea and nearby islands, and 19 men, 10 women, and 2 children to the British Solomons (MMSA miscellaneous papers M/28). Note that the grand total of figures for all three areas does not match that of later official correspondence (CSO 740/1912) concerning the high death rate (over 30 per cent) of the Fijian missionaries.

[5]It is doubtful whether **pipi** was ever in wide use in Fiji, but it is found in Hazlewood's (1850) dictionary of Fijian and used in the Katafaga Journal, written in Fijian in the 1880s (in the National Archives of Fiji).

[6]Although it has been thought that this word originated in Fiji, it probably originated in Tonga, and was reported in use there as early as 1830 (Schütz 1978:4; Clark 1979:31).

[7]Paul Geraghty (personal communication, April 1985) has pointed out several other words from Tolai which might be of Fijian origin:

Tolai		Fijian
boro	*chilli, capsicum*	boro
iabia	*arrowroot*	yabia
ikut	*scissors*	ikoti
kula	*wool mat fringe*	kula
laglag	*glory, pride*	lagilagi
lulul	*shake hands*	lululu

[8]Beaumont (1979) also notes three of these as Fijian loans in his short vocabulary of Tigak (New Ireland): kalou, lotu, and talatala.

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ON THE GEOGRAPHICAL LOCATION OF EARLY AUSTRONESIAN

Ülo Sirk

For a long time now the attention of linguists, anthropologists and historians has been directed to the unusual picture of distribution of the Austronesian (AN) languages scattered over the islands of two oceans. Professor S.A. Wurm has more than once contributed to the world-wide discussion of the probable ways of the spreading of these languages (Wurm 1967; Wurm, Laycock, Voorhoeve, Dutton 1975).

In this paper, I do not intend to present any survey, or evaluation, of previous hypotheses concerning the AN homeland and migrations. A brief critical survey of such works published up to the early 60s was made by Anceaux (1965). His conclusions are certainly worthy of attention. Anceaux writes, in particular:

> The history of the migrations of the Austronesian-speaking peoples is rather intricate. There was not just a single movement, but a complicated series of greater and smaller changes, forward and backward movements, the more recent ones obscuring the evidence of the older ones. (1965:428)

This thesis is essentially confirmed by the knotty interlacement of genetic and areal ties observed by linguists in quite a number of instances in the history of some particular groups of AN languages. In my opinion, we must agree with Anceaux at this point. What follows from the vague picture of migrations is a complicated picture of unstable and ephemeral homelands (centres of dispersion), which are attributable to language groups at various levels.

Although AN comparative linguistics has made considerable progress during the last decades, nevertheless the highest levels of the AN family-tree model are still too poorly understood for a secure confrontation with the highly complicated pattern of migrations and homelands. Hence, in my opinion, the time is not yet ripe for posing the problem of location of a territory which can be rightfully called the *AN homeland* (cf. the similar assertion made by Anceaux 1965:427). However, the question may be looked at from another direction, namely: where did AN-speaking people live at certain early stages of the history of the language family? (That is, we need not endeavour to find out the ultimate centre of dispersion.)

The aim of this paper is to attempt the approach just outlined.

As the point of departure, I choose the discussion of the AN homeland problem by Dyen (1971). Dyen presents two lists of lexical items which are widely expressed in AN languages by reflexes of roots said to be assignable to Proto-Austronesian (PAN).

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The first list consists of 14 words connected with sea, and with water in general: *boat, giant clam, crocodile, eel, fish-poison, fish trap, octopus, oyster, paddle, ray (fish), shark, shrimp, Triton shell, sea-turtle.*

The second list is composed of 15 names of plants said to be tropical: *Alocasia, bamboo, banana, Barringtonia, Casuarina equisetifolia, coconut, Erythrina, ginger, Hibiscus, mangrove, Pandanus, sugarcane, taro, Terminalia, yam.*

Dyen evaluates these lists as strongly suggesting that "the homeland was in the tropics and was either insular or, if continental, coastal" (1971:10).[1]

In Dyen's second list, the objection can be raised that not all the plants included there are strictly tropical. Indeed the distributional areas of several taxa as defined by Dyen's glosses extend into the subtropics, and in two or three cases, even into the temperate zone (while bamboo (*Bambusoideae*), and yam (*Dioscorea*), reach as far north, respectively, as Sakhalin and the Amur region). No doubt the uncertainties arising from the incomplete fit of the distribution of several items with the boundaries of the tropic zone can be reduced to some extent if one carefully compares various lines of evidence (plant systemics, plant geography, characteristic tendencies in coining vernacular names of plants, ethnobotany, and so on). Any fundamental analysis of this kind would of course require cooperation of experts in various fields. The cursory remarks I am about to make here may none the less be of some interest.

On the whole, it is difficult to account for shifts of vernacular names from one plant to another systematically close, or similar in some respect. For example, the AN words given by Dyen under the gloss *Hibiscus* apparently suggest that the root *baRu has referred to some tropical species of this genus, most likely to *Hibiscus tiliaceus*. However, there also exist subtropical species of *Hibiscus*. I do not see so far how one can disprove the possibility that *baRu might have denoted some of those species, and that is reflexes were transferred to *H. tiliaceus* (this shift should become understandable if we surmised migrations into tropic coastal areas). Similar problems arise in connection with ginger and banana. With *Casuarina equisetifolia*, however, the case is clearly somewhat different. Although the possibility cannot be denied in principle that the names reducible to *aRuSu might have been transferred from some other species of *Casuarina*, it is important to note that the non-tropical range of this genus is restricted to Australia and Tasmania, a region where AN-speaking peoples have certainly never lived.

Even if we discard bamboo and yam as insufficiently clear items, and count *Hibiscus*, ginger and banana with some caution, there remain nevertheless a sizeable number of plants evidently tied to the tropics.[2]

At the same time, the list under consideration can be further supplemented. Dyen's criterion for including roots in his lists is obviously their presence in both the Philippines-Western Indonesia-Madagascar area and in Oceania. Here are some more plants whose names in the AN languages meet this condition:

Artocarpus (at least two roots: *kuluR and *kamac/si);
Calophyllum inophyllum (*bitaquR);
Metroxylon (*Rumbia/Rambia);
Pterocarpus indica (*nara/naRa).

These plants are tropical.

On the same basis we can add the following to Dyen's first list:

barracuda fish (*qalu);
mangrove crab (*qalimaŋaw);

to paddle (*aluja);
another term for *boat*: *qabaŋ;
the root *namaw with meaning outlined by Blust (1980:114) as *sheltered water*.[3]

With such additions, only one half of the list points definitely to the sea, while the other half is ambiguous for the sea and freshwater regions. At the same time, the sea finds considerable support in the second list: note *mangrove, coconut, Barringtonia, Casuarina equisetifolia, Calophyllum inophyllum, Terminalia*;[4] in addition, *Hibiscus tiliaceus* generally tends to coastal regions, as does *Erythrina variegata*.

Summing up, we are led to admit that the AN vocabulary determined by the criterion specified above is indeed suggestive of the natural environments of a tropic sea coast.

Now we come up to a most intriguing question. Both the two lists as presented by Dyen in 1971, and the modifications proposed by me in this paper, disregard the evidence of the languages of Taiwan. But the crucial importance of these languages for understanding the earliest stages of development of the AN family can hardly be doubted, notwithstanding all the vagueness still persisting in the highest-level subgrouping (for arguments supporting this role of the Taiwan languages see Blust, particularly 1977 and 1982; Dahl 1973/1976; Harvey 1982). In view of this, I hold that by turning to Taiwan we shall be able to characterise, in the history of the AN family, another stage which antedates the stage discussed above. Accordingly, I introduce the following terms:

(a) for the stage discussed above - *Later Stage*;

(b) for the stage to be defined with the aid of the Taiwan languages - *Earlier Stage*.

Our Later Stage can be compared to Dempwolff's Uraustronesisch and to Blust's (post 1977) Proto-Malayo-Polynesian. The Earlier Stage is comparable to (even if not readily identifiable with) the PAN of those authors in whose opinion the deepest split or splits of the family tree are closely associated with the languages of Taiwan (either passing between them or separating them from the rest of the family).

The data from Taiwan languages available to me at present are insufficient for saying with confidence just how many items of the modified lists can be found in them.

From the items of the first list, at least the following ones are represented in Taiwan: *boat* *qabaŋ (various languages), *eel* *CuNa (various languages), *octopus* *(ku)R/riCa (Paiwan, Ami), *ray fish* *paRi (Siraya). We may add *fish-hook* *kawil on the evidence of Puyuma kawiran (cf. Malay kail, Rejang kewea). However, the strongest argument for the coastal, or near-coastal dwelling-place of the AN speakers at the Earlier Stage is the use of two AN roots *laHud *sea(ward)* and *Daya *land(ward)* for designating points of the compass. The same practice is widespread in other AN languages too. Compare:

	*laHud	*Daya
TAIWAN: Puyuma, Tamalakaw dial. (Tsuchida 1980)	rauz *east*	zaya *west*
Paiwan, probably Kułaław dial. (Tsuchida 1976)	lauz *seaward*	i-zaya *uphill*
Paiwan, Caovałi dial. (Ogawa, Asai 1935)	i̯lauz *east*	izaja *west*
Paiwan, Laliklik dial. (Ogawa, Asai 1935)	iʁauş *north*	izaja *south*
Pazeh (Tsuchida 1976)	rahut *west*	daya˥ *east (=mountain side)*
Sedeq/Taroko		daja *east* (Ogawa, Asai 1935); daya 'en haut, en amont' (Pecoraro 1977)
INDONESIA: Macassarese, Western (Lakiung) dial.	lau˥ *west*	raya *east*
Macassarese, Bantaeng dial.	lau˥ *south*	raya *north*
Buginese	ri-lau˥ *in the east*	ri-aja *in the west*
Malay	laut *sea* (also used in designations of the NW and NE points)	daya (used in the designation of SW)

If we turn to names of cultured plants, the following points merit special attention:

(1) The roots *pajəy and *bəRas[5] both referring to rice (respectively: *rice plant, unhusked rice grains* and *husked rice grains*) are reflected by most of the languages of Taiwan, where sound correspondences are usually regular (see Tsuchida 1976, 1977). At least two languages, Pazeh and Ami, seem to display reflexes of one more root which is fairly widespread in the Malay Archipelago: *Səmay, with the reconstructed meaning *cooked rice* (see Blust 1976:32). Further, there is reason to reconstruct two roots, *bəCəŋ and *baCaR/r,[6] with original reference to panicine cereals (the former applied, perhaps, to foxtail millet, cf. Blust 1980:49), the reflexes of which are found both in the Malay Archipelago and in Taiwan.

(2) Judging from Tsuchida 1977, AN roots referring to tuber plants are less extensively represented in Taiwan. In particular, *qubi *yam* apparently does not occur there. The problem of *taləs *Colocasia* is unclear (Tsuchida 1977:95 fn.). In my opinion, the words reduced by Tsuchida to Proto-Formosan *Cali may have been borrowed from some unidentified extra-Taiwan source ultimately reflecting *taləs. Further, as far as the languages of Taiwan are concerned, the

meaning *Alocasia* of the reflexes of *bi̯Raq seems to be restricted to the Rukai dialects only. Puyuma vi̯RaH means *leaf*, which may suggest that with *Alocasia*, it was not its tuber that was of chief interest to AN speakers at some early stage (the plant is notable for its broad luxuriant leaves).

According to Plucknett (1976:11), both *Colocasia* and *Alocasia* were probably domesticated in the region of India and Ceylon. At the same time, there is little doubt that rice culture originated in South China, where the site Ho-mu-tu (Chekiang) has yielded the earliest dated rice remains (Hui Lin-Li 1983:42). China is the likeliest place for domestication of foxtail millet (Smith 1976: 309). R. Ferrell calls the Lungshanoid Horizon of South China "a rice- and millet-growing culture" (1969:10). From the cereals in question, foxtail millet at least was cultivated for a long time, perhaps thousands of years, in Taiwan.

From ethnographic details, we should pay attention to the general absence of the outrigger from the coasts of Indo-China and the Malay Peninsula (for example, the Mawken boat lacks this detail; see Sopher 1965). But suggestions of the use of both outrigger and double boats in ancient China have been made (Obayashi 1964).

The body of data just presented gives us grounds for believing that at the Earlier Stage the AN speakers lived somewhere in a sea-associated area near, or in, South China. At present at least, it would be highly adventurous to define that place with any greater precision. None the less I am bold enough to point out, most tentatively, the area of Formosa Strait. But which side of that strait would be more likely?

Let us say at once that the continental side has the advantage of greater proximity to early centres of rice and millet cultivation. Some clues for more precise localisation might be found in the natural environments. So far I am able to note only two points. First, most likely the home of the AN speakers at the Earlier Stage lay within the distributional limits of *Cordia* (tree or shrub).[7] Secondly, *Pandanus* also probably grew in that place.[8] Data on these two plants are not sufficient for a definite choice between the mainland coast and the Taiwan one, but, were the 'mainland hypothesis' preferred, such data would point out to some northern limit. As a matter of fact, the essentially tropical genus *Cordia* does not extend farther north than Chekiang (according to Chung 1924), and *Pandanus* seems not to reach even so far (Grušvickij 1982:483; sketch map).[9]

If we accept that the AN speakers resided at the Earlier Stage somewhere in the Formosa Strait area, they would probably have migrated to the south later on.[10]

There are various (though mostly rather vague) indications to what may have occurred in reality, namely, the dissemination of these people over coasts in the northern part of the Malay Archipelago, involving much of the Philippines and North Borneo (with further migrations to Sarawak) and North Sulawesi, perhaps also some of the Molucca Islands. Since the reflexes of the root *qaRəm *pangolin* are attested both in Taiwan and in Borneo, while the mammal itself is not found in most of the Philippines territory (see Blust 1982:237,239), we may conjecture that a portion of the AN speakers once made the Taiwan-Borneo passage with considerable speed.

Probably it is but a sort of initial phase in the outlined migration processes that constitutes the Later Stage as defined above.

NOTES

[1]As to the general characteristics of the AN homeland, Dyen's view does not differ from that expressed by H. Kern in 1889. Dyen, however, does not accept Kern's further argumentation aiming at locating the homeland.

[2]Only a few of these plants - *Pandanus, Terminalia* and mangrove (*Rhizophoraceae*) - also grow on seashores in such warm regions as the Ryukyu Islands (which are noted for their largely tropical vegetation).

[3]Most of the reconstructions added to the lists by me have been taken from Blust 1980.

[4]The AN root in question (*talisay) seems to have referred to *Terminalia catappa*.

[5]The root *bəRas has undoubtedly been borrowed from some Sino-Tibetan language (see Peyros and Starostin 1984). Evidently this borrowing took place already at the Earlier Stage.

[6]Quite clear-cut semantic differences between the reflexes of these two roots are observable in such remote languages as Rukai and the South Sulawesi group.

[7]Compare the words referring to *Cordia* spp. in the languages of Taiwan and in those of the Malay Archipelago: Puyuma Halulaŋ, Rukai (Mantauran) uɬuɬaŋə, Tsou həhŋə; Minangkabau nunaŋ, Macassarese kanunaŋ.

[8]Compare Rukai (Mantauran) paŋudaɬə, Rukai (Maga) pŋ́dlə, which both mean *pineapple*, and Paiwan paŋudaɬ, Ilokano paŋdán, Tagalog, Malay pandan, Buginese panrəŋ, Samoa fala *Pandanus*. To add, the natural environments reconstructible for the Earlier Stage also include such plants as *Smilax* (*baNaR), *Imperata* (or some similar high reed; *r/Ria, perhaps also *biRaw (?)), *thorny bamboo* (*kawayan), *Solanum nigrum* (*-aməCi), perhaps *Ficus* (*nunuk), and such animals as *pangolin* (*qaRəm) and *monkey* (*luCuŋ). All these items, however, are of little or no use for geographical localisation.

[9]Unfortunately I have not been able to consult modern descriptions of the flora of continental China.

[10]There might also be groups who migrated in other directions (for example, to the west along China's south coast), but evidently they have not given rise to any surviving AN language, or language group.

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A SHORT KABOLA TEXT (ALOR, EAST INDONESIA)

W.A.L. Stokhof

1. Our knowledge of East-Indonesian languages is still practically nil: any new data are most welcome. Below a short text is offered in the Kabola[1] language. It is spoken by a group of inhabitants of the Kabola peninsula, on the island of Alor in the province of Nusa Tenggara Timur. The Kabola live in hamlets along the coast (intermingled with speakers of the only 'indigenous' Austronesian language found on the island, called Alor, a dialect of Lamaholot) and in the adjacent mountainous hinterland. Kabola is a non-Austronesian language which, according to Wurm 1982 and Voorhoeve 1975, belongs to the Trans-New Guinea Phylum. Other non-Austronesian languages spoken in the area are: Kelon, Kafoa, Abui, Woisika, Tanglapui and Kolana (all on Alor), Nedebang, Lamma, Tewa, Blagar (on Pantar and Pura), Buna, Oirata, Lovaea, Fataluku (on Eastern Timor). The number of Kabola speakers is unknown.

2. The text was provided by Pak Christofel Foang (born 1943 in Adang but living in Jakarta since 1968), with whom I had the pleasure of working on several occasions. Stokhof 1975 offers three wordlists from Kabola: Pitumbang, Aimoli and Hamap. According to the informant these three short vocabularies are taken from the three regional variants which together constitute the Kabola language: dialect Adang/Pitumbang, spoken in the *desas* of Alor Kecil, Alor Besar, Ampera, Dulolong, Aimoli, Adang, Alila and Otuai (= Pitumbang); dialect Kabola spoken in Lawahing and Kabola; and dialect Hamap. The first two regional variants are found in the district *Alor Barat Laut*, Hamap in the *desa* Moru, district *Alor Barat Daya* (see Wurm and Hattori 1981; also Biro Pusat Statistik 1982). Basic information on the Kabola area is given in Bouman 1943, Vatter 1932. Below some general linguistic observations are offered, necessarily of a somewhat fragmentary and preliminary nature as they are limited to the material which I have been able to collect.

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3.1 Kabola phonemic system.

Table 1

labials	alveo-dentals	palatal	velars	glottals
p	t		k	ʔ
b	d		g	
m	n		ŋ	
f	s			h
	r			
	l			
w		y		

Table 2

u	i
o[ʊ, o^]	e[e, e^]
ɔ[ɔ, o˯]	ɛ
	a[ɑ, a]

3.1.1 Vowel oppositions:

/bel/ *dog*, /bil/ *k.o. wild citrus fruit*, /bɛl/ *to peel*, /bal/ *ball*, /bɔl/ *to lose a fight*, /bol/ *hollow*, /bul/ *makeshift raincape made from leaves*

3.1.2 /o,e/ tend to have a relatively longer realisation than the other vowel phonemes.

3.1.3 Word-initial vowels after a pause are realised with a slight glottal constriction, sometimes producing a sort of tense breathiness, which is obviously different from sequences starting in /h/: /hur/ *spoon* vs. /ur/ ([ᵸ̰u̯r]) *age*.

3.1.4 Word-initial high vowels may be realised after a pause with an optional slight homorganic on-glide: /it/ ([ⁱ̰i̯tˀ]) *to defecate*.

3.1.5 Before a pause word-final /t/ and /d/ are unreleased (as are all other stops) and often retroflex.

3.1.6 Certain words ending in a vowel have doublet forms in /-ŋ/: /'mesa(ŋ)/ *table*, /'kadera(ŋ)/ *chair*, /fa'ni(ŋ)/ *to hide something*, /tafu'ni(ŋ)/ *to hide oneself*, /u'ʔinu(ŋ)/ *to answer yes*.

3.1.7 (Unstressed) /i/ and /y/, (unstressed) /u/ and /w/ are neutralised after a vowel before a consonant or pause:

/na 'dou/ *to cook (something)*
/'daɪ/ *not yet*

3.1.8 Word-finally a set of palatalised consonants occur: [c,j,ñ,ʎ] which freely vary with post-palatalised consonants: [tʲ,dʲ,nʲ,lʲ]. Since there is obviously no opposition between the two sets, I write /ty,dy,ny,ly/, respectively:

[muj, mudʲ] → [mudy] *to fall*

However, all these forms ending in the final consonant sequency /Cy#/ show variant forms in /ɪCy#/ as well as /ɪC#/, where C is a plain alveo-dental consonant and /ɪ/ the archiphoneme of /i/ ([i]) and /y/ ([ɨ]), see 3.1.7 ['muidˀ, mu̯i̯dˀ] (along with ['muij], [mu̯i̯j], etc.).

Here we are confronted with the relevant unorderedness (Kortlandt 1972) of the feature 'palatality'; somewhere in the final section of the word it is obligatory: either as part of the alveo-dental consonant or as an independent archiphoneme. Complete absence of palatality is necessary to distinguish */mud/ from its palatalised opponents /'muɪd/, /mudy/. In the latter forms, however, either the /ɪ/ or the palatalised consonant suffices to distinguish both from */mud/. Examples:

/puny, 'puɪn/ *to take*, /fɛty, 'fɛɪt/ *to defecate* (vs. /fɛt/ *to pull out*), /fa'lady, fa'laɪd/ *Ipomoea batatas* (vs. /fa'lad/ *lungs*), /bany, 'baɪn/ proper name, /ha'loly, ha'loɪl/ *straight*, /dɛty, 'dɛɪt/ *wallet*, /'pi?ɔl/ *to fall hitting us*, is /pi'?ɔl/ *we fall*.

3.1.9 The voice correlation in the stops is not neutralised word finally: /ta'rɔp/ *bone* vs. /ta'rɔb/ *the two or three year fallow period after the harvest*.

3.1.10 The place of the prominence peak is distinctive (indicated in front of the stressed syllables): /na'fel/ *my ear* vs. /'na fel/ *to buy something*, /'tabaŋ/ *to add to one's questions* vs. /ta'baŋ/ *to ask us*, /'bu hɛr/ *a fallen areca nut* vs. /bu 'hɛr/ *an areca nut falls*, /'fedmuɪd, 'fedmudy/ *the West* vs. /fed 'muɪd, fed 'mudy/ *the sun goes down*.

3.1.11 The text is given in the explicit subcode: in the elliptic subcode (Jacobson and Halle 1971) external sandhi is regular:

/na ?a-'taŋ hɔr ∿ na'?taŋ hɔr/ *I cut his hand*
/na a-'taŋ hɔr ∿ na'taŋ hɔr/ *I cut your hand*
/bi ?a-'fihiŋ ∿ bi'?fihiŋ/ *a pig's teeth*

4.1 Nouns are divided into two classes: nouns occurring without possession-marking personal prefixes, and nouns which show obligatory possessive personal prefixes (inalienables). The latter class consists mainly of nouns with body parts or kinship relations as appropriate referents, the former covers all other nouns. According to my observations, most alienables have the 'thematic' vowel /ɔ/ between the person marker and the stem in the singular, whereas inalienables show thematic vowels /ɛ/ (rare), /a/ and also Ø.[2] Several nouns, however, have been encountered, which do not belong to the class of inalienable nouns, although they do have body parts as referents; e.g. /la'fuŋ/ (1) *head*, (2) *hair on head*, /bɔ?/ *body*.[3]

In Table 3 the personal markers are given (V standing for the thematic vowel):

Table 3

<table>
<tr><th></th><th></th><th>+sg.</th><th>-sg.</th><th>Ø sg.</th></tr>
<tr><td rowspan="2">1</td><td>incl.</td><td rowspan="2">n-V-</td><td>p-i-</td><td rowspan="5">t-V-</td></tr>
<tr><td>excl.</td><td>n-i-</td></tr>
<tr><td>2</td><td></td><td>Ø-V-</td><td>Ø-i-</td></tr>
<tr><td rowspan="2">3</td><td>+coref. with subj.</td><td>s-V-</td><td rowspan="2">s-V-
'sopi
?-V-</td></tr>
<tr><td>-coref. with subj.</td><td>?-V-</td></tr>
</table>

Examples are:

	hand /-taŋ/		*mouth* /-at/		*dog* /bel/
my hand(s)	na'taŋ	*my mouth(s)*	nat	*my dog(s)*	'nɔbel
	a'taŋ		at		'ɔbel
	sa'taŋ		sat		'sɔbel
	ʔa'taŋ		ʔat		'ʔɔbel
	*pi'taŋ		pi'at		'pibel
	ni'taŋ		ni'at		'nibel
	i'taŋ		i'at		'ibel
'sopi	sa'taŋ	'sopi	sat	'sopi	'sɔbel
'sopi	ʔa'taŋ	'sopi	ʔat	'sopi	'ʔɔbel
	ta'taŋ		tat		*'tɔbel

Commentary:

(1) Number is indicated by a non-high V vs. /i/, e.g. /a'taŋ/ *your* (+sg.) *hand(s)* vs. /i'taŋ/ *your* (-sg.) *hand(s)*.

(2) 1 pers.(-sg.) distinguishes between addressee inclusive vs. addressee exclusive.

(3) 3 pers. has ± coreferentiality with subject: cf. Latin *suus* vs. *eius*.

(4) Ø sg. has different meanings, partly conditioned by the meaning of the nominal stem;

(a) /t-Ø-at/ in /pi tat bɛh/ signifies reciprocity: *we*(incl.) *hit each other's mouths* (vs. /pi pi'at bɛh/ *we*(incl.) *hit our own mouths*

(b) In cases where the /pi/-alternant does not occur (for reasons yet unknown) the Ø-sg. form conveys both reflexivity and reciprocity:

/pi ta'taŋ 'hafɔ/ 1) *we wash our own hands* 2) *we wash each other's hands*

(c) Generic use is seen in: /tat ma'ʔar/ *mouth infection*; the Ø singular marker seems to be limited in distribution: a form */'t-ɔ-bel/ in */pi 'tɔbel ʔa'minɛam/ *we killed each other's dogs* was rejected by the informant.

4.2 In addition there is a series of 'possessive forms' (prefixed to the noun if used attributively, and independent if used predicatively marked by the morpheme /-e-/ (compare Table 3):

/n -e, Ø - e, s - e, ʔ - e; pi -'e, ni -'e, i -'e, 'sopi s-e, 'sopi ʔ-e; t - e/

Examples are: /bel/ *dog*, /'nebel/ *dog in my possession*, /'bel ho ne/ *that dog is mine*, /bɔʔ/ *body*, /'nɔbɔʔ/ *my body*, /'nebɔʔ/ *body in my possession (not necessarily my own body)*, /ma'saɪr/ *lego-lego (k.o. round dance)*, /'nɔmasaɪr/ *my inherent knowledge about lego-lego dancing* vs. /'nemasaɪr/ *the way I perform the lego-lego (seen as separated from the S.)*: /na sam 'nɔfɔɪ lap/ *I go to look for my stones (belonging to the S.)*, /na sam 'nefɔɪ lap/ *I go to look for stones (e.g. to finish this building job I have been ordered to complete)*, /'nɛlafuŋ/ *my head*, /'nelafuŋ/ *head in my possession*.

In inalienables the /ne/ is prefixed to the original possessive prefix, yielding a meaning which is different as compared with /ne-/ plus alienable nouns: /'nenataŋ/ *this very hand of mine*, /'nenat/ *this my mouth*.

Somebody else's hand in my possession would be: /nenamɛ ʔa'taŋ/ *the human being's hand in my possession* (also: *the hand of this man of mine*).

From some of the adduced instances it is clear that relation between the appropriate referent of the pronominal prefix and that of the succeeding noun is actually much looser than which is usually called 'possession'; it is an unspecified relation between the respective appropriate referents, which has to be interpreted within the given frame of reference.

4.3 The 3 pers. marker ʔV- functions as a connective between head and modifier (see 8.1) or modifier head (see 8.2, also note 77).

4.4 In alienables absence of a possessive prefix signals 'indefiniteness':

/baŋ/ *a village, villages*

Nominals with a human being as appropriate referent may be optionally pluralised by adding an element /bar/:

/na'mɛ/ *person(s); human being(s)*
/na'mɛ bar/ *people; persons*

5.1 A verb in Kabola takes prefixes as well as suffixes: certain verbs have obligatory personal prefixes (see below). Verbs may take elements such as /ta$_1$-/ *on top of*, /ta$_2$-/ *in addition*, /mi-/ *in*, /u-/ *purposive*, /'ta-mih/ *to sit on top*, /'mi-tar/ *to sleep in (sth.)*, /'u-hɔʔ/ *to come for a certain reason (with a certain purpose)*, e.g.:

/bel ho ta$_2$-'n-eh'am/
*dog that again-me-bite-*PERF.
that dog has bitten me once again

/u-'maʔataŋ/ *to come to join the lego-lego to celebrate something*

/ta$_2$-mi-'bɛh/ *to strike again on the same place*

A variety of tenses, moods and aspect (Aktionsarten) is expressed by combination of several suffixes (or clitic-like elements: their status is not always clear) in different linear arrangement. The exact meanings are, as could be expected, not easily detected. Below I offer some instances:

/- am/:
/'sopi 'naʔdɛ - am/ *they have eaten/finished eating*
/na sɔl'dady - am/ *I have entered the service; I am a soldier now*
/di'lɛl hɛʔ na la'mɛ - am/ *tomorrow I shall have gone*

the event/state of affairs 'x' as expressed by the predicate (be it a verb or a noun) has occurred at THE orientation point/period.[4]

/- eh/:
/'sopi 'naʔdɛ - eh/ *they are/were eating*

'x' is in progress at THE orientation point/period.

/- fe/:
/'sopi 'naʔdɛ - fe/ *they eat/ate first*

given the orientation point, the implementation of 'x' will be or has been started before any other event/state of affairs 'y' is undertaken/has come into existence.

/- so/:
/'sopi 'naʔdɛ - so/ *they intend(ed) to eat*

'x' is intended to be undertaken at THE orientation point/period.

/- nɔʔ/:
/'sopi 'naʔdɛ - nɔʔ/ *they completed/have completed their meal*

given the orientation point 'x' is completely carried out (but also /'sopi 'naʔdɛ - nɔʔ/ *they are/were able to eat*).

/- eh-am/:
(1) /'sopi 'naʔdɛ -eh-am/ *they are/were about to eat*

The decision to start 'x' has been taken before THE orientation point/period.

(2) /'sopi 'naʔdɛ-eh-am/ *they had already begun to eat*

'x' has already been started before THE orientation point/period.

Those are but a few instances; below some more are given together with their somewhat haphazard translation; further research is needed here:

/'sopi 'naʔdɛ - so - am/ *they decided to eat*
/'sopi 'naʔdɛ - am - so/ *they have eaten already* (S. supposes that addressee thinks otherwise)
/'sopi 'naʔdɛ-nɔʔ-am/ *they have completely finished their meal*
/'sopi 'naʔdɛ-nɔʔ-am-fe,/ *they completely finished their meal first,*
/(di'lɛl) 'sopi 'naʔdɛ-am-fe-so/ *(tomorrow) they will finish their meal first*
/(u'fami) 'sopi 'naʔdɛ-am-fe-so/ *(yesterday) they finished their meal first*
/'sopi 'naʔdɛ-fe-so-amʔ/ *will they finish their meal?*
/'sopi 'naʔdɛ-fe-am-so/ *they must finish their meal now*
/'sopi 'naʔdɛ-so-ʊ/ *to eat, that is what they want, nothing else*
/'sopi 'naʔdɛ-so-ʔ!/ *they want to eat! (don't disturb them)*
/'sopi 'naʔdɛ-eh-so/ *they are now eating (and they aren't doing anything else).*

The difference in lineal ordering between /- fɛ - am/ and /am- fɛ/ signals the difference between a main clause and a subordinate clause; /-am - fɛ/ is the sentence medial alternant of /-fɛ - am/:

/'sopi 'naʔdɛ-fe-am/ *they finish eating first*
/'sopi 'naʔdɛ-am-fe, 'sopi 'feɪ ka'rasaŋ/ *after they had finished their meals, they worked again.*

In predicates with juxtaposition of several verbs those suffixes/clitics are attached to the very last verbal element:

/'nɔmatu 'sura med 'nahoʊ 'ʔɛdun-am/
my-older-sibling letter take order-me see-it-PERF.
My older sibling showed me the letter.

Table 4 below shows the independent subject and object forms: column (a) gives the unmarked subject forms, while column (b) presents the unmarked object forms in SOV position. However, the (b) forms are also employed in marked (i.e. emphatic) use in the subject as well as object function, the latter usually in foregrounded position: ŚOV or ÓSV. Column (c) shows the dual forms.

Table 4

		(unmarked) subj.		marked subj./obj. and unmarked obj.		subj./obj.
		+sg.	-sg.	+sg.	-sg.	du.
1	incl.	na	pi	'nari	'piri	'pinalɔ
	excl.		ni		'niri	'ninalɔ
2		a	i	'ari	'iri	'inalɔ
3	+coref. with subj.	sa	'sopi(sa)	'sari[5]	'sopi	'sɔnalɔ
	-coref. with subj.			'?ari[5]		
		ta		'tari		-
		(a)		(b)		(c)

Examples:

/pi nɔp/ *we*(incl.) *are sleepy*

/sa 'nari 'bɛh-am/
he me hit- PERF.
he hit me

/'sari na 'bɛh-am/ *it is he whom I hit, I hit him*

/'sari(so) sam/ *it is he who goes, he goes*

The demonstratives /'hɔ?(ɔ)/ and /ho/ (see par. 7.1) as well as /-so/ and other functional sentence perspective markers such as /-u/ (focus marker) are often found in combination with these forms: (/'sari ho, 'sariso, 'nariu/):[6]

/'nariso sa 'bɛh-am/ *I am hit by him*
/'sariso na 'bɛh-am/ *It is he who has been hit by me, I have hit him*
/'sariso 'nari 'bɛh-am/ *It is he who hit me, he hit me*
/'sari ho na 'bɛh/ *It is he (there) whom I hit*
/'nari 'hɔ?ɔ sa bɛh/ *It is I (here) whom he hit*
/pi 'piri bɛh/ *we hit ourselves*
/pi 'tari bɛh/ *we hit each other (as members of one group, or of two or more groups)*
/'sopi 'sari bɛh/ 1) *they hit themselves* (reflexive)
2) *they hit each other* (reciprocal)
/'sopi 'sopi bɛh/ *they*$_1$ *hit them*$_2$
/sa '?ari bɛh/ *he*$_1$ *hits him*$_2$
/sa 'sari bɛh/ *he hits himself*
/'sariso sa bɛh/ *he*$_1$ *it is whom he*$_2$ *hit*
/'sariso 'sari bɛh/ *himself did he hit*
/'sɔnalɔ 'piri bɛh/ *they two hit us*(incl.)
/'pinalɔ 'sɔnalɔ bɛh/ 1) *we two*(incl.) *hit them two*
2) *we two got hit by them two*
/'sɔnalɔso na 'bɛh-so/ *them I want to hit*
/'sɔnalɔ 'nari 'bɛh-so/ *it is the two of them who want to hit me*

6.1 On the basis of the material now available I divide the Kabola verbs into four subclasses:

(1) verbs which occur with an obligatory prefixed pronominal marker in subject or object function, e.g.:

/-eh/ : /n-eh/ *bite me*
/-'minɛ/ : /ʔa-'minɛ/ *kill him*
/-fɔɪl/ : /'nɔ-fɔɪl/ *I take a bath*
/-'ʔɔl/ : /pi-'ʔɔl/ *we*(incl.) *fall down*
/-'bɔr/ : /sa-'bɔr/ *he goes (home)*
/-'bɔr/ : /ʔa-'bɔr/ *give it back*
/-fɛʔ/ : /'ni-fɛʔ/ *we*(excl.) *are the last ones*

(2) verbs which occur with independent subject and object forms:

/la'mɛ/ *to walk*, /hɔʔ/ *to come*, /tuh/ *to stand upright; to get up*, /nɔp/ *to be sleepy*, e.g.:

/'nifɛsɛl toh na 'dou-am/
my-aunt (MS) *get-up thing cook-already*
My aunt had already got up to cook

/a'bit tɔʔ hɔʔ/
Abit old come
old Abit comes

(3) verbs with dependent subject or object forms (3a verbs) as well as with independent forms (3b verbs):

/bɛh/, /-bɛh/ : /na 'ari bɛh/ *I hit you*
/sa 'tɔ-bɛh/ *he hit us together*

/'puɪn/, /-'puɪn/ : /na dir 'puɪn ʔari tɛʔ/ *(I knife take you* (obj.) *stab)*
I stab you with a knife
/'sɔpi ta-'puɪn/ *they catch us*

(4) (a small set of transitive) verbs showing an obligatory object with a non-human appropriate referent. If the object is not explicitly mentioned the noun /na/ *thing(s)* occurs in front of the verb and usually forms one accentual unit with that verb:

/'dou/ : /na 'dou/ *to cook something (in pot)*
/'nɔmɛʔ/ : /na 'nɔmɛʔ/ *to steam something*
/heʔ/ : /na 'heʔ/ *to grill something*
/de/ : /na 'de/ *to weave something*
/ha'rɔt/ : /na ha'rɔt/, etc. *to sew something*
/fel/ : /na 'fel/ *to buy something*

6.2 Verbs with dependent subject or object forms show the same personal markers as in Table 3 (although with different syntactic functions), followed by the 'thematic' vowels /ɛ, e, a, ɔ/ or Ø (zero):

/s-a-'bɔr/ *he goes*, /(na)ʔ-a-'bɔr/ *(I) give it* (obj.) *back*, /n-Ø-eh/ *bite me* (obj.), /Ø-a-'minɛ/ *kill you* (obj.), /'n-ɔ-fɔɪl/ *I take a bath*, /ʔ-ɛ-ma'riŋ/ *tell him/her*, /'n-e-foɪl/ *I take over*

In the ÓSV construction the speaker may choose in the case of the (1) and (3b) verbs between two options: (a) to maintain in the obligatory (object) prefix the number and person marking in agreement with the marking of the foregrounded independent object form, or (b) to substitute the third person singular prefix

(/ʔ-/) instead. In the latter case /ʔ-/ signals that the referent of the foregrounded object is singled out by the S among the other members of a given set:

/na 'ɛ-dun-am/ *I saw you*
/'ariso na 'ɛ-dun-am/ *It was you whom I saw; I saw you*
/'ariso na 'ʔɛ-dun-am/ *It was you among the others who caught my eye*
/'ufami 'iriso na 'iɛ-dun-am/ *It was you*(pl.) *whom I saw yesterday*
/'ufami 'iriso na 'ʔɛ-dun-am/ *It was you*(pl.) *whom I perceived as distinct from other people yesterday*

This opposition seems to be absent in the third person:

/'sariso na ʔa-'minɛ-so/ *It is he whom I want to kill; I want to kill him*

6.3 The verbal /t-/ prefix signals that always two or more participants are involved in various roles in the event or state of affairs; the specific meaning is conditioned by the meaning of the verb:

/pi 'fɔɪ 'puɪn t-Ø-od/
we stone take each-other-pelt
we(incl.) *pelt each other with stones*

(vs. /pi 'fɔɪ 'puɪn pi-'od/ *we hit ourselves with stones*
/pi t-a-'minɛ/ *we kill each other*
/pi pi-'minɛ/ *we kill ourselves*

/'sopi t-a-'puɪn/ *they catch us*
(*pi-'puɪn)

/'sopi t-a-'bitɛ/ 1) *they separate us*
(*pi-'bitɛ) 2) *they disperse/separate (determined by uncontrolled circumstances)*

(vs. /'sopi s-a-'bitɛ/ *they separate (on their own initiative)*

/'sopi 'niri 't-ɔ-bɛh/ 1) *they hit us*(excl.) *together/at the same time*
2) *they hit us against each other*

In addition t-forms seem to have a kind of gnomic aspect; they may indicate a general, all-human experience:

/'t-ɛ-sa hono?/ *to love (each other) is good*

6.4 At present, it is not clear which verbs take which thematic vowel (or Ø). Is there a relationship between the 'thematic' vowels and the meaning of the verb stem? Many verbs show different shades of meaning dependent on the vowel used in the pronominal prefix (and also usually independent verbs may occur with prefixes):

/na 'mudy/ *I fall*, /sa 'nɔ-mudy/ *he falls in order to harm me* (vs. /'nɔ-mudy/ *my falling; my fiasco, failure* and /'ne-mudy/ *the way I fall*), /na tuh/ *I stand upright* but /na ʔa-'tuh/ *I stand guard over him/her*, /na bi ʔɛ-'tuh/ *I lie to ambush a pig*, /sa hɔʔ/ *he comes*, /sa 'nɛ-hɔʔ/ *he comes at me/to harm me* (vs. /'ʔɔ-hɔʔ/ *his arrival*, /'sɔ-hɔʔ/ *his own arrival*), /na 'nɔ-fɔɪl/ *I take a bath*, /na 'ʔa-fɔɪl/ *I wash him*; /na 'ne-foɪl/ *I take over*; /sa 'niri bɛh/ *he hits us*(excl.) (vs. /sa 'niri 'tɔ-bɛh/ 1) *he hit us*(excl.) *against each other*, 2) *he hit us*(excl.) *at the same time/together*), /na mih/ *I sit*, /na 'nɔ-mih/ *I stay behind.*

7.1 There are two basic demonstratives: /'hɔʔ(ɔ)/ (speaker's pivot: signifying any x which is (physically and/or mentally) relatively proximal to S) and /ho/

(neutral as to S proximity). Only when both demonstratives occur in each other's immediate environment, does /ho/ mean 'any x which in the mind of the S comes after any y referred to by /'hɔʔ(ɔ)/'. It follows from this definition that spatially both referents can have the same distance as to S. /'hɔʔ(ɔ)/ is obviously the marked member of the set. /'hɔʔ(ɔ)/ and /ho/ are used for spatial deixis, /'hɛʔ(ɛ)/ for temporal deixis. As a subordinating conjunction it signifies an orderedness in time between two events/states of affairs:

/na na 'lam-nɔʔ 'hɛʔɛ, 'sɛka 'sɔ-fɔɪl/
I finished the washing and then Seka took a bath

/'hɛʔɛ/ is often preceded by /'hɔrɔ/ (see Table 5) without any difference in meaning. When combined with /'honin/ (ibid.) it sometimes signals simultaneity of events/states of affairs (however, see 9.1):

/ni maŋ sam 'mol-mi 'hɔrɔ 'hɛʔɛ, 'sɛka na 'lam-eh 'honin 'hɛʔɛ, na 'nɔ-fɔɪl/
After we had gone into the river, Seka did the washing while I took a bath

/'hɔrɔ/ and /'honin/ function here as anaphoric summarisers; they are 'coreferential' with the preceding part of the utterance, summing it up whereas the cataphoric /'hɛʔɛ/ introduces new information.

Below /hɔʔ/, /ho/ and related forms are given:

Table 5

			this/that	*in this/that manner*	LOC., ABL. *in/at, from*	illative *in, into*
spatial	+proximity to S	Ø emphasis	'hɔʔ(ɔ)	'hɔʔ(ɔ)ni(n)	'hɔʔ(ɔ)mi	'hɔʔ(ɔ)lɛ
		+emphasis	'hɔʔ(ɔ)rɔ	'hɔʔrɔʔni(n)	'hɔʔrɔmi	'hɔʔrɔlɛ
	Ø proximity to S	Ø emphasis	ho	'honi(n)	'homi	'holɛ
		+emphasis	'hɔrɔ	'hɔrɔni(n)	'hɔrɔmi	'hɔrɔlɛ
temporal			'hɛʔ(ɛ), hɛ	'honin 'hɛʔɛ	'hɔrɔ 'hɛʔɛ	

(1) -rɔ indicates emphasis: /'tarɔʔ/ *which?*, /ta'rɔ-rɔʔ/ *which one?*, /'ne-ba 'hɔrɔ!/ *(the thing) in my possession* (/ne-/) *you know what I mean* (/ba/) *is that one there* (/'hɔ-rɔ/)

(2) the /-mi/ and /-lɛ/ series are sometimes followed by /'hɔʔ(ɔ)/ or /ho/ which adds to the respective basic meanings a sense of direct involvement of the S in the speech event (compare Indonesian /itutu/ *that there over there*)

/'homi ho na'mɛ la'fuh/
over there that people many
there, over there are many people

(3) /'hɔrɔ/ as summariser may be combined with /fɛ/ or /ba/ yielding conjunctions meaning *thus; consequently* (cf. Indonesian maka)

7.2 A second set of spatial terms has been encountered, closely related to a limited set of motion verbs. See Table 6:

Table 6

	motion verbs		spatial adverbs			nouns	
	+ goal orient.	∅ goal orient.	medial	distal			
to ascend	ma'daŋ	mid	'midlɛ 'ta?lɛ	tɔŋ	'hɛtɔ	'talɛ	*the top*
to go on level territory	ma	fa	'falɛ 'malɛ	mɔŋ	'hɛmɔ		
to descend	hɛl		'hɛlɛ	pɔŋ	'hɛpɔ	'farlɛ	*the bottom*

Commentary:

(1) /ma/ and /fa/ are only used for short distances (vs. /sam/ *to go*, /hɔ?/ *to come*, /lɔl/ *to pass by*, /'du?hil/ *to go into the mountains*, /la'mɛ/ *to go (away); to walk.*

(2) /hɛl/ is not marked for goal orientation.

(3) /'malɛ/ means *over there, facing the S* vs. /'falɛ/ *over there beyond* /'malɛ/ (not facing the S), /'midlɛ/ means *up there somewhat higher than* /'ta?lɛ/ *up there.*

(4) The difference between /'hɔ?mi, 'homi/ and similar forms with the /'midlɛ, tɔŋ/ and /'hɛtɔ/ series is proximal vs. medial vs. distal; '± visible' does not seem to be distinctive.

(5) The difference between the /tɔŋ/ and /'hɛtɔ/ series is that the former set of forms is used as independent demonstratives to which no spatial markers can be suffixed: the locative/ablative marker /-mi/ and the illative /-lɛ/ occur suffixed to the /'hɛtɔ/ series, e.g.: /'hɛtɔmi/ *in/from that place far away up there*, also with optional /tɔŋ/, e.g. /('tɔŋ)hɛtɔlɛ/ *(in)to that place very far away up there.*

(6) The same holds for the /'ta?lɛ/ series; they are used as independent demonstratives; if combined with /-mi/ or /-lɛ/, then /hɔ?/ or /ho/ is obligatory:

/'hɛlɛ 'hɔ?mi/ *(from) down there*
/'hɛlɛ 'hɔ?lɛ/ *down to there*
/'falɛ 'homi/ *over there on that side*

(7) The /tɔŋ/ series seems also to co-occur with the /'ta?lɛ/ series, although with obvious restrictions; the meaning is not always clear to me:

/'pɔŋ 'hɛlɛ/ *(?)down there far away somewhere*

(8) In addition to forms such as /'hɔ?ni(n)/ *in this way*, /'honi(n)/ *in that way* also /'hɛpɔ(?)nin/ *in that way* (as opposed to /'honi(n)/) is found.

(9) The /'ta?lɛ/ series may be combined with the emphasised forms in -rɔ of /'hɔ?(ɔ)/ and /ho/ (see Table 5): /'falɛhɔrɔ/ *in that very area (not facing the S).* /'malɛhɔ?rɔ/ *in this very area facing the S.* The /('tɔŋ)hɛtɔ/ series can

also be suffixed with /-rɔ/. /'tɔŋhɛtɔrɔ/ *(it is) up there over there very far away.*

(10) Motion verbs in combination with /mi/ and /lɛ/ are placed after the subject before the goal; or after the goal, or in both positions; /mi/ and /lɛ/ are usually suffixed to the goal, however, there are exceptions, see text 9.1, note 67, where /lɛ/ forms an accentual unit together with the following verb /mid/:

/sa (hɔʔ) ara'bahlɛ hɔʔfe/
he (comes) Kalabahi-towards/in comes-first
he comes to Kalabahi first

/sa ara'bahmi hɔʔ/
he Kalabahi-from comes
he comes from Kalabahi

/sa (mid) 'baŋlɛ 'mid-am/
he (goes up) village-towards/in goes up-PERF.
I went up there (in)to the village

/i (sam) ara'bahlɛ 'amˀ-am/
you(pl.) *(go) Kalabahi-towards/in go*-PERF.
you(pl.) *went into Kalabahi*

8.1 Kabola has SOV as 'neutral' word order; however, from earlier sections we know that OSV also occurs, depending on how the speaker chooses to connect the content of the message to the frame reference. Another instance:

/'ɛlafuŋ ʔɔ'miʊtatapah-am ho na ta'tɔʔso/
your-hair its-become-thicker-PERF. *that I cut-want/shall*
O S V
I shall cut that thick (/ta'pah/) *hair of yours!*

The (non-equative) clause can be summarised as follows: (OBL)S(OBL)O(OBL)V(OBL) where OBL stands for optional elements:

/(fed 'hɔʔɔ) na ('ʔuɪlʔuɪl) (ha'nuʔaŋ) la'mɛ/
now this I must fast go
I must go now quickly

/('fɛʔdɛ la'lami) ni'maŋsɛl (ʔa'ra) sam ('mɔdɛbaŋlɛ-am)/
just-now this morning my-uncle with-him go hospital-ILL. *go*
this morning my uncle went with him to the hospital

The equative clause consists basically of two noun elements:

/na'mɛ ho i'baŋ ka'pal/ *that man is your*(pl.) *village head*
/'nɔʔaɪ 'guru/ *my child is a teacher*

8.2 The order in the noun phrase is: N(ADJ.)(CLASSIF.)(NUM.)(DEM.):

/'nɔdɛkɔ 'habar paʔ nu 'hɔʔɔ/
my-trousers new CLASSIF. *one this*
this one pair of trousers of mine

However, compound nouns show modifier-head:

/'mɔdɛbaŋ/
ill-house
hospital

/'hiʊdɔ/ (vs. /'hiʊ '?ɔdɔ/
bird-egg *bird its-egg*
egg *(an) egg of a bird)*

/'tibɛ ?a'maŋ/
drum its-voice
the sound of the drum(s)

8.3 Negation is indicated by means of an element /?ɛ/ usually added in front of the verb and an obligatory element /'nɛnɛ/ at the end of the utterance:

/na ?ɛ ?a'minɛ 'nɛnɛ/
I not him-kill not
I do not kill him

/u'fami na ?ɛ sam ab lap 'nɛnɛ/
yesterday I not go fish look for not
Yesterday I did not go fishing

But /?ɛ/ may also be added in front of other forms depending on what the S chooses to deny:

/na ?ɛ u'fami sam ab lap 'nɛnɛ/ *it wasn't yesterday that I went fishing*
/u'fami na ?ɛ ab lap 'nɛnɛ/ *yesterday it wasn't fish which I looked for*

8.4 The prohibitive is indicated by (1) /'nɛnɛ/ after the verb: /hɔ? 'nɛnɛ/ *don't come*, (2) /'ha?aɪ/ in front of the verb: /'ha?aɪ hɔ?/, (3) by both /'ha?aɪ na-'minɛ 'nɛnɛ/ *don't kill me* or (4) by the suffix -?ɛ? alone: /na-'minɛ?ɛ?/ *don't kill me*, /'nari bɛh ?ɛ?/ *don't hit me*.

The imperative is indicated by Ø after consonants and a facultative glottal stop after the final vowel: /bɛh!/ *hit!*

/la'mɛ! la'mɛ?!/ *go!*
Adhortative: /ma pi sam!/ *let's go!*

9.1 Text

/ma'saɪr[1].a'daŋmi[2] ho[3] tun[4] ?a'ri?an[5] na'mɛ[6] '?uɪl?uɪl[7] ma'saɪr[8]. fed[9] ?a'ri?iŋ[10] ?ɔ'ul[11] 'ho[3]mi[2]am[12] 'hɛ?ɛ[13], maŋ papa'ne?[14], 'asala[15] na'mɛ[6] maŋ[16] na[17] nu[18] pa'nɛn[19] 'hɛ?ɛ[13], na'mɛ ma'saɪr. maŋ'fɛ?dɛ[20], ti[21] tɛ'faŋ[22], baŋ[23] ?a'tɛl[24], baŋ[23] fa[25], '?a?aɪ[26] 'honin 'hɛ?ɛ[27] na'mɛ ma'tɛ[28] dɛn[29] baŋ[23]lɛ[30] hɔ?[31], nɛ'gara[32] ?ɔ'haɪr[33] ma'tɛ[28], medbɛŋta[34]. 'tibɛ[35] maŋ[16] '?amaŋ[36] 'hɛ?ɛ[13], bi'asa[37] ho[38] 'aɪka[39] bar[40] so[41] 'sɔtur[42] 'lɔɪ[43]lɛ[30]hɛl[44]. 'mipanɛta[45], od[46] 'ti?ɛnu[47] 'aɪrnu[48], 'aɪka bar sam[49] 'nɔp[50]am[12], 'honin 'hɛ?ɛ na'mɛ ma'tɛ bar 'sefoɪl[51]. na'mɛ dal[52] mɔ'laŋ[53] med[54] ?a'fɔr[55] bar la'fat[56] bar ho 'lɔɪ[43]lɛ 'hɛlam, 'honin 'hɛ?ɛ 'lɔɪ[43] fɛ'taŋ[57]. dal 'tiniŋ[58] ɔ'raŋ[59] ham[60] 'honin 'hɛ?ɛ, ma'saɪr di[61] la'mɛ[62] ha'loɪl[63] 'tiniŋ[58]. ?a'fɔr la'fat 'sari[64]lɛ[30] mid[65]. la'fat bar tu'mɔ?[66] bar u'ada[67] lɛ 'mid ?a'taŋ[68] 'puɪn[69]. na'mɛ baŋ bɛŋ[70] di 'asala 'tibɛ ?a'maŋ[71] ma'?eh[72] 'hɛ?ɛ 'sopi[73] 'ma?ataŋ[74]. ma'saɪr '?ara[75] di'lɛl[76]. ma'saɪr ho ?ɔta'bitɛ[77] 'mieham[78] 'honin 'hɛ?ɛ, na'mɛ 'soŋbolo[79]. 'soŋbolo ta'fal[80] 'honin 'hɛ?ɛ, na'mɛ sah[81] sa'foɪl[82] nɔ?amfe[83] na'mɛ ta'bitɛ sɔ'baŋlɛ am[84]. sam 'hɔ?ɔmi[85] mɛŋ[86]./

9.2 Commentary to the text

[1]also /ma'sɛɪr, ma'sɛɛr/ *k.o. ringdance*, Kupang Malay lego-lego. See Stokhof 1977:32ff; its category is formally not indicated: both nominal and verbal interpretations are possible.

[2] /a'daŋ/ village in Kabola area; /-mi/ location marker, here *in*.

[3] /ho/ see section 7, Table 5.

[4] *year* < ? Ind. tahun.

[5] *every, each* (/ʔari/ + /ʔan/ *even, complete*)

[6] *people*.

[7] *must, have to*

[8] *to dance the lego-lego*.

[9] /fed/ *sun; monsoon*.

[10] /ʔa'riʔiŋ/ *hot, warm*.

[11] /ul/ *month*: /fed ʔa'riʔiŋ ʔɔ-'ul/ *the months of the dry monsoon*.

[12] /-am/ perfective; section 5.1.

[13] see section 7.1, Table 5.

[14] /maŋ papa'neʔ/ *very often*, /maŋ/ *only* (idiomatic expression; see also note 16) or *as soon as there is an occasion*.

[15] cf. Indonesian asal *on condition that, provided that*; here *when*.

[16] /maŋ/ (directly after subject) is the first constituent of a correlative subordinating conjunction with /'hɛʔɛ/ or /'hɔrɔ 'hɛʔɛ/ as second constituent in clause final position:

/sa maŋ hɔʔ 'hɛʔɛ, na'mɛ ta'ʔunu(ŋ)/
after he had arrived, the people came together

[17] *a thing, something*.

[18] /nu/ *one; a*.

[19] /pa'nɛn/ *to make, to carry out sth*.

[20] /'fɛʔdɛ/ *just a moment ago*, but /maŋ 'fɛʔdɛ/ *for instance* (idiomatic expression).

[21] *firewood*.

[22] *to carry (heavy objects)*; e.g. /'seɪ tɛ'faŋ/ *to carry water*.

[23] *village; house*.

[24] /-tɛl/ *to lift up*; /ʔa-/ 3sg.(obj.); /baŋ ʔa'tɛl/ *to build a house*.

[25] /fa/ (1) *to roof a house* ((2) *to go on a level territory*, (3) *coconut*).

[26] /'ʔaʔaɪ/ *if that does not happen*.

[27] *then*; see section 7.1.

[28] /ma'tɛ/ *big*: /na'mɛ ma'tɛ/ *important man/men*.

[29] /dɛn/ (1) *half*, (2) *some*; /fa den/ *some coconuts*.

[30] /lɛ/ illative; independently used; *place; area*.

[31] *to come*, see section 7.2.

[32] Ind. negara *the state*.

[33] /'haɪr/ Ind. hari *day*; /ne'gara ʔɔ-'haɪr ma'tɛ/ *a national holiday*.

[34] /med/ *and*, /bɛŋ/ *another*, /ta/ *to add*; here: *etc.* (idiomatic expression).

[35] *drum.*

[36] /'ʔamaŋ/ *to sound; to make noises*, see note 71.

[37] < Ind. biasa *usual(ly)*, /bi'asa ho/ *usually.*

[38] the use of /ho/ is unclear.

[39] *child (up till approximately 11 years).*

[40] /bar/ plural marker occurring with nouns which have human beings as appropriate referent.

[41] /so/ prominence marker: *it is the younger children who ...*, see also section 6.1 for other instances.

[42] /'sɔ-tur/ *they are the first*; /na 'nɔtur 'naʔdɛ/ *I eat first, before the others.*

[43] the dance place; see Stokhof 1977; Vater 1932; Bouman 1943.

[44] *to descend*; contrary to the Woisika, the Kabola dance not on top of the dancing place, but round it.

[45] /pa 'nɛta/ *a few moments*, /'mipanɛta/ *a few moments later*; comp. /di'lɛl/ *the following day*, /'midilɛl/ *the day after* /di'lɛl/; /pa'nɛta/ is probably related to /pa'nɛ/ *presently; in a few moments.* For the function of /mi-/ with adj., compare /ta'pah/ *thick (of hair)*, /'mitapah/ *thicker*, /'fɛɪ 'mitapah/ *thickest.*

[46] [o^d̤¬] (1) *o'clock*, (2) *to throw sth.*, see 3.1.5.

[47] *nine.*

[48] *ten.*

[49] *to go.*

[50] *to become sleepy*: /nɔp/ also /mɔp/.

[51] /'sefoɪl/ or /'sefoly/ see section 3.1.8 *they take over.*

[52] /dal/ *to sing.*

[53] /mɔ'laŋ/ *expert*: /na'mɛ dal mɔ'laŋ/ *the singer; the precentor.*

[54] /med/ *and.*

[55] *male adolescent (16 years and older).*

[56] *female adolescent (16 years and older).*

[57] /fɛ'taŋ/ *alive*: /na 'daɪ fɛ'taŋ/ *I am still alive.*

[58] /'tini(ŋ)/ *calm, quiet*; see section 3.1.6.

[59] *to answer the song of the precentor.*

[60] *simultaneously/in the same way.*

[61] /di/ *also; too.*

[62] *to walk.*

[63] *orderly, in good order.*

[64] /'sari/ here: *each other.*

[65] [mid̤] *to go up*; /'sopi 'sarilɛ mid/ *they lead each other in turns* (into the rows of the dancers); see Table 6.

[66] *old*: /tu'mɔʔ bar/ *the older people; elders, prominent people.*

[67] /'ada/ *respect*; ? Indonesian adat *customary law;* /u-'ada/ *in order to respect, out of respect for*: section 5.1; /u'ada/ is usually put after /lɛ mid/ (see Table 6, note 10); /la'fat bar tu'mɔʔ bar lɛ mid/ *(to honour them) girls go to the elder people (and take them by the hand).*

[68] /-taŋ/ *hand*, /ʔa-'taŋ/ *his/her/their hand(s).*

[69] /puny/ or /'puɪn/ *to take.*

[70] *other.*

[71] /'tibɛ ʔa'maŋ/ *the sound of the drum(s)*, vs. 36. /'tibɛ 'ʔamaŋ/ *the drums sound.*

[72] *to hear*: /na a'maŋ ma'ʔeham/ *I heard your voice.*

[73] *they*, Table 4.

[74] *to come to join the lego-lego dance.*

[75] /'ʔ-a-ra/ *together with him/her/it*, /ni-'a-ra/ *together with us*(excl.), etc.; here: *up to and including; up to.* -ra suffixed to the independent personal markers signals 'comitative': /ma pi 't-a-ra 'naʔdɛ/ *come, let's eat together.*

[76] *the following morning.*

[77] /-'bitɛ/ *to separate*: /'sopi sa-'bitɛ/ *they separate, disperse*, /ta-'bitɛ/ *to separate, to disperse*, /ma'saɪr ho ʔɔ-'ta-bitɛ/ *(lego-lego that its-t-form-disperse) the end of the lego-lego*, see 6.3.

[78] /'mi-eh-am/ : /-eh-am/ *is about to*, see section 5.1, /mi/ *(to be) in (sth.)* carries the stress: it is not a clitic here, compare note 2.

[79] /'soŋbolo/ also /'sombolo/ (<? Portuguese) *a wild and fast dance performed at the end of the lego-lego.*

[80] /ta-'fal/ *is completed*; compare: /pi ka'rasaŋ ta-'fal/ *we complete the work together.*

[81] /s-ah/ : /-ah/ *to feed somebody*, /('sopi) 'sah/ *they feed each other/themselves.*

[82] /sa-'foɪl/ : /-'foɪl/ *to wash oneself*, /('sopi) sa'foɪl/ *they wash each other/themselves.* /sah sa'foɪl/: after the *lego-lego* the participants eat together and young girls spray the backs of the guests and their favourites with water.

[83] see section 5.1: *and after they first had finished their meals and taken a bath ....*

[84] /sɔ-'baŋ/ *their village* /-lɛ/ see section 7.2, /-am/ *to go* see section 7.2, *in fine* and note 7.

[85] *here*, section 7.1, Table 5.

[86] /mɛŋ/ *to put down*; /sam 'hɔʔɔmi mɛŋ/ *the end* (idiomatic expression).

9.3 Free translation

[1] *The lego-lego.* [2] *In Adang people have to dance every year the lego-lego.* [9] *When it is the time of the dry monsoon, as soon as possible, provided something is accomplished, they dance.* [20] *For instance, when they carry firewood, build a house, roof a house, or if that does not happen, when some important men come to the village, or when there is a national holiday, etc.* [35] *As soon as the drums sound, the little children are usually* [44] *the first to enter the dance place.*

After some time, about nine or ten o'clock, the children become sleepy and [51] *the adults take over. The precentor and the older boys and girls enter the dance place and then the floor becomes lively. The singing is quiet and they answer simultaneously and also the dancers move most neatly* [58] *and quietly. The boys and girls lead each other in turns in to the rows of the dancers. Girls enter (the floor) and guide the elders by the hand* [69] *to honour them. Also people from other villages come to join the lego-lego when they* [74] *hear the sound of the drums. The dancing goes on until the following morning. When the lego-lego is about to end, then they dance* [79] *the sombolo. When the sombolo is over, the participants* [84] *eat and bathe together first before they leave for their villages.* [86] *The end.*

NOTES

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Symbols and abbreviations used in the text are:

coref.	: coreferential	subj.	: subject
excl.	: exclusive	/'(C)V/	: prominence peak
incl.	: inclusive	/-/	: morpheme boundary
Ind.	: Indonesian	[V̥]	: breathiness
obj.	: object	S	: speaker
orient.	: oriented	LOC.	: locative
perf.	: perfective	ABL.	: ablative
pers.	: person	OBL.	: oblique
pl.	: plural	ILL.	: illative
sg.	: singular	C	: consonant
sth.	: something	[C˺]	: unreleased consonant

'-' is written between constituents which together form the translation of a Kabola word/morpheme.

[2]Two exceptions to this rule have been attested: /'n-i-fɛʔ/ *my mother; older woman* and /'n-i-maŋ/ *my father; older man* show thematic vowel /ɔ/ in 3sg./pl. and /i/ everywhere else: /'n-i-fɛʔ/ *my mother(s)*, /Ø-'i-fɛʔ/ *your mother(s)*, /'ʔ-ɔ-fɔʔ/ *his/her mother(s)*, /'s-ɔ-fɔʔ/ *his/her own mother(s)*, but /'p-i-fɛʔ/ *our*(incl.) *mother(s)*, /'n-i-fɛʔ/ *our*(excl.) *mother(s)*, /'Ø-i-fɛʔ/ *your*(pl.) *mother(s)*, /'sopi 'ʔ-ɔ-fɔʔ/ *their mother(s)*, /'sopi 's-ɔ-fɔʔ/ *their own mother(s)*. Note the vowel harmony (i-Cɛ ∿ ɔ-Cɔ), which is lacking in /'nimaŋ/ : /'ʔ-ɔ-maŋ/ *his/her father(s)*, etc.

[3]/la'fuŋ/ shows, however, the usual vowel for inalienables /-ɛ/ : /'nɛlafuŋ/ *my head*, whereas /bɔʔ/ has /-ɔ-/ : /'nɔbɔʔ/ *my body*.

[4]THE means 'the speech moment/period or any other moment/period previous to or following upon the speech moment/period as chosen by the speaker', e.g. in the case of /na sɔl-'dady-am/ the S takes as orientation point/period the point/period before he became a soldier.

[5]In unmarked object function an opposition /'sari/ '+ coreferential with subject' vs. /'ʔari/ '- coreferential with subject' is demonstrable. In marked subject/object function this opposition is neutralised in /'sari(so)/.

[6]Along with the /'nariso/ series a /'naŋso/ series occurs with the same function:

/'saŋso na 'bɛh-am/ *It is he who has been hit by me; I have hit him*
/'saŋso 'nari 'bɛh-am/ *It is he who hit me; he hit me*

/'naŋso sa 'bɛh-am/ *I was hit by him*
/'naŋso '?ari 'bɛh-am/ *it was I who hit him; I hit him*

There may be a close semantic relationship between /-so/ in /'sopi 'na?dɛ-so/ *they intend(ed) to eat* (see 5.1) and /-so/ in forms such as /'sariso/ and /'saŋso/; further investigation is needed here.

[7]/am/ is the morphophonologically conditioned alternant of /sam/ *to go*; compare:

/sa (hɛl) 'baŋlɛ 'hɛl-am/ *he went down to the village*
/sa (sam) 'baŋlɛ 'am-am/ *he went to the village*

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'THERE'S A LOT OF IT ABOUT': SELF-ESTIMATES OF THEIR USE OF TOK PISIN BY STUDENTS OF THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

John Swan and D.J. Lewis

1. INTRODUCTION

Writing in 1974 in the Preface to *Tok Pisin i go we?*, R.K. Johnson (co-chairman of the Organising Committee for the Conference on the Future of Tok Pisin) declared:

> Pidgin speakers themselves have often been defensive about its use, have felt themselves to be disadvantaged and have accepted that the use of English would eventually make Pidgin redundant, if not for themselves then for their children. (Johnson 1973:7)

Despite this prognostication, a number of writers since then have claimed to detect considerable advances for Tok Pisin (TP) vis-à-vis English in Papua New Guinea (PNG). For instance, Wurm, Mühlhäusler and Laycock (1977) recall the attempts to condemn and eliminate TP not only in Papua (where the move was largely successful) but also in the New Guinea area. They continue:

> In spite of this, Pidgin has continued flourishing at an ever-accelerating pace, and could potentially be heading for a bright future. (p.1152)

Again, Wurm and Mühlhäusler (1979) refer to TP as a 'means of national self-identification' and assert:

> This attitude is spreading and forms a background against which the importance of NGP [= TP] can be expected to grow in all spheres of its potential use and applicability. (p.249)

More recently, Mühlhäusler (1984) has written:

> In the recent past, there appears to have occurred a reassessment of the role of English, and TP has regained much of its lost prestige. (p.454)

Not everyone agrees with this very positive viewpoint, however. Laycock (1982) appears much more doubtful than when he co-authored five years earlier with Wurm and Mühlhäusler.

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 649-663. *Pacific Linguistics*, C-100, 1987.
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> TP in PNG today ... is accepted at all levels as a useful language; but it may never have any status or prestige ... It seems that TP has nowhere to go but down in the future ... TP will decline because, however appropriate it may seem as a solution to linguistic problems on a *national* level, there are other ways of solving the linguistic dilemma at *regional* levels. In a modified form, what we are likely to see is a return to the local solutions of the pre-contact era — at least until such time as English is widespread enough to serve as a truly national language. (pp.266-267)

Which school of thought is right — those who see TP as on the rise to the status of a national language; or those who see it as a temporary solution to a communication problem which will eventually go away as the spread and improvement of English renders it redundant?

To quote Wurm and Mühlhäusler again:

> Progress towards study of language attitudes towards TP has been hampered by two facts: (a) the neglect of indigenous attitudes towards the language; and (b) the absence of up-to-date techniques such as surveying with questionnaires and matched-guise tests. Instead, all studies carried out to date have been of a strictly observational kind. (p.243)

The present study, the authors believe, at least makes a start towards filling this gap in the evidence identified by Wurm and Mühlhäusler.

It arose out of an observational impression on the part of one of the authors. Some six years ago when he first came to work at the Papua New Guinea University of Technology (PNGUT), he was attempting to learn some Tok Pisin. To this end, he sometimes left his office door open so as to overhear authentic snatches of the language as students made their way to and from class. In fact at this time he was struck by the frequency with which students continued to use English rather than Tok Pisin between classes. Over the past two or three years, however, he has steadily gained the impression that instead of using English in the corridor students frequently switch to TP as soon as they emerge from a class which has been conducted in English. Further informal observation of language use by students elsewhere on campus has served to confirm this impression of the increased use of TP by PNGUT students. Also personal communication with Papua New Guinean linguists at the University of Papua New Guinea indicates that a similar development is taking place there (Nidue: personal communication 1985).

In order to obtain more concrete evidence of what languages students are actually using at PNGUT (and how much of each) he attached a somewhat hastily devised questionnaire to the Personal Details Form which all students attending language lessons are asked to fill in at the beginning of each academic year. The source of data for the present paper is therefore an amalgam of the standard Department of Language and Social Science Personal Details Form and these additional questions on TP and other languages used. The result is a somewhat less than satisfactory investigative instrument. Nevertheless the authors believe that it does provide some useful data and suggest some interesting conclusions. They hoped to improve on this version of the questionnaire when they replicated the inquiry in both PNG universities during 1986.

2. WHAT THE INQUIRY SOUGHT TO ASCERTAIN

The inquiry addressed itself to the following questions:

[1] which language students first spoke as children
[2] which language(s) students currently speak when at home with their family
[3] how well students estimate themselves to speak and understand English, Tok Pisin and Hiri Motu
[4] from whom students first learned TP
[5] to whom students currently speak TP
[6] the relative amounts, expressed as a percentage, of English, Tok Pisin and Vernacular (V) students estimated themselves to use or to have used in various settings: in the village; in town; in Community Primary School, High School (HS) and National High School (NHS); and currently at PNGUT
[7] whether students estimated themselves to be using more or less TP than (a) five (b) ten years ago.

In addition, the Personal Details part of the form provided information on students' age, course and year of study, place of origin, previous education, and father's occupation. A number of these questions as presented (for example, [1], [5] and even [7]) proved to be insufficiently precise to elicit clear answers and appear to have been differently interpreted by different students.

For the purpose of the present paper we shall take account of the students' personal background details, together with [2] and [3] (above). Furthermore, we shall concentrate on certain aspects of [6], in particular self-estimates of how much TP students speak at PNGUT.

It should be emphasised at the outset what our inquiry did not and could not seek to do. Firstly, no attempt was made to inquire into exact domains of use of TP (or any other language). This is an area of such complexity that it obviously deserves quite separate study. Adding domain-related questions would only have made the questionnaire unwieldy for students to fill up in class. (We wanted to ensure that the questionnaires were filled up during class time because it was feared that if students took them away to be filled in at leisure a great many would not be returned.) It is hoped that one of our colleagues will be taking up the study of this aspect of student language use separately in the near future. Secondly, a single administration of the questionnaire could obviously not by itself establish whether the use of TP is on the increase amongst our student population. At best it could provide a benchmark for future comparison. As already indicated the present authors intend to pursue this question at a later date.

We are also well aware of certain problems with the approach we took to the acquisition of data. In the first place, the vast majority of our student sample (72%) were Year 1 students. (This is because all Year 1 students take a language course whereas only a selection do so in later years.) They were therefore being asked to estimate how much TP they were using within two or at most three weeks of coming to university and perhaps before a regular pattern of study and social activity had been established. For this reason it is hardly surprising that this First Estimate by Year 1 students bears a very close relation to their estimate of the amount of TP used previously at NHS. To offset this, we asked a considerable proportion (55%) of them to re-estimate their percentage use of TP at PNGUT early in Semester II, that is fully halfway through the academic year. We believe the figures for the change between First and Second Estimates to be among the most reliable and intriguing data we obtained.

Of course, much of what we have to report in this paper hinges on the reliability to be attached to students' self-estimates of how much of a given language they use. Ervin-Tripp (1972) has claimed that multilingual informants may not even be consciously aware which language they have just spoken on a given occasion. We have no reason to doubt this. On the other hand, we asked our informants for a *global* estimate — almost a 'gut reaction' to the question of relative percentages. For a number of reasons we believe these estimates to have good reliability:

[1] Students did seem to understand what they were doing in this questionnaire where in others there is evidence of some confusion. Almost without exception the three percentages (English, TP, V) added up to 100. Students in PNG do have difficulties with the concept of percentages but their response here was at least encouraging.

[2] Most students gave round estimates rather than exact percentages — 40% or 35%, rather than 39%, for example. This again seems encouraging.

[3] The estimates appear to the authors to *make sense*. We can calculate with some accuracy the amount of English students *have to use* in connection with their studies. If therefore we had obtained a mean TP use estimate of, say, 50% or above overall, *prima facie* there would be good reason to suspect this as a more or less wild over-estimate. In fact, the figures obtained accord well with our observational experience — and indeed (since the inquiry emanated from the Language Department with what might be felt to be its vested interest in support of English) we suspect the estimates are on the low side. They are certainly eminently reasonable.

3. STUDENT SAMPLE AND ADMINISTRATION OF THE QUESTIONNAIRE

All Preliminary Year and Year 1 students at PNGUT take a language course and in addition courses are mounted for some students in later years, depending on their subject of study. Non-Papua New Guinean students were, of course, eliminated from our sample, which numbered 469 students in all, broken down as follows by Year Group:

YEAR GROUPS		
Preliminary Year (PY)	31	(7%)
Year 1 (ex PY)	48	(10%)
Year 1 (ex G12 or NSL)	305	(65%)
Year 2	27	(6%)
Year 3	38	(8%)
Year 4	20	(5%)
TOTAL	469	(101%)

Four hundred and thirty one usable returns were received. This represents just under 50% of the entire body of PNG students at PNGUT at the beginning of the 1984 academic year. As can be seen, a considerable majority (72%) of the sample were in their first year at university, having come either direct from High School at Grade 10 (31 students) (7% of the sample); or from NHS at Grade 12 or as Non-School Leavers (that is having completed at least Grade 10 and then spent some years in a professional field usually at technician level) (combined total

of 305 students) (65% of the sample). Numbers for Post Year 1 students are comparatively small because the Language Department runs relatively fewer courses for such students and because relatively fewer returns were received from such students in any case. (Some of these students were unfortunately allowed to take the questionnaires away to be filled up later.)

The key question (for this present analysis) was framed as follows:

> Estimate the relative amounts of TP, English and Tokples you use(d) in each of the following situations. Use a percentage.
>
> | | TP | ENGLISH | TOKPLES |
> |---|---|---|---|
> | (e.g., in the village | 20 | 10 | 70) |
>
> | | TP | ENGLISH | TOKPLES |
> |---|---|---|---|
> | (1) in the village | | | |
> | (2) in town | | | |
> | (3) in Community School | | | |
> | (4) in High School | | | |
> | (5) in NHS | | | |
> | (6) at PNGUT | | | |

4. RESULTS AND DISCUSSION

4.1 Students' self-estimated relative percentage use of TP overall

Overall figures for students' estimates of their use of various languages are as follows:

	MEAN ESTIMATED % USE OF:			
	TP	ENG	V	
At: Community School	34	37	29	(431 students)
High School	29	58	13	(431 students)
NHS	30	62	8	(310 students)
PNGUT	28	63	9	(431 students)

The above figures indicate a fairly dramatic decline in the use of vernacular within the educational framework and the rise of English at the expense of vernacular and to a much lesser extent of TP.

The mean estimated percentage use of TP at PNGUT by all students in the sample was 28%. We shall assume this to mean not just speaking the language though almost certainly speaking and listening rather than reading and writing accounts for the largest part of the estimate in the case of TP, whereas in addition reading and writing are assumed to be included in the estimate for English.

The mean of 28% represents only a slight fall compared with HS and NHS and indeed is not so very far different from the estimates for the use of TP at Community Primary School which students would have been attending not less than six years before.

4.2 Students' relative estimated percentage use of TP by year of course

4.2.1 The table below shows students' relative estimated percentage use of TP by year of their course at PNGUT.

YEAR GROUP	NO.	% OF SAMPLE	MEAN ESTIMATED % USE OF TP AT PNGUT
Preliminary Year (Ex G10)	31	(7%)	23%
Year 1 (Ex G12 or NSL)	278	(65%)	28%
1st Prof. Year (Ex PY)	46	(11%)	26%
Year 2	23	(5%)	40%
Year 3 and 4	53	(12%)	29%
	431	(100%)	

From these figures it would appear that PY students (that is those joining university straight from HS without going through NHS) use somewhat less TP (and somewhat more English) than the sample as a whole; and that Grade 10 entrants even in their *second* year at university are still slightly below the overall mean (26% as against 28%). However, in both cases the sample is relatively small and perhaps not too much significance can be read into the differences, especially in view of Second Estimate figures (see below).

Apart from the ex-Grade 10 Second Year Group (that is First Professional Year), the other Year 2 students were almost entirely students of Communications Engineering who had just returned to PNGUT from several months of work experience with their sponsors. It is almost certainly the case that these students would have been using a considerable amount of TP in the work environment and this may well have influenced their estimates of how much TP they would continue to use at PNGUT during their second year there.

For the rest, the most remarkable feature is the consistency of the estimates (even allowing for the rather small samples) for Year 3 and Year 4 students. Taken together with estimates for the use of TP at HS and NHS (see Table on previous page), this seems to indicate that a plateau of about 28-30% TP use is reached through HS and NHS to the end of tertiary education. (However, see comments below on students' Second Estimates.)

4.2.2 Second Estimates by Year 1 students

Because it was realised that students in Year 1 had been asked to make estimates of their percentage use of TP based on relatively limited experience of university life, we decided to repeat this part of the questionnaire with this group early in Semester II. By this time a certain number of Year 1 students had already dropped out; and for various administrative reasons we were unable to get Second Estimates from all those who had survived into Semester II. However, we did obtain a very substantial number of Second Estimates (203) from those in the Year 1 group. One hundred and fifty three of those who were strictly Year 1 (that is not ex-PY) provided usable second returns; and a further 55 usable returns were received from PY or ex-PY students. Comparative figures are as in the table below.

SECOND ESTIMATES BY STUDENTS IN FIRST YEAR AT PNGUT (i.e. not ex-PY)

NO.	% OF GROUP	ESTIMATED % USE AT PNGUT		
153	55%	TP	ENG	V
	First Estimate	29	60	11
	Second Estimate	37	51	12

This perceived increase in TP usage was tested using a matched pair t-test and found to be highly statistically significant ($p<0.01$).

The rise in TP is accounted for almost entirely by a corresponding drop in English, since the use of Vernacular remains almost the same. In case the increase was largely or even significantly attributable to Papuan non-TP speakers learning to use TP since coming to PNGUT we broke the figures down for both estimates by students' region of origin as in the table below.

STUDENTS' REGION OF ORIGIN	NO.	INITIAL ESTIMATE	SECOND ESTIMATE	CHANGE
Papua	29	16.7%	16.4%	- 0.3%
Highlands	53	29.6%	29.1%	- 0.5%
New Guinea Coastal	39	32.7%	48.4%	+15.6%
New Guinea Islands	32	33.1%	52.8%	+19.7%
Overall:	153	28.7%	36.7%	7.9%

These figures conclusively allow us to dismiss the assumption that Papuan students had increased their use of TP during their first five months at PNGUT. Instead, the striking finding is that it is those students — Coastals and Islanders — whose first estimates were the highest who have significantly increased their use of TP, while Highlanders and Papuans have remained almost exactly the same. (Incidentally, the extraordinary similarity in the two estimates for these latter groups lends further credibility to students' estimates.)

In view of the fact that ex-Grade 10 entrants had a lower than average mean estimated use of TP, we separated this group out from the ex-NHS/NSL Year 1's. Findings were as follows:

SECOND ESTIMATES BY EX-PY YEAR 1 STUDENTS

NO.	% OF GROUP	ESTIMATED % USE OF TP AT PNGUT
25	54%	First Estimate 28% (i.e. for these 25 only)
		Second Estimate 33%

This difference is not considered to be statistically strongly significant, that is it does not seem to be clearly demonstrated that ex-PY Year 1 students *significantly* increase their use of TP during their second year at PNGUT.

We also looked at the PY students who gave two estimates.

SECOND ESTIMATES BY EX-G10 PY STUDENTS

NO.	% OF GROUP	ESTIMATED % USE OF TP AT PNGUT
30	97%	First Estimate 23%
		Second Estimate 37%

Statistical analysis indicates this increase to be highly significant.

The precise significance of these fairly dramatic increases in estimated use of TP during the first five months at PNGUT is not clear to us at this stage for a number of reasons:

[1] It is not on the whole matched by any *sustained* increased use of TP amongst Post-Year 1 students. See, for example, the relatively lower estimates for Year 3 and 4 students (where admittedly our sample was rather small) and the mixed estimates for Year 2 students (26% for ex-Grade 10's, 40% for ex-Grade 12's). Are we to interpret the results here as meaning that increased use of TP at PNGUT is a new phenomenon affecting only more recent students but excluding ex-Grade 10's in their second year?

[2] There are no other Second Estimate statistics to compare the Year 1 set with. For instance, Year 2 Communications Diploma students had an even higher *initial* estimate of 40%. Would a Second Estimate by this group have shown a further rise, a levelling out or a drop back closer to the overall mean? A rise or levelling out would perhaps indicate the beginning of a trend at least among younger students towards using more TP than the *present* Year 3's and Year 4's, but we simply cannot be sure at this stage.

[3] If there *is* a trend towards increasing use of TP amongst younger students, why are ex-PY students not also clearly involved, *at least by the time they have completed a year and a half at PNGUT?*

[4] The present statistics are, so far as we know, the first hard data collected on relative percentage estimates of use of languages at university level in PNG. It would be premature to draw conclusions as to a trend from only one set of figures.

Despite the above provisos, we can say quite definitely that PNGUT students *as a whole* by their own self-estimate are using a considerable amount of TP. There is no evidence of any significant *decline* in their use of TP over the four years at university, that is no evidence of any move towards identifying with English as the language of preference because of its status internationally or as an educational medium. Some younger students indeed appear to be using more TP at university than at any previous time in their educational career since Community School. Overall, the data would seem to indicate a very positive attitude to the language even in an environment where using a lot of English is an educational requirement and where switching to greater use of English might be expected to offer the reward of increased prestige and possibly even have the spin-off effect of improved academic performance.

4.3 Estimated relative percentage use of TP by sex

The breakdown here is as follows:

	NO.	% OF SAMPLE	MEAN ESTIMATED % USE OF TP AT PNGUT
Male	390	(90%)	28%
Female	41	(10%)	26%
TOTAL	431	(100%)	

There is no statistically significant difference between estimates by male and female students.

4.4 Estimated relative percentage use of TP by age at entry to university

It is difficult to correlate age directly with year of course in the PNG context as there are still some students coming through the educational system who started Community School relatively late. The accepted meaning of the term 'mature age student' at PNGUT is 'any student who entered university not from school but after a period of employment subsequent to leaving school'. However, for the purposes of the present inquiry, we defined 'Mature Age Group' more literally as those students irrespective of where they had just come from who entered university after they had reached the age of 21. Broken down in this way, the figures are as follows:

AGE OF STUDENTS*	NO.	% OF SAMPLE	MEAN ESTIMATED % USE OF TP AT PNGUT
'Normal' Age Group	339	(79%)	27%
Mature Age Group	92	(21%)	30%
TOTAL	431	(100%)	

*Mature = over 21 when started university

While it is clear that Mature Age students as thus defined are 3% above the overall mean, this is not found to be a significant difference statistically.

4.5 Estimated relative percentage use of TP by region of origin

The general picture of students' region of origin is as under:

	NO.	% OF SAMPLE	MEAN ESTIMATED % USE OF TP AT PNGUT
Papua	85	(20%)	18%
Highlands	136	(32%)	26%
New Guinea Coastal	120	(28%)	33%
New Guinea Islands	90	(21%)	33%
TOTAL	431	(101%)	

Given the importance of Hiri Motu (for example in Central Province) and the traditional lack of TP in certain other areas of Papua (for example Milne Bay), it is hardly surprising that students from the Papuan region trail considerably behind the others in their estimated use of TP. (It should be noted that 278 students in all or 59% speak no HM and a further 10% speak it only 'poorly'. The competent to fluent speakers of HM are concentrated almost exclusively in Papua.)

By contrast, it is interesting to note that under 1% of all students in the sample speak 'no TP at all'. Clearly, the pressure is on the Papuan HM and/or non-TP-speaking students to acquire TP; there is little evidence of any corresponding pressure in the reverse direction. Eighty eight per cent of the sample rate themselves 'good' or 'very good' in their comprehension of TP. To fully belong to the student body therefore it would seem that at the very least a fair knowledge of TP is a sine qua non. (Even the non-Papua New Guinean students are known to acquire at least a working knowledge.)

4.6 Estimated relative percentage use of TP by father's occupation

Breakdown according to father's occupation reveals the following sociolinguistic pattern:

FATHER'S OCCUPATION	NO.	% OF SAMPLE	MEAN ESTIMATED % USE OF TP AT PNGUT
Subsistence Farmer	264	(56%)	30%
Rural (non-subsistence)	112	(24%)	24%
Urban	43	(9%)	25%
Nil Responses	50	(11%)	-
TOTAL	469	(100%)	

It is in itself interesting that over 80% of the students in our sample come from a *rural background* — at least 56% from a subsistence farming background. It is also of some interest that where the father has moved into the money earning bracket students claim to use rather less TP. This applied just as much in rural areas as in urban areas. (We took the latter as being restricted to Port Moresby, Lae, Madang, Rabaul, Goroka, Mt Hagen and Wewak.) Do students from such a background associate English rather than TP with 'getting on'? For those students who have moved *directly* from the subsistence level background to university this is, however, clearly not the case. Once again, if we were to find a really strong trend towards identifying English with 'success', 'getting on', 'joining the world or even simply the Papua New Guinean educated élite', etc., we would surely find this reaching its peak at university, with a correspondingly low use of TP among such students. No such trend emerges from the present study.

4.7 First choice home language relative to father's occupation

FATHER'S OCCUPATION	% OF THE GROUP WHOSE FIRST CHOICE HOME LANGUAGE IS:				
	TP	ENG	HM	V	
Rural (subsistence)	18%	3%	1%	78%	(100%)
Rural (non-subsistence)	35%	5%	6%	54%	(100%)
Urban	47%	13%	11%	29%	(100%)

From the above table it is clear that students from an urban background or a rural (non-subsistence) background are much more likely to use TP as first choice home language than those from a subsistence background. Thirteen per cent of urban students claim to use English as first choice at home, but the smallness of the sample (43) means this refers to only five or six students.

The overall picture of first choice home language for the sample is as follows:

FIRST CHOICE HOME LANGUAGE	NO.	% OF SAMPLE	MEAN ESTIMATED % USE OF TP AT PNGUT BY THIS GROUP
Vernacular	283	(66%)	28%
TP	108	(25%)	31%
English	21	(5%)	21%
HM	15	(4%)	18%
TOTAL	427	(100%)	

There is quite clearly a significant difference here between those who speak either Vernacular or TP as first choice home language on one hand and those who speak either English or HM at home on the other. Those who speak English as first choice at home carry this choice over into university activities.

4.8 Estimated relative percentage use of TP by NHS

Papua New Guinea has four National High Schools which operate as the main feeders to the two universities. These National High Schools are:

[1] Sogeri (about 25km from Port Moresby)

[2] Kerevat (about 25km from Rabaul in East New Britain Province)

[3] Aiyura (in the Eastern Highlands Province: this NHS is by far the furthest away from a sizeable urban settlement — Goroka is about 70km away)

[4] Passam (about 25km from Wewak, capital of East Sepik Province)

Students attend NHS for two years (Grades 11 and 12). In contrast to Community School and High School, the vast majority of staff are expatriate — most of them native speakers of English.

In the past there was positive discouragement of student use of TP, even outside the classroom (where, of course, education is totally English-medium) even to the extent of punishment of those students found speaking TP. Today, this kind of punitive attitude has been abandoned. However, there is little doubt that there is a tendency to push students to use English as much as possible outside the classroom for the sake of their future educational and career prospects. For instance, the 1985 edition of the Aiyura NHS Student Handbook has a section on 'Speaking Languages Other Than English' as follows:

> While we have no law forbidding the speaking of local languages, students are encouraged to use English outside as well as inside the classroom if they are serious about truly attempting to master the language. It is very noticeable that the majority of students leaving the school at the end of Grade 12 speak English far more fluently than when they entered at the beginning of Grade 11. This is not because of English lessons alone but because they have been speaking the language out of class to students from different language areas. Those students who avoid English and confine themselves whenever possible to Pidgin or Tokples improve their English at a much slower rate.
>
> Furthermore, it is wise for students to avoid using their own local language in situations which could bring shame or hurt to students or staff not of their language group. (p.20)

Breakdown of figures for the sample by NHS of origin are:

	NO.	% OF SAMPLE	MEAN ESTIMATED % TP USE BY THIS GROUP AT PNGUT
Aiyura	73	(17%)	23%
Kerevat	64	(15%)	34%
Passam	70	(16%)	32%
Sogeri	93	(22%)	27%
Kabiufa*	3	(1%)	33%
Other	9	(2%)	17%
Non-NHS	119	(28%)	26%
TOTAL	431	(101%)	

*Kabiufa is a small Seventh Day Adventist College near Goroka. Its students follow the NHS syllabus.

The results for the four National High Schools were analysed using simple one-way analysis of variance and the difference between them was found to be strongly statistically significant.

Of course, another factor influencing the above results is almost certainly the fact that students at the four schools are not an equally representative sample of the country as a whole. While the policy is to produce a 'mix' of students in each NHS for purposes of nation building, about 60% of students in each school come from the more immediate catchment area, that is some 60% of students at Aiyura are from the Highlands Provinces and so Aiyura tends to be seen as the 'Highlands NHS'. If we take this factor into account, the following pattern emerges:

NHS	NO.	% OF SAMPLE	60% OF STUDENTS FROM	MEAN ESTD. % TP USE AT PNGUT BY THIS AREA GROUP	MEAN ESTD. % TP USE AT PNGUT BY STUDENTS FROM THIS INSTITUTION
ANHS	73	(17%)	Highlands	26%	23%
KNHS	64	(15%)	Islands	33%	34%
PNHS	70	(16%)	NG Coastal (esp. Sepik)	33%	32%
SNHS	93	(22%)	Papua	18%	27%

On this basis we can posit the *combined* influence of school policy and area of origin as accounting for the differences between schools, that is the relatively pro-English anti-TP policy of ANHS reinforces the lower use of TP among Highlands students relative to NG Islands and NG Coastal students; the relatively liberal attitude to the use of TP at KNHS and PNHS enhances the tendency of Islanders and Sepik students to use a lot of TP anyway.

5. STUDENTS' SELF-RATING OF COMPETENCE IN USE OF VARIOUS LANGUAGES

The table below summarises findings with regard to how well students rated their ability to speak and comprehend English, TP and HM. Figures in brackets indicate the percentage of the entire sample of students giving this self-rating.

	ENG				TP				HM	
	SPEAKING		COMPREHENDING		SPEAKING		COMPREHENDING		SPEAKING	COMPREHENDING
Not at all	0	(0%)	0	(0%)	2	(1%)	4	(1%)	278 (59%)	269 (57%)
Poor	3	(1%)	3	(1%)	20	(4%)	3	(1%)	45 (10%)	39 (8%)
Fair	148	(32%)	90	(19%)	44	(9%)	46	(10%)	32 (7%)	37 (8%)
Good	270	(58%)	296	(63%)	119	(25%)	104	(22%)	20 (4%)	23 (5%)
Very Good	44	(9%)	78	(17%)	282	(60%)	309	(66%)	23 (5%)	28 (6%)
Nil Response	4	(1%)	2	(1%)	2	(1%)	3	(1%)	71 (15%)	73 (16%)
TOTALS	469	(101%)	469	(101%)	469	(101%)	469	(101%)	469 (100%)	469 (100%)

If we place these self-estimates on a scale 1-5, the following are the means:

	MEAN ESTIMATED COMPETENCE	
	SPEAKING	COMPREHENDING
TP	4.411	4.526
ENGLISH	3.758	3.961
HM	1.656	1.742

Thus we see that despite (theoretically) some 12 years (or more) of completely English-medium education, students at PNGUT remain substantially more confident in their use of TP than of English — this despite the fact that TP is L1 for only a minority (25%) and that in most cases they would have had no formal instruction in the use of TP. Assuming that — whenever possible and permissible — one uses the language one feels most 'at home' in, it would appear that TP would, for the majority of students at PNGUT, be their *language of preference* and English would largely have 'instrumental' status.

Further support for the view that TP is used in preference to English because of students' self-perceived inadequate command of English can be seen if we plot students' self-ratings on English proficiency against Mean Estimated Percentage TP Use at PNGUT:

STUDENTS RATING THEIR ENGLISH AS:	NO.	% OF SAMPLE	MEAN ESTIMATED % USE OF TP AT PNGUT
Fair	134	(29%)	32%
Good	251	(54%)	27%
Very Good	41	(9%)	21%

These differences are statistically significant. Essentially, the better one's English, the less TP one uses.

6. CONCLUSIONS

The present investigation has sought:

[1] to establish benchmarks for later investigations to ascertain whether the amount of TP used by PNGUT students is increasing or not

[2] to ascertain how much TP students currently *claim* to be using at PNGUT (and thereby indirectly to obtain some idea of students' positive or negative attitude to the language)

[3] to determine what factors significantly influence the amount of TP used by students of PNGUT.

The authors conclude:

[1] TP is used to a significant extent by PNGUT students, far more, for example, than vernacular or HM

[2] there is no indication that students use significantly less TP at PNGUT than at HS or NHS

[3] TP *may* be the language of preference for most students with English performing an 'instrumental' rather than 'integrative' function. At the very least it is clear that students have a positive attitude toward TP

[4] the amount of TP students estimate themselves to be using does not vary significantly by sex, age of student at entry to university or year of course

[5] the amount of TP students estimate themselves to be using at PNGUT *does* vary significantly by region of origin, father's occupation, the NHS which students attend prior to joining PNGUT, and self-perceived competence with English.

In addition, there is a statistically significant increase in the Mean Estimated Percentage use of TP by students during their first five months at University. In the absence of evidence as to whether such a trend is continued beyond Year 1, particularly the doubtful evidence from ex-PY students, it would be unwise to posit any actual current trend towards increase in the use of TP by students at PNGUT. But equally such a possibility cannot definitely be ruled out. Only further investigation will confirm or disprove the hypothesis.

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AN ANTHROPOLOGY TRANSLATION - THE 'ROT BILONG KAGO' PROJECT

W.E. Tomasetti

In December 1978 I commenced the translation of Peter Lawrence's *Road belong cargo* (Lawrence 1964) from English into Tok Pisin - the major lingua franca of Papua New Guinea. Commencement of work on the project had been preceded by agreement reached in friendly and informal discussions spread over a number of months between the author of the work, Professor Peter Lawrence, and the translator. The task was to be on a part-time amateur basis, except that Professor Lawrence volunteered to assign any resultant publication royalties to me.

My general willingness to undertake the project was strengthened by various references describing general interest among Papua New Guineans, whose societies have been the object of research by anthropologists, in reading any texts published as a result of such research. The publication of this translation seemed likely to help meet part of such interest.

Further, it seemed to me that *Road belong cargo* was potentially an excellent text for such a project, because it deals with a topic of great current importance in public affairs in Papua New Guinea - namely the relationship between cargo cults and the modernisation of society and culture. Whilst the book focusses on cults and their ramifications in one sector of one province only, I believed it threw light on such societal phenomena throughout Papua New Guinea.

In January 1984, the manuscript - entitled *Rot bilong kago* - was finished and sent to the Institute of Papua New Guinea Studies, who had agreed to publish it - a lengthy gestation.

In some respects the project is an experiment, and, I believe, a pioneering one. *Road belong cargo* is a very well known anthropological text written - of course - in scholarly style, and it deals with very complex societal phenomena. It seems unlikely that there are earlier instances of the translation of a text of that category into Tok Pisin (or perhaps any other well established lingua franca of the region). There seemed to be no precise example to look to, and perhaps lean on.

However three publications should be mentioned as they are, in differing ways, forerunners to *Rot bilong kago*. First is the series of summaries of New Guinea Research Bulletins published by the New Guinea Research Unit in Tok Pisin. Next is the translation into Tok Pisin of a shortened version of *Chimbu: issues in development* (Howlett and others 1976, 1977). The translation was done (I believe) by Dr Howlett. The third of these publications is named *Man, langwis mo kastom long Niu Hebridis* (Brunton and others 1978). The contents consist of a series of short articles on social sciences topics each of which was (I think) written in Bislama by its author.

Donald C. Laycock and Werner Winter, eds *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*, 665-668. *Pacific Linguistics*, C-100, 1987.
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Apart from the foregoing scholarly texts, as might be expected there is much secular and religious writing in Tok Pisin available in Papua New Guinea. The Government has published a great deal of material in Tok Pisin. The Bible, of course, a newspaper entitled *Wantok*, and much educational material for church schools have all been published in Tok Pisin by various church organisations. Finally, the University of Papua New Guinea, particularly in its early years, was the source of much Tok Pisin literature, examples of which may be found in *Kovave* (the literature magazine published by the University).

From scholarly English to the colloquial Tok Pisin of the 1970s is a long way, and it would have been foolish to have dismissed all doubts about the practicality of the project.

I set myself three guidelines within which to work. In rough order of importance they are: (1) preserve the scholarly nature of the original; (2) write for mature readers with a general broadly defined interest in public affairs; (3) aim at a length of text close to that of the original.

Concerning (1), Professor Lawrence believed that a translation that omitted or only superficially dealt with the detailed and subtle descriptions and commentaries in the English text would be rejected by readers in the Madang area (at least) as another attempt to conceal from them the 'real' truth about *kago*. The first guideline provided an approach to this potential difficulty. Although initially I worked towards a free translation, I increasingly recognised that such a translation would involve serious risks of departing from the precise meaning of the English text, particularly in abstract passages - of which there are many. I therefore concentrated on producing as close a translation as possible. Discussions with Professor Lawrence clarified this aspect of the job (and others) as it proceeded. However, not surprisingly, the differing patterns of expression between the two languages meant a frequent radical restructuring of sentences (sometimes only one, sometimes several in sequence) of the English text. This, of course, complicated adherence to this guidline.

In general, the nature of the text was well served by the capacity of Tok Pisin to present a studied seriousness in expression. But it seemed a good idea, from time to time, to avoid fully suppressing the amiable lightheartedness of Tok Pisin, which - anyway - is never far from the surface.

Concerning (2), I felt that the category of potential reader mentioned above - being possibly in some instances the actual participators in the events dealt with (or similar events) - may have a deep interest in reading a scholarly work dealing with what must have been a most exciting period in their lives. Perhaps other potential readers would be able to identify readily with the actors (major and minor). Cargo cults have a widespread distribution in Papua New Guinea society, and it could be expected that there would be many persons able to and interested in making this identification. The target readership would probably be more familiar with a style of Tok Pisin that avoided the more fashionable tendencies towards anglicisms that are features of modern urban usage. This presumption of familiarity (and thus probably preference) certainly was congenial to my established use and vision of the language.

Concerning (3), I wished to pursue the simple practical aim of rough equality in length, if only to attempt to counter the often heard unthinking opinion that Tok Pisin is incapable of concise expression. In the event the Tok Pisin version is, I think, about one tenth longer than the English version.

There were, of course, problems. Three warrant some discussion: they are - vocabulary, spelling, and foreign names.

The most time-consuming problem (and the one that provided a constant source of interest) arose from the inadequacy of the existing Tok Pisin lexicon for an economical translation of various words and/or phrases in the text - this is not surprising if one recalls that anthropology (and its professional vocabulary) is a field into which Tok Pisin has scarcely ventured. Apart, that is, from a comparatively small number of people, from time to time and from place to place, meeting the needs of field researchers for anthropological data, and otherwise seeing something of the discipline in action.

Some words in the original text, for which no Tok Pisin equivalent could be found, occurred only infrequently in the text - in these cases space was not wasted by translating the word with a phrase, formed as concisely as possible. However other words without a Tok Pisin equivalent occurred in the text with a frequency that would have made phrase-for-word translation quite space consuming.

Tok Pisin has an established capacity to produce, adopt, and use new vocabulary with great facility as the need for it emerges - I suppose this happens in what has probably been called the language market-place. The translation was facilitated by taking advantage of this feature of the language, but in the circumstances it was necessary to do my own crafting as the text produced needs. In so crafting, I preferred the combination of existing Tok Pisin words (e.g. pultoktok or raus-sindaun) to writing a Tok Pisin version of an English word (e.g. ikonomi or politik), where it was possible. This choice arose from a belief that the new meaning would be more easily recognised by readers in the products of the first technique. In most cases only two words were combined, but there are instances (e.g. graunwarawin or kainlainsindaun) of the combination of three Tok Pisin elements into one new word - this probably stretches usage to its limit, but (I think) no further. A glossary of the 'new' words has been prepared for inclusion in the publication.

Spelling presented some difficulties. I believe that the Papua New Guinea Government has not prescribed a national system of spelling for Tok Pisin, and I thus used my own system, if it warrants such a designation. I favour writing vowels in positions in which I have commonly heard them, but this sometimes seems inappropriate: and in any case it is a practice with critics, so it has not been done in the cases in which it looked over-elaborate - e.g. olgeta. It is perhaps worth mentioning that the distinction between forms such as no gat and nogat, or namba wan and nambawan is more easily observed in speech than in writing. In an attempt to signal new words (involving new meanings) I have used a hyphen between the elements of some new words that were formed by combination. In all these matters consistency proved to be most elusive.

Although it produced some startling results, I decided to transcribe non-Papua New Guinean names into Tok Pisin orthography (giving each name thus treated its original spelling (in brackets) on its first appearance in the text). This seemed a practical way to assist readers towards an understanding and perhaps a recognition of them. There is good precedent for the practice, which also follows common practice in speech.

It seemed to me, from time to time during work on the text, that there could be value in testing parts of the text with Papua New Guineans currently using Tok Pisin during their daily round. The parts of the text I had in mind were some of the quite dense sections dealing with theoretical questions, and also some of the newly crafted words the meaning of which perhaps seemed obscure. However there would have been difficulties in designing such tests so that they would have produced results that would have had something useful to say about the impact of the text on the presumed readership. Also, from Sydney, it would

have been difficult and expensive to arrange testees. So I did not proceed with the proposal.

However, it could be considered for any future such translations.

Tok Pisin still has its detractors - and this despite some decades of research and publication the result of which has been an increasingly fuller understanding of the linguistic characteristics of Tok Pisin. This material has also provided the means to refute the carelessly inaccurate common criticisms of the language: nevertheless one should not be confident that ignorance and prejudice will not continue to be the basis of some opinions expressed about Tok Pisin.

The prime purpose of this translation was to help Papua New Guineans towards an understanding of something of their history and of some of the forces that are playing a part in the contemporary shaping of their society. However, it will be an extra and welcome outcome if the translation helps towards illustrating the capacity of Tok Pisin to respond to some of the needs that emerge as the culture, of which it is an expression, responds to modernising influences.

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THE MARQUESAN DIALECTS: A FIRST APPROACH

D.T. Tryon

Introductory

Apart from the work of members of Cook's expeditions to the Pacific, the first recording of Marquesan consisting of more than brief wordlists was made by the English missionary William Pascoe Crook, who lived on Nuku Hiva in the north-west of the group from 1797 to 1799. This work exists only in manuscript and is generally unknown to Pacific linguists. A number of traders and whalers also make mention of Marquesan in the early years of the nineteenth century, for example Melville (1846). The principal systematic recording of the language, however, apart from the work of the hydrographer Gaussin (1853), was undertaken by missionaries of the Picpus order, beginning with Gracia (1843).

The first bishop of the Marquesas, Bishop Dordillon, arrived in the Marquesas in 1845 and remained there until his death in 1888. His Marquesan dictionaries, published posthumously (Dordillon 1904, 1931, 1932), were largely edited by other members of the Picpus Order, especially Father Simeon Delmas. These dictionaries contain a considerable corpus of material on Marquesan, perhaps more than for any other Polynesian language apart from New Zealand Maori. Dordillon's monumental work unfortunately only rarely indicates which of the Marquesan dialects is the source for particular lexical entries in the dictionaries. In the grammatical introductions to them, however, Dordillon does point out the basic south-east versus north-west dialect dichotomy, and lists their principal characteristics. He says, inter alia:

> *Aux Marquises, de même que l'archipel se divise en deux groupes, l'un Sud-Est, et l'autre Nord-Ouest, de même la langue se divise en deux dialectes bien distincts, mais non pas tellement qu'on ne puisse se comprendre d'un groupe à l'autre.* (Dordillon 1904:4)

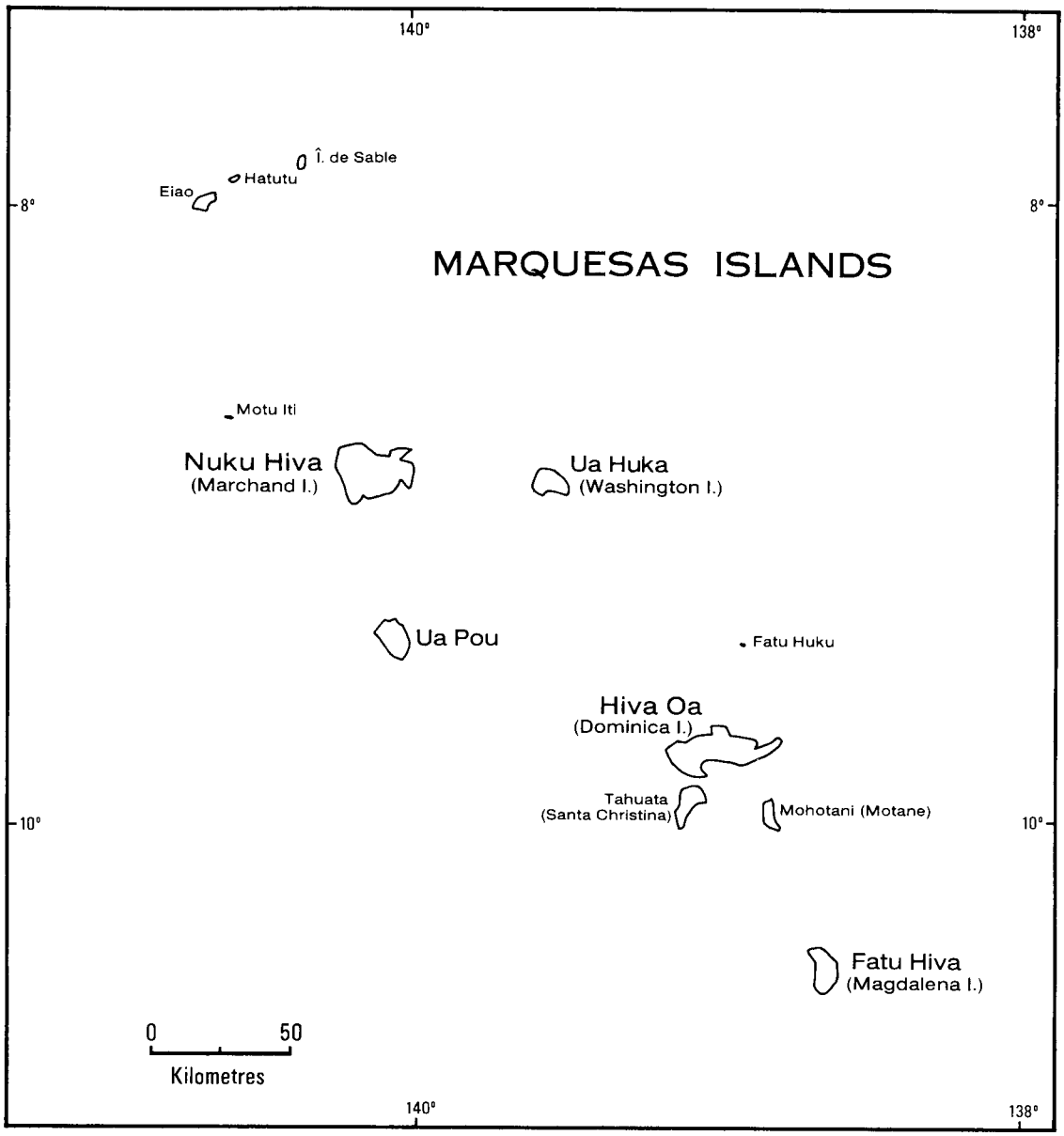
The Marquesas Islands consist of six inhabited islands, which lie in two groups as follows: North-West (Nuku Hiva, 'Ua Pou, 'Ua Huka); South-East (Hiva 'Oa, Tahuata, Fatuiva), see Map 1. The respective populations, together with the abbreviations used to identify the communalects, are as follows:

NUK	Nuku Hiva	1797	HOA	Hiva 'Oa	1522
(TAI = Taipivai Valley, Nuku Hiva)			TAH	Tahuata	555
UAP	'Ua Pou	1791	FAT	Fatuiva	407
UHU	'Ua Huka	476			

(Census 1983:15)

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Map 1: The Marquesas Islands

To this population of 6548 living in the Marquesas may be added another 4000-5000 Marquesans who have migrated to Tahiti, mainly for economic and educational reasons.

As stated above, Marquesan is traditionally divided into two main dialects, North-West (MQN): NUK, UAP and UHU, and South-East (MQS): consisting of HOA, TAH and FAT. MQS is generally considered to be the homeland of Mangarevan and Hawaiian (Green 1966, Elbert 1982). The Marquesas Islands are believed to have been the first eastern Polynesian islands to be settled and thus to have been the primary dispersal point for the Eastern Polynesian languages.

The present paper emerges from the first stage of a long-term study of the Marquesan dialects whose aim is to provide detailed documentation on dialect differentiation within the group. The data upon which the discussion is based were collected in the Marquesas in 1984 and 1985 from speakers from each of the six inhabited islands. A large corpus of lexical and morpho-syntactic material was collected for each island. For illustrative purposes a sample lexicon of 100 items is presented in an appendix to this paper.

North-West versus South-East distinctive features

There are a number of phonological, lexical and morphological features which distinguish MQN from MQS. The sound correspondences noted among the Marquesan dialects are as follows (PPN: Proto-Polynesian, PNP: Proto-Nuclear Polynesian, PCE: Proto-Central-Eastern Polynesian):

Table 1: Consonant correspondences

PPN	*p	*t	*k	*m	*n	*ŋ	*ʔ	*f	*s	*h	*w	*l	*r
PNP	p	t	k	m	n	ŋ	ʔ	f	s	Ø	w		l
PCE	p	t	k	m	n	ŋ	Ø	f	h	Ø	w		r
NUK	p	t,n[1]	k,ʔ[2]	m	n	k	Ø	h	h	Ø	v		ʔ,r[3]
TAI	p	t	k,ʔ[2]	m	n	ŋ	Ø	h	h	Ø	v		ʔ,r[3]
UAP	p	t,n[1]	k,ʔ[2]	m	n	k	Ø	h	h	Ø	v		ʔ,r[3]
UHU	p	t,n[1]	k,ʔ[2]	m	n	n,ŋ[4]	Ø	h	h	Ø	v		ʔ,r[3]
HOA	p	t	ʔ,k[2]	m	n	n	Ø	h,f[5]	h	Ø	v		ʔ,r[3]
TAH	p	t	ʔ,k[2]	m	n	n	Ø	h,f[5]	h	Ø	v		ʔ,r[3]
FAT	p	t	ʔ,k[2]	m	n	n	Ø	h,f[5]	h	Ø	v		ʔ,r[3]

[1]Reflex unexplained
[2]Unexplained reflex; normally PPN *k > MQN /k/, MQS /ʔ/; other reflexes unexplained
[3]In a few unexplained cases, PPN *r is retained as /r/
[4]Among descendants of Taipivai Marquesans
[5]Word initially before /a/, /e/, /i/

Table 2: Vowel correspondences

PPN	*a	*e	*i	*o	*u
PNP	a	e	i	o	u
PCE	a	e	i	o	u
NUK	a,e[1]	e,o[1]	i	o	u
UAP	a,e[1]	e,o[1]	i	o	u
UHU	a,e[1]	e,o[1]	i	o	u
HOA	a,e[1]	e,o[1]	i	o	u
TAH	a,e[1]	e,o[1]	i	o	u
FAT	a,e[1]	e,o[1]	i	o	u

[1]Reflex unexplained

Phonological features which distinguish MQN from MQS include the following:

1. PPN *f > MQN /h/, MQS /f/ in word initial position before /a/, /e/ and /i/; elsewhere /h/.
Examples: PPN *fanau, NUK, UAP, UHU: hanau, HOA, TAH, FAT: fanau, *be born*; PPN *fetuqu, NUK, UAP, UHU: hetu, HOA, TAH, FAT: fetu, *star*; PPN *feke, NUK, UAP, UHU: heke, HOA, TAH, FAT: fe?e, *octopus*.

2. PPN *k > MQN /k/, MQS /?/ in general terms.
Examples: PPN *tuku, NUK, UAP, UHU: tuku, HOA, TAH, FAT: tu?u, *give*; PPN *kopu, NUK, UAP, UHU: kopu, HOA, TAH, FAT: ?opu, *belly*. While this correspondence is common to a large number of lexemes, PPN *k is often reflected as /?/ in MWN and is retained as /k/ in MQS, even giving rise to doublets for a number of items. This phenomenon will be further discussed below.

A number of irregular phonological developments within specific lexemes also serve to support the North-West/South-East dialect division in Marquesan.
Examples: PPN *toke, NUK, UAP, UHU: nokenoke, HOA, TAH, FAT: toketoke, *worm*; NUK, UAP, UHU: ?enana, HOA, TAH, FAT: ?enata, *person*; NUK, UAP, UHU: pohu?e, HOA, TAH, FAT: poho?e, *life*, NUK, UAP, UHU: va?anui, HOA, TAH, FAT: a?anui, *road*; NUK, UAP, UHU: vahana, HOA, TAH, FAT: ahana, *male*.

Noteworthy also is the fact that Lavondès and Randall (1978), in their article on Marquesan fish names list 14 fish name sets which support the widely accepted MQN/MQS dialect division.

An important morphological distinction between MQN and MQS is maintained by the noun forming suffix -ia (MQN)/ -tina (MQS). Examples: MQN: patuia, MQS: patutina, *writing*; MQN: mateia, MQS: matetina, *death*.

Problems in distribution

While the North-West/South-East dialect dichotomy has long been recognised in Marquesan, it is only recently that such a distribution has been found inadequate. Lavondès and Randall discovered distributional problems with

Marquesan fish names (Lavondès and Randall 1978). Others too, for example Elbert (1982), have found problems with such an oversimplified picture. The problems are essentially of two kinds: (a) regular sound correspondences which run counter to the MQN/MQS dialect division and (b) lexical innovations running counter to the traditional divisions.

If the North-West/South-East dialect division applied to all sound correspondences, then PPN *ŋ would be expected to yield one set of reflexes for Nuku Hiva, 'Ua Pou and 'Ua Huka, and another for the remaining islands. Such is not the case. Thus, for example: PPN *ŋ > NUK, UAP /k/, TAI /ŋ/, UHU /ŋ/ and /n/, HOA, TAH, FAT /n/. Thus one has, for example: PPN *toŋo, NUK, UAP: toko, TAI: toŋo, UHU, HOA, TAH, FAT: tono, *heavy*; PPN *ŋaŋala, NUK, TAI, UAP: kaka?a, UHU, HOA, TAH, FAT: nana?a, *lizard species*; PPN *ŋaŋafu, NUK, TAI, UAP: kakahu, UHU, HOA, TAH, FAT: nanahu, *bite*.

There are two points of significance here:

1. The UHU reflex of PPN *ŋ is almost invariably the same as that of HOA, TAH and FAT, namely /n/, as in the above examples.

2. It has long been reported (Dordillon 1904:4) that PPN *ŋ remained /ŋ/ at Taipivai on Nuku Hiva. Lavondès (1978:104) reported that he could find no evidence of it, and that nowadays PPN *ŋ > /k/ in TAI, as for Nuku Hiva generally. Fieldwork at Taipivai in 1985 revealed that two elderly women still preserved /ŋ/ in their speech, but that generally PPN *ŋ > /k/ in that valley. Thus while the two elderly women have ?aŋi, *sky* (PPN *laŋi), other speakers use the common NUK form ?aki. More surprisingly, fieldwork revealed that while PPN *ŋ > /n/ in most idiolects of UHU, it is reflected as /ŋ/ in the speech of some UHU residents. Thus one hears, for example: PPN *laŋi, NUK, TAI, UAP: ?aki, UHU: ?aŋi/?ani, HOA, TAH, FAT: ?ani, *sky*. Investigations showed that UHU speakers who retain /ŋ/ in such forms are descendants of Marquesans from Taipivai on neighbouring Nuku Hiva.

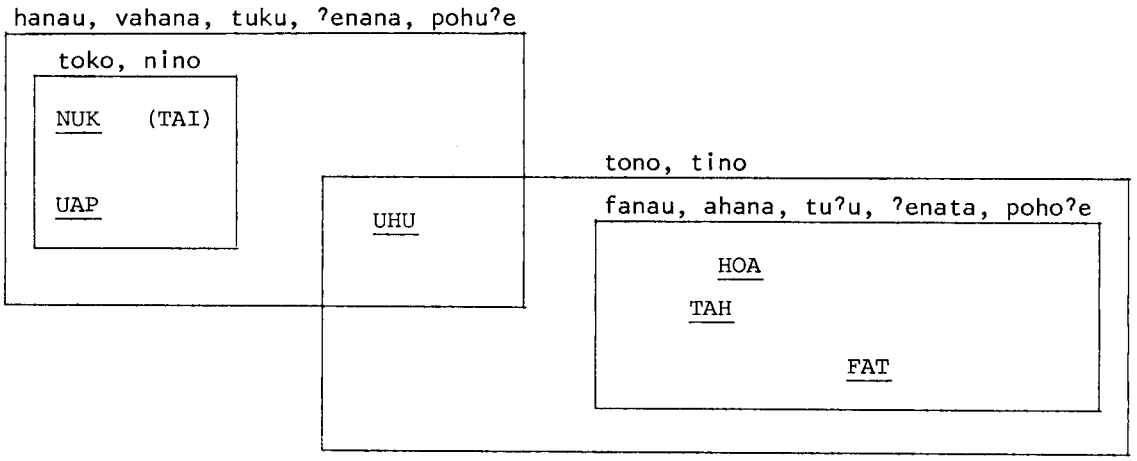
In addition to the problems posed by UHU reflexes of PPN *ŋ, a number of lexical items share irregular phonological developments which run counter to the generally accepted dialect division. So, for example, we have PPN *tino, NUK, UAP: nino, UHU, HOA, TAH, FAT: tino *body* ; PPN *tunu, NUK, TAI, UAP: nunu, UHU, HOA, TAH, FAT: tunu, *cook*. As the sound correspondence tables above indicate, PPN *t is normally reflected as /t/ throughout the Marquesas.

Again, the position of 'Ua Huka (UHU), is equivocal in terms of its lexicon, for there are a number of lexical differences between the North-West and the South-East of the Marquesas. Sometimes UHU shares the same etymon as the south-eastern islands, sometimes not. From a basic 200 word list alone, for example, we find the following:

	NUK, UAP	UHU	HOA, TAH, FAT
moon	me?ama	mahina	mahina
mud	?epokau	ko?a	ko?a
butterfly	pepe	pepe	pukehua
dog	peto	peto	nuhe
wing	pekeheu	ke?eheu	ke?eheu
comb	pa?ehu	pa?ehu	kofe?u
sit	noho	ka?ape?e	ka?ape?e
stand	ma?o	ma?o	tu
weave	a?aka	ke?ana	ke?ana

The lexical items just listed represent only a small fraction of the total available sets which demonstrate the equivocal position of UHU within Marquesan. Obviously there has been considerable interaction between UHU and NUK and UAP (the NW dialect) on the one hand, and also between UHU and HOA, TAH, FAT (the SE dialect) on the other. The reason for such intensive interaction lies probably in the fact that population numbers dropped alarmingly in the Marquesas in the 1920s, for a variety of reasons. In 1934 the total population was officially put at 2384 (Rollin 1974:66), individual island populations being given as: Nuku Hiva 635, 'Ua Huka 128, 'Ua Pou 457, Hiva 'Oa 736, Tahuata 251, Fatuiva 177. With such small populations the effects of inter-island marriages, linguistically, would have been considerable.

The evidence presented above, then, suggests that the traditional North-West/ South-East dialect division within Marquesan is basically correct, but that it certainly falls short of representing the complete picture, especially as regards the island of 'Ua Huka. The subgrouping evidence presented to this point may be represented schematically in summary form as follows:



'Ua Huka, then, can be seen as a transitional dialect between MQN and MQS. Green's (1966) explanation that forms reflecting PPN *ŋ as UHU /n/ are due to borrowing is demonstrably false since first there are very numerous examples and also since UHU has a number of lexical items which involve not only PPN *ŋ > /n/, but also PPN *f > /h/ within the same lexeme. So, for example, we have:

NUK, UAP	UHU	HOA, TAH, FAT	
haka	hana	fana	*bay*

Irregular and incomplete sound changes

There are a number of sound changes in Marquesan which have reached most but not all of the lexicon in all idiolects. At the same time, and as a consequence, these incomplete sound changes have reached different items in different areas of the Marquesas, even within the same island at times, resulting in numbers of sets of doublets. These doublets mostly involve reflexes of PCE *r and *k.

1. Elbert (1982), culling through the Dordillon dictionaries, noted that although PCE *r is nearly always reflected in Marquesan as /ʔ/, there are, or rather were, 108 /ʔ/-/r/ doublets, 28 /n/-/r/ doublets and even seven

/ʔ/-/n/-/r/ triplets. He explains the /r/ forms as examples of incomplete lexical diffusion, but offers no explanation for the few cases of the PCE *r > /n/ correspondence.

Examples:

UAP:	ʔeʔe/rere	*flee*
	taʔa/tara	*tern sp.*

The forms with /r/ and /ʔ/ are used indifferently by the same speaker. It should be observed that forms which retain /r/ are more common in the 'Ua Pou and Fatuiva dialects than elsewhere. In Fatuiva, where /r/ is commonly encountered, it is frequently attributable to borrowings from Tahitian. For example:

FATUIVA	TAHITIAN	
ʔaarahu	ʔaarahu	*charcoal*
vero	vero	*storm*
turuʔa	turuʔa	*pillow*

While the PCE *r > /ʔ/ change is now complete in the vast majority of cases (Dordillon's material goes back to the 1870/1880 period), /r/ is occasionally preserved through all dialects, as, for example, in kere, *fight*, huru, *push*, neither of which is a borrowing from Tahitian. As Elbert noted, PCE *r also > /n/ in some cases, although usually only as a doublet. For example:

tiporo/tipono	*lemon*
tira/tina	*scissors*

At the same time, PCE *n also > /r/, occasionally, especially in the Fatuiva dialect. Examples:

FAT	moro	*shark*	(HOA, TAH, UHU: mono PPN *maŋo)
UAP	rui	*big*	(PPN *nui)

2. Apart from irregularities with the reflexes of PCE *r, there is also considerable variation in the reflexes of PCE *k. While MQN most commonly retains PCE *k as /k/, it is commonly reflected as /ʔ/ in MQS. However, there are numerous cases where MQS retains PCE *k as /k/ and where MQN reflects it as /ʔ/ for the same item. Some of the MQN /ʔ/ reflexes can be attributed to Tahitian borrowings (PCE *k > /ʔ/ in Tahitian), but many cannot, for the lexemes involved are not found in Tahitian. As far as the reflexes of PCE *k are concerned, UAP is well known as being the most conservative, while FAT is the least conservative in this respect. Note, too, that the same speaker will use a form with or without /k/ indifferently where two competing forms exist in the one dialect. While MQN speakers generally attribute forms with /ʔ/ to Tahitian borrowing or influence, such an explanation is obviously valid in only a certain percentage of cases.

While the Marquesan dialect situation is complicated by variation in the reflexes of PCE *r and *k, it is sometimes subject to still greater complication when, for example, in some dialects /k/ is re-established in place of /ʔ/, where the source of the /ʔ/ is PCE *r and not PCE *k. Examples of such hypercorrection, noted by Lavondès and Randall (1978) include:

MQN	paaʔaiʔai,	MQS	paakaikai	< PCE *lai	*Scomberoides, fish sp.*
MQN	matuuʔau,	MQS	tuukau	< PCE *matulau	*mullet*

Conclusion

The dialect situation in Marquesan is considerably more complex than it would first appear, for while the traditional breakdown into two major dialect groups, North-Western and South-Eastern Marquesan is adequate for some purposes, there are many enigmas of a lexical and phonological nature which must be addressed before the internal history of the development of this language can be charted. To this end, a detailed study of the speech of each of the six island communities is required, together with a careful analysis of demographic information fortunately preserved in mission and administrative archives.

Appendix: Comparative Marquesan wordlist

	1. *head*	2. *hair (head)*	3. *eyebrow*	4. *nose*
NUK	upoko	ouoho	hu?umata	ihu
TAI	upoko	ouoho	hu?umata	ihu
UAP	upoko	ouoho	hu?umata	ihu
UHU	upoko	ouoho	hu?umata	ihu
HOA	upo?o	ouoho	hu?umata	ihu
TAH	upo?o	ouoho	hu?umata	ihu
FAT	upo?o	ouoho	hu?umata	ihu

	5. *eye*	6. *mouth*	7. *tooth*	8. *tongue*
NUK	mata	haha	niho	?e?o
TAI	mata	haha	niho	?e?o
UAP	mata	haha	niho	?e?o
UHU	mata	haha	niho	?e?o
HOA	mata	fafa	niho	?e?o
TAH	mata	fafa	niho	?e?o
FAT	mata	fafa	niho	?e?o

	9. *chin*	10. *back (body)*	11. *hair (body)*	12. *hand*
NUK	kovae	tua	hu?uhu?u	?ima
TAI	kovae	tua	hu?uhu?u	?ima/?i?ima
UAP	kovae	tua	hu?uhu?u	?ima/?i?ima
UHU	kovae	tua	hu?uhu?u	?ima/?i?ima
HOA	?ovae	tua	hu?uhu?u	?ima/?i?ima
TAH	?ovae	tua	hu?uhu?u	?ima
FAT	?ovae	tua	hu?u	?i?ima

	13. *navel*	14. *skin*	15. *stomach*	16. *ear*
NUK	pito	ki?i	kopu	pua?ika
TAI	pito	ki?i	kopu	pua?ika
UAP	pito	ki?i	kopu	pua?ika
UHU	pito	ki?i	kopu	pua?ina
HOA	pito	ki?i	?opu	pua?ina
TAH	pito	ki?i	?opu	pua?ina
FAT	pito	ki?i	?opu	pua?ina

	17. *elbow*	18. *buttocks*	19. *leg*	20. *knee*
NUK	tuke ?ima	keo	vaevae	mu?o
TAI	tuke ?ima	keo	vaevae	mu?o
UAP	tuke ?ima	keo	vaevae	mu?o
UHU	tuke ?ima	keo	vaevae	mu?o
HOA	tu?e ?ima	keo	vaevae	mu?o
TAH	tuke ?ima	keo	vaevae	mu?o
FAT	tuke ?ima	keo	vaevae	mu?o

	21. *finger*	22. *body*	23. *heart*	24. *intestines*
NUK	mamaka ?ima	nino	houpo	koekoe
TAI	mamaka ?ima	nino	houpo	koekoe
UAP	mamaka ?ima	nino	houpo	koekoe
UHU	mamana ?ima	tino	houpo	koekoe
HOA	mamana ?ima	tino	houpo	koekoe
TAH	mamana ?i?ima	tino	houpo	koekoe
FAT	mamana ?ima	tino	houpo	koekoe

	25. *bone*	26. *blood*	27. *sun*	28. *moon*
NUK	ivi	toto	oumati	me?ama
TAI	ivi	toto	oumati	me?ama
UAP	ivi	toto	oumati	me?ama
UHU	ivi	toto	oumaati	mahina
HOA	ivi	toto	oumaati	mahina
TAH	ivi	toto	oumati	mahina
FAT	ivi	toto	oumati	mahina

	29. *star*	30. *sky*	31. *cloud*	32. *lightning*
NUK	hetu	?aki	ao	ui?a
TAI	hetu	?aŋi	ao	ui?a
UAP	hetu	?aki	ao	ui?a
UHU	hetu	?aŋi/?ani	ao	ui?a
HOA	fetu	?ani	ao	ui?a
TAH	fetu	?ani	ao	ui?a
FAT	fetu	?ani	ao	ui?a

	33. *thunder*	34. *fog*	35. *wind*	36. *rain*
NUK	hatuti?i	kohu	metaki	ua
TAI	hatuti?i	kohu	metaaki	ua
UAP	hatuti?i	kohu	metaki	ua
UHU	hatuti?i	kohu	metaani	ua
HOA	fatuti?i	kohu	metaani	ua
TAH	fatuti?i	kekehu	metani	ua
FAT	fatuti?i	kohu	metani	ua

	37. *water*	38. *land*	39. *mud*	40. *earth*
NUK	vai	henua	?epokau	?epo
TAI	vai	henua	?epokau	?epo
UAP	vai	henua	?epokau	?epo
UHU	vai	henua	ko?a	?epo
HOA	vai	fenua	ko?a	?epo
TAH	vai	fenua	ko?a	?epo
FAT	vai	fenua	ko?a	?epo

	41. *stone*	42. *sand*	43. *sea*	44. *night*
NUK	ke?a	one	tai	poo
TAI	ke?a	one	tai	poo
UAP	ke?a	one	tai	poo
UHU	ke?a	one	tai	poo
HOA	ke?a	one	tai	poo
TAH	ke?a	one	tai	poo
FAT	ke?a	one	tai	poo

	45. *year*	46. *morning*	47. *fire*	48. *smoke*
NUK	ehua	popou?i	ahi	auahi
TAI	ehua	popou?i	ahi	auahi
UAP	ehua	popou?i	ahi	auahi
UHU	ehua	popou?i	ahi	euahi
HOA	ehua	popou?i	ahi	euahi
TAH	ehua	popou?i	ahi	auahi
FAT	ehua	popou?i	ahi	auahi

	49. *ashes*	50. *oven*	51. *house*	52. *louse*
NUK	ka?ahu ahi	umu	ha?e	kutu
TAI	ka?ahu ahi	umu	ha?e	kutu
UAP	ka?ahu ahi	umu	ha?e	kutu
UHU	?ehu ahi	umu	ha?e	kutu
HOA	kehu ahi	umu	fa?e	?utu
TAH	kehu ahi	umu	fa?e	?utu
FAT	kehu ahi	umu	fa?e	?utu

	53. *fly*	54. *butterfly*	55. *lizard sp.*	56. *rat*
NUK	tikau?e	pepe	kaka?a	kio?e
TAI	tikau?e	pepe	kaka?a	kio?e
UAP	tikau?e	pepe	kaka?a	kio?e
UHU	tikau?e	pepe	nana?a	kio?e
HOA	tikau?e	pukehua	nana?a	kio?e
TAH	ti?au?e	pukehua	nana?a	kio?e
FAT	ti?au?e	pukehua	nana?a	kio?e

	57. *pig*	58. *dog*	59. *chicken*	60. *bird*
NUK	puaka	peto	moa	manu
TAI	puaka	peto	moa	manu
UAP	puaka	peto	moa	manu
UHU	puaka	peto	moa	manu
HOA	pua?a	nuhe	moa	manu
TAH	pua?a	nuhe	moa	manu
FAT	pua?a	nuhe	moa	manu

	61. *octopus*	62. *shark*	63. *fish*	64. *tail*
NUK	heke	moko	ika	ve?o
TAI	heke	moko	ika	ve?o
UAP	heke	moko	ika	ve?o
UHU	heke	mono	ika	ve?o
HOA	fe?e	mono	i?a	ve?o
TAH	fe?e	mono	i?a	ve?o
FAT	fe?e	moro	i?a	ve?o

	65. *person*	66. *man*	67. *woman*	68. *child*
NUK	?enana	vahana	vehine	to?iki
TAI	?enana	vahana	vehine	to?iki
UAP	?enana	vahana	vehine	to?iki
UHU	?enana	vahana	vehine	to?iki
HOA	?enata	ahana	vehine	to?i?i
TAH	?enata	ahana	vehine	to?i?i
FAT	?enata	ahana	vehine	to?i?i

	69. *name*	70. *tree*	71. *leaf*	72. *root*
NUK	ikoa	tumu ?aakau	?au	aka
TAI	ikoa	tumu ?aakau	?au	aka
UAP	ikoa	tumu ?aakau	?au	aka
UHU	inoa	tumu ?aakau	?au	aka
HOA	inoa	tumu ?aakau	?au	aka
TAH	inoa	tumu ?aakau	?au	aka
FAT	inoa	tumu ?aakau	?au	aka

	73. *flower*	74. *coconut*	75. *kumara*	76. *river*
NUK	pua	?ehi	kuma?a	ka?avai
TAI	pua	?ehi	kuma?a	ka?avai
UAP	pua	?ehi	kuma?a	ka?avai
UHU	pua	?ehi	kuma?a	ka?avai
HOA	pua	?ehi	?uma?a	ka?avai
TAH	pua	?ehi	?uma?a	ka?avai
FAT	pua	?ehi	?uma?a	ka?avai

	77. *road*	78. *comb*	79. *stand*	80. *go*
NUK	va?anui	pa?ehu	ma?o	he?e
TAI	va?anui	pa?ehu	ma?o	he?e
UAP	va?anui	pa?ehu	ma?o	he?e
UHU	va?anui	pa?ehu	ma?o	he?e
HOA	a?anui	kofe?u	tu	he?e
TAH	a?anui	kofe?u	tu	he?e
FAT	a?anui	kofe?u	tu	he?e

	81. *eat*	82. *look at*	83. *give*	84. *fear*
NUK	kaikai	ti?ohi	tuku	ha?ameta?u
TAI	kaikai	ti?ohi	tuku	ha?ameta?u
UAP	kaikai	ti?ohi	tuku	ha?ameta?u
UHU	kai	ti?ohi	tuku	ha?ameta?u
HOA	kaikai	ti?ohi	tu?u	ha?ameta?u
TAH	kaikai	ti?ohi	tu?u	ha?ameta?u
FAT	?ai	ti?ohi	tu?u	ha?ameta?u

	85. *fly*	86. *kill*	87. *cut*	88. *live*
NUK	ona	kukumi	kokoti	pohu?e
TAI	ona	kukumi	kokoti	pohu?e
UAP	ona	kukumi	kokoti	pohu?e
UHU	ona	kumi	kokoti	pohu?e
HOA	ona	?u?umi	kokoti	poho?e
TAH	ona	?u?umi	kokoti	poho?e
FAT	ona	?u?umi	kokoti	poho?e

	89. *speak*	90. *swim*	91. *vomit*	92. *cook*
NUK	tekao	kau	?ua	nunu
TAI	tekao	kau	?ua	nunu
UAP	tekao	kau	?ua	nunu
UHU	tekao	kau	?ua	tunu
HOA	te?ao	kau	?ua	tunu
TAH	te?ao	kau	?ua	tunu
FAT	te?ao	kau	?ua	tunu

	93. *bite*	94. *cough*	95. *big*	96. *good*
NUK	kakahu	hapu	kauo?o	meita?i
TAI	kakahu	hapu	kauo?o	meita?i
UAP	kakahu	hapu	kauo?o	meita?i
UHU	nanahu	hapu	kauo?o	meita?i
HOA	nanahu	hapu	kauo?o	meita?i
TAH	nanahu	hapu	kauo?o	meita?i
FAT	nanahu	hapu	kauo?o	meita?i

	97. *heavy*	98. *thick*	99. *thin*	100. *right (hand)*
NUK	toko	moto?u	?ahi?ahi	oko
TAI	toko	moto?u	?ahi?ahi	oko
UAP	toko	moto?u	?ahi?ahi	oko
UHU	tono	moto?u	kahikahi	oko
HOA	tono	moto?u	kahikahi	oko
TAH	tono	moto?u	kahikahi	oko
FAT	tono	moto?u	kahikahi	oko

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COREFERENCE AND RELATED ISSUES IN WARRUNGU DISCOURSE

Tasaku Tsunoda

1. INTRODUCTION

This paper presents portions of my ongoing research into discourse of the Warrungu language.[1] Section 1 outlines the basic points of Warrungu grammar (details: Tsunoda 1974) and the methodology employed in this work. Section 2 furnishes data on coreference in Warrungu, while Section 3 discusses issues that arise from these data.

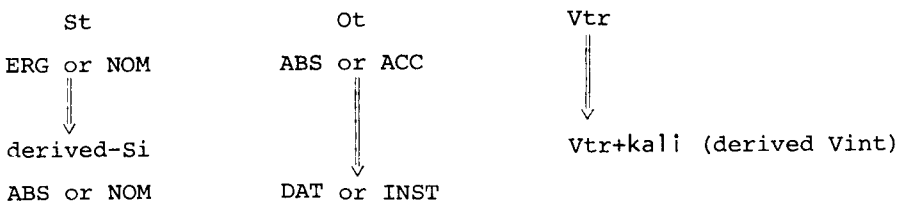
It is my honour to be able to dedicate a paper to Professor Wurm in my deepest appreciation for his continuing guidance, assistance and encouragement which he has extended to me over the years directly and indirectly.

1.1 Case-marking systems

The case-marking system in Warrungu is ergative-absolutive for nouns, and nominative-accusative for pronouns; see (13).[2]

1.2 Antipassive constructions

The affixation of the verbal-derivational suffix -kali 'antipassive' to a transitive verb turns a transitive construction to an antipassive construction. Thus:



Since most of the pronouns have just NOM for both St and Si, the change from St to der-Si is not reflected in their case-marking. But, it is manifested syntactically - 2.2.

Antipassivisation has been reported from elsewhere in Australia and also from outside Australia (for instance, see the works cited in Section 4), and it is

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now widely known. It can have various functions cross-linguistically and also intralinguistically. But, perhaps its best known function is its role regarding coreference, and this function is among the main issues of this paper. (For further details of Warrungu antipassivisation, see Tsunoda, forthcoming.)

1.3 Methodology

This paper confines itself to the three core syntactic functions: St, Ot, and Si (including der-Si). Treatment of other types of NP is planned for a future paper. Furthermore, our discussion is restricted to those instances where the antecedent is in the immediately preceding clause and explicitly mentioned. Ellipsis with no explicit antecedent does occur in Warrungu discourse, and indeed it is common, but again it is reserved for future work.

The following logically possible combinations of antecedent-plus-target are classified into four groups of patterns (der-Si is included in Si):

(a) ergative patterns (Si/Ot) : Si=Ot, Ot=Si;
(b) accusative patterns (Si/St) : Si=St, St=Si;
(c) neutral patterns : St=St, Ot=Ot, Si=Si;
(d) aberrant patterns (St/Ot) : St=Ot, Ot=St.

This paper deals with subordination only. (Among other levels in discourse, coordination and sentence-sequence will be discussed in Tsunoda, forthcoming.) Specifically, we shall be concerned with purposive subordination, which is by far the most frequently used type of subordination. Its subordinate clause contains the purposive form of a verb, indicating purpose, consequence, or successive action. (A purposive form can also be used as a finite verb, expressing intention, obligation, future, etc., e.g. the main clause of (3) and that of (16).)

The data for this paper are taken from about a quarter of my 12 hours of running texts.

2. COREFERENCE IN PURPOSIVE SUBORDINATION

2.1 Involving no antipassives

Table 1 shows the numbers of the relevant examples in purposive subordination that does not involve antipassive constructions.

Generally (and in fact not just in purposive subordination), coreferential NPs in Warrungu are either retained or deleted. 3rd person pronouns can have human/animate referents, e.g. (2), but pronominalisation of coreferential NPs is uncommon, being absent in the texts under study. Table 1 also shows an instance of 'nominalisation' of a pronoun antecedent, where nyunya 3SG+ACC(Ot) was 'nominalised' to pirku+Ø *wife*+ABS(Ot). But, again this is rare.

Regarding deletion patterns, ergative patterns (Si/Ot) and neutral patterns (St=St, Ot=Ot, Si=Si) are common, whereas accusative patterns (Si/St) and aberrant patterns (St/Ot) are not. Ergative patterns (16 examples) are far more frequent than accusative patterns (5 examples). Examples of ergative-pattern deletion: (1), involving a noun antecedent, and (2), involving a pronoun antecedent:

Table 1: Coreference in purposive subordination without antipassives

noun antecedent		coreference patterns and cases involved			pronoun antecedent		
retention	deletion				retention	nominalisation	deletion
		ergative (Si/Ot)					
0	1	ABS=ABS	Si=Ot	NOM=ACC	2	0	0
1	5	ABS=ABS	Ot=Si	ACC=NOM	4	0	10
		neutral					
0	1	ERG=ERG	St=St	NOM=NOM	2	0	18[3]
			St=St	ERG=ERG[4]	0	0	8
2	32	ABS=ABS	Ot=Ot	ACC=ACC	1	0	0
			Ot=Ot	ACC=ABS	0	1	0
0	0	ABS=ABS	Si=Si	NOM=NOM	0	0	16
		accusative (Si/St)					
0	0	ABS=ERG	Si=St	NOM=NOM	3	0	5
0	0	ERG=ABS	St=Si	NOM=NOM	0	0	0
		aberrant (St/Ot)					
0	0	ERG=ABS	St=Ot	NOM=ACC	3	0	1
0	0	ABS=ERG	Ot=St	ACC=NOM	1	0	0

(1) ngaya yinu kalngana+Ø pirri+lka [TT yinu kalngana+Ø]
1SG+NOM(St) 2SG+GEN *uncle*+ABS(Ot) *send*+APPR [2SG+GEN *uncle*+ABS(Si)]

yarru+n+ta nyina+yal
here+LIG+LOC *stay*+PURP (Ot=Si)
I might send your uncle so he can stay here.

(2) nyula watali+n nguni+n+ta kantu+ngku [TT nyunya]
3SG+NOM(Si) *run*+P/P *there*+LIG+LOC *dog*+ERG(St) [3SG+ACC(Ot)]

patya+lku
bite+PURP (Si=Ot)
It [a kangaroo] ran away, but a dog bit it there.

2.2 Involving antipassives

Table 2 shows the numbers of the relevant examples in purposive subordination in which the main and/or the subordinate clause(s) involve an antipassive construction.

Table 2: Coreference in purposive subordination with antipassives

noun antecedent		coreference patterns and cases involved			pronoun antecedent	
retention	deletion				retention	deletion
		ergative				
0	0	ABS=ABS	der-Si=Ot	NOM=ACC	1	0
0	1	ABS=ABS	Ot=der-Si	ACC=NOM	0	3
0	1	ACC=ABS[5]	Ot=der-Si			
		neutral				
0	0	ABS=ABS	der-Si=Si	NOM=NOM	0	2
0	10	ABS=ABS	Si=der-Si	NOM=NOM	0	68
0	0	ABS=ABS	der-Si=der-Si	NOM=NOM	0	1
		accusative				
0	1	ABS=ERG	der-Si=St	NOM=NOM	0	0
0	0	ERG=ABS	St=der-Si	NOM=NOM	0	1

Before discussing the deletion patterns, we will first examine the effects of antipassivisation. This process changes St (ERG/NOM) into der-Si (ABS/NOM) (1.2), and, in the instances listed in Table 2, it has one of the following four types of effect:

type-(a): aberrant patterns (St/Ot) → ergative patterns (der-Si/Ot):
St=Ot → der-Si=Ot;
Ot=St → Ot=der-Si;

type-(b): accusative patterns (Si/St) → neutral patterns (Si/der-Si):
Si=St → Si=der-Si;
St=Si → der-Si=Si;

type-(c): neutral pattern (St=St) → neutral pattern (der-Si=der-Si);

type-(d): neutral pattern (St=St) → accusative patterns (der-Si/St):
St=St → der-Si=St;
St=St → St=der-Si.

These four types of effect will be exemplified below.

Type-(a): aberrant patterns (St/Ot) → ergative patterns (der-Si/Ot):

(3) ngaya pama+Ø muka+lku [TT pama+Ø] puri+wu
1SG+NOM(St) *man*+ABS(Ot) *get*+PURP [*man*+ABS(der-Si)] *wood*+DAT
kunma+kali+yal
cut+ANTI+PURP (Ot=der-Si)
I will get a man to [make him] cut wood.

The second clause was antipassivised from:

(4) TT pama+ngku puri+Ø kunma+lku
man+ERG(St) *wood*+ABS(Ot) *cut*+PURP
for a man to cut wood

The second occurrence of pama+Ø was subsequently deleted under identity with its first occurrence. Before antipassivisation applied, the coreference was of the aberrant pattern 'Ot=St'.
Type-(b): accusative patterns (Si/St) → neutral patterns (Si/der-Si):

(5) ngaya yani+Ø [TT ngaya] papa+kali+yal yuri+wu
1SG+NOM(Si) *go*+P/P [1SG+NOM(der-Si)] *spear*+ANTI+PURP *kangaroo*+DAT
(Si=der-Si)
I went to spear a kangaroo.
The second clause was antipassivised from:

(6) TT ngaya papa+lku yuri+Ø
1SG+NOM(St) *spear*+PURP *kangaroo*+ABS
for me to spear a kangaroo
Initially, the coreference was of the accusative pattern 'Si=St'. Note that the function of ngaya changed from St to der-Si, although this is not reflected in its case-marking (cf. 1.2). Recall that most of the pronouns have just NOM for both St and Si (1.1).

Type-(c): neutral pattern (St=St) → neutral pattern (der-Si=der-Si):

(7) yinun+ku nyula yangka+kali+n [TT nyula yinun+ku]
2SG+DAT 3SG+NOM(der-Si) *search*+ANTI+P/P [3SG+NOM(der-Si) 2SG+DAT]
nyaka+kali+yal
see+ANTI+PURP (der-Si=der-Si)
He is looking for you to see you.

The two clauses were antipassivised respectively from:

(8) TT yina nyula yangka+n nyula yina (Ot)
2SG+ACC(Ot) 3SG+NOM(St) *search*+P/P 3SG+NOM(St) 2SG+ACC 2SG+ACC(Ot)
nyaka+lku
see+PURP (St=St)
As (7).

Type-(d): neutral pattern (St=St) → accusative patterns (der-Si/St):

(9) nyula [TT winkar+Ø] papa+n [TT nyula winkar+ku]
3SG+NOM(St) [*fish*+ABS(Ot)] *spear*+P/P [3SG+NOM(der-Si) *fish*+DAT]
puramu+wu kanytyi+kali+yal
ceremonial ground+DAT *carry*+ANTI+PURP (St=der-Si)
He speared [some fish] and carried [them] to the ceremonial ground.

The second clause was antipassivised from:

(10) TT nyula winkar+Ø puramu+wu kanytyi+lku
3SG+NOM(St) *fish*+ABS(Ot) *c.g.*+DAT *carry*+PURP
for him to carry fish to the ceremonial ground

The original coreference was of the neutral pattern 'St=St'.

In Table 1, the ergative-pattern deletion (16 examples) is preferred to accusative-pattern deletion (5 examples). Indeed, this preference is even stronger in Table 2. At first glance, this is not obvious, for there are two examples of accusative-pattern deletion (der-Si/St) as against only five examples of ergative-pattern deletion (der-Si/Ot), while the vast majority of examples involve neutral-pattern deletion (71 examples).

In fact, such a comparison of figures is not revealing at all. What is crucial about antipassivisation is its effect, and not the resultant pattern itself. Thus, in type-(a) effect (aberrant patterns (St/Ot) → ergative patterns (der-Si/Ot)), which has five examples of deletion, antipassivisation changes the coreference into ergative patterns. In type-(b) effect (accusative patterns (Si/St) → neutral patterns (Si/der-Si)), which has as many as 70 examples, antipassivisation functions to avoid accusative patterns. On the other hand, it is only in the two examples of type-(d) effect (neutral pattern (St=St → accusative patterns (der-Si/St)) that antipassivisation renders the coreference compatible with accusative patterns. That is, in Table 2, ergative patterns are overwhelmingly preferred in deletion over accusative patterns - even more strongly than in Table 1 - and antipassivisation effects this preference.

Incidentally, note that the type-(c) effect (neutral pattern (St=St) → neutral pattern (der-Si=der-Si)), e.g. (7), would seem to be redundant, since deletion of 'St=St' is common (Table 1). And that the type-(d) effect (neutral pattern (St=St) → accusative patterns (der-Si/St)), e.g. (8), is in conflict with the overall preference for ergative patterns in deletion. Nonetheless, these two types of effect do occur in Warrungu text - albeit very infrequently.

3. DISCUSSION

3.1 Aberrant patterns

Aberrant patterns (St/Ot) strongly prefer retention to deletion (Table 1). (Pronominalisation and 'nominalisation' are uncommon in any case - 2.1.) An example of such retention:

(11) yarru+Ø yinta mutya+Ø ngaya yina nyaka+lku
this+ABS(Ot) 2SG+NOM(St) *eat*+IMP 1SG+NOM(St) 2SG+ACC(Ot) *see*+PURP (St=Ot)
Eat this [food] so I can watch you [eating it].

Naturally, aberrant patterns can be turned into ergative patterns (der-Si/Ot) by means of antipassivisation (i.e. type-(a) effect), and subsequently deletion is perfectly acceptable (cf. Table 2), e.g. (3).

Disfavour or prohibition of aberrant-pattern deletion appears to be a universal tendency (hence, this naming), irrespective of a given language's preferred patterns in deletion, e.g. Dyirbal (Dixon 1972:134), Bandjalang (Crowley 1978: 114), Kalkatungu (Blake 1979:113) - all from Australia - and also Tagalog (Cooreman, Fox and Givón 1984:27), Arabic (Eid 1983:291,297), German (Van Valin 1980:305), English and Japanese. Thus, from English:

(12) *Bob (St) slapped Joh (Ot) and Flo (St) slapped [Bob (Ot)] back. (St=Ot)

3.2 Behaviour of pronouns

As the preceding discussions illustrate, the preferred/frequent deletion patterns are ergative ones and neutral ones, and where the coreference falls into one of these patterns, we are most likely to have deletion rather than retention, etc. Pronouns, too, generally follow this tendency. Note particularly that, in Table 2, pronouns have as many as 60 examples of the type-(b) effect (accusative patterns (Si/St) → neutral patterns (Si/der-Si)), which positively avoids accusative patterns, and that all of them involve deletion.

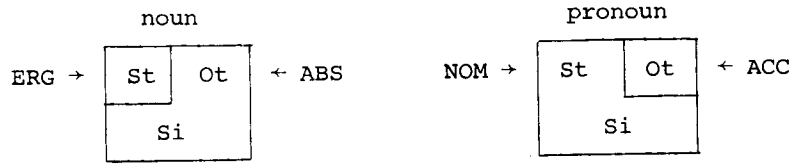
However, on closer examination, pronouns deviate from the abovementioned tendency in the following two respects:

[1] Consider ergative patterns in Table 1. Nouns are deleted in 86% (6/7), i.e. they are retained in 14%. In sharp contrast, pronouns are retained in as many as 38% (6/16) - almost three times as frequently.

Initially, this looked puzzling, since pronouns - particularly, 1st and 2nd persons, which refer to speech act participants - are contextually given and easily recoverable, and indeed they are often understood in languages such as Japanese. Even in English, where a sentence strongly requires the subject, the pronouns *I* and *we* are often deleted in diaries, letters to close family members, etc.

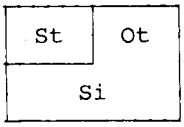
Now, recall that the case-marking system in Warrungu is ergative-absolutive for nouns, but nominative-accusative for pronouns (1.1):

(13) Case-marking systems



As stated above, the preferred/frequent deletion patterns are ergative ones (Si/Ot) and neutral ones (St=St, Ot=Ot, Si=Si) (der-Si included in Si). This can be shown as follows:

(14) Preferred/frequent deletion patterns



It then seems that this higher rate of pronoun retention (than noun retention) is a device for maintaining recoverability in the presence of the discrepancy between the preferred/frequent deletion patterns and the pronominal case-marking system. Thus, compare:

(15) kalngana+Ø kuta+ngantu yani+Ø yinta nyaka+lku [TT kalngana+Ø]
uncle+ABS(Si) *behind+from come*+P/P 2SG+NOM(St) *see*+PURP [*uncle*+ABS(Ot)]
(Si=Ot)
[My] uncle is coming behind, and you will see him.

(16) ngaya nyampa+karra+yal yarru+n+ta yupala nyaka+lku
1SG+NOM(Si) *dance*+REP+PURP *here*+LIG+LOC 2DU+NOM(St) *see*+PURP
nganya
1SG+ACC(Ot) (Si=Ot)
I will dance here so you-two can see me [dancing].

Both (15) and (16) involve 'Si=Ot'. The coreferential NPs in (15) - a noun - share an identical case-marking (i.e. ABS for both Si and Ot), and deletion would not affect recoverability. On the other hand, the coreferential NPs in (16) - a pronoun - have different case forms (i.e. NOM for Si and ACC for Ot), and deletion would reduce recoverability. It is probably this consideration of recoverability that motivated retention in examples such as (16).

[2] As seen above, in ergative patterns (Si/Ot) of Table 1, pronouns show a high rate of retention. On the contrary, in accusative patterns (Si/St) of the same table, they are deleted frequently - in as many as 63% (5/8). An example:

(17) nyula yani+Ø [TT nyula] muka+lku
3SG+NOM(Si) *go*+P/P [3SG+NOM(St)] *get*+PURP (Si=St)
He went to get [it].

Note that accusative-pattern deletion is in direct conflict with the preferred ergative-pattern deletion (Si/Ot).

Unlike pronouns, nouns have no example of accusative-pattern deletion in Table 1 (and have just one example in Table 2). Thus, compare (17) with (18), which I composed and presented to the informant:

(18) pama+Ø yani+Ø [TT pama+Ø] papa+lku
man+ABS(Si) *go*+P/P [*man*+ABS(Ot)] *kill/hit*+PURP (Si=Ot)
A man went and [someone] killed him.

The informant's reaction to (18) was *He want* (sic) *to get killed.* As this reaction clearly indicates, (18) - unlike (17) - does not mean *A man went and killed [someone].*

It again seems to be the nominative-accusative case-marking system of the pronouns that is responsible for their high rate of accusative-pattern deletion.

Certainly, congruency between the deletion pattern and the case-marking system would enhance recoverability.[6]

3.3 Surface cases and syntactic organisation

Anderson (1976), in his survey of the syntax of ergative languages, concluded that "These differences [in case-marking within a given ergative language - TT] are not reflected by differences in the operation of syntactic rules" (p.18), i.e. surface cases play no significant role in their syntactic organisation (see pp.16-17, particularly).

On the contrary, the present paper has demonstrated the relevance of surface cases to syntax in Warrungu - in terms of the pattern and the rate of coreferential retention/deletion.[7]

3.4 Deletion patterns and topic

Dixon (1972:71-73) refers to a sequence of Si/Ot and/or Si/Si deletion in Dyirbal as "a topic chain" (der-Si included in Si), and this view is adopted by Mallinson and Blake (1981:113) and Cooreman, Fox and Givón (1984:2). Along the same line, Wierzbicka (1981:69,70,72) argues that languages with Si/Ot deletion (rather than Si/St deletion) are patient-oriented, i.e. in these languages patients are more topical than agents.

As we saw above, in Tables 1 and 2, deletion strongly prefers ergative patterns (Si/Ot) to accusative patterns (Si/St), and Warrungu may be called a "quintessential deep-ergative language" (Cooreman, Fox and Givón 1984:5). Nonetheless, our data do not support the view listed above. A full discussion of this point is beyond the scope of this paper (and see Tsunoda, forthcoming). I shall simply present the following reasons for my misgivings regarding the above.

[1] These claims are based on the assumption that patterns of coreferential deletion indicate topic. However, in fact, this assumption is not totally justified. Thus, both St of Si/St and der-Si of Si/der-Si refer to agents. Since topic concerns referents, but not NPs (Chafe 1976:28) and since a change from Si/St to Si/der-Si leaves the referents unchanged, this difference in deletion patterns does not necessarily correlate with a difference in topic. Similarly for St of St/Ot and der-Si of der-Si/Ot. That is, generally, coreferential deletion patterns do not always indicate topic.

[2] Even if we were to admit, for the sake of argument, that deletion patterns indicated topic, preference of ergative patterns to accusative patterns does not automatically mean that patients are more topical than agents. There are two reasons for this.

Firstly, the rate of ergative-pattern deletion (Si/Ot, der-Si/Ot) is in fact low - contrary to what Wierzbicka might have expected. The vast majority is taken up by neutral patterns, which are neutral as to the ergative/accusative dichotomy.

Secondly, as seen above, the preference to ergative-pattern deletion is effected by turning St to der-Si. But, as we have just seen, the referents remain the same whether they are indicated by St or der-Si.

Many theories have been put forward concerning putative differences in topic structure between ergative languages and accusative languages. Clearly, issues such as this should be investigated on the basis of discourse data, as is done in the present paper, but, unfortunately most of them are "largely based on the intellectual rationalization of the case-marking system" (Heath 1980:885).

4. CONCLUDING REMARKS

Previous studies of coreference in ergative languages (e.g. Anderson 1976, Blake 1977, Comrie 1978, Dixon 1979 among many others, including Tsunoda 1974) were almost exclusively preoccupied with deletion, paying virtually no attention to other possibilities, such as retention. Furthermore, they pursued a clear-cut dichotomy between possibilities and impossibilities, taking no account of 'exceptions'/deviations.

The present paper has illustrated a different approach. Specifically, it presented a general picture of coreference by investigating:

(a) preferred patterns (rather than possibilities/impossibilities) in deletion;

(b) the rate of retention, deletion, etc.; and

(c) - where deviations occur - their rate and the conditions under which they occur.

This paper has also demonstrated how the inadequacy of the previous approach led to incorrect theoretical claims. Thus, neglect of deviations led to Anderson's claim that surface cases were irrelevent to syntax. Concentration on the contrast between Si/Ot and Si/St, with little or no attention to the general picture including other deletion patterns, led to Wierzbicka's claim that languages with Si/Ot deletion are patient-oriented.

In conclusion, we hope to have shown that our approach is more fruitful in the study of syntax and discourse than the method employed in previous studies.

NOTES

[1]Warrungu is an Aboriginal language that used to be spoken in the upper Herbert River area of North Queensland. Most of the data were obtained from the late Mr Alf Palmer (tyinpilngkay), the last fluent speaker of the language. I am most grateful to him for teaching me his language so willingly, patiently and intelligently; and also to the Australian Institute of Aboriginal Studies (AIAS) for financing two field trips and the write-up phase of Tsunoda 1974.

This paper incorporates portions of Tsunoda 1985, forthcoming, and papers presented at the University of Newcastle on 16 May 1985 and also at the 90th meeting of the Linguistic Society of Japan on 9 June 1985 (held at Dokkyoo University). I am grateful for the comments the audiences provided. I also wish to thank Peter Austin and Greville G. Corbett for their comments on Tsunoda 1985; and Barry J. Blake, Mimi Klaiman, Gilbert Lazard, Masayoshi Shibatani and Etienne Tiffou for their comments on the first draft of Tsunoda, forthcoming.

The Warrungu phoneme inventory, written in a practical orthography, is: /p, t, ty, k, m, n, ny, ng, rr, r, l, y, w, i, a, u/. Abbreviations used include the

following: ABS[olutive], ACC[usative], ANTI[passive], APPR[ehensional], DAT[ive], der[ived]-Si, DU[al], ERG[ative], GEN[itive], IMP[erative], INST[rumental], LIG[ature], NOM[inative], Ot 'transitive direct object', PL[ural], P[ast]/P[resent], PURP[osive], REP[etitive], SG 'singular', Si 'intransitive subject', St 'transitive subject', Vint 'intransitive verb', and Vtr 'transitive verb'. (This paper uses the terms 'St', 'Ot' and 'Si' informally, and does not attempt to justify their existence in Warrungu à la Relational Grammar.) 'TT' indicates word(s) I added, or a sentence I composed for this paper.

[2]This statement is in fact an oversimplification. Thus, among nouns, vowel-final kinship and human proper nouns can also have the tripartite system (i.e. St≠Si≠Ot; ERG≠ABS≠ACC), while among pronouns '3rdDU' and '3rdPL' can also have the tripartite system and the interrogative word 'who' always has this system. But, examples involving such an NP constitute a very low percentage (cf. notes 3, 4 and 5), and this oversimplification does not affect our argument at all.

[3]This includes one example of NOM of '3rdPL'.

[4]This refers to examples of ERG of '3rdPL'.

[5]The antecedent is the vowel-final kinship noun kayana+nya *father*+ACC(Ot) and the (deleted) target is kayana+Ø *father*+ABS(der-Si).

[6]It should be stressed here again that pronouns, too, disfavour accusative-pattern deletion. Thus, when (17) was presented out of context to the informant, he replaced it with a version in which the second clause was antipassivised, resulting in the 'Si=der-Si' pattern, exactly as in (5).

[7]In Yidiny, about 150 km north of Warrungu, preferred deletion patterns in coordination (but not in subordination) appear to mirror surface cases. Thus, nouns, which have the ergative-absolutive case-marking system (St≠Si=Ot), have deletions of Si/Ot, Si=Si and Ot=Ot, while pronouns, which have the nominative-accusative system (St=Si≠Ot), have deletions of Si/St, St=St and Si=Si (Dixon 1977:388-392).

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SENTENCE PATTERNS IN THE OLD JAVANESE OF THE PARWA LITERATURE

E.M. Uhlenbeck

I

This article, written in honour of my friend and colleague Professor Stephen Wurm, is a sequel and a revision of my contribution to the Festschrift for a mutual friend, Professor Shirô Hattori (Uhlenbeck 1970). In that article — exploratory in character — I attempted to describe the positional rules of the Old Javanese particle ta and to get closer to understanding its syntactic function. I tried to show that the role of ta could be understood not simply as a means for putting emphasis on certain sentence parts (Zoetmulder 1950), but as a distinctive feature of certain syntactic patterns. In at least two aspects my first attempt remained unsatisfactory. First of all the scope of the article was too narrow, as no links were established between the ta-sentence patterns and those in which ta is consistently absent. Secondly I had not yet understood that the uses of ta depend on notions such as givenness, theme, and focus, and in general on the presentation of informational content by the speaker. To a large extent this was caused by a lack of appreciation at that time of the phenomenon of sentence segmentation, which — as I found out some years later (Uhlenbeck 1975) — is of crucial importance for understanding the syntactic structure of present-day Javanese, as well as of Old Javanese.

It is the aim of the present article to remedy these defects and to make some progress on the road towards a full understanding of why in certain Old Javanese sentences ta is present and why it is lacking in others. In addition it confirms the fruitfulness of the Prague approach known as Functional Sentence Prespective (Daneš 1974, Firbas 1974, Allerton 1978) and more specifically lends some substance to the view that for syntactic purposes a notion of subject is not needed for all languages.

The data on which this study is based come from the Ādiparwa, the Wirāṭaparwa. and to some extent from the Bhīṣmaparwa[1]. It is assumed that these three texts (containing relatively unsophisticated narrative prose) provide a sufficiently homogeneous corpus for arriving at valid conclusions about Old Javanese as spoken and written around 1000 AD. However, it should be realised that, for

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reasons mentioned elsewhere (Uhlenbeck, 1985, the linguistic study of Old Javanese literature faces certain fundamental difficulties which pose a limit to our analytic possibilities. The spelling followed in this article is the same as that of my 1970 article, and the same method of word division has been applied. I have not continued the linguistically unsatisfactory practice (still current in philological editions of Old Javanese texts) of writing suffixes apart from the words of which they form an integral part. Clitics are connected with a hyphen to the words to which they phonologically belong.

The organisation of the article is as follows. In II the various types of sentences characterised by the presence of ta[2] will be systematically reviewed. In III those sentence types in which ta cannot occur will be discussed. A final paragraph will contain some concluding remarks.

II

1. It is a property of the particle ta that it never occurs either as the first or as the last word in a sentence. It always requires that two positions, one immediately before and one immediately after it, are simultaneously filled, each by minimally one word. In Uhlenbeck 1970 the formula A-ta-B was used for indicating this bipartite structural framework in which ta functions, separating two elements which differ from each other by their communicative salience. The word or word group which appears in position A is always foregrounded or highlighted in comparison to B. It is A which conveys new or more important information in relation to or about B, which contains information that is given or information assumed by the speaker to be known to or recoverable by the hearer.

A further characteristic of this A-ta-B structure is that there is a restriction as to the verbal content of the A position, but this does not apply to the B position. The A place can usually be occupied only by a single word, or (in very rare cases) by two synonyms. Only when the word in A position is an adjective or a verb may it be preceded by a verbal auxiliary, a negation or a qualifier syntactically connected with the verb or the adjective. Other words syntactically connected with the verb or adjective in A position have to follow B. The following examples may illustrate the foregoing.

(1) piněkulnira ta suku saṅ Yudhiṣṭira. (A 181:27)
he embraced the feet of Yudhiṣṭira.
(A = a verb; B = a nominal group.)

(2) agělěṅ ta sira. (A 91:20)
he became angry.
(A = a derived adjective; B = a pronoun 3rd pers.)

(3) harsāgiraṅ ta cita saṅ Paṇḍawa. (B 129:1)
glad and full of joy was the heart of the Paṇḍawa (brothers).
(A = a combination of two adjectives, the second a derived one; B = a nominal group. There is sandhi of the a of harsa with the prefix a or agiraṅ.)

(4) tělas pějah ta saṅ Kicaka. (W 38:22)
Kicaka had died.
(A = a verb preceded by an auxiliary; B = a proper name.)

(5) tan aṅga tamběk saṅ Nandini. (A 160:14)
the heart of Nandini was unwilling.
(A = a verb preceded by a negation; B = a nominal group. There is sandhi of the a of ta with the a of amběk.)

(6) muwah umiṅsor ta ya mareṅ paprahan. (B 114:11)
he descended again to the battlefield.
(A = a verb preceded by a qualifier; B = a pronoun 3rd pers.; the last two words form a verb phrase consisting of a verb mara, a preposition iṅ, and a derived noun paprahan. There is sandhi of the a of mara with the i of the preposition.)

(7) anon ta sira stri paripurneṅ hayu. (A 66:6)
he saw a woman of perfect beauty.
(A = a verb; B = a pronoun 3rd pers.; the rest is a nominal group: a woman perfect in beauty, syntactically connected with anon.)

2. Besides by an adjective or verb, the A position may be filled entirely by a qualifier such as muwah, maṅkin, tadanantara, that is by the same qualifiers which may appear in A position together with a verb. This implies that the following pairs of sentences occur:

(8) muwah ta saṅ Kuṇṭi kinon aṅaradana baṭara Bayu. (A 120:19)
again Kuṇṭi was asked to summon the god Bayu.
(A = a qualifier; B = a proper name; the rest is a verbal group syntactically connected with muwah.)

(8a) muwah katon ta waṅkaynikaṅ Purocana. (A 140:3)
also became visible the dead body of Purocana.
(A = muwah katon; B = a nominal group.)

(9) atěhěr ta siragawe panotsawa. (A 205:22)
next he gave a banquet.
(A = a qualifier; B = a pronoun 3rd pers.; agawe panotsawa is a verbal group consisting of a verb + noun. There is sandhi between the a of sira and the prefix a of agawe.)

(9a) atěhěr basmibuta ta awaknira madadi hawu. (A 53:25)
thereupon his body was basmibuta (that is) reduced to ashes.
(A = a verb preceded by a qualifier; B = a noun; the last two words are semantically identical to basmibuta: they are added to explain the Skt. loanword.)

Earlier I had declared that no difference between such pairs could be established (Uhlenbeck 1970:653). I am now of another opinion. It is true that as to communicative salience the difference between sentences with only a qualifier in A position, and those with qualifier + verb in that position, is slight and therefore — if the context does not provide sufficient clues — difficult to determine. Still there are cases in which it is reasonably clear that the A-ta-B sentences with only a qualifier in A position enhance the communicative salience of that qualifier. A good example is furnished by:

(10) maṅkin ta ḍaṅ hyaṅ Droṇa asih i sira. (A 131:25)
more and more the holy Droṇa became fond of him.
(A = a qualifier; B = a proper name; asih i sira is a verb group consisting of the verb asih, the preposition i, and the pronoun 3rd pers.)

From the preceding context one gathers that the fact that Droṇa had become fond of Arjuna (the person to which sira refers in the sentence) is already known (see the preceding kinolakĕn ta sira de ḍaṅ hyaṅ Droṇa *Droṇa embraced him (Arjuna)*). Therefore it is appropriate that only maṅkin is in A position, as it indicates the only piece of new information, more appropriate than maṅkin asiḥ, although maṅkin asiḥ ta ḍan hyaṅ Droṇa i sira would be in itself a quite acceptable sentence. The same can be said about the maṅkin ta sentence of A 207:24, presented earlier (Uhlenbeck 1970:653).

In two respects the account given above is imprecise: no exhaustive list can be presented at the moment of the qualifiers involved in these constructions, and no full account can yet be given of the syntactic consequences for the rest of the sentence of putting the qualifier in A-position. I hope to be able to remedy these defects in the future.

3. Next to the A-ta-B sentences discussed so far, there are others mostly[3] with a temporal clause preceding A. The presence of such a clause does not affect the regularities observed in simple A-ta-B sentences. This requires an explanation. First some examples:

(11) satĕkanyeṅ taman / katon ta saṅ Tilotamaṅalap sĕkar. (A 195:15)
after they had arrived in the garden, they saw Tilotama gathering flowers (lit.: *Tilotama was seen gathering flowers*).
(There is sandhi between the a of satĕkanya *after their arrival*, and the i of the preposition iṅ; there is sandhi between the final a of Tilotama and the initial a of the verb aṅalap.)

(12) pira kunaṅ antajinya / magoṣṭi maṅalocita ta maharaja Yudhiṣṭira mwaṅ saṅ catur Paṇḍawa. (W 3:21)
after some time, king Yudhiṣṭira took counsel with the four Paṇḍawa (brothers).
(As in (3) the A position is occupied by two synonymous verbs.)

(13) sĕḍĕn pinataṅkilakĕn baṭara Brahma / katañcana katon ta rakwa baṭara Wisṇu tĕkapnira. (B 96:21)
while they were sitting before the god Brahma, it happened that they saw the god Wisṇu (lit.: *that god Wisṇu was seen by them*).
(the A position is filled by the qualifier katañcana and the verb katon; rakwa is an emphatic particle.)

Even two or three temporal clauses may precede the A element without having any influence on the following A-ta-B structure:

(14) irikaṅ sakatambe mesuk / irikaṅ waṅuṇḍahi nagöṅ / ri kapiṅ saṅa-niṅ laga / awuṅu ta maharaja Kurupati. (B 121:22)
on the next morning, at early dawn, on the ninth (day) of the battle, king Kurupati awoke.
(agöṅ as a determiner of ḍahina *dawn* is unusual.)

Ta never occurs either after such temporal clauses or inside them. I am aware of only one exception: sometimes one finds used as temporal clause pira ta kunaṅ lawasnira ṅkana (in A 117:20) as well as pira kunaṅ lawasnira hana ṅkana (as in A 204:27) without any perceptible difference.

These temporal clauses in initial position which precede the A-ta-B structure, but are not part of it, fulfil a special role clearly distinguished from the roles played by the A and B elements. These clauses are meant by the speaker to be explicit elements of the *setting* in which the A-ta-B structure functions communicatively. To use the terminology of Tesnière, they are *circonstants* and not *actants* (Tesnière 1959:102-103). They are comparable to spatial and

temporal adverbials in English, of which Allerton aptly remarked that they "place a restriction on the validity of the sentence by limiting it to a certain setting" (Allerton 1978:165). They belong neither to the theme nor to the propos of the sentence, and this explains why they do not influence the A-ta-B structure of the rest of the sentence in any way.

4. So far only those sentences have been discussed in which the A position is filled by a verb, an adjective, or a qualifier, preceded or not preceded by a temporal clause. There is, however, a fourth possibility: the A position may be filled by a deictic word, of which many examples have been given in Uhlenbeck 1970:655-657. I have reached the conclusion that my former account of these deictic cases has to be amended on two closely related points.

In 1970 I was in doubt as to whether the deictic element in those sentences could be identified 'qua sentence part' with A in the A-ta-B structures discussed earlier in the article (Uhlenbeck 1970:655). Now I do not see any objection to such an identification, provided that one takes into account the fundamental semantic difference between deictic words and the appellatives which, as we have seen, may occur in A position. There is sufficient evidence that all A-ta-B structures in which the A position is filled by a deictic may be viewed from one single point of view: they are always focus constructions. They indicate what is singled out by the speaker for comment. Therefore they often occur directly after sentences in which a person or a thing is introduced or "put on the scene" (Firbas 1974:18). One example may suffice here, as several others have been given earlier (Uhlenbeck 1970:656).

(15) hana sira saṅ Saradwan ṅaranira / putra bhagawan Gotama / parĕṅ mijil lawan warayaṅnira. Sira ta maṅaji dhanurweda ... (A 125:14)
there was somebody named Saradwan, a son of the holy Gotama, born simultaneously with his arrows. He taught the science of archery ...

Secondly, I now believe that it is not correct to say that the use of ta after an interrogative pronoun, and more generally after a deictic word, is not obligatory. In a focus-sentence ta *is* obligatory, and if there is no ta after a deictic word, an explanation can be given for its absence in at least many cases, as will be shown in III.

For our survey of A-ta-B structures it is sufficient to state that in the Old Javanese of 1000 AD three different uses of deictics within an A-ta-B frame regularly occur:

(a) cases in which the deictic points to an item of the situation in which the sentence is spoken, or to a participant of the speech event:

(16) nahan ta-ṅ tikus mijil saṅke lyaṅnya. (A 212:28)
overthere is the mouse coming out of his hole!
(A = nahan, *there* (French: voilà); -ṅ in taṅ is the enclitic definite article.)

(17) nihan ta-ṅ laras / nihan ta-ṅ tinuju muṅgwiṅ tuṅtuṅ-niṅ kayu / nahan ta warayaṅ limaṅ siki kwehnya. (A 178:15)
here is the bow, here is the top of the pole, the target which you have to hit, there are arrows, five in number.
(In the three co-ordinated sentences nihan (= French: voici) is twice in A position, nahan once; the literal translation of the second sentence is: *here is what has to be hit being at the top of the pole.*)

(b) cases in which the deictic is used anaphorically, pointing to a preceding sentence or an element of that sentence:

(18) irika ta yan manurun saṅ Tapati umintonakĕn rupanira ri haji. (A 157:9)
then it was that Tapati descended to show her (beautiful) figure to the king.
(The context allows both a locative and a temporal interpretation of irika.)

(19) irika ta bhagawan Bhiṣmanambut lipuṅ. (B 133:19)
it was at that moment that the holy Bhiṣma took his spear.

(c) cases in which the deictic is also used anaphorically, but pointing to a preceding sentence segment within the sentence in which the deictic occurs:

(20) seḍĕṅ haneṅ hawan sira / (i)rika ta sira sinantwa deniṅ naga Takṣaka. (A 51:26)
while he was on his way, then it was that the snake Takṣaka kindly addressed him.

(21) ri wijil saṅ Astika / samaṅkana ta saṅ pitara gumantuṅ i tuṅtuṅ-niṅ pĕtuṅ mĕsat mulih mareṅ pitĕrloka. (A 28:29)
when Astika was born, then it was that the pitara creatures who had been hanging at the end of the bamboo jumped back to their (ancestral) world.

(22) kadi rupa-niṅ wukir pinariwĕrta(n)iṅ mega makandĕl / maṅkana ta saṅ Korawakula.[4] (B 132:4)
like mountains surrounded by heavy clouds, such was the appearance of the Korawas.

(23) satĕṅah-ni huripta / ya ta pawehanta huripa saṅ Pramathana. (A 22:21)
half of your life, let that be your gift so that Pramathana may live.
(paweh-a-nta is a noun containing the irrealis suffix -a, which is also present in hurip-a, and the second pers. pronominal suffix -nta, which also appears in huripta: -ta after consonants, -nta after vowels.)

5. The conclusions which may be drawn from the preceding survey of A-ta-B structures in Old Javanese sentences, are the following:

(1) Only one word (or, in certain well defined cases, a word group consisting of not more than two words) may appear in A position.
(2) This word or word group occupies the initial position of the sentence, or comes directly after a temporal clause belonging to the setting of the sentence, or in segmented focus-sentences directly after the first segment of the sentence.
(3) From the point of view of communicative function, a distinction has to be made at least between: setting, the focus, new information, and given information.

III

It goes without saying that there are in Old Javanese syntactic structures other than those discussed in the previous section. There are also other bipartite sentence structures which distinguish themselves from A-ta-B sentences because of the regular absence of ta between the two sentence parts. They are the following:

(a) Equational sentences[5] characterised by two positions which may be filled by nouns, personal pronouns, proper names, or by nominal groups. Some examples:

(24) sapapaniṅ maliṅ / papanta. (A 82:26)
all the misery of a thief (will be) your misery.

(25) ikaṅ suluh (ya) panulaknire warayaṅ saṅ Aṅgaraparṇa. (A 155:2)
this torch is his instrument to ward off the arrows of Aṅgaraparṇa.
(Not all versions of the text have ya here, but it may occur, providing perhaps some emphasis on the preceding sentence part; panulaknira is a derived noun from the verb manulak; -nira is 3rd pers, suffix. There is sandhi between the a of -nira and the preposition i.)

(26) ṅhulun / widyadari saṅkeṅ swarga, si Sarwada / ṅaraniṅhulun. (A 200:7)
I (am) a nymph from heaven, Sarwada (is) my name.
((26) consists of two equational sentences of a very frequently occurring type: si is a particle regularly occurring before proper names denoting people not of high rank.)

(27) gopalaṅhwan lĕmbu maharaja Dharmatmaja / patikhaji. (W 17:22)
your servant is a cowherd who looks after the cows of king Dharmatmaja.
(patikhaji *your (royal) servant.* There is sandhi between gopala, *cowherd,* and aṅhwan, a verb.)

(b) Comparative sentences introduced by kadi[6]:

(28) kadi tejaniṅ Aditya wahu mijil / tejanira (A 205:24)
like the splendour of the rising sun (was) his splendour.

(29) kadi dala-dalaniṅ tuñjuṅ biru / matanya. (A 152:30)
like the petals of the blue lotus (were) his eyes.

(30) kadi siṅha ahyun aṅdĕmaka satwa / bawanira. (W 37:16)
like a lion wanting to pounce upon an animal (was) his behaviour.

What these equational and comparative sentences have in common is that an identity is posited by the speaker between A and B, while it is characteristic for A-ta-B sentences that there is a certain disparity between them. This may very well be the reason why ta is consistently absent in equational and comparative sentences as discussed in (a) and (b). This hypothesis tallies well with the fact that in those rare cases in which ta occurs in an equational sentence (it never occurs in a comparative one), the context is such that the identity between A and B is as it were overruled by the communicative salience of A. A clear case is:

(31) Ratu Suryawaṅsa ta kita / tan paramarta raksasa. (A 170:5)
a king of the Solar race you are, not really a demon.

Clearly, Ratu Suryawaṅsa is emphasised and put in strong contrast with raksasa.

(c) Bipartite sentences with a deictic word as first segment.

All three texts provide many instances of these sentences which strictly speaking are not, or are only marginally, part of the narrative itself, and whose only function is to structure the story by indicating that a story or a speech reported in it has come to an end, and that something new is to begin (Gonda 1975:494). In such sentences ta is absent in most cases.

Some examples:

(32) maṅkana ghoṣana saṅ Bhima. (A 151:3)
such was the announcement of Bhima.

(33) nahan liṅ saṅ Utaṅka. (A 14:14)
such were the words of the holy Utaṅka.

(34) maṅkana pakon bhagawan Byasa. (A 113:12)
such was the order of the holy Byasa.

This means that a difference is made between anaphoric use within the narrative itself (sentences (19)-(23)) and anaphoric use outside the narrative (as illustrated by the sentences (32)-(34)). This distinction is reinforced by the fact that ta tends to be absent in bipartite sentences often directly following sentences like (32)-(34), and fulfilling a comparable function:

(36) sumahur baṭara Brahma: ... (A 185:13)
God Brahma answered: ...

(37) mojar saṅ Amba ri saṅ Dewabrata liṅnira: ... (A 102:2)
Amba spoke to Dewabrata as follows: ...

(d) Apart from the sentence types just mentioned, attention must be given to those syntactic structures which are part of larger constructions. The general rule seems to be that in such syntactic structures ta does not occur. Specifically in structures introduced by the conjunctions yan, yapwan, yadin, yadyan, yatanyan, apan, narapwan, mataṅyan it is relatively rare that one finds ta, even in bipartite structures which otherwise would normally have ta. Some examples (the conjunction is underlined):

(38) yogya ta kita paritrana ri kami / apan kita utama-niṅ kaga. (A 37:7)
it is proper that you protect us, for you are the most excellent of the birds.

(39) waraṅĕn ta juga mwaṅ saṅ Subhadra / yatanyan apagĕha pamitranta lawan saṅ Paṇḍawa. (A 204:1)
let him marry with Subhadra, in order that your friendship with the Paṇḍawa remains strong.

(40) yan aṅhel rahadyan saṅhulun / mararyana sakarĕṅ. (A 144:11)
if your highness is tired, take a short rest.

(41) mogaṅkwahyun i kita / mataṅyan kami ḍatĕṅ maṅke. (A 92:14)
it so happened that I became desirous of you, that is why I have come at this moment.

Given the present state of our knowledge of Old Javanese syntax, it is not quite possible to furnish an explanation for the non-occurrence of A-ta-B structures in clauses which form part of a larger syntactic whole. It seems as if there is room for only one occurrence of ta in one sentence. However, there are a number of exceptions. It is not unlikely that one is faced by tendencies rather than by obligatory rules. Moreover there might be a relation with word order, which in structures introduced by a conjunction seems to be the converse of what one finds in main clauses.

One further observation may be made. In direct speech A-ta-B structures occur just as in main clauses:

(42) tajarĕn ta ṅhulun maṅke / ndi ta tibanya. (A 168:6)
tell me now, where the fire had to come down.

(43) maṅĕn-aṅĕn ta sira/aparan ta kunaṅ hetu-niṅ sapa. (A 7:19)
he thought about what the reason was for the curse.

Compare these with the following sentences in which no ta appears after syapa and aparan:

(44) tinañanira pwa ri karananya-n panaṅis muwah yan syapa saṅ makastri ya. (A 186:1)
he asked her about the reason for her crying and who was the man who had her as his wife.

(45) matakwan ta ye saṅ brahmana / yan aparan kawwaṅan saṅ umati ratu Baka. (A 151:9)
they asked the brahman, what kind of man it was who killed king Baka.
(kawwaṅan, a derived noun from wwaṅ *human being* with the meaning of *position, status, (noble) birth*; saṅ umati ratu Baka functions as a noun; the two nouns together form one nominal group.)

Sentence pairs such as (42)-(43) (as against (44)-(45)) suggest that in clauses introduced by a conjunction there is indeed no place for ta[7], but here again there are exceptions. The whole matter requires further examination.

(e) Finally mention should be made of a quite different case of a consistent absence of ta in sentences in which one would expect it to be present. These are bipartite sentences with first position occupied by the frequently used word atyanta (in later texts antyanta, see Zoetmulder 1982 s.v. atyanta) *excessive, very great*. A few examples:

(46) atyanta / sĕkĕlni hatimami. (B 120:19)
very great is the sorrow of my heart.

(47) atyanta / sih bhagawan Sukra ri saṅ Kaca. (A 73:26)
very great was the love of the holy Sukra for Kaca.

(48) atyanta / manastapaniṅhulun deniṅ taṅista. (W 33:13)
very great is my sadness because of your laments.

It is likely that this consistent absence all through the three texts has a phonological explanation, that is it has to do with the fact that atyanta ends in -ta. Three facts support such an explanation: (1) the occurrence of atyan and antyan in more recent texts, with the same meaning as atyanta (see Zoetmulder 1982 s.v. atyanta); (2) the fact that words with comparable meaning, such as atisaya may be followed by ta (see for instance A 12:30); and finally (3) that the only atyanta-sentence in our material in which atyanta is followed by an emphatic particle, this is not ta, but mara (B 120:21).

IV

The distinctions made in II and III enable us to describe and to understand many occurrences of ta in the language of the *parwas*, but certainly not yet all of them. We have indicated areas for further linguistic research, but there are also other matters to be considered. There are certain instances of ta in the present text editions which are caused by misinterpretation of the text or inaccuracies in their transliteration. To give a very elementary example: in A 22:3 the Juynboll edition has ai kamuṅ hyaṅ sakweh ta dewata, while it is obvious that ta is here a 2nd pers. suffix and not the particle ta; therefore the text should have had: sakwehta. Moreover one has to take into

account that the Javanese or Balinese scribes in copying the Old Javanese manuscripts could easily misunderstand the ta-mechanism operating in Old Javanese many centuries ago, because in their own native tongue ta (= Modern Javanese to) plays a quite different and much more restricted role. In short, one may expect that renewed philological activity will lead to a reduction of the number of presently unclear cases of ta. For instance, it may turn out that in exceptional cases such as:

(49) saṅ Pramathana ta sira (k)ahyun saṅ Ruru. (A 21:8)
Pramathana, she was (the one) whom Ruru desired.

(50) saṅ Utaṅka ta sira kinon an atuṅgwa patapan. (A 11:23)
Utaṅka, he was instructed to guard the hermitage.

the occurrence of ta before sira instead of after this pronoun, is simply due to scribal errors (of a rather common type). On the other hand there are a few cases such as:

(51) sri Krsna pwa sira ahyun lumawada ri saṅ Subhadra. (A 204:16)
Krsna, he wanted to pay a visit to Subhadra.

which suggest that ta or pwa may occur after nouns which form the verbal content of the first segment of the sentence[8]. There would then be a break after ta in (49), (50), and after pwa in (51), marked by intonation. More definite conclusions can only be reached if — preferably with computer assistance — we could have a complete syntactic survey of the texts.

There are in my opinion still further linguistic possibilities for discovering yet unknown regularities governing the use of ta, the most important probably being the treatment of clauses dependent on the main clause of the sentence. For instance it may be that in certain bipartite structures the absence of ta signals dependence of those structures on the main clause. Examples may be:

(52) mulat ta maharaja Duryodhana ascarya manahnira. (B 82:12)
king Duryodhana saw with astonishment

(53) aturu ta sira mahenak ambĕknira. (W 38:25)
she went to sleep having put her heart at ease

in which ascarya manahnira and mahenak ambĕknira may be interpreted more or less as adverbial adjuncts. Such cases may be related to the very frequent absence of ta in what one might call measuring sentences, such as:

(54) hana ta ya paññyomulu wetan / satus yojana dawanya / kahanan saṅ sastisahasra Walakilya / rĕsi sida sira / saṅgusta paṅadĕg-ny awaknira / nĕmaṅ-pulu-iwu kwehnira. (A 40:26)
it had branches projecting eastwards, a hundred yojana was their length, the place where the sixty thousand Walikilya lived, perfect sages they (were), their height being one thumb, sixty thousand in number.

It would seem that in the underlined structures ta could have been present after yojana, after saṅgusta and after nĕmaṅ-pulu-iwu. We noticed that especially before kwehnya (kweh-ni), ta is in most cases absent, but there are a few exceptions (for instance A 131:24).

Finally there are very rare occurrences of ta which seem to be of an altogether different nature. In:

(55) bhagawan Wasistha saṅ pinaṅan ta anaknira (A 170:17)
the holy Wasistha, the one whose children had been devoured

the word group saṅ pinaṅan ta anaknira is a case of substitution: the position after saṅ normally taken in by a proper name or by a noun indicating some category of persons (or things) is here filled by a sentence: pinaṅan ta anaknira *his children have been devoured.* Substitution in general is a widespread phenomenon, and there are many instances of substitution after saṅ. What is unusual here, is that while in normal cases such as saṅ manuntun kuda (A 15:23), *the one who is leading the horse*, or saṅ gumaway ikaṅ kaḍatwan (A 89:26), *the one who built the royal residence*, saṅ is followed by an active verb, here an A-ta-B structure has been inserted with a passive verb in the A position. The question arises whether the Old Javanese author has made use of a normal possibility of his language, or whether he has made creative use of his language, extending a *procédé* beyond its normal boundaries. This is a problem which we much more often have to face in interpreting literary texts and for which only a tentative solution can be found on the basis of statistical evidence, at present regrettably not at our disposal.

Our discussion of ta-sentences in II led to the conclusion that the concepts of theme, propos, focus, and setting provide a natural framework for their description. It appeared that the main facts could be expressed by two formulas. The first is:

(1) (S) - A - ta - B - (A)

in which S = a clause (or perhaps a segment, if we could have intonational information) which is part of the setting of the sentence, and which is put between brackets (as it may but does not have to occur), and in which (A) indicates that a portion of A may be present after B, not being allowed to occur in A position because of the restriction put on that position.

As to the words in A position, they belong to one universal semantic type: they are appellatives (preferably verbs or adjectives) or syntactic combinations of appellatives. As to B, this position is filled also by appellatives (preferably nouns or proper names) or syntactic combinations of appellatives. The word (or words) occupying the A position is the propos of the sentence, those in B position the theme.

The other sentences may be subsumed under the second formula:

(2) A_1 - A_2 - ta - B

in which A_2 is the position filled by a deictic word (that is, by a word which also belongs to a universal semantic type) and in which A_1 is either a segment of the same sentence as A_2, or an element in a preceding sentence, or a preceding sentence taken as a whole. The sentences covered by formula 2 are all focus sentences with B being the topic.

It appears then that in Old Javanese of 1000 AD propos-theme sentences and focus-topic sentences are served by the same formal means, but by words of two different semantic types. What propos and focus have in common is that each is communicatively more salient than theme and topic respectively. One might say that it is this difference in salience to which the language is sensitive.

Another conclusion is that the notion of *setting* is needed to account for the fact that segments functioning as explicit setting for the communicative structure A-ta-B do not interfere with the rules governing this structure. This notion also permits us to express the very real distinction between temporal clauses appearing in formula 1 sentences, and temporal clauses appearing as A_1 in sentences covered by formula 2.

For FSP-theorists the Old Javanese data presented here may be of some interest, because of the use made in Old Javanese of syntactic particles for the demarcation of what is communicatively salient from what is less so. Finally, the description proposed in this article may also be of interest because of the assumption (suggested by the data) that at least certain sentence types are characterisable as not expressing in their structure any difference in communicative salience.

NOTES

[1]The editions used were the following: H.H. Juynboll ed., Ādiparwa. Oudjavaansch prozageschrift, The Hague 1906; A.A. Fokker ed., Wirāṭaparwa, The Hague 1938; J. Gonda ed., Het Oudjavaansche Bhīṣmaparwa, *Bibliotheca Javanica* 7, Bandung 1936. In quoting sentences from these texts, the abbreviations A, W, and B are used, followed by the number of the page and of the line on the page.

[2]Other particles occur with the same syntactic function as ta, but much less frequently. The most frequent of them is pwa. No difference could be established between A-ta-B and A-pwa-B structures. Next to ta and pwa, are found taya and pwaya, forms which probably incorporate either the personal pronoun 3rd pers. or the particle ya. Taya occurs much more frequently than pwaya. Other combinations (tapwa and pwayata) rarely occur, see Uhlenbeck 1970:649 for exact figures.

[3]My material contains one causative clause:

> saṅka ri walatkara maharaja Wiswamitra ri sira / masabda ta sira goranada. (A 160:15)
> *because of the force used by king Wiswamitra on her (the cow Nandini), she lowed with a terrible noise.*

I do not exclude the possibility that other cases will be found, also, of locative clauses.

[4]In view of the fact that ta is absent in comparative sentences introduced by kadi (see II.2), it is remarkable that this sentence, which is also comparative, fits into the model exemplified by the sentences (20)-(23). It is perhaps significant that one of the very few sentences of this latter type in which ta is absent, is a comparative sentence:

> kadi rupa saṅ hyaṅ Indra-n pamĕjahi daityadanawa / maṅkana lwir saṅ Bhima ambrastakĕn ikaṅ Kicakawandawa (W 40:23)
> *like God Indra killing the demons, such was the appearance of Bhima annihilating Kicaka's relatives.*

[5]The term equative sentence or clause is perhaps more common. It is used both by Lyons and Allerton for certain English sentences with *be*, see for instance Allerton 1978:164.

[6]These sentences differ from A-ta-B sentences in which the A position is filled by kadi, such as: kadi ta sira wukir agöṅ pinaṅan iṅ gĕlap (A 17:16), *he seemed like a big mountain destroyed by lightning.*

[7]Compare also a sentence like kunaṅ deyanta: iběr ta kita, pĕṅpöṅ saṅ hyaṅ Agni tapwan tĕka (A 212:13) *what you have to do is: fly away, as long as the god Agni has not yet arrived.*

[8]Segmented sentences occur in Old Javanese in a wide variety: for instance, the following sentences, which are very similar to those found in modern Javanese:

... kunaṅ maharaja Salya / saṅ Bhima humarĕpakĕn sira. (A 180:14)
but king Salya, Bhima confronted him.

... kunaṅ saṅ Bhima mwaṅ saṅ Duryodhana / gadayuda/pawehnira ri sira. (A 130:15)
but Bhima and Duryodhana, clubs were what he gave to them.

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WORMING ONE'S WAY THROUGH NEW GUINEA: THE CHASE OF THE PERIPATETIC PRONOUNS

C.L. Voorhoeve

1. WPP: WURM'S PERIPATETIC PRONOUNS

1.1 Preamble

It seems fitting to this contributor to the present volume in honour of Stephen Wurm firstly to begin his offering with a truly Wurmian English sentence of almost indefinite length and secondly to devote it to a topic which although of more than marginal interest to himself, might not have spurred him into writing were it not that the same topic is, and has been for a long time, of absorbing interest to the beneficiary of this book who for more than thirty years has applied himself with unremitting vigour to the description and classification of the Papuan languages and not least to the question of how the present linguistic situation in the New Guinea area can be accounted for in terms of past language migrations and the language mixing which resulted from them. Many of us who have done comparative work in New Guinea have addressed themselves to the latter question in relation to the areas they were working in. But no-one has ventured deeper into the mist of the New Guinea's linguistic past or has come up with a bolder picture of early language migrations than Stephen Wurm. First in 1972, and again in 1975 and 1978, he put forward the hypothesis that in prehistoric times two large language migrations must have moved through New Guinea in a generally West to East direction. It is assumed that the two migrations were separated by a long time interval of perhaps thousands of years. Where languages of the second migration or their descendants came into contact with languages going back to the first migration various forms of language mixing took place.

1.2 Basic assumptions

The basic idea underlying the migration hypothesis is that the geographical distribution of genetically related forms of the present-day personal pronouns can give clues as to the direction and sequence of past language migrations. It is further assumed that the clues offered by the patterns of pronoun distribution are supported by correlated typological and structural features.

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Taking these assumptions as his starting point Wurm set out to study the personal pronoun forms in all the Papuan languages for which sufficient data were available. The results of this study were summarised by him in the following way (Wurm 1972:14):

> A study of the forms of the personal pronouns in over 450 Papuan languages ... has shown that, with rare exceptions, these pronouns belong to three basic sets whose members are formally distinct though one of them shows strong connections with the other two and may well be ultimately derived from them.

The three sets he labelled sets I, II, and III.[1]

Wurm restricted his study to the personal pronouns in the 1st, 2nd, and 3rd person singular and the 1st and 2nd person plural. He disregarded the 3rd person plural forms because of their wide variability, and dual forms because they are often derived from plural forms by means of affixes. Moreover, data for the latter two categories are often lacking. Each of his basic sets therefore contains only five forms. It was assumed that in the course of time language contact often resulted in borrowing of pronouns so that many present-day languages have personal pronouns originating from different basic sets. Either forms of one set have been replaced by forms from another (mostly, but not necessarily, the corresponding ones), or corresponding forms of different sets have combined to form composite pronouns or what Wurm calls 'fused forms'.

1.3 Postulated migrations

The interpretation of the geographical distribution of the pronoun forms of the three sets led Wurm to postulate two large prehistoric language migrations. The most recent of the two would have carried with it the pronouns of set I and the languages associated with this set were the ancestors of most of those now classified as members of the Trans-New Guinea Phylum. This migration is thought to have entered New Guinea well before the arrival of the Austronesians in the area (c. 3000 B.C.) at a point somewhere near the 'neck' of the Bird's Head Peninsula from where it moved eastwards through the full length of the island. The pronouns of basic sets II and III belong to a much older stratum. Wurm claims that 'a language type characterised by pronoun forms of sets II and III ... reached the New Guinea area via northern Halmahera and the northern main part of the Vogelkop (Bird's Head) Peninsula ...' From there, languages with set II pronouns and those with set III pronouns moved along roughly the same route through the northern half of New Guinea all the way to the tail of Papua. Wurm further noted that the forms of set I and set II are correlated with different sets of typological features whereas languages with predominantly set III pronouns do not represent a separate type but are typologically either like set I languages or like set II languages.

1.4 Criticism

Wurm presented his migration hypothesis in a summary fashion without including actual language data or a discussion of the methodology. Even the forms of the personal pronouns of the basic sets are given only in the 1975 version of the hypothesis. It gave his reviewers[2] the opportunity to criticise the hypothesis from a variety of angles. In addition to complaints about the absence of

language data, the lack of information on the method followed, and about the general vagueness of Wurm's statements, doubt was expressed about the soundness of the classifications—mostly based on lexicostatistics—underlying his reconstructions, the relevance of structural and typological features for genetic classification, and the usefulness of the notion of substratum. Wurm's critics had good grounds for being sceptical. Reconstruction of proto-vocabulary and/or proto-sounds has been carried out for only a few language families in New Guinea. For high-level reconstructions like the ones attempted by Wurm the comparative linguist has largely to depend on his intuitions regarding the possible cognateness of words. That such intuitions can easily be wrong is clear from the results of comparative work on lower levels which show that in New Guinea at least one proto-sound can have a great variety of reflexes. Thus all dental, alveolar, velar or glottal consonants are potential reflexes of one proto-sound:

$$*C \lessdot \begin{matrix} c,\ t,\ j,\ d,\ ny,\ n,\ s,\ r,\ l,\ s,\ y \\ k,\ g,\ ng,\ ',\ h \end{matrix}$$

The same applies to the bilabials and labiodental f, with the possible change of f > h, and y > w or w > y linking the series. Especially in short forms such as personal pronouns cognate decisions often depend on one pair of consonants only, which makes it a hazardous undertaking. It is therefore unfortunate that the planned publication of the full results of Wurm's study, announced in Wurm 1975, did not eventuate. It would have met at least some of the criticism and given a better opportunity for assessing the merits of the hypothesis. It is my opinion that the objections raised so far while rightly stressing the caution with which the migration hypothesis has to be treated, have been by necessity too general to invalidate it. It certainly is interesting enough to deserve more than the passing attention given to it so far. In this article, therefore, I shall subject the migration hypothesis to some further scrutiny, focusing on one of the main pieces of evidence on which it is based: the composition of the basic sets. I shall take the position that Wurm's reconstruction of the personal pronoun forms is correct unless proven otherwise. Also I shall accept Wurm's view that there are two major strata to be found in the Papuan language of New Guinea, associated with two major migrations, and that the languages associated with the first of these migrations shared a number of typological features different from those shared by the second migration languages. That the general direction of the language migrations was from west to east can be accepted on extra-linguistic grounds: the Papuan population of New Guinea can have reached the island only from the south-east Asian mainland, probably at a time when the sea level was much lower than it is now.[3]

1.5 The basic sets

Once the decision has been made as to which reconstructed forms go together to form a basic set the geographical distribution of the set can be determined allowing certain conclusions to be drawn regarding possible migrations. It is therefore important to explicate the way in which one arrives at this decision. One should find in a number of languages belonging to different families, stocks, or even phyla, full sets[4] of personal pronouns which seem derivable from one and the same set of proto-forms. When this has been established, further evidence can be sought in languages which seem to contain only a subset of the basic set, e.g. only three or four of the five forms. Let me illustrate

this on the basis of set I, associated with the languages of the youngest migration. The base consonants of this set have the following reflexes in the present-day Papuan languages:[5]

	Sg.[6]	Pl.
1	n	n
2	k, g, ŋg	k, g, ŋg, ŋ; t, d, r, s, y
3	y, t, d, r, l, s; k, g, ŋ	

Important base forms of this set are:

	Sg.	Pl.
1	na	ni
2	ka	ki, te
3	ye, te, (V)k	

On Wurm's distribution map of set I forms (Wurm 1975a:193) we find no less than 22 instances of single languages or clusters of neighbouring languages which have the full set. These languages are scattered over a wide area reaching from the Bomberai Peninsula in the west to the Huon Peninsula in the east and they belong to many different stocks. Four of the five forms are found in 18 instances, scattered over the same area. This is a strong indication that set I is indeed a phylum-level proto set.[7]

With set I pronouns go the following typological features: absence of gender; noun classes manifested in the use of classificatory verbs; a tendency to suffixing; a high morphological complexity of the verb with marking of aspect, mode, tense, and reference to subject, object, and beneficiary; presence of sentence-medial verbs.

The largest genetic group of present-day languages which have a majority of set I pronouns and have typological features agreeing for the main part with those mentioned above, is the Trans New Guinea Phylum (TNGP).[8]

For basic set II the following base consonants have been posited:

	Sg.	Pl.
1	k, g, ŋg, ŋ	m, p
2	m	m, p
3	b, p, m, w	

and important base forms of this set are:

	Sg.	Pl.
1	ka	me
2	ma	mi
3	ba, wa, pi, mi	

Here however the evidence is much weaker. The distribution map (Wurm 1975a:198) gives only two instances of the full set, both within the same stock. There are nine instances of a subset of four, scattered along the north coast from Cenderawasih Bay to south of Wewak, with a single case in south-east Irian Jaya. Some of the cases cited above are within the TNGP where they are explained as substratum features, others are outside it. What is interesting about their distribution is that they are found on the northern and southern fringes of the area covered by the TNGP languages.

Typological features associated with set II pronouns are: presence of a two-gender system overtly indicated with pronouns and subject markers on the verb; a general tendency towards prefixing, especially with regard to the subject markers on the verb and possessive prefixes with nouns; a usually high morphological complexity of the verb, but less in the marking of aspect, mood, and tense than of person, number and gender; absence of sentence-medial verbs.

For set III forms we are not much better off. The base consonants of this set are:

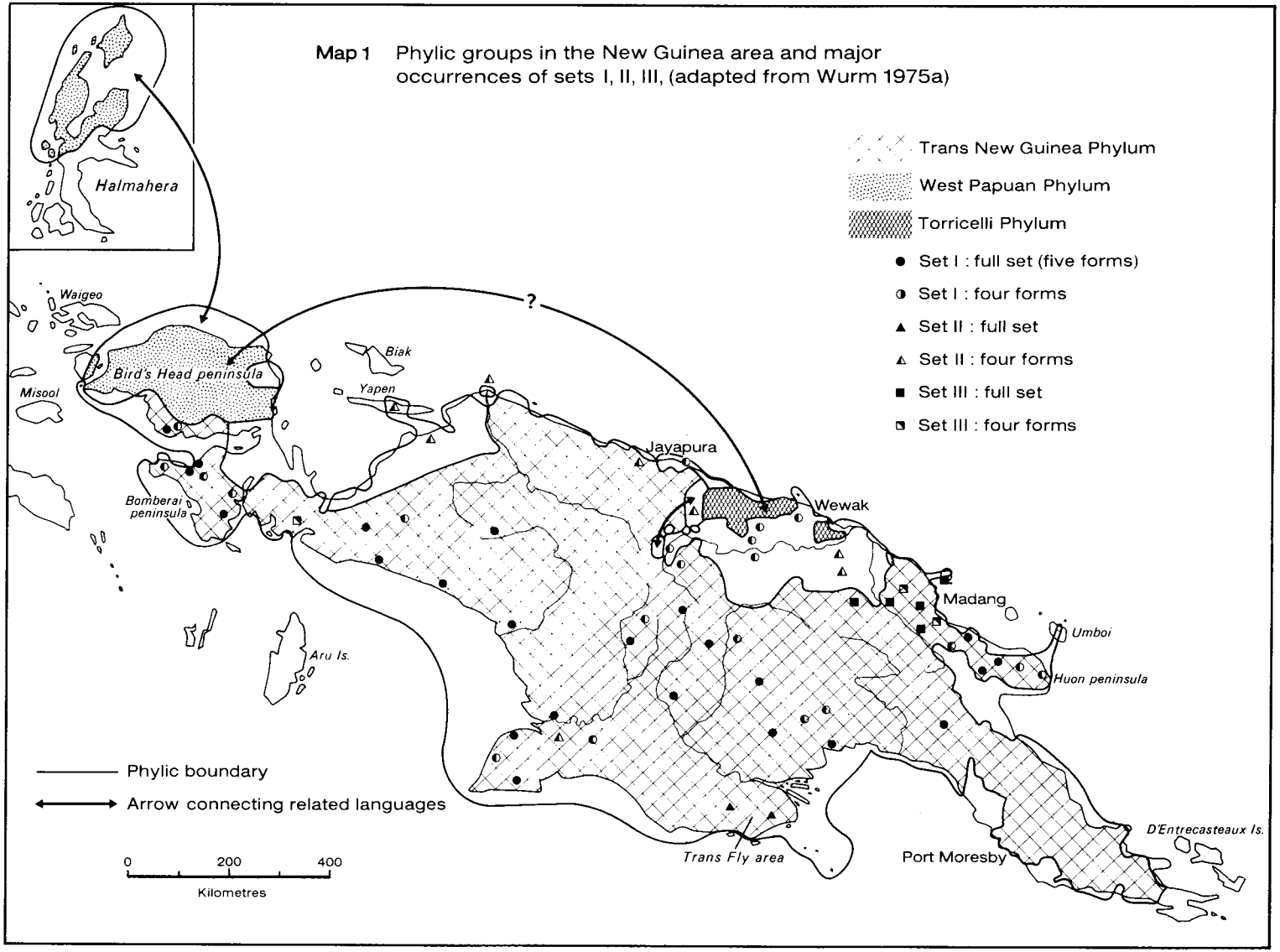
	Sg.	Pl.
1	t, d, y	k, g; t, y, s
2	n, ny	n(Vg), n(Vk)
3	n	

and important base forms of this set are:

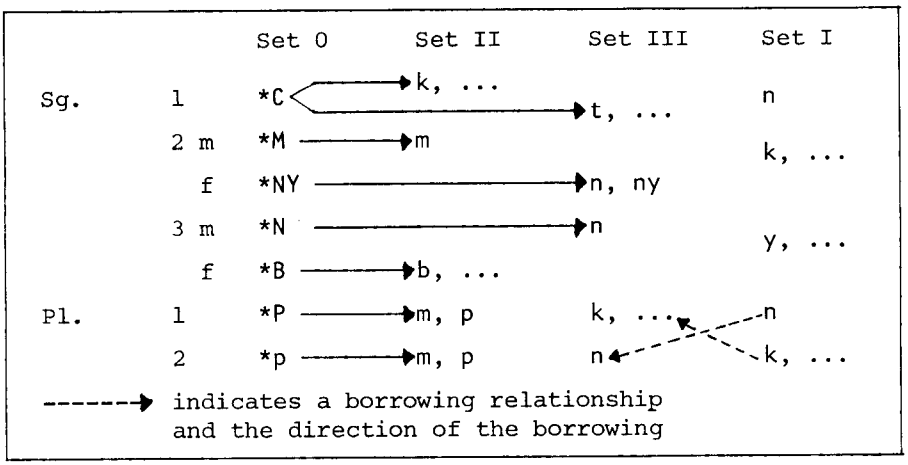
	Sg.	Pl.
1	ta, da, ya	ki, ti
2	na	nik
3	nu	

The distribution map (Wurm 1975a:200) shows five instances of the full set, all in the north-eastern corner of New Guinea, three instances of a subset of four in the same area, and one case of this subset in the far south-west near Etna Bay. All the languages containing five or four forms of set III have been classified as TNGP languages, and the appearance of this set of pronouns in them has to be explained as a substratum feature.

This, and the fact that languages with a majority of set III forms typologically agree either with set II languages or with set I languages led Wurm to question the validity of set III and to posit an alternative solution. He noted that there is a strong possibility that the set III forms are partly derived from the same original forms as those of set II, and in part directly from set I. Thus 1st person singular forms of set II are completely lacking in the Bird's Head, appearing only in languages further east, while 1st person singular forms of set III occur in the Bird's Head and also further east. These forms of the two sets (set II k, etc., set III t, etc.) could derive from an earlier form with *C. The difference between the two sets in the 2nd and 3rd person singular (set II 2PS m, set III 2PS n, ny; set II 3PS b, ..., set III 3PS n) can be related to the observation that in languages with a gender distinction in the 2nd and/or 3rd person singular, the 2PS masculine form usually belongs to set II and the feminine form to set III whereas the 3PS masculine form usually belongs to set III and the feminine form to set II. The original system would have had a gender distinction in both the 2nd and 3rd person singular; languages which lost the distinction in one or both persons would either have retained the 2PS masculine and 3PS feminine forms or the 2PS feminine and 3PS masculine forms. Wurm further assumed that the original system had set II forms in the plural but that a number of languages lost these under the impact of the second migration, replacing them by set I forms, but switching the 1st and 2nd person in the process. The transformation of the original set into sets II and III is summarised in the following table. The original set is labelled set O.

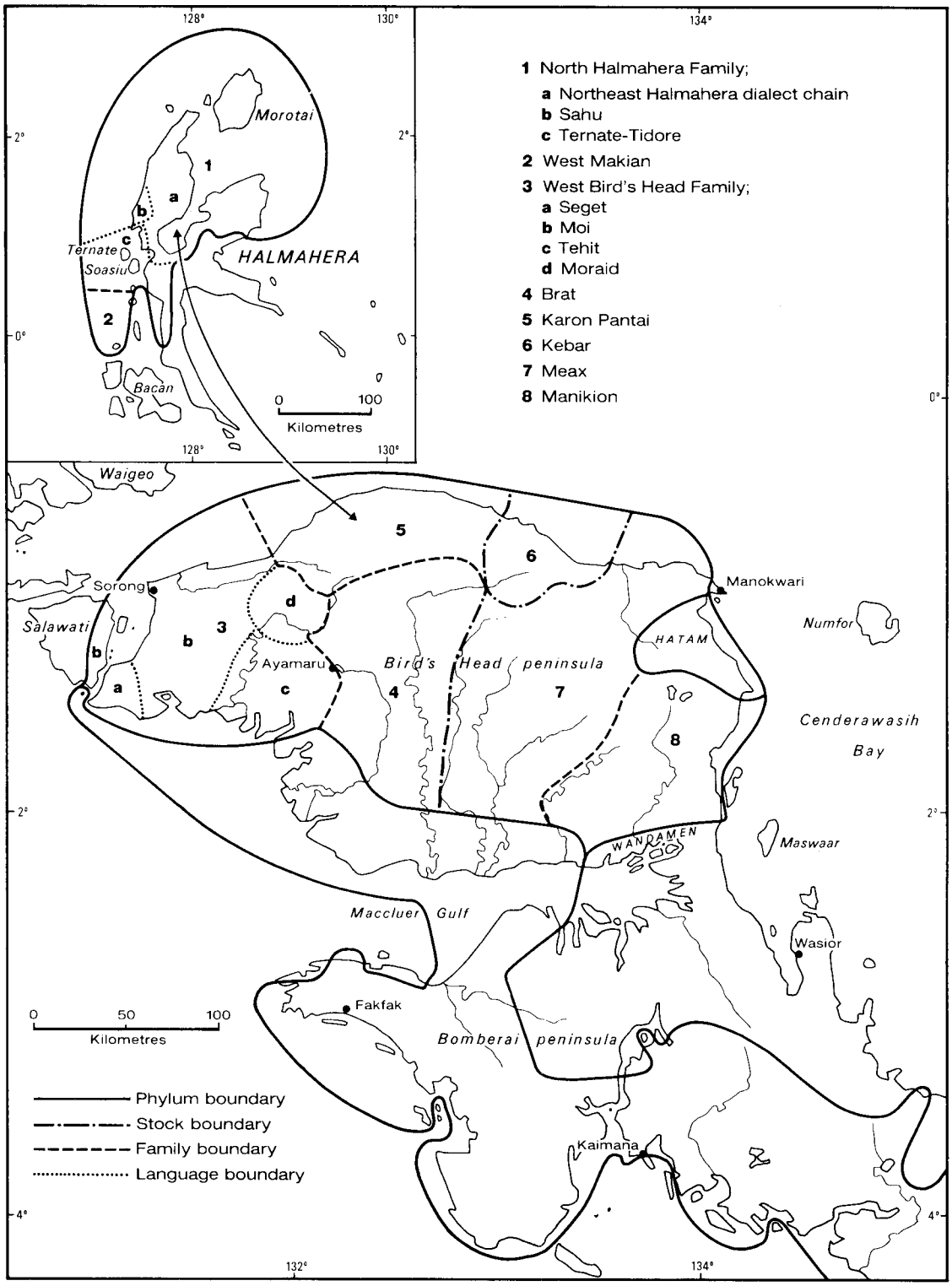


Map 1 Phylic groups in the New Guinea area and major occurrences of sets I, II, III, (adapted from Wurm 1975a)



1.6 The first migration

Wurm's alternative solution amounts to saying that the first migration carried with it the single set of pronouns I have labelled O. As mentioned above it is thought to have entered New Guinea via the north Moluccas and the northern main part of the Bird's Head Peninsula. The reconstruction of the route of entry is based on the present-day distribution of the languages of the West Papuan Phylum (see map 1), which seem to be descendants of languages which entered the area with the earlier migration. The West Papuan Phylum languages are found in the island of Halmahera and in most of the Bird's Head area except for a narrow strip along the south coast where Trans New Guinea Phylum languages are spoken, the south-east corner, now occupied by the Austronesian Wandamen language, and an area in the north-east where Hatam is spoken — a language which still defies classification. My own recent work in the North Moluccas and the Bird's Head has led me to believe that the WPP languages in the Moluccas migrated to their present location from the western Bird's Head, and that the TNGP languages of the south coast are relative latecomers who came to the Bird's Head from the east long after the second migration had entered the New Guinea mainland. The only thing we can say about the entry of the earlier migration is that it entered New Guinea through the Bird's Head from an unknown point of departure. In contrast to the languages which moved further east the languages in the Bird's Head seem to have been left to themselves, at least by the languages of the second migration. As we shall see there is evidence that they have been influenced to a considerable degree by Austronesian languages once these appeared on the scene. Still, except for the probable introduction of an inclusive-exclusive distinction in the 1st person plural the Austronesian influence did not affect the pronouns of the WPP languages. Most of the set O languages further east came in contact with languages of the second migration and were influenced by them to such an extent at least lexically, that many of them have now been classified as Trans New Guinea Phylum languages. I have already mentioned that the languages which provided Wurm with the full sets II and III pronoun forms are among those now classified as TNGP languages. This very fact however raises doubts about the validity of sets II and III, and consequently of set O. Rather than the few TNGP-influenced languages which



Map 2: West Papuan Phylum languages

display the full set II or set III forms the West Papuan Phylum languages should form the basis for the reconstruction of the basic set associated with the first migration. If we can reconstruct their basic set of personal pronoun forms we have a tool by which, it seems to me, we can assess the validity of Wurm's sets II and III, and of his theory about their interrelationship.

2. WPP: the West Papuan Phylum

2.1 Subgrouping

The West Papuan Phylum can be divided into four stocks (see map 2). From west to east they are:

1. The North Moluccan Stock (NMS) consisting of the North Halmahera Family (NHF) with three member languages, and one Family-level Isolate, West Makian (WM).
2. The West Bird's Head Stock (WBS) consisting of the West Bird's Head Family (WBF) with four member languages, and two Family-level Isolates Brat (BR) and Karon Pantai (KP).
3. The East Bird's Head Stock-level Family (EBS) with two member languages, Meax (MX) and Manikion (MN).
4. A Stock-level Isolate, Kebar (KB).

The present subgrouping of the languages of the West Papuan Phylum rest mainly on lexicostatistical evidence. This means that there are still areas of uncertainty, especially where cognation percentages drop below the Stock level i.e. are lower than 12%. Thus, while the cognation percentages shared by Brat and Karon Pantai with the languages of the NHF definitely place them into different stocks the cognation percentages shared by the WBF and the NHF are high enough (14% - 18%) to place the two families in the same stock. West Makian on the other hand shares only 10% cognates with languages of the WBF, and 7% with Brat and Karon Pantai. As the NHF languages have absorbed a large amount of Austronesian loan words (up to 30% of basic vocabulary) their cognation percentages with the WBF are probably deflated. Their cognation percentages with West Makian, which range from 23% - 28% are probably somewhat inflated by borrowing by WM from the nearest NHF languages. Uncertainty in cognate identification means that the WPP membership of KB and the EBS is still somewhat tenuous. Counting of 'safe' cognates yields no more than 5 - 7% shared between them and the WBF; when uncertain cases are included the percentages rise to 9 - 11%. The percentages between them and the NMS languages have not been calculated but I expect them to fall below the Phylum level.

2.2 Typology

The languages of the WPP are predominantly prefixing. The only exception encountered so far is Tehit, one of the WBF languages, in which gender markers can be suffixed to nouns. The verb is morphologically simple, at least on the flexional level.[9] In most languages the verb takes only a prefixed subject marker. Tense, mood, and aspect are not indicated by affixes on the verb. Two languages of the NHF also have object markers which are positioned between the subject marker and the verb stem. There are no sentence-medial verbs. The personal pronouns in all WPP languages distinguish between 1st, 2nd and 3rd person singular and plural. Dual pronouns have not been found within the North

Moluccan Stock but they have been attested in Moi and Tehit of the West Bird's Head Family and in Kebar, Meax, and Manikion. All these languages have a full set of dual forms. Inclusive and exclusive forms of the 1st person plural are found in all languages except Brat, Karon Pantai, and Kebar which geographically form the middle section of the WPP languages. Tehit, Meax, and Manikion also have the inclusive-exclusive distinction in the 1st person dual.

The inclusive-exclusive distinction is rare in Papuan languages of other phyla and where it is found it can be attributed to influence from Austronesian languages. The widespread occurrence of inclusive and exclusive forms in the WPP is likely to come from the same source. In the North Moluccan Stock the root of the 1st person plural inclusive is mi or imi which strongly suggests an Austronesian origin. The distribution of inclusive and exclusive forms within the Bird's Head suggests that the distinction was introduced from the west as well as from the east, without reaching the centre.

All languages of the NHF, the WBF, and also Kebar have a gender distinction in the 3rd person singular. In the NHF neuter, masculine, and feminine are distinguished; the other languages only have a masculine-feminine distinction. West Makian must have lost this feature under the impact of the Austronesian East Makian language with which it shares the same island. If the EBS languages once had gender they have lost it without it leaving a trace. The gender markers in Tehit have the peculiarity that when they are suffixed to a noun they can mark size: feminine = big, masculine = small. It is possible that the same feature is shared by other WPP languages but they have not yet been studied in sufficient detail to detect it. I mention it here because we shall have reason to refer to it in the last part of the paper.

Almost all languages of the WPP have a basic SVO word order associated with the use of prepositions. The only exceptions are found within the NHF. Originally all members of this family must have had a basic SOV order correlated with the use of postpositions and the presence of subject and object markers on the verb. Nowadays only one of them retains all these features: one has switched to SVO order and prepositions but still retains the subject and object markers, and one now has SVO order, prepositions, and has lost the object markers. There can be no doubt that the typological change has been caused by long-lasting contact with Austronesian languages. The question now is whether the same has happened to the other WPP languages, or whether Proto North Halmaheran changed from SVO to SOV, and later back to SVO again. It is a question which at the moment I am unable to answer.

2.3 The personal pronouns

I shall discuss the personal pronoun forms on the basis of Chart 1 in which the singular and plural forms have been set out. For sake of completeness I have included the 3rd person plural forms although they form no part of Wurm's basic sets. The dual forms have not been included as they are irrelevant to the discussion and would take up too much space. Before going into detail I want to make a few general comments. Firstly, our data in the languages of the North Halmahera and West Bird's Head families are sufficient to reconstruct their protoforms with some confidence. In order to save space I give only these protoforms instead of the forms in the individual languages of the two families. They can be found in the columns marked PNH (Proto North Halmaheran) and PWB (Proto West Bird's Head). All other languages of the WPP are represented individually. Secondly, it appears that in several WPP languages the free pronouns have been combined with other elements, mostly from the

	North Moluccan Stock (NMS)		West Bird's Head Stock (WBS)			Stock Level Isolate	East Bird's Head Stock (EBS)	
Free forms	Proto-North Halmahera (PNH)	West Makian (WM)	Proto-West Bird's Head (PWB)	Brat (BR)	Karon Pantai (KP)	Kebar (KB)	Meax (MX)	Manikion (MN)
Sg. 1	*ngoji	de	*tet	tio, tuo	ji, ta:t	in	didif, dedef	dani
2	*ngona	ni	*nin	nuo	nan	na:n	bowa	bani
3 n	*enang	me	*wow	ait/yaku	yene	yeta	ofa	eni
m	*unang							
f	*munang		*mom	aw/maku	?	mi:n		
Pl. 1 incl.	*ngone	ene	*pap	amu	mem	yik	mimif	mamani
excl.	*ngomi	imi	*mam				memef	emeni
2	*ngoni	ini	*nan	anu	nin, nun	ni:n	iwa	yeni
3	*anang	eme	*yit-yey	ana	yetu, anatu, letatu	di:r	rora	leni
Subject prefixes	(PNH)	(WM)	(PWB)	(BR)	(KP)	(KB)	(MX)	(MN)
Sg. 1	*to-	t-	*t-	t-	ta-	∅?	d(i/e)-	d(e)-
2	*no-	n-	*n-	n-	na-	an-	b(o)-	b-
3 n	*i-	i-	*w-	y-	a-	a-	e-	e-
m	*wo-							
f	*mo-		*m-	m-	?	(m)		
Pl. 1 incl.	*po-	m-	*p-	p-	ma-	e-	mi-	ma-
excl.	*mi-	a-	*m-				men-	eme-
2	*ni-	f-	*n-	n-	nin-, nun-	nin	i-	ye-
3	*yo-	d-	*y-	m-	?	d(e)-	re-	l-

Note: Forms separated by / are alternative forms, those separated by , are dialectal variants. The letters have their usual phonetic value except in Meax and Manikion where d = [d, t] and b = [p, b]. In composite forms the pronominal root has been underlined. Gaps in the Karon Pantai data have been indicated by a question mark.

Chart 1: Personal pronoun forms in the West Papuan Phylum

demonstrative system. In other words, personal and spatial deixis are often combined in one form. In the languages of the NHF the personal pronouns contain a root which is preceded by an element ngo of unknown origin or followed by an element nang which is also found with demonstrative roots. The endings t and (a)ku in the 3rd person singular forms in Brat may also have a demonstrative origin; certainly this is the case with Karon Pantai ne in yene (3rd person singular) and tu, atu, or tatu in the 3rd person plural. In Meax and Manikion the endings ef, if and (a)ni derive from demonstratives and the same is possibly the case with ta in Kebar yeta (3rd person singular). The tendency to combine personal pronoun roots with demonstrative elements is found in three of the four WPP stocks and may well be a very old feature of the WPP languages. One wonders if the 'fused forms' observed in many languages are not old compounds of a similar make-up rather than combinations of two personal pronouns.

1st person singular forms

All 1st person singular forms except KB in seem to be cognate. In could possibly be linked to the main series by postulating in < yin < yi < ji which leaves the accretive nasal unaccounted for. But not only the 1st person singular in KB is aberrant. The same is the case with the 1st person plural form, and the subject prefixes 1st person singular and 1st person plural. This suggests that they are of a different origin and probably an innovation peculiar to Kebar. Wurm seems to have interpreted the 1st person singular free pronoun in KB as belonging to set I, and the 1st person plural as a set III form (i.e. derived from set I, see 1.5 above). I reject this interpretation on the grounds that WPP languages must have had no or very little contact with set I languages. All other 1st person singular pronouns belong to set III.

2nd person singular forms

The 2nd person singular forms are cognate in all languages except Meax and Manikion; the forms in the NMS, WBS, and Kebar all belong to set III. In Meax and Manikion we find a situation parallel to the one in Kebar: not only the 2nd person singular form falls outside the basic sets, but also the 2nd person plural and the corresponding subject prefixes. At first sight these forms seem to be innovations, as they are restricted to only one of the WPP stocks. When we look a bit closer, however, we cannot be too sure. Firstly there is reason to suspect that the NMS and WBS form *one* first-order subgroup of the WPP, not two. The uniformity of the personal pronouns in the two groups, and the unexpectedly high cognation percentage shared between the North Halmahera family and the West Bird's Head family point in that direction. Secondly, the Kebar language borders on the Brat and Karon Pantai languages and could easily have borrowed its 2nd person forms from one of them. And finally there is some external evidence that the 2nd person forms in Meax and Manikion are a retention from the original WPP system. I shall return to this point in 2.5.

3rd person singular forms

It seems to me that a three-way gender distinction must have been present at least in the language ancestral to the North Moluccan and West Bird's Head stocks (which as stated above probably form a single first-order subgroup of the WPP), and perhaps also in Kebar. The formal means for expressing gender were (1) a (high) front vowel or y for neuter, (2) a high back vowel or w for masculine, (3) m for feminine. Where the three-way distinction was reduced to two either the neuter form or the masculine form was dropped — the neuter form

in the WBF, the masculine form in Brat, Karon Pantai, and Kebar. In all those languages m remained the base consonant of the feminine form, with one exception:[10] in Brat we find two forms in the 3rd person singular masculine and 3rd person singular feminine. In the first forms the contrast is between i (masc.) and w (fem.); in the second between y (masc.) and m (fem.). The semantic difference between the forms was explained to me as unspecific versus specific: ait, aw *a he, a she*, yaku, maku *that particular he, she*, an indication that the latter forms indeed contain a demonstrative formative. In West Makian which dropped the gender distinction altogether only the feminine form survived as a free pronoun. The remaining subject prefix is i- which is either a perpetuation of the neuter prefix i- still present in the NHF languages, or a borrowing (plus a shift in morphological status) of the East Makian free pronoun 3rd person plural i. WM borrowed at least the subject prefixes 1st person plural exclusive and 2rd person plural from this language as we shall see below. The subject prefix a- in Karon Pantai and Kebar has to be left unexplained. The EBS forms o and e could be reflexes of an earlier *wo. Some supporting evidence for this assumption will be given in section 2.5. The set membership of the 3rd person singular forms would be set II for both w/u/o and m forms. Forms with y/i, if not an innovation, would have to be assigned set O membership and represent a new member of this set. Their formal similarity to the 3rd person singular forms of set I must be purely accidental for the same reason as the rejection of Kebar in as a set I form (see above, 1st person singular forms).

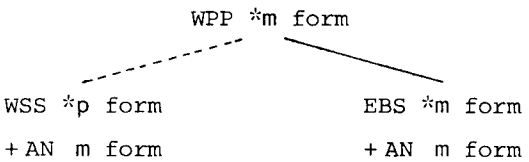
1st person plural forms

The first observation we can make is that in most cases the base consonants of the 1st person plural forms belong to set II (m, p) and that those forms which do not belong to set II are innovations. They are the Kebar forms yik and e- already discussed above, the West Makian form a- which is a loan from its Austronesian neighbour East Makian, and the form ne/ene in the North Halmahera languages and West Makian. The subject prefix *po reconstructed for PNH is cognate with the form *pap reconstructed for PWB and the subject prefix p- in Brat. In the paragraph on the 2nd person singular forms it was pointed out that the North Moluccan stock and the West Bird's Head stock probably form a first-order subgroup of the WPP. Let us take this for granted and call the subgroup the Western Super-Stock (WSS). We can then say that the original WSS set had p as base consonant in the 1st person plural. In the present-day WSS languages with an inclusive-exclusive distinction p forms are associated with the inclusive. West Makian and Karon Pantai lost the p forms altogether; in Brat the p form survived as a subject prefix, as it did in the NHF.

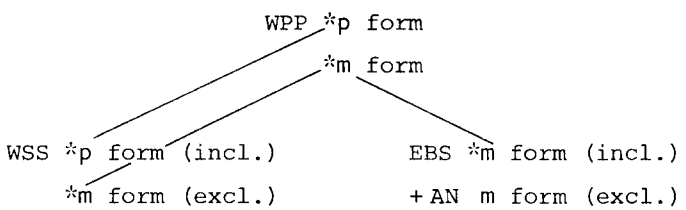
Further we find that all the WSS languages have a m form in the 1st person plural. In languages with an inclusive-exclusive distinction this form is generally associated with the exclusive. The exception is the prefixed form in West Makian which is inclusive. In this language the borrowing of East Makian a- as the exclusive form must have triggered the shift of m- to inclusive, and the loss of p-. In Brat, the m form is only found as a free pronoun, not as a prefix.

The original WSS set therefore seems to have had two 1st person plural forms, one characterised by p, the other by m. The former was the inclusive form, the latter the exclusive. The inclusive-exclusive distinction, as I have argued above, is probably due to Austronesian influence, and the forms most likely to be Austronesian loans are the m forms: PNH *mi, WM imi, BR amu could all derive from PAN *kami. Less clear is how PWB *mam and KP mem would derive from it. If the m forms have an Austronesian origin they could have been borrowed

independently by WSS languages, and do not necessarily derive from an Austronesian loan in the original WSS set. In that case only p remains as the base consonant of the 1st person plural. But matters become even more complicated when we look at the 1st person plural pronouns in Meax and Manikion. There, both the inclusive and the exclusive forms have m as base consonant. Moreover, they are strikingly similar to the 1st person plural exclusive form in Brat and the 1st person plural form in Karon Pantai. And, as we shall see in 2.5, there is evidence that at least one of them is derived directly from a form in the original WPP set with m as base consonant. Now there seem to be two possibilities. The first is, that the original WPP set had the m form, which was retained in the EBS, but replaced by a p form in the WSS (I hesitate to derive p from an earlier *m), and that later Austronesian loans characterised by m were added to these:



The second is, that the two forms were already present in the original WPP set and carried an as yet unknown semantic distinction which was later replaced by the inclusive-exclusive distinction in some languages, and lost in others. Of the former, the WSS languages kept the original forms and the EBS languages replaced the p form by an (AN) m form; of the latter, BR kept the p form as prefix, and the m form as free pronoun; KP dropped the p form altogether.



In either case the original WPP form(s) 1st person plural belonged to set II.

2nd person plural forms

All the free forms and most of the subject prefixes in the WSS and Kebar are cognate and belong to set III. However it is unlikely that they have been derived from set I, as Wurm postulates, even if they share with the 2nd person plural forms of this set the feature that they form part of a system in which the singular-plural distinction is carried by vowel contrast. In the set I languages this feature extends over the 1st and 2nd persons; in the WPP it is restricted to the 2nd person forms, and judging by Wurm's sets II and III it is found in this form also in languages in north-east New Guinea. It seems to me that it is a very old feature of Papuan languages, predating the forming of the phyla as we know them today.

Of the forms which do not belong to set III, West Makian f- is a loan from the East Makian language and the EBS forms fall outside any of the basic sets. On the basis of the WPP data one would suspect them to be innovations of the EBS, but there is some evidence to the contrary as we shall see in section 2.5.

3rd person plural forms

Wurm excluded the 3rd person plural pronouns from his basic sets because of their wide variability. This variability is well demonstrated by the WPP data. There are no less than four series of probable cognates:

1. PNH *a or *an, BR ana, KP ana;
2. PNH *yo-, PWB *yit or *yey, y-, KP ye;
3. WM d-, KP le, KB di:r, d-, MX rora, re-, MN le, l-;
4. WM eme, BR m-.

Perhaps the form a'di/a'du- found in the Sahu language of the NHF also belongs to series 3. This series is found in all WPP stocks and probably derived from an original WPP form. Three of the four series are represented in Karon Pantai and two in the NHF, West Makian, and Brat. This suggests that within the 3rd person plural several semantic distinctions were made — possibly gender distinctions, but this is only a guess.[11]

2.4 Questions of set membership

From the foregoing discussion of the pronouns we can conclude that the basic WPP set contained three set II and three set III forms as follows:

Sg. 1. III, 2. III, 3m II, 3f II; Pl. 1. II, 2. III.

This supports Wurm's suggestions that the two sets are interrelated. Still, the match between the WPP set and set O is not perfect:

Set O		WPP set
Sg. 1	(II, III)	III
2m	II	III
2f	III	
3m	III	II
3f	II	II
Pl. 1	II	II
2	II	III

The lack of a gender distinction in the 2nd person singular of the WPP set could be explained as the loss of a distinction which is still present in a number of first migration languages further east. The presence of a set II form 3rd person masculine in the WPP set may be a development particular to the WPP, and the same can be suspected of the neuter form in the WPP languages (not shown above). The most important difference between the two sets is the presence of a set III form in the 2nd person plural of the WPP set. It seems that in this respect set O needs modification. Either the set II form should not belong to it or we have to assume that set O did have a gender distinction in the 2nd person plural involving a set II and a set III form. If so, we would expect the 2nd person plural masculine to have been a set II form, and the 2nd person plural feminine a set III form, parallel to the 2nd person singular masculine and 2nd person singular feminine forms. We would have to assume that this gender distinction was lost everywhere, but that some languages retained the masculine form, others the feminine form. We have now reached the limit of what can be said about Wurm's sets II and III on the basis of the WPP data. It seems that his assumptions about the interrelationship of the two

sets are essentially correct and that only his explanation of the 2nd person plural set III form as a loan from set I must be rejected. I could let the matter rest here, but I should like to have one further look, over the confines of the WPP, at a language group in north-east New Guinea which promises to be the easternmost extension of the WPP. This language group is the Torricelli Phylum (TP), located in the Torricelli mountains south of Aitape in the Sepik Province of Papua New Guinea.

2.5 WPP + TP = WPTP?

The Torricelli Phylum counts some 47 languages divided over seven stocks and thirteen families (Laycock 1975). A striking feature of the language of this phylum is that they are typologically remarkably similar to the WPP languages, much more so than any other language group in New Guinea. This is shown in the chart below in which I have listed the typological features of the two phyla. The TP data have been taken from Laycock 1975.

Torricelli Phylum	West Papuan Phylum
1. Subject markers prefixed to the verb; no other verb prefixes.	Idem, except for the NHF where object markers are also prefixed.
2. No tense/aspect marking on the verb.	Idem.
3. No sentence-medial verbs.	Idem.
4. Pronouns usually in singular, dual, and plural with a masculine, feminine, and less frequently also a neuter distinction in the 3rd person, mostly in singular.	Idem, but dual not as common.
5. Two-, three-, or multiple-class systems with concordance minimally of numerals and pronouns.	Idem, attested in three of the four stocks.
6. Morphologically marked plural forms of nouns.	So far only attested in Tehit, a WBF language.
7. SVO, but also SOV order.[12]	Idem.
8. Gender distinction also used to express the dimension large — small, with masc. = large, fem. = small.	Idem, but so far only attested in Tehit where the reverse holds: masc. = small, fem. = large.

Chart 2: Typological similarities between the West Papuan and Torricelli Phyla.

The first indication that the typological similarity between the two phyla is not accidental can be found in the sets of personal pronouns of three of the westernmost Torricelli languages, Oni, Seta, and Seti. Their pronouns completely match those of Meax and Manikion, if one assumes that a switch from

singular to plural and vice versa has occurred in the 2nd person forms.[13] Meax and Manikion as we have seen are the WPP language with 'aberrant' pronoun forms in 2nd person singular and 2nd person plural. The Torricelli data have been taken from Laycock 1968:

		Meax	Manikion	Oni	Seta	Seti
Sg.	1	di	d(a)	i	ki	ka
	2	bo	b(a)	yo	yo	ay
	3	o	e	one	wo	wa
Pl.	1	me(m)	m(a)	mo	mo	mei
	2	i	y(e)	po	po	pei
	3	ro(ra)	l(e)	none	no	nei

Note that Meax, Manikion d = [t, d], and b = [b, p]. Meax and Manikion display the set III reflex of *C, Oni, Seta, and Seti the set II reflex.

A first inspection of the lexical data in Laycock 1968 has yielded a few words, both nouns and verbs, which have probable cognates in the WPP languages. It is not possible to pursue the matter further here, but I feel confident that enough probable cognates can be found to establish genetic relationship between the two phyla, which then have to be united into one new phylum for which the name West Papuan-Torricelli Phylum would be appropriate.

The amalgamation of the WPP and TP into one WPTP would have important consequences not only for the picture of the basic sets developed in the preceding pages, but also for the west-to-east idea of the migration hypothesis. With regard to the basic sets it would be clear that the 2nd person pronouns in the East Bird's Head stock languages could no longer be swept under the table as 'innovations' but are at least on a par with the set III forms shared by the other (former) WPP languages. The question of the make-up of set O would have to be looked at anew from the wider WPTP perspective. The existence of a WPTP would also compel us to reassess the validity of the west-to-east component of the migration hypothesis. So far we have accepted this part of it on the basis of the consideration that the original population of New Guinea could have come only from the south-east Asian mainland. The question raised now is whether Wurm's first migration has to be equated with these undoubtedly very early population movements: there are indications to the contrary. When we have a look at the make-up of the West Papuan and Torricelli Phyla, an interesting discrepancy between them can be noticed. While the TP seems to present the usual picture of languages bound together in families, and families united in stocks, there is something odd with the WPP: it contains only two language families, and no less than six isolates. One of these, Kebar, is a stock-level isolate, the others—West Makian, Brat, Karon Pantai, Meax, and Manikion — are family-level isolates. In addition there is in the Bird's Head one phylum-level isolate, Hatam, which typologically agrees with the WPTP languages, but lexically seems to have almost no agreements with them. The impression one gains is that the Bird's Head Peninsula has received an influx of several probably distantly related languages which subsequently through mutual contact developed enough lexical similarities to make them look one separate group.[14] The time elapsed since their arrival in the area would have been too short to allow single ancestor languages to develop into language families. Where would they have come from? The answer, it seems to me, would be: from the east, either

from the present-day Torricelli area, or from a geographically intermediate area formerly occupied by WPTP languages. This would make the history of early migrations in New Guinea considerably more complex than as pictured in the migration hypothesis proposed by Wurm.

NOTES

[1]I am restricting myself to the main points of the migration hypothesis, leaving out all irrelevant details. For the full account the reader is referred to Wurm 1975b.

[2]Lang 1976, Heeschen 1977, Haiman 1979.

[3]i.e. during the early Wisconsin maximum glaciation (sometime between 40,000 and 100,000 B.P.) and/or the final Wisconsin maximum glaciation (10,000 - 8,000 B.P.). From about 700 B.P. the sea level has been at approximately its present height. See Jennings 1971.

[4]In this context 'full set' means the set of five personal pronouns studies by Wurm.

[5]See Wurm 1975a:194-201.

[6]Abbreviations used are: pl - plural; sg - singular; 1PS, 2PS, 3PS - first, second, third person singular; m - masculine, f - feminine, n - neuter; incl. - inclusive, excl. - exclusive.

[7]The distribution maps include instances of three and two forms of a single set per language. I disregard them here because they carry little weight in the establishment of a basic set.

[8]According to Haiman (1979) one of the most impressive pieces of evidence for the existence of a TNGP is the correlation between plurality and vowel fronting (and raising), of which the base forms given above provide an example. However this phenomenon is not restricted to the TNGP. It is also found in the West Papuan Phylum (WPP) where it is restricted to the 2nd person forms. The base forms of set II given below suggest that it occurs also in languages outside those two phyla.

[9]In the languages of the North Halmahera family verbs can be morphologically complex, but only on the derivational level.

[10]Disregarding Karon Pantai for which no data on the 3rd person singular feminine form(s) are available.

[11]In fact the distinction of gender extends to the 3rd person plural in the North Halmahera languages. The neuter form can refer to any number of non-human referents and the 3rd person plural form therefore refers only to human referents.

[12]Laycock (pers. comm.) advises that SVO is more common in Torricelli Phylum languages than SOV, in spite of his 1975 statement to the contrary.

[13]An example of such a switch can be seen in chart I if one compares the 2nd person forms in Karon Pantai (KP) with those in the West Bird's Head family and North Halmahera family.

[14]Personal pronouns suspect of being loans from western WPP languages are the 2nd person forms in Kebar and the 1st person singular forms in the East Bird's Head stock languages.

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DIFFERENTIATION WITHIN RAI: NON-LEXICAL ISOGLOSSES

Werner Winter

Rai languages, spoken in Eastern Nepal,[1] form part of the larger group of Kiranti languages, which include also Limbu toward the east and Sunwar and Vayu toward the west of Rai territory. The number of Rai idioms (a term which I prefer to use as long as the status of the speech of a localised group has not been determined yet in the context of the language-dialect dichotomy) is very large. In order to achieve some economy in the evaluation of the hundreds of questionnaires at our disposal, and, beyond that, in order to provide a reasonably solid basis for further work, both descriptive and comparative in the narrower framework of Kiranti as well as in the larger Tibeto-Burman context, it is imperative that a classification of the idioms be undertaken at a fairly early date.

Such classification can be based on lexical as well as on non-lexical evidence. On the side of the lexicon, our questionnaires, if completely filled in, provide us with an inventory of close to 500 items. The full number is generally not reached if one wants to take into account only native material; the share of borrowed items is high, at least outside the category of the verb. The presence of borrowings, even within a core vocabulary, is of course of great interest; but loanwords, mostly from Nepali, tell us very little about the relationship between two or more idioms. Non-lexical evidence may come from all levels of language. Syntactic data can only be evaluated with proper care as almost all of them are to be found in translated sentences. Thus, word order agreeing with that of a Nepali source sentence may reflect acceptable order in the target language, but it may also just be a projection of a Nepali pattern onto the language investigated. Even if the pattern found in the translation may be an acceptable one in the target language, it may still not be the preferred arrangement extractable from purely native texts. In the domain of morphology, case endings are usually of native extraction (and as such usable for purposes considered here), but borrowings from Nepali also occur. The phonological system will usually not be affected in native forms, but the presence of a high degree of bilingualism and a resulting influx of numerous borrowed words may lead to an eventual modification of the sound system of an idiom.

Still, morphology and phonology are areas to be studied in closer detail if one does not want to rely completely on data of the lexicon.

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In the present paper, findings from the areas just mentioned will be discussed. In phonology, the question of agreement between rules will be left aside, and only correspondences in the final output will be studied. In morphology, attention will be paid above all to the case system as here we have fairly ample data at our disposal in the sentences included in our questionnaires.

For practical reasons, our point of reference will usually be Bantawa, the most widespread Rai language, which in many respects tends also to be more conservative – particularly in phonology – than some of its counterparts. Deviations from this approach will occur when it is to be assumed that Bantawa is the innovating language. In such a case, a pre-Bantawa form will be reconstructed which in the usual manner will be prefixed with an asterisk.

As to be expected with a mere evaluation of questionnaires not explicitly designed for the topic under consideration, data will not always be complete. Items supplied on the basis of pattern symmetry will be marked with a post-fixed asterisk. Where gaps cannot be filled with reasonable confidence even by internal reconstruction, these gaps will be retained as such.

For practical reasons, a somewhat simplified transcription will be used. The distinction made by our fieldworkers between dental and postalveolar apicals will be disregarded. Affricates will be written c and c^h; velar nasal will be rendered by the sequence ng; nasalisation, unless automatic (in which case it will be neglected), will be taken as an instance of ng. No distinction will be made between open and closed vowels as this distinction appears not to be significant in the idioms discussed here. Central vowels other than a will be written ʉ for a high and ə for a low variant.

The Rai idioms selected for this presentation, apart from Bantawa, are Athpariya of Belhara (Dhankuta), Bahing (Okhaldunga), Bangdale (Ilam), Chamling (Khotang-Diktel), Deosali (Ilam), Dewan-Yakkha (Ilam), Thulung (Bhojpur), Sangpang (Khotang-Diktel), Takkhaba (Sankuwasabha).

We first turn to correspondences of stem-initial stops and affricates in Bantawa. We find:

(1) Isogloss set one with three variants, (a), (b), (c):				
Bantawa p t c k:	(a) Athpariya	p t c k	(b) Bahing	d d j g
	Bangdale	p t c k	Deosali	d b j
	Chamling	p t c k	(c) Thulung	b d c(!)
	Dewan-Y.	p t c k	Yakkhaba	b d c(!) g
	Sangpang	p t c k		
(2) Bantawa b d g:	(a) Bangdale	b d	(b) Bahing	p t
	Chamling	b d	(c) Athpariya	p^h ?
	Deosali	b d	Dewan-Y.	p^h ?
	Sangpang	b d	(d) Yakkhaba	p^h t^h
	Thulung	b d		
(3) Bantawa p^h t^h c^h k^h:	(a) Athpariya	t^h c^h k^h	(b) Bahing	s/c k^h/k
	Bangdale	c^h k^h	Deosali	c
	Chamling	t^h c^h k^h	(c) Thulung	c^h k^h/k
	Dewan-Y.	k^h	(d) Yakkhaba	b? s k^h/g
	Sangpang	p^h t^h c^h k^h		
(4) Bantawa b^h d^h g^h:	(a) Bangdale	b^h	(b) Athpariya	p^h
	Chamling	b^h	Thulung	p^h
	Sangpang	d^h g^h	(c) Bahing	p
			(d) Yakkhaba	b

(5) In intervocalic position, voiceless stops are lenited in Bantawa; (a) p t k are replaced by -w- -r- -w- (c does not seem to occur in this position). No lenition occurs (b) in Chamling and Sangpang. In (c) Athpariya, p- alternates with -b-, t- with -r-; voiceless aspirates apparently have voiced counterparts; ?- (: Bantawa d-) is matched by -d- (i.e., -d^h-?). In (d) Dewan Yakkha, p- and p^h- occur alongside -b-, whereas -d- seems to go with t-. -d- is the match of t- also in Bahing. In (e) Yakkhaba, finally, p^h- and t^h- (: Bantawa b- d-) have -b^h- and -r- as their counterparts. Lenition thus is a widespread, though not a general, phenomenon in the group of Rai idioms presented here. The results of lenition, however, differ almost from language to language; we therefore appear to be faced with independent rather than common innovation in most instances. The recent productivity of the phenomenon is also signalled by the fact that lenition affects voiceless stops that owe their existence to a shift from voiced to voiceless.

(6) Final velar is retained in Bantawa; here we find, along with other combinations, -ak -ang, -ʉk (< *-ik) -ʉng (<*-ing), -uk -ung. The final velars are retained as such in Athpariya, Dewan Yakkha, and Yakkhaba, though details of the vocalisation seem to vary: Athpariya apparently has -ek -ang, -ik -ing, -ok -ung, Yakkhaba has -ek/-ak -ang, -ik -ing, -uk -ong according to our records, and Dewan-Yakkha, -ək -ang, -ik -ing, -ok -ung. Elsewhere, the final velar is (b) lost, rather consistently in the case of -k, less so in that of -ng, and the preceding vowel tends to undergo rounding so that corresponding to Bantawa -ak we find Bahing, Bangdale, Chamling, Sangpang -o.

(7) *r is (a) retained before vowel in Athpariya, Bahing, Bangdale, Chamling, Deosali, Sangpang, and Thulung. It is (b) replaced in the same position by y in Bantawa, Dewan-Yakkha, and Yakkhaba.

(8) Before consonant, it (a) survives as r in Bahing, Chamling, and Sangpang; it is (b) lost in Athpariya and Yakkhaba, and (c) replaced by n in Bantawa and Bangdale.

(9) *l is (a) retained prevocalically by Bantawa, Bahing, Chamling, Sangpang; it is (b) replaced by r in Yakkhaba.

(10) Before consonants, *l becomes n in Bantawa; the same applies to final *l.

(11) Final t is (a) retained as such in Eastern Bantawa and in Athpariya, but (b) palatalised with or without loss of occlusion in Western Bantawa, Bangdale, Chamling and Sangpang. Final n is treated, as far as can be seen, in a parallel way; here, though, palatalisation is attested also for Bahing.

(12) The pronoun of the first person singular is (a) ʉngka in Bantawa and Athpariya. This form does not agree with (b) kang in Bangdale, Chamling, and Sangpang, nor with ga ∿ gang (with shift of the initial stop) in Yakkhaba, nor with go in Deosali and Thulung (with shift of initial and reduction of the final velar), nor with gu in Bahing which thus shows basically the same changes as do Deosali and Thulung.

(13) The second person singular pronoun is (a) Bantawa k^hana; an identical form occurs in Chamling. (b) gana is found in Deosali and Thulung; (c) an in Bangdale and ana in Sangpang; (d) han in Athpariya and hen in Yakkhaba, and (e) gyo in Bahing.

(14) The ergative-instrumental in Bantawa (a) is indicated by the suffix -?a. Chamling -wa and Sangpang -wa ∿ -a closely resemble the Bantawa form; so does Bangdale -a. (b) -ka is found in Deosali and Thulung; (c) -nga in Athpariya and Dewan-Yakkha; (d) -de ∿ -e in Yakkhaba, and (e) -mi in Bahing.

(15) For the locative we find (a) -da in Bantawa, Chamling, and Thulung; -ra in Deosali may be added here. (b) -pi occurs unlenited in Bangdale and Sangpang, is matched by lenited -be in Dewan-Yakkha, and by shifted -bi in Yakkhaba. (c) Athpariya has -e; so does Bahing beside other suffixes.

(16) The possessive in Bantawa is (a) -wo, which may be the lenited match of Dewan-Yakkha -ka (unlenited), -ga (lenited). Athpariya -ha (b) does not seem to agree with these forms. Suffixes with an onset -m- (c) are found in Bangdale and Sangpang -mi, Yakkhaba -mi, Chamling -mo, Deosali and Thulung -ma. (d) Bahing -ke appears to be isolated.

(17) The subordinative suffix Bantawa -wo can be viewed as the lenited counterpart of unlenited Bangdale, Chamling, and Sangpang -ko. In this case, Bantawa then is separated from Bangdale, Chamling, and Sangpang only by the phonological isogloss '-LENITION: +LENITION'.

Let us turn now to a tabulation of the isoglosses enumerated. They will be referred to by the numbers and lower case letters entered in the text. The reference to the respective idiom will be placed in the appropriate column. The abbreviations are to be read: B = Bantawa, A = Athpariya, Bh = Bahing, Bd = Bangdale, C = Chamling, D = Deosali, DY = Dewan-Yakkha, S = Sangpang, T = Thulung, Y = Yakkhaba.

ISOGLOSS NUMBER	IDIOM REFERENCE									
	B	A	Bh	Bd	C	D	DY	S	T	Y
1	a	a	b	a	a	b	a	a	c	c
2	a	c	b	a	a	a	c	a	a	d
3	a	a	b	a	a	b	a	a	c	d
4	a	b	c	a	a			a	b	d
5	a	c	d		b		d	b		e
6	a	a	b	b	b		a	b		a
7	b	a	a	a	a	a	b	a	a	b
8	c	b	a	c	a			a		b
9	a		a		a			a		b
10	a	b	b	b	b	b	b	b	b	b
11	a/b	a		b	b			b		
12	a	a	b	b	b	b		b	b	b
13	a	d	e	c	a	b		c	b	d
14	a	c	e	a	a	b	c	a	b	d
15	a	c	c	b	a	a	b	b	a	b
16	a	b		c	c	c	a	c	c	c
17	a			a	a			a		

The table just given allows us to quantify the degree of closeness between pairs of idioms. The procedure is simple. We determine how often the letters entered in the columns are identical for a pair of idioms; as not all slots have been filled, the result can only be an approximation of the correct value. The values obtained will be given in a second table which makes again use of the idiom abbreviations introduced above.

	B	A	Bh	Bd	C	D	DY	S	T	Y
B		5	1	8	10	2	5	8	2	2
A			3	4	4	2	6	3	3	4
Bh				4	6	5	2	6	3	2
Bd					12	5	4	14	5	4
C						6	3	15	6	3
D							1	5	8	3
DY								4	1	4
S									5	4
T										4
Y										

These absolute figures of agreement now have to be converted into percentages of agreements possible if the gaps in the first table are taken into consideration. The adjusted results read:

	B	A	Bh	Bd	C	D	DY	S	T	Y
B		33	07	53	59	20	50	47	18	13
A			23	29	27	20	60	20	27	23
Bh				33	43	56	22	43	33	14
Bd					80	50	44	93	45	31
C						60	33	88	55	20
D							13	50	80	33
DY								40	13	40
S									46	27
T										36
Y										

As we know that Sangpang is a cover term for a rather varied group of idioms, the close resemblance with Chamling should not come as very much of a surprise. If we fix, somewhat arbitrarily to be sure, a level of 80% agreement between two idioms as the threshold above which we want to label two idioms as dialects of one language, then Deosali and Thulung, on the one hand, and Chamling, 'Sangpang', and Bangdale, on the other, have to be grouped together as dialects of one language each. As for the other idioms, none would enter into a dialect relationship with any one of the others. Our sample of ten idioms could therefore merely be reduced to a set of seven languages. This figure may be a bit too high because of the gaps in table one: the filled slots have been taken to be representative of the totality of slots, and there is an element of potential error here. But it is of limited magnitude: take the example of the value for the agreement between B(antawa) and D(eosali) which was found to be 40% with only ten slots to be compared; if we were to assume that the seven empty slots in the D column would, if filled, all show the same values as found in B — a very improbable assumption indeed — then the level of agreement would be raised to 53%, not a dramatic change at all, which would certainly not lead to a reinterpretation of the relationship between Bantawa and Deosali as one of dialects.

This paper has tried to show how sets of isoglosses with relatively high intrinsic value — since they were taken not from the more volatile lexicon, but from such relatively stable domains as phonology and paradigmatic morphology —

could be used to quantify the presumed relative distance between idioms and help us to reach decisions as to which relationships should be viewed as those of dialects, and which as those of languages. What has been presented here is just a small selection from our data; the necessary groundwork has been done for a larger number of idioms, and more can be added readily as we proceed with our analysis.

NOTE

[1]Work for this paper was carried out in the context of the Linguistic Survey of Nepal, a project generously financed by the Deutsche Forschungsgemeinschaft and carried out in close co-operation with the Centre for Nepal and Asian Studies of Tribhuvan University, Kirtipur, Kathmandu, Nepal.

ON DEFENDING AUSTRALIAN ABORIGINAL NUMBER SYSTEMS

Colin Yallop

1. INTRODUCTION

In his introduction to the languages of Australia, Stephen Wurm noted that only two or three 'monomorphemically signalled numerals' existed in most of the languages and that higher numerals or numeral systems were rare (1972:63-64).

Comments of this kind have been made often enough. John Fraser, addressing the Royal Society of New South Wales in 1890, says

> As is well known, the Australian numeral system is very limited in its range (Fraser 1890:236)

while Strehlow, drawing on his familiarity with Aranda, writes

> Aranda, like all other native Australian languages, is extremely poor in its stock of numerals (Strehlow 1944:101)

Similar remarks — albeit in more modern phrasing — can be found in the general works on Australian languages that have followed Wurm's:

> The one obvious gap in Australian vocabularies is the lack of any system of numbers (Dixon 1980:107)
>
> No Australian Aboriginal language has a word for a number higher than four (Blake 1981:3)
>
> Aboriginal languages are well known for their paucity of number words (Yallop 1982:145)

In fact, what is unusual about Wurm's comment is not so much what he says but what he does not say; for most other commentators go on to defend Aboriginal languages against possible negative implications of a 'lack of numerals'. Thus Fraser specifically refutes the allegation that the lack of numerals is a 'proof that Australians possess very limited mental powers' and links this with remarks about their 'adverse environment' (1890:236). Likewise Strehlow, despite critical remarks about the 'native mind', is quick to talk of the original environment, of a consequent lack of incentive to trouble about numbers, and of keen sight and a first-rate knowledge of tracking (1944: 101-102).

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These themes are echoed in later works, when, for example, Dixon writes that

> No special significance attaches to the absence of numeral systems in Australian languages; it is simply a reflection of the absence of any need for them in traditional culture. Aboriginal Australians have no difficulties in learning to use English numerals ... (1980:108)

or when Blake asserts that

> Australian Aborigines learned to count as soon as the white man arrived with livestock and money and the need to count ... For centuries they had the capacity to learn mathematics, but had no need of it (1981:3-4)

My purpose in this paper is to examine more closely such lines of defence and to ask whether it is warranted to presuppose that such defence is needed. I will begin by enlarging the discussion of numerals in Australian languages, then move to assumptions about what numerals actually are, before pointing to textual evidence of 'number concepts' and their use and elaboration. In conclusion I will suggest that defence of Aboriginal languages, however well-intentioned, may strengthen the very criticisms it is designed to answer. In short, the restraint of Wurm's observations may represent a wise course.

2. DISCUSSION OF NUMERALS IN AUSTRALIAN LANGUAGES

We have already seen that several writers on Australian languages defend the lack of numerals by saying that Aborigines traditionally had no incentive to count — but that they have proved capable of learning to count when the need has arisen.

A number of papers published in the 1980s, notably one by John Harris (1982), have refined the discussion of this point: Harris reports languages that do have relatively high numerals (which were not unnoticed by Wurm in 1972) and thus qualifies overgeneralisations about Aborigines' lack of interest in counting and about the absence of numerals above three or four. Harris goes further than this, however, and states that *all* numeral systems extend indefinitely upward (1982:165), suggesting a line of argument that Aboriginal numeral systems are in principle equal to Western systems but are not as heavily exploited. He refers to the 'rich field of Aboriginal mathematical concepts' and chides linguists for overlooking this field (1982:174).

To some extent, Sayers (1982) and Stokes (1982) support Harris's contention by giving valuable details of what they call the 'mathematical concepts' of particular Aboriginal societies. At the same time both authors stress the difference in perspective between Aboriginal and Western societies and candidly speak of their experience of the genuine difficulties faced by Aborigines in mastering numbers and mathematics (Sayers 1982:186-187; Stokes 1982:34, 39).

It must be granted that some of the earlier works on Aboriginal languages were guilty of oversimplification and that linguists have, as Harris puts it, 'helped to perpetuate misconceptions' (1982:174). Nevertheless, the wider discussion of what is at stake here threatens to introduce overt contradictions. The time-honoured contention that Aborigines were uninterested in Western-style mathematics seems to be supported by arguments that they had their own (i.e.

different) mathematical language or concepts. Yet the claim that all numeral systems extend indefinitely upward suggests after all a measure of uniformity — but at the risk of implying that Aborigines *could* have counted much higher if only they had bothered. At the same time, the reports of genuine difficulties encountered by Aborigines seem to underline the extent of cultural difference rather than indicating easy extension of an existing number system.

Of course there may be various reasons why these threads do not seem to hold together as cogent argument. I sense an inevitable tension when one is, on the one hand, asked to be sympathetic and supportive towards Aborigines because of the problems they face, and, on the other, asked to believe that the problems are not really serious after all. More fundamentally, I suspect that it is necessary to examine more closely the underlying assumptions about what numerals are and the actual function and usage of numerals.

3. THE NATURE OF NUMERALS

Much discussion of numerals seems to hold fast to the belief that numbers are entities that exist independently of language. Following certain traditions we might well maintain that God made the integers; among modern linguists, however, the belief is more likely to be anchored in 'universal number concepts'. A particularly clear example of such a view is found in Hurford (1975) who, in the context of a transformational-generative treatment of numerals, states that there is an infinite set of universal number concepts:

> The notion of numeration and the concepts of particular numbers seem to be universal ... A theory of language must contain the means for describing how each particular language associates arbitrary phonological sequences (words) with these universal concepts.
> The most natural and neutral form of representation to adopt is one from which one may actually 'count off' the number which is being represented in any given case. Thus to represent the concept underlying the English word *three*, for example, I shall use three marks /// ...
> The set of number concepts is ... infinite.
> (Hurford 1975:2, 4)

On this view, an infinite set of number concepts appears to be ontologically prior to any particular language and it is somehow up to each language to map or represent these universal concepts. If this is true, then it is hardly surprising that many Westerners are tempted to find Aboriginal languages deficient. And if we resort to saying that Aborigines *could* have extended their numeral systems upward, we are left with the awkward question of why they did not in fact do so, given the existence of universal number concepts.

I am not suggesting that all those who have commented upon Aboriginal numerals necessarily share exactly Hurford's view. Certainly there are quite different views, which avoid the rationalistic commitment to universal concepts. Whorf, for example, refers to the 'objectification' of numbers, a pattern of English (and Western) thinking in which the serial listing of numbers is assumed to be a process of counting, on the analogy of the tallying of discrete entities (Carroll 1956:140). On this view, while counting or tallying may be a universal human experience, the abstraction of number concepts and the

elaboration of a numeral system may be expected to vary from culture to culture. If this is true, there seems no a priori reason to assume either that every language ought to have an infinite set of numerals or that all human beings ought to take readily to manipulation of numbers.

4. USE AND ELABORATION OF NUMERALS IN ENGLISH

If it is possible to dispense with the assumption that numbers are universal concepts and to see numeral systems as part of linguistic and cultural elaboration, then we can do more than compare sets of integer names.

It is important here to note that mastery of English numerals is much more than a matter of knowing the words and being able to list them in ascending order. Even this kind of counting is, as Whorf suggests, culturally determined, in the sense that parents and teachers may attach considerable significance to the ability to recite numbers as one of those unquestioned demonstrations of a child's intelligence. But the average speaker of English is not only 'able to count' but can also handle decimal notation, can perform operations such as addition and multiplication and has some degree of control over many systems of numerical quantification, serialisation and measurement, including for example money, clock time, house numbering and scoring in various games and sports. Moreover, it is typical of most 'technological' societies that numbers are used as identifiers or names, for example as vehicle numbers, telephone numbers, postcodes, account numbers and so on.

Even a cursory examination of the most commonly read English texts, such as newspapers and popular magazines, shows not only that numerals are pervasive but also that most numerals have to be interpreted within some specific subsystem. Indeed, we might argue from the textual evidence that few English speakers need to be greatly concerned with a numeral system that extends indefinitely upwards or with mathematics in the usual sense. Instead they need to know a variety of numerical conventions. If we take for instance the front page of the *Sydney Morning Herald* for May 1st 1985, we find that a high proportion of numerals appears in very specific contexts: note the high degree of implicitness in examples such as

INSIDE		
Amusements	35	(no explicit indication
Arts	12	that these are page
Comics, Crosswords . . .	36	numbers)
WEATHER		
Temps: City 15-19,		(no indication of degrees
Liverpool 14-20		and no explanation of centigrade system)
Tides: High 4.52 am (1.6);		('am' & 'pm' are assumed
5.45 pm (1.5)		to denote time; no clarification of heights)

In the news items themselves, the reader is likewise expected to be able to interpret the figures in quite different ways (e.g. as ages, times, dates):

> At 15 the child can leave school, and at 16 girls can get married ...

... he was telephoned at 8.15 pm and told bluntly: you owe $5000

... who was tried before him on July 11, 1983.

Indeed, alternative readings of figures (e.g. 8.15 as 'eight fifteen' or 'eight point one five') represent a serious problem in the design of systems for converting text to speech.

It may also be worth noting that even where figures are used as general quantifiers (as opposed to temperatures, times, dates, etc.), high numbers are rarely used with any great claim to precision, e.g.

... would cost about $10 million in lost production

... bans against more than 200 companies

More than 1000 people have consulted the lawyers ...

... some 50,000 refugees from overrun coastal villages

5. NUMBER IN ABORIGINAL LANGUAGES

It can hardly need stating that numeral usage of the kind noted above is foreign to Australian Aboriginal cultures (as of course it was to European cultures of a few centuries ago). The fact that some Australian languages have numerals above three or four does not bridge this kind of gap between divergent patterns of cultural elaboration.

Indeed, the textual evidence from Australian languages points to a quite different underlying perspective. It has been noted (e.g. by Dixon 1980:108) that many Australian languages show a parallelism of the following kind:

	Personal Pronoun	Noun	'Numeral'
Singular	I	woman	one
Dual	we 2	woman+DU	two
Plural	we 3+	woman+PL	several/many

This may suit a world view in which duality stands crucially between singularity and plurality, rather than one in which numbering extends serially upwards. Actual texts support the notion that duality is a special focus of attention. Consider for example the following Alyawarra text (actually about one third of the original):

1 Anin aylin, irrpingika, anin; May-ilanim arika
sat we 2 for fish sat May saw

2 waylpil-athirr-anim, pulparrilanintj, waylpil-athirr-an
white two swimming white two

3 iltjarrika, May-an atiririlanim atntirrika;
waved May fearing ran

4 aylininhanim ilika: waylpil-athirra yanhiy!
us 2 told white two there!

5 waylpilik-athirr-itjanim aylin atntirrika, arinanim;
from white two we 2 ran saw

6 kila ikurithiy May-ilapa ilika: atntirriy anwanthirra
then next May told run we PLU

7 waylpilikitj; kila ikurithiy, arinanim, atha arnkurnima
from white then next saw I washing

8 inikanim; waylpil-athirra kwatjithiy itjarrilhika,
got white two from water emerged

9 arinanim ra-thirra; apiyalhinanima ra-thirra ilpayila;
saw they two came they two along creek

10 ayingan inpilalhikanim, itninanim ayinga, anarikanim
I set off stood I saw

11 athirra; putay angkuriy! yanhila apiyalhiylikitja;
two hey sister there coming

12 May-athirr-ana Lanie-athirr-anapa [...] atntirrika ...
May two Lanie two ran

TRANSLATION:

> *We two sat fishing; then May saw two whites swimming and the two whites waved and May, being afraid, ran away. She told us two 'There are two whites over there!' We two then ran away from the whites and watched. Then May said 'Let's all run away from the whites!' Then I watched and went and got the washing. The two whites came out of the water and the two of them were now looking. They were coming right along the creek. I set off and then stood and saw them coming towards me. [I said:] 'Hey, sister, watch out for them coming over there!' But May and Lanie, the two of them, ran off ...*

Overt dual marking is prominent in the above text, both in the form of personal pronouns (aylin- forms glossed as *we 2/us 2*) and in the use of athirra *two* as an adjective or clitic after nouns. This is all the more surprising when we note that there are in fact four persons by the creek at the opening of this story, namely the narrator, her older sister (included in the *we 2* of line 1 and addressed in line 11) and two daughters, May and Lanie. The narrator continually treats the four people as two pairs, and it is doubtful whether this pairing is 'naturally' determined by location and age.

In this connection it is worth noting that the grammar of many Aboriginal languages tends *not* to treat pairings as simple conjunctions of two entities. A common construction, for example, is one which renders English *May and I* as *May we 2* (Alyawarra May aylina). Line 12 of the Alyawarra text illustrates another example of this kind of patterning, cf. May-athirra *May and another; May and someone*. On such evidence it can be argued that pairs are a special focus of attention in Australian grammars.

Inspection of other texts suggests that this Alyawarra text is not exceptional. As part of a check on a random selection of texts, I looked at the first text

in each of the studies in Dixon and Blake (1983). The Djapu text (p. 149) concerns five people out in a car. At one point two people get out to chase a lizard; the three people left in the car start laughing at the antics of the other two, but the three are divided into two and one, i.e. 'How we laughed! Bangara and I were dying (of laughter). We and Frances were dying.' The Yukulta text (p. 261) concerns a mythical figure who asks a father and mother if he can take a boy and girl as companions, thus making an immediate and overt appeal to fundamental dyads. The Uradhi text (p. 389) relates the story of the crocodile and the blue-tongue lizard and sets up an opposition between the two: 'You live in the water and I'll live in the bush', etc.

Such texts argue for the central importance of duality in Australian cultures, not just as a matter of the surface mechanics of grammar or as a stylistic convention, but as part of a world view in which wholeness is achieved through the integration of dichotomies. The importance of duality has been recognised both in accounts of Aboriginal society (e.g. Maddock 1974:95ff) and in wider contexts (e.g. Bean 1970:562-564); but the extent to which this is enshrined in linguistic organisation, to the point of being inimical to modern Western notions of enumeration and countability, deserves attention.

6. CONCLUSION

Observations about the lack of numerals in Aboriginal languages may be justified insofar as they comment only upon lexical inventories. Taken on their most innocent reading, these observations leave open such questions as whether number concepts are indeed universal or what significance attaches to the number of numerals in the lexicon. Assertions to the effect that Aborigines easily learn English numerals or that their own numeral systems extend indefinitely upwards may likewise have some validity if taken to refer rather narrowly to a set of numerals. The apparently contradictory evidence that many Aborigines do have difficulties with Western numerals may simply underline the point that using and understanding numerals in English discourse requires much more than familiarity with a set of lexical items.

Defence of Aborigines along the lines that they have always had the *capacity* to handle numerals is no doubt intended to combat prejudice. But it is difficult to make such defence without hinting that Aborigines ought to have done better or that the pursuit of higher numerals is a proper universal ambition. Of course, the assumption that numbers are universal concepts inevitably raises the question of why some cultures have not exploited these concepts and encourages the view that numbers cannot be difficult to learn. Thus it is in the course of refuting Whorf that Lyons (1981:308), for example, makes his claim that Aborigines readily learn Western numerals.

In fact, the admission that Aborigines have difficulty in learning to use English numerals need be no more alarming than the recognition that English speakers have difficulty in understanding Aboriginal kinship terminology. And if English speakers insist that numerals are part of the natural order, prior to language, I imagine that Aborigines might appeal with equal conviction to the 'objective' duality of nature — to the maleness and femaleness of humanity, to the duality of the body with two eyes, two ears, two arms, and so on, to the opposition of night and day, sun and moon, dry season and wet, and so on. They might well argue that their own social structure, with twofold divisions of moieties and sections, their camp layout with opposing sides, the motifs of

reciprocity and cyclicity in their kinship terminology, that all of these aspects of human life merely reflect the natural state of affairs, in which the basic duality of reality is far more prominent than the contrivance of numbering.

Of course the point at issue here is not so much the true nature of reality but rather the diversity of human response to reality. If there is a gap between Western and Aboriginal cultures, it is not a gap between complexity and simplicity or between civilisation and primitiveness, but rather between two perspectives, two kinds of complexity and civilisation. And it must be acknowledged that even the apparently matter-of-fact nature of numerals cannot be resolved without at least uncovering our foundational beliefs — faith in an autonomous and ultimate reality, for example, or acceptance of a universe that will never be completely comprehended by human rationality.

ACKNOWLEDGEMENTS

My interest in Australian Aboriginal languages began in earnest in 1966 and it is appropriate here to recall an interview at that time with Stephen Wurm: he managed both to give me the encouragement I needed and to find charitable wording to express his fully justifiable misgivings about green young linguists heading off into the bush.

This paper is partly derived from unpublished papers delivered at the Sydney Linguistics Circle and Australian Linguistics Society Conference in 1984. I am grateful to a number of people for their general comments, in particular David Butt and Ruqaiya Hasan. I also thank Bruce Rigsby for calling my attention to the paper by Susan Bean and John Clark for noting the problems of interpreting figures in automatic text-to-speech conversion.

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MYTH AND ORIGIN OF LANGUAGE IN THE MADANG PROVINCE, PAPUA NEW GUINEA

John A. Z'graggen

Myths in Papua New Guinea[1] describe the origin of world and/or man. More common are myths of becoming of single or of a group of subjects, rather than the becoming of the whole universe as in the Bible[2]. For linguistics it is also of interest to know how human behaviour in speech is thought to have come into existence in the oral literature of a population. For locating languages mentioned below the reader is referred to: Wurm and Hattori 1983: sheet 7; Z'graggen 1971:100-104; 1975:1-154.

1. THE NAMITE MYTH

Of special interest is the Namite myth, because, among other things, it accounts for the complex structure of their language and its consequences. The Namite myth is known through publications by Vormann 1910:415-417; Schebesta 1932:249-262; Höltker 1965:77-80; 1967:417-420. The homeland or place of origin of this myth is Monumbo or Mambuan. Among the various populations of this area, only the Monumbo derive a second origin of the human race from this myth and play a prominent part in it. The myth consists of three parts. Part A and C exist in other areas as single myths.

PART A: The killer Omberama

A population exists on the mainland, but is endangered by a male killer Omberama (Ombrama, Omberaman, Wombera), who goes around, kills and eats uncooked men, women and children. Their number down, the people decide to leave the mainland and flee to nearby Manam island. There they live in safety with a Manam speaking population. The unmarried woman Namite (Namit, Namitä, Namint) is for a variety of reasons not allowed to go along, so she hides in a hole or under a tree, well protected. Though she is all by herself, she gives birth to male twins, Kauke (Kaukä) and Gebara (Gewara). The twin brothers find and kill Omberama with the help of their mother. The people, after receiving word of Omberama's death, return to their old location and live from now on undisturbed.

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This part of the Namite myth is known in the coastal villages west of Monumbo. But they frequently refer to Monumbo as the owner of this myth. The myth is practically unknown in the east of Monumbo except in the Sepa language area. In the neighbouring Lilau or Ngaimbom language area it was given only in a fragmentary form after informants had repeatedly been asked to tell the story.

PART B: Emergence of a new generation

In the Monumbo variant of the myth, the returnees are killed by the twin brothers as they land on the shore of the mainland. The twins acted this way in revenge for their mother, but against the mother's will. In other variants the returnees just returned again to Manam island. A first generation is thus destroyed as in the flood myth, and a new generation emerges. Schebesta (1932:253-255) adds Part B also to his Namite-variant of the Sepa people. But this is most likely a borrowing from their Monumbo neighbours. For instance, the Sepaman doesn't play as prominent a role as does the Monumboman. In addition Part B is lacking in the variants I was given in Sepa village.

For illustrative purposes two variants of Part B are given in brief; they are taken from the hamlets of Bonateka and Kamasina in the western part of the Monumbo language area.

1. The Bonateka variant

In the Bonateka variant the Monumbo return to the mainland. Against the warning of their mother, they kill the returnees. Mother scolds her sons, on the ground that now they will be alone. In order to create many languages and many people, mother persuades her twin sons to kill her. After an argument between the brothers, the younger one does the killing. As advised by their mother, they cut her body into small pieces, put them into sections of a bamboo, cut at the nodes, and seal each piece. Heart and tongue they put in the short piece nearest to the roots of the bamboo. Later the two brothers break open the various sections and send or throw distinct languages away with their population to their present location. Languages referred to are Mikarew, Kaian, Simbine (Tani). The short bottom section, with heart and tongue of the mother in it, listens to the different languages. That section is opened last. From it there emerges the Monumbo tribe and their language. Because the Monumbo could understand other people's languages by then, no other language harbours any mystery to them, but for everybody else the Monumbo language is too difficult to learn and understand.

2. The Kamasina variant

In this variant, the Monumbo return from Manam to the mainland. Not knowing who is coming in the canoes, the two brothers want to shoot them. Their mother warns them and tells them they are their relatives. Still the twins kill all of them.

Now the two brothers are only with their mother. The mother is worried and she wants the Monumbo to become many. Mother convinces her sons to kill her and tells them what to do with her body after her death. Reluctantly the brothers obey her. They cut a bamboo in pieces at their nodes, fill them up with flesh, bones etc. of their mother's body and put them in line along the wall in the house beginning with the uppermost part of the bamboo. In the lowest section near the roots they put mother's head near the door. They do exactly as their mother told them, but they fail to close the door early enough. The lowest section of the bamboo breaks open first and stays in place. The other pieces, however, break open, and leave, producing different people and languages.

The brothers listen to their speech. Each part of the bamboo speaks a different language. All of a sudden the brothers remember the advice of their mother. Quickly they shut the door close, but already many had gone out. The Monumbo are from the lowest part of the bamboo and, because of the twin's mistake, they are only few in number. The Monumbo were able to understand the other people's languages and now they learn any other language very fast, but all the others are unable to learn the Monumbo language properly.

COMMENTS:

Though only a few languages with their populations, referred to by a single village representing a particular language, are specifically mentioned, they are in fact meant to include all of mankind and all languages. The Monumbo language is emphasised very much and even briefly mentioned in variants given only in fragmentary form. This Part B of the myth is relevant to present-day reality. Monumbo has a very complex grammar — see Vormann and Scharfenberger 1914, and Höltker 1964. According to a census early in the 1970s the Monumbo speakers numbered 459, in contrast to the 5786 speakers of Mikarew (Z'graggen 1975:33, 38).

PART C: Separation

In some of the Namite variants a Part C is added.

The Monumbo go to a festival (singsing) to a faraway location, usually referred to as the Chimbu Province or generally to the Highlands. On their way they encounter an old woman, who invites them for a rest and offers them sago mixed with mucus of the nose or throat. The Monumbo don't like that unsavoury food and so they continue their journey. Much later a sister (Umapal) and her brother (Ambale) come and accept the old woman's offer. The old woman tells them to come back very early in the morning. The sister and brother do so and return to Monumbo. After their return the old woman closes the road with a high mountain and the Monumbo are separated from their place of origin. Since only a sister and a brother now live in Monumbo, they marry, but give birth to only a few children. For this reason the Monumbo is a small population while the Highland's population is numerous.

Laycock (1973) and Z'graggen (1971) have linked the Monumbo and the Lilau languages with the Torricelli language phylum in the East- and West-Sepik Provinces. The two languages are separated from the main area of the Torricelli Phylum by the Sepik-Ramu Phylum. This part of the myth could reflect the people's view of the cause of their separation. Striking, however, is the persistent mention of the Highlands as the location of the festival and the settling there after the closure of the road. But a change of name in post-European times could account for those references to the Highlands rather than to the Torricelli area as the linguistic distribution suggests. Some hints in the materials presently available, vague though they are, seem to be in support of the separation from the main area of the Torricelli in the west, rather in the south in the Highlands. In questioning informants, they refer to locations between the Ramu and Sepik rivers, or across the Sepik River. A separation from the main area of the Torricelli Phylum in the west is more likely.

2. THE SPIRIT MATU CHANGES LANGUAGES

Matu is like God who made the earth and a place for human beings to live. He gathers all peoples and wants to give them their locations. Then the spirit Malagu kills Matu's child. After Matu learns that Malagu killed the child, father Matu disinters his child's body and starts walking around and eats his child's body. While going around he cleans his blood-stained hands on stems of trees; and for this reason those have now red spots. On his journey from the island of Karkar to the mainland Matu changes or puts various languages. In Buson he starts with the Takia language. Seeing himself being too close yet to Malagu, Matu walks to Mugil on the mainland. He cuts off the link between mainland and the island Karkar[3]. From Megiar Matu walks eastwards along the coast, putting in Tokain village again the Waskia language. His last location mentioned is Suaru (Pay), where he makes a canoe and disappears into the hinterland.

There are unfortunately only two variants of this narrative at our disposition and a fuller account than contained in them is probably needed. Both variants repeatedly mention the change of language for the various locations, which confirm the present linguistic distribution.

3. THE MYTH OF MANUB AND KULBOB

The Manub and Kulbob (Kilibob) myth (Schubert:1970) may be briefly mentioned here as well. In some of the variants Kulbob changes various languages. But in contrast to Matu it is not Kulbob's main or only accomplishment on his journey. Space limitation here forbids further discussion.

4. IN OTHER PARTS OF PAPUA NEW GUINEA

McElhanon (1974, 1982) has published extensive materials on legends from many parts of Papua New Guinea on behalf of the Summer Institute of Linguistics. The interested reader is referred to McElhanon 1974:183-184; 1982:15-17, 51-53, 56-58 for additional material.

5. THE DOG LOSES HIS ABILITY TO SPEAK

The dog was first not only a close friend to human beings, but he could also speak in a human way. One day, however, he speaks carelessly about what husband and wife do together in privacy. In revenge the husband slashes the dog's tongue and the dog loses his ability to speak a human language. In contrast, human beings acquire the ability to speak while the dog, as animal, loses it.

Lack of space precludes the addition of more materials. But hopefully this paper shows the value of studying the role of language in narratives for linguistics. The case of the Namite myth hopefully shows also the value of collecting more than one variant of the same language in identical and different villages.

NOTES

[1]This paper was prepared to honour Professor S.A. Wurm's life-long commitment to Pacific linguistics and in gratitude to his personal interest in my research work for many years. The data for this paper are taken from the Tok Pisin Text collection in possession of The Research Centre, Divine Word Institute, Madang, Papua New Guinea. References to published materials are added as they were known to me at the time of preparation of this paper.

[2]For an overall view of topics of New Guinea legends, the reader is referred to Z'graggen 1983.

[3]The same course of action is also attributed to the spirit Bog in Mugil.

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AUSTRONESIAN APICALS (*dDzZ) AND THE PHILIPPINE NON-EVIDENCE

R. David Zorc

0. INTRODUCTION

I am very pleased to have this opportunity to dedicate an article to Professor Wurm who has inspired a great deal of innovative and enduring Austronesian research over the past decades. This article summarises a small part of one such area, and suggests that order may yet be brought to the chaos of Austronesian reconstruction. Limitations of both space and time require me to refer to several publications without the benefit of summary.

There are almost as many PAN apical phonemes as there are publications on the issue. Not only do conventions differ (e.g. *d vs *D, or *d_1, *d_2, *d_3), but also the PAN correspondence set(s) to which each language, each symbol, or even each piece of evidence relates. The numerous disparate conventions already established in the literature put a tremendous strain on Austronesianists to "control" both data and reconstructions. Some examples include:

UAN *bukid Dempwolff (1938:33)
PMP *bukid Blust (1972a:20), Dyen-McFarland (1970)
PMJ *BukiL (= *Bukij) Nothofer (1975:103,127)
PAN *bukiZ Wolff (1976:96) *mound, heap of earth, hill*

UAN *[dḍ]aɣah Dempwolff (1938:41)
PAN *[dḍ]aɣaq Dahl (1976:30)
PAN *d_1aɣaq Dahl (1982:96), Ferrell (1980:245)
PAN *daRaQ_2 Tsuchida (1976:181)
PMJ *DaRah Nothofer (1975:147)
PAN *[dḍ]aR_1aQ_2ə Nothofer (1975:147)
PAN *[dD]aR_1aQ_2ə Dyen-McFarland (1970)
PAN *daRaq/daRəq Blust (1981:33) *blood*

UAN *laud Dempwolff (1938:93)
PMP *laud Dyen (1953:14, 1971:39)
PAN *laH_1ud_3 Dahl (1982:41)
PAN *laH_1ud Tsuchida (1976:136,181)
PAN *lawuZ Wolff (1974:96)
PMJ *lauL (= *lauj) Nothofer (1976:103) *sea(wards)*

Wolff (1974) has argued that *r and *d can be dropped from the PAN phonemic inventory. Many of his points reflect a careful analysis of fresh data and most of his reassignments (especially to *R and *D) are well-founded. One may take

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issue with his *-Z for Dempwolff's and Dyen's *-d (95ff). However, he has noted that "Tagalog offers no evidence for *D- as opposed to *d-" (fn 29). At the same time, Charles (1974) indicated the need for only two voiced apicals (*d, *j) in the reconstruction of PPH; furthermore, most Philippine and North Borneo languages "have merged PMP *z and *Z with *d, *D, and *j" (ibid: fn 2). Therefore, *these languages cannot be used as evidence for phonemic distinctions that disappeared by or before PPH times*.

In the reconstruction of Proto-Bisayan, I argued against the need for a distinction amongst voiced apicals (1977:211-216), giving seven explanations of how a spurious contrast arose:

(1) morpheme boundary [see data in sets #22, 25, 39 below]
(2) analogical levelling [#06, 13, 14, 15, 22, 24, 38, 39]
(3) metathesis [#14, 22]
(4) doublet [#25, 44, 45, 50]
(5) cluster reduction [#01, 04]
(6a) direct/intimate borrowing from another Ph language [#01, 03, 05, 07, 08, 10, 13, 14, 15]
(6b) indirect borrowing (e.g. via Tag < Ml) [#16-19]

Since then, I have also observed (Zorc 1982:124f) that *the relative time-period of a sound shift* is important in explaining irregularities. For example, Central Philippine languages have the correspondence *d > d-r-d, but in the *earlier history* of some (Tag, Akl, Ceb), the intervocalic -r- became -l-, whereas words that *more recently* have come to have a -d- [by metathesis, analogy, or borrowing] reflect -r-. Witness Tag talim *sharp* < *taZəm (inherited), but ta:ri? *cockspur* < *tazi? (recent Ml loan). Hence, to the above list can be added:

(7) recent sound shift [#01, 02]

And, based on a different area of research (Zorc 1983:13f,20), the quantity or quality of consonants which otherwise appear to be irregular reflexes may have been affected by short vowels. Hence:

(8) strengthened consonant after short vowel [#02, 11]

These explanations still serve to account for a wider range of problematic correspondences than just Bisayan. There are irregularities in Tagalog, Manobo, Ilokano and most other Ph data that might otherwise lead to either the cataloguing ($*d_1$ ... $*d_{25}$) or the reconstruction of differences (*d, *D).

1. TRIANGULATION ON THE REFLEXES OF *j

The reconstruction of PAN or PPH *j in intervocalic and final position is unassailable. So long as test or criterion languages are available, there is no dispute over etyma. Nevertheless, irregularities do arise which illustrate that language-specific explanations (when we are in a position to ascertain them) prove better than some assignment to a proto-language or proto-phoneme.

In the following data sets, problems are discussed in brackets after the reconstruction; the numbers in parentheses refer to one of eight explanations outlined above. Most illustrations of well-established reconstructions are limited to Philippines languages.

(01) PAN *qal(ə)jaw *day* > Akl, Ceb ʔadlaw, Bik ʔadlaw, Kal kaldaw, Isg ʔalgaw, Bon ʔalgəw, Ifg ʔalgo [Tag ʔa:raw (5-loss of *l with compensatory vowel lengthening and 7-the recent shift of *d > r); Ilk ʔaldaw (6a); Tbl kədaw (5)]

(02) PAN *Sajə́k *sniff; kiss* > Tag halik, Kin harək, Mas, S-L haruk, Hil, Ceb haluk, WBM hazək, K-C hadək, Sar ʔadək, Ivt may-arək, Bol mang-arək, Sbl ʔaluk, Ilk ʔagək, Mong ayok [Akl haroʔ (7 < WBs *hadəʔ, a recent reshaping of the PAN form); Bik haduk (8)]

(03) PNP *ajamáng > Tag, Kpm ʔalamang, Png ʔagamang [*shrimp - tiny*] [Ilk ʔaramang (6-expected **ʔagamang)]

(04) PPH *qaʔjung *nose* > Bot ʔaʔrung, Kpm ʔa:rung, Ilk ʔagung *nose* [Kal kadung *pointed nose* (5); SPl *ʔədung *nose* (4/8)]

(05) PMP *bu:kij *mound, hill* > Tag bu:kid *farm*, Akl, Ceb, Hil, Kin, S-L bu:kid *mountain*, Han bu:kid *mountain people*, Png bukig *eastern part of town (towards the mountains)*, Kly bukkig *west*, OJv wukir, NJv wuker, Ml bukit *hill*, Sm puʔe *heap* [Cas buked, Itw bukid (6-may be loans from SLz languages); however Palau bukl *hill, mound of earth* is unexplained for expected **buks if < *bukij or **bukt < *bukid]

(06) PPH *nga:jan < PAN *n-a:jan *name* > Tag pang-a:lan, Akl nga:ɬan, Odg, Rom, Sur nga:yan, Hil, Ceb, Sbl nga:lan, But, Tsg, Ceb nga:n, Kin, Mas, S-L, Bik, Han, Bol nga:ran, Soc ngalan, Mar, Abr, Btk, Ivt, Itb ngaran, WBM ngazan, Tig, Bkd, Ata, Dbw, K-C, Tas ngadan, Cas ngahen, Atta, Yog, Ibg nga:gan [Ilk na:gan (2-dissimilation of initial *ng-); Itg nga:lan, Kla, Ifg, Bon, Knk nga:dan, Ilt ngadə:n, Png ngaran (2-dissimilation from **nga:gan, or 6a-influenced by SLz/SPh languages)]

(07) PHF *pa:jəy *rice plant, unhusked rice* > Tag, Hil pa:lay, Akl pa:ɬay, Kin, Bik, Han pa:ray, Tsg pa:y, Abr, Btk, Kal paray, Tbl halay, BlSar fali, Cas pahay, Ilk pa:gay, Kla pa:goy, Ifg pa:ge, Bon, Knk pa:gəy, Png pagəy, Ilt pagi, Ach pade, Ib, Ml padi, Pai paday [WBM parəy (6a < Iln) or like K-C falay (6b < Bilic/Bisayan)]

(08) PHN *pa:laj *palm (of hand)* > Tag, Kpm, Hil, Kin, S-L, Bik pa:lad, Akl pa:ɬad, Abr, Btk pala-palad, Gor paladu, Tbl holol, BlK faləl, Bot pa:lal, Sml paad, TB palak, Mlg fəlatana [Tir furor (2-assimilation); Png pa:lar *lines on palm* (6a-the length indicates loan status); Cas, Yog palad, Ilk, Mlw, Itg, Ifg, Bon, Knk pa:lad may indicate a doublet *pa:lad, but are probably loans from SPh, since other evidence indicates that PHF *dalu:kap is the inherited word amongst NPh languages]

(09) PAN *pijáH *how many?* > Akl, Ceb, Hil, Tsg pilah, Bik, Kin, Mas, S-L pirah-, Abr, Btk, Kal, Mar pira, Tbl hiluh, BlS, BlK filə, Tir firo-y, Ibg, Isg, Png piga, Itw piha, Itb pirah [WBM, Iln pira, Bkd, Tig, Dbw, Ata pila, Tas, K-C fila (6a or 6b < Mar)]

(10) PPH *su:jud *fine tooth comb* > Akl su:ɬud, Rom, Sur su:yud, Hil su:lud, Bik, Mas, S-L su:rud, Ceb, Tsg su:d, Mar sorod, Abr, Pal, Tir surud, Tbl sulud, Kal tulud, Ibg tugud, Ifg hu:gud, Ilk su:gud [Tag su:yod, Iry, Kuy suyud (6a < Bs), WBM surud (6b < Mar)]

(11) PHF *Sa-pəjíq *pain(ful), smart(ing)* > Tag, Akl hapdi?, Ml pədeh, NJv pəreh, Snd pɬrih *smart, ache*, Tsg hapdi? *hunger*, Ibg na-fəggi *stinging pain, spicy*, Mer fəri *injury*, Pai sapədiq *painful (feet)* [Tir fəde?, Mong pom-pori?, Soc om-podi? *pain* (8)]

(12) PMP *ha-pəjás *pain(ful), spicy hot* > Akl, Ceb, Tsg hapdus, Kin hapdəs, Kdz opodos, Ilk ?apgəs *painful*, WBM ma-pəzəs *sour; smarting*, Itw na-pəggət, Ml pədas *sharp, burning (taste)* [Note: OJv pəDəs (2 or 6)]

(13) PPH *la:ja *weave (mat), braid* > Tag, Kpm, Bot la:la, Akl ɬaɬah, Ceb, Hil la:la, S-L la:ra, Bon, Knk, Isg, Ilk, Mlw la:ga, Png laga [Kin, Bik ra:ra (2-assimilation), Bkd lala, WBM rara (6 < Mar rara), Cas ladey (6-an early loan from SLz or CPh)]

(14) PPH *lu:jan *ride; load a vehicle* > Tag, Sbl lu:lan, Akl ɬu:ɬan, Isg lu:xan, Knk, Ilk lu:gan [Bik lu:nad (3), Tir ruran (2), WBM ruran, Bkd, K-C lulan (6 < Mar roran)]

(15) PHN *lu:luj *shin; knee* > Tag lulod, Akl ɬu:ɬud, NgD lulor *shin*, Tbl lulul, Ifg lu:lug *knee* [Ilk lu:lud *calf* (6), Png lulor (6), NgD ruror *shin* (2-assimilation)]

2. THE REFLEXES OF *Z AND *z

The reconstruction of *Z as opposed to *z was first proposed by Dyen (1951) thus: for *Z, Malay has j and Javanese has the same reflexes as for *d while Tagalic for *D or *j; for *z both Malay and Javanese have j, while Tagalic has the same reflexes as for *d. Some Philippine languages were seen as *criterial* for a contrast that we now know had disappeared long before PCP. Discrepant forms [with y (early shift) or r (more recent development) instead of **l in Tag, Akl, Ceb, Hil or d instead of *r in Bik, Kin, Mas, Sor, S-L] illustrate that what we are dealing with are loans from Malay, such as:

(16) Persian bazu *shoulder* > Ml, Ib baju *coat, shirt* [Tag, Rom ba:ro?, Hil ba:yu?, Tsg baju?, Bik ba:do?, Ilk ba:do *shirt* (6b)]

(17) WI *a:zar *instruct(ion)* > Ml, TB, NgD ajar [Tag ?a:ral, Btk, Mgd adal, Mas, Sor, Bik, Han ?a:dal, Odg ?a:ray *study* (6b)]

(18) PWI *Zadi *become, happen* > Ml, Ib, TB, NgD jadi, NJv dadi, Mlg zari [Tag, Bik, Han mang-ya:ri, Tsg man-jari *happen*, Kin yadi? *useful*, Ceb ya:ri? *finish off* (6b)]

(19) PWI *kazang *loosely woven (mat)* > KB hajang, NJv, Ml, NgD kajang [Tag kayang, ka:rang *nipa awning*, Hil kayang-ka:yang *shed, hut, tent* (6b)]

Therefore, Philippine languages do not support any distinction for a higher-level contrast (i.e. other than a PPH *d):

(20) PHN *azá? [Neg-imperative] *Don't!* > Odg, Sib ?aya?, Kdz ada, OJv aja, Mad ajjha?, əjjha?, Mlg aza, Bug aja?, Mdr da?

(21) PAN *quZáN *rain* > Tag, Hil, Ceb, Tsg ʔulan, Akl ʔuɬan, Kin, Mas, S-L, Bik, Han, Kpm, Bot, Ibl, Png ʔuran, Kal kuran, Abr, Mar uran, WBM ʔuzan, Ata, Bkd, K-C, Isg, Kla, Ifg, Knk ʔudan, Ml hujan, To ʔuha, Kan ʔucanəʔ, Pai qudjaL, Puy Hudal, Ami qulaL, Bun xudan

(22) PHN *zaqət *bad, evil* > Bkd daʔət *dirty*, Itb ma-raət, Ml jahat *bad, evil* [Tag laːʔit *blaspheme*, Akl ma-ɬaːʔut, S-L ma-raːʔut, Sur ma-yaʔut, Bik ma-raʔut, WBM mə-zaʔat (1), Mar ma-rataʔ (3), Ceb maːʔut (2-loss of -d-), Ivt ma-rahət (2-intrustive h)]

(23) PMP *zaːqit *sew, patch up* > Tag daʔit *contiguous, touching*, Akl hi-daːʔit *peace, togetherness*, daːʔit *weave buri fibres*, Ilk, Png daʔit, Itg, Kla, Bon, Knk daːʔit, Ml, Bjr jahit, Ib jait *sew*, To haʔi *bind*, fe-haʔit-aki *knot*

(24) PAN *Zaːlan *road, path, trail* > Akl daːɬan, Ceb, Bon, Ilk daːlan, Ml jalan, Pai djalan, To hala [Tag daʔan (loss of *l)]

(25) PAN *-zaNí *near* > Ata, Tig ma-dani, Cas ʔa-deːneʔ, Bol, Itg, Kla ʔa-dani, San dani *near*, Ilk dan-dani *nearly, almost*, Kan ará-cani, Sar ma-saLi, RukMg me-d-dáli, Sed dalix *near* [S-L ha-raːni, Bik ha-rani, Soc mo-lani, Sbl ma-rani (1), Sai ʔal-ʔalih-an, Paz ʔalih (4, or unexplained loss of initial consonant, if cognate)]

(26) PHN *zazáh *carry around (e.g. items for sale)* > Tag dala, Akl daɬah *carry*, Hil dalah, Kin, S-L, Bik darah, Tsg daːh, Mam dadh-ən *carry*, Itb rarah *load*, Ib jajaʔ, Ml jaja *peddle*

(27) PMP *ZuRúq *sap, syrup* > Tag dugoʔ, Akl, Bik, Ceb duguʔ, Abr, Mong, Pal, Soc, Tsg duguʔ, Gia duluʔ, Gor duhu *blood*; Ml juruh *syrup*, NJv du-doh *sap*, To hu-huʔ-a *liquid*

See also reflexes of PHF *ZaRaːmiH *rice-stalk, straw* and *zaːwah *millet, Setaria italica* (Zorc 1982:122) and of PHN *Zuːru *corner* (ibid:131).

3. THE REFLEXES OF *D AND *d

Having illustrated the disparity to be found amongst Ph languages with regard to the phonemes discussed above, we can turn to the assumed distinctions between *d and *D. Dyen (1947) was correct in assigning certain instances of Tagalog initial l to a voiced apical due to analogy (with a morphophonemic variation), but such a change has occurred within the recent history of Tag, and does not attest to any distinction earlier than PCP (pre-Tagalic) times. Similar variations can be found throughout the archipelago.

It is generally conceded that FINAL -d as found in most Philippine languages gives no evidence for either a PPH or PAN distinction:

(28) PHF *qaːlad *fence* > Tag, Ceb, S-L, Bon, Ifg, Ilk ʔaːlad, Msk, Abr, WBM ʔalad, Tsg ʔaːd, Itb ʔaxad, Mar, Kel alad, Puy Haraz

(29) PAN *qaːñud *drift with current* > Tag, Akl, Bon ʔaːnod, Bik, Ceb, Han, Ilk, Itg, Knk ʔaːnud, Sbl ʔaːnul, Kpm ʔanyud, Tbl konul, Ml hanyut, Pai qaLudj

(30) PHF *Sa(n)téD *convey* > Tag hatid, Akl, Hil, Ceb, Bik hatud, Tsg hatud *bring*, Cas ʔatəd, Isi mang-atod, Ilk, Itg, Knk ʔi-təd, Png ʔi-tər *give*, WBM hatəd *deliver*, Ml hantar, NJv atər *conduct*, Pai satjəz *return*

(31) PHN *ba:yaD *pay* > Tag, Akl, Ceb, Hil, Han, S-L, Bon, Ilk, Itg, Ifg, Sbl ba:yad, Tsg, Abr, Btk, Kal, WBM, Tir bayad, Ml bayar

In INITIAL POSITION the regular reflex is also d-, irrespective of the PAN source:

(32) PAN *daqíS *forehead* > Akl, Blk, Kin dahiʔ, Ml dahi, Bjr dahiʔ, To laʔe, Pai djaqis, Bun daxis [Note: OJv rahi, NJv Dai]

(33) PMP *Da:hun *leaf* > Tag da:hon, Akl, Bik, Hil, Ceb, Kin, S-L da:hun, Soc daon, Mar raʔon, Tsg, WBM dahun, Han da:wun, Kal daun, Tbl doʔun, Ibg, Mlw don, Ml, Ib daun, OJv rwan, NJv rOn-DOn, To, Sm lau

(34) PAN *DaNúm *drinking water* > Bon danom, Abr, Btk, Han, Ilk, Ibg, Ifg, Png, Kpm danum, Bol, Itb ranum, Sbl lanum, Sar saLumuʔ, Tso chumu, Pai zaLum, Sai ralum, Paz dalum; To lanu *rinse in fresh water*

(35) PMP *DapDap *[tree] Erythrina indica* > Tag, Bik, Akl, Ceb, Hil, S-L, Kpm, Ilk, Png dapdap, Mong dodap, TB dapdap, NJv DaDap, Ml, NgD dadap, Fj, Saa rara; Sm lala [name of a growth]

(36) PMP *DapúR *hearth, kitchen* > Tag dapog, Akl, Bik, Hil, Ceb, Mlw dapug, Ibg dafug, Man dapuL, Yog da-rafug-an, Ivt rapuy-an, OJv Dapur, Ml dapor, Sm mangaa-lafu [Tsg, Mgd dapul-an (6b < Ml)]

(37) PHF *dʒi:laq *lick* > Tag, Bik, Akl, Ceb, Hil, S-L, Han, Kpm, Sbl di:laʔ, Bon, Ilk, Knk di:la, Ib dilah, Ml lidah *tongue*; Sar s/um/a-silaə, Pai dj/m/ilaq *lick*

However, INITIAL d- in the history of *some* forms has come to be INTERVOCALIC due to prefixation (e.g. *ma-danaw *lake people*) or frequent positioning after a vowel-final marker (e.g. *sa danaw *by the lake*); by analogy, a doublet or new stem has been formed:

(38) PAN *da:naw *lake, pond* > Tag, Bik, Ilk da:naw, Akl, Hil, Msk danaw *lake*, TB danO *fish-pond*, Mlg ranu *water*, Ml, NgD danaw, NJv ranu, Fj ndrano, Puy danaw *pond*, Sm lano *lake*, Pai djanaw *lake without outlets* [Tag la:naw (4), Tir ranaw, Mar ranao, Tbl lanaw (2), WBM ranəw (6a < Mar)]

(39) PPH *da:wis *sharp, pointed* > Ilk da:wis *point (of land)*, na-da:wis *pointed*, Mar daois *sharp point* [Tag la:wis *sickle-like cutter*, Ceb lawis *point of low land; jut out* (1/2), Ilk ra:wis *pointed* (4); PBS *ta-da:wis *pointed, sharp* (1-Zorc 1977:253)]

Regular INTERVOCALIC reflexes are illustrated by:

(40) PHN *Da-Da:Ra *maiden, young girl* > Tag, Hil, Ceb, Kpm, Sbl da-la:ga, Akl da-ɬa:ga, Kin, S-L, Bik, Han da-ra:ga, Kal da-ralaʔ, TB, Ml dara *maiden, virgin*, OJv rara:, Dara, NJv rO-rO, lO-rO *maid*

(41) PPH *ha:daw *remove* > Tag halaw *abstract; select(ed)*, S-L ha:raw *forage for food in the kitchen*, Ilk ʔa:daw *take out*, Itb haraw-an *remove fuel from fire*

(42) PMP *ha-Di:Ri *housepost, beam* > Tag, Akl, Ceb hali:gi, Bik hari:gi, Kal arili, Ilk ʔadi:gi, Saa lili; Ib diri *erect*

(43) PAN *quDáng *crustacean* > Tag, Ceb, Hil, Kpm ʔulang, Akl ʔułang, Kin, Bik, Han, Png ʔurang, Mar odang, Ilk, Itg ʔudang, TB udang, OJv, Snd hurang, NJv uDang, urang *shrimp*, Ml hudang, Pai quzang *crustacean*, Fj ura *crab* [WBM ʔuzazang (2-reduplication)]

Doubleting may be found in the following evidence:

(44) PCP *a:dam *wise, intelligent* > Tag ʔa:lam, ʔalam, Kin, S-L, Bik ʔa:ram, Akl ʔa:łam *wise*, kina-ʔadm-an *wisdom* [Han ʔa:lam (6a)] *as opposed to* PSP *andam *wary, ready* > Tag, Akl, WBM ʔandam

(45) PPH *ha-da:ləm *deep* > Tag ma-la:lim, Bik ha-ra:rum, Ceb lalum, WBM mə-zaləm, Kpm ma-la:lam, Bon, Ilk ʔa-da:ləm, Itb ma-ha-raxəm (with regular intervocalic reflexes) *as opposed to* Akl ma-da:łum, Hil da:lum, Mas ha-dalum, Kal a-daləm (with *d irregularly preserved at the morpheme boundary) [cf. PAN *Daləm *inside*]

Such disparate shifts are not uncommon, contrast Tag ma-da:mi *many* (with *d preserved), ma-ru:nong *wise* (with *d > r), and ma-la:yuʔ *far* (with *d > l). Each of these probably descends from a different time-period in the development of modern Tagalog, the first being the most recent and the third the most remote. However, *none offers ineluctible evidence for a different pre-Tag or PAN phoneme*.

4. CONCLUSIONS

My concern here has been with the overall witness of Philippine languages, especially Tagalog which is used so extensively in the literature. If additionally we bear in mind Dahl's analysis of Javanese and Madurese (1976:66ff) supporting a hypothesis of phoneme split under Indic influence, much of the evidence for PAN distinctions from the Western Austronesian branch melts away. Unfortunately, Dahl did not challenge the Tagalog data and in fact went to great pains to explain it on occasion (ibid:65,80). In the evaluation of critical evidence, Dempwolff took Tagalog to be *Testsprache*, whereas Dyen (1947) did so for Javanese. Yet there are several instances where the Indonesian and the Formosan evidence are in conflict:

(46) PAN *DamaR *torch, light* > Tag damag *all night*, Iri da:mag *burn*, Kla ma-dama *afternoon*, To ama *to fish by torch light*, Ami lamal *fire*, Ml damar *resin, torch*, Fu lama; CONTRAST OJv, NJv damar (< *d) *[resin]* and Pai zama-n (< *D) *torch*

(47) PAN *da:Raq *blood* > Ach, Ml darah, Fj ndra: *blood, sap*, Kan caráʔə, Sar caraʔə, Puy daraH, Sed dalaʔ *blood*; CONTRAST OJv ra:h, NJv rah (< *D) *blood* and Pai djaq (< *d) *menstrual flow*

(48) PAN *Dəlás *bowstring* > Tag dilis, Bik, S-L dulus *guitar string*, Png dələs, Isg dallat, Saa i-lolo, Kan cəə- *bowstring*, Ars roro-ʔi *string a bow*; CONTRAST OJv dələs (< *d) and Pai zələt (< *D)

(49) PAN *du:RiH *thorn* > Akl du:gih, Ib duriʔ, TB, Ml duri; CONTRAST Jv ri (< *D) and Pai djui (< *d)

(50) PAN *laHúD *sea(wards)* > Akl ɬawud *open sea*, Mad laOʔ *south*, Fj lau [name of Windward Islands], Kan ʔama-laúcu *downhill*, Tso mua-rovcu *blow downhill*, moh-rovcu *flow downstream*, RukTn aúDu, Thao mana-rawθ *downhill*, Sai hau-ähör *downstream*, Paz rahut *west*; CONTRAST OJv lod *sea*, NJv iwaʔ lod-an *whale* (< *d), OJv lor, NJv lOr *north* (< *D) and Pai lauz, lauD (< *D) *seaward*

I would generally agree with Harvey (1982) that if there is any justification for a distinction amongst voiced apicals at the PAN level, it will come from Formosan languages - but only when we are in a position to evaluate the influences of these languages on one another and the historical/analogical developments within each language. I would also call on fellow Austronesianists for a critical and thorough reassessment of evidence supporting *d, *D, *dʒ, *z, and *Z from the Oceanic and Western Austronesian witnesses. Wolff (1974 and 1982) and Dahl (1982) have already made important contributions.

My overall conclusion is that, with regard to these apicals, Philippine languages are neither *test* nor *criterion* languages, but only serve as *witnesses* (see Zorc 1982:fn 5 for definitions and examples of these terms).

ABBREVIATIONS

Abr	Aborlan Tagbanwa
Ach	Acehnese
Akl	Aklanon-Bisayan
Ami	Ami = Amis
Ars	Arosi
Ata	Ata-Manobo
Aty	Atayal
Bik	Bikol (Naga dialect)
Bjr	Banjarese
Bkd	Binukid-Manobo
Blk	Bulalakaw-Bisayan
BlK	Koronadal-Bilaan
BlS	Sarangani-Bilaan
Bol	Bolinao-Sambal
Bon	Bontok
Bot	Botolan-Sambal
Btk	Palawan Batak
Bug	Buginese
Bun	Bunun
But	Butuanon-Bisayan
Cas	Casiguran-Dumagat
Ceb	Cebuano
CPh	Central Philippine
Dbw	Dibabawon-Manobo
Fj	Fijian
Fu	Futuna
Gia	Giangan = Bagobo Bilic
Gor	Gorontalo
Han	Hanuno'o
Hil	Hiligaynon-Bisayan
Ib	Iban = Sea Dayak
Ibg	Ibanag
Ibl	Inibaloi
Ifg	Ifugao dialects
Ilk	Ilokano
Iln	Ilianen-Manobo
Ilt	Ilongot
Iri	Iriga-Bikol
Isg	Isneg
Isi	Isinai
Itb	Itbayaten
Itg	Itneg
Itw	Itawis
Ivt	Ivatan
Kal	Kalamian Tagbanwa
Kan	Kanakanabu
KB	Karo Batak
K-C	Kalamansig-Cotabato Manobo
Kdz	Kadazan
Kel	Bario Kelabit

Kin	Kinaray'a-Bisayan
Kla	Kalinga
Kly	Keley'i' Kallahan
Knk	Kankanay
Kpm	Kapampangan
Mad	Madurese
Mam	Mamanwa
Man	Manabo Itneg
Mar	Maranao
Mas	Masbate-Bisayan
Mdr	Mandar
Mer	Merina-Malagasy
Mgd	Magindanao
Ml	Malay
Mlg	Malagasy
Mlw	Malaweg
Mong	Bolaang Mongondow
Msk	Mansaka
NgD	Ngaju Dayak
NJv	New Javanese
NPh	Northern Philippine
Odg	Odionganon-Bisayan
OJv	Old Javanese
Pai	Paiwan
Pal	Palawano
PAN	Proto-Austronesian
Paz	Pazeh
PBS	Proto-Bisayan
PCP	Proto-Central Philippine
Ph	Philippine
PHF	Proto-Hesperonesian-Formosan
PHN	Proto-Hesperonesian
PMJ	Proto-Malayo-Javanic
PMP	Proto-Malayo-Polynesian
Png	Pangasinan
PNP	Proto-North Philippine
PPH	Proto-Philippine
Puy	Puyuma
PWI	Proto-West-Indonesian
Rom	Romblon-Bisayan
RukMg	Rukai-Maga dialect
RukTn	Rukai-Tona dialect
Saa	Sa'a
Sai	Saisiyat
San	Sangirese
Sar	Saaroa
Sbl	Sambal
Sed	Sedeq
Sib	Sibale-Bisayan
S-L	Samar-Leyte = Waray
SLz	Southern Luzon
Sm	Samoan
Sml	Sama = Samal
Snd	Sundanese
Soc	Siocon-Subanon
Sor	Sorsogon-Bisayan
SPh	Southern Philippine
SPl	Southern Palawan
Sur	Surigaonon-Bisayan
Tag	Tagalog
Tas	Tasaday-Manobo
TB	Toba-Batak
Tba	Tagabawa-Manobo
Tbl	Tboli = Tagabili
Tig	Tigwa-Manobo
Tir	Tiruray
To	Tongan
Tsg	Tausug
Tso	Tsou
UAN	Uraustronesisch (Dempwolff)
WBM	Western Bukidnon Manobo
WBs	West Bisayan
WI	West Indonesian
Yog	Yogad

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