Byron W. Bender, *Editor*
Kenneth L. Reh, *Managing Editor*
Robert Blust, *Review Editor*

ASSOCIATE EDITORS

Niko Besnier, *University of California, Los Angeles*
Juliette Blevins, *Max Planck Institute for Evolutionary Anthropology, Leipzig*
James T. Collins, *Universiti Kebangsaan Malaysia*
†Terry Crowley, *University of Waikato* ‡d. 01/15/05
William Davies, *University of Iowa*
Michael Forman, *University of Hawai'i*
John Lynch, *University of the South Pacific*
Malcolm D. Ross, *Australian National University*
Elizabeth Zeitoun, *Academia Sinica*
R. David Zorc, *McNeil Technologies Language Research Center*

EDITORIAL ADVISORY BOARD

Ernesto Constantino, <i>Philippines</i>	Bernd Nothofer, <i>Germany</i>
Videa De Guzman, <i>Canada</i>	Andrew K. Pawley, <i>Australia</i>
Isidore Dyen, <i>U.S.A.</i>	Lawrence A. Reid, <i>U.S.A.</i>
George W. Grace, <i>U.S.A.</i>	Suzanne Romaine, <i>England</i>
Paul Jen-kuei Li, <i>Taiwan</i>	Albert J. Schütz, <i>U.S.A.</i>
George B. Milner, <i>England</i>	

Oceanic Linguistics was created at the request of the Panel on Research Needs in Pacific Languages of the Tenth Pacific Science Congress. Its object is to provide competent information and better communication across national boundaries on current research bearing on the languages of the Oceanic area. The "Oceanic area" is defined for the purposes of the journal as the combined Austronesian, Papuan, and Australian language areas. *Oceanic Linguistics* is a refereed publication.

Oceanic Linguistics is published twice a year. Annual subscription rates are US\$50 for institutions and US\$25 for individuals. All inquiries regarding subscriptions and subscription orders should be sent to University of Hawai'i Press, Journals Department, 2840 Kolowalu Street, Honolulu, Hawai'i 96822-1888. Claims for issues not received will be honored for 180 days past the date of publication; thereafter, the single copy rate will be charged.

Oceanic Linguistics is available online through Project MUSE <<http://muse.jhu.edu>>. Standard gloss abbreviations are to be found at <http://www.eva.mpg.de/lingua/files/morpheme.html>.

All submissions and editorial inquiries should be addressed to the Editor, *Oceanic Linguistics*, Department of Linguistics, University of Hawai'i at Mānoa, 1890 East-West Road, Honolulu, Hawai'i 96822-2318. See inside back cover for instructions for contributors.

© 2005 by University of Hawai'i Press. All rights reserved. Manufactured in the U.S.A.

The paper used in this publication meets the minimum requirements of the American National Standard for Information Science—Permanence of Paper for Printed Library Materials. ANSI Z39.48-1984.

ISSN: 0029-8115

Oceanic Linguistics

VOLUME 44 NUMBER 1 JUNE 2005

CONTENTS

- I Some Notes on the Proto-Austronesian Words for 'Water'
ISIDORE DYEN
- 12 What the Rawas Dialect Reveals about the Linguistic History of Rejang
RICHARD MCGINN
- 65 Positional Slots in Saliba Complex Verbs
ANNA MARGETTS
- 90 Final Consonants in Remote Oceanic
JOHN LYNCH
- 113 On the Notion "Adjective" in Toqabaqita
FRANTISEK LICHTENBERK
- 145 Sulka of East New Britain: A Mixture of Oceanic and Papuan Traits
GER REESINK
- 194 *Kena* as a Third Type of Malay Passive
SIAW-FONG CHUNG

SQUIB

- 215 A Note on the History of Genitive Marking in Austronesian Languages
ROBERT BLUST

IN MEMORIAM

- 223 In Memoriam, Terry Crowley 1953-2005
JOHN LYNCH

REVIEW ARTICLE

- 242 Australian Languages Reconsidered: A Review of Dixon (2002)
NICHOLAS EVANS

BOOK REVIEWS

- 287 Ger P. Reesink, ed. 2002. *Languages of the Eastern Bird's Head*.
REVIEWED BY MARK DONOHUE
- 301 Terry Crowley. 2004. *Bislama reference grammar*.
REVIEWED BY MIRIAM MEYERHOFF

Oceanic Linguistics is abstracted and/or indexed in *Arts and Humanities Citation Index*; *Blackwell's Linguistics Abstracts Online*; *Current Contents*; *International Bibliography of Periodical Literature*; *International Bibliography of the Social Sciences*; *International Current Awareness Services*; *Linguistics Abstracts*; *Linguistics and Language Behavior Abstracts*; *MLA International Bibliography*; *Research Alert*; *Sociological Abstracts*; *Cultures, Langues, Textes*; *La Revue de Sommaires*.

Some Notes on the Proto-Austronesian Words for 'Water'

Isidore Dyen

YALE UNIVERSITY (EMERITUS)

Dempwolff's reconstruction of *wayeR 'water' is reviewed. The meaning 'fresh water' is suggested. The initial *w may have been dialectally distributed with a probably older *kw. Chamorro's treatment of *w is formulated and its relevance to the evidence for *kw is challenged. The articulation of *R may have not been a velar spirant in all PAN dialects in view of the agreement of Bonfia, Palauan, and Yapese on sibilance. In some dialects there may have been a paragodic vowel after the *R and that vowel itself may have been followed by a glottal stop. Finally, evidence for a medial *S has been found.

1. INTRODUCTION. Proto-Austronesian exhibits at least three different words for 'water': (1) *Casik, with reflexes usually associated with 'sea water' and thus also with 'salt'; (2) *DaNum, usually associated with 'drinking water' and thus often with 'fresh water'; and (3) one reflected by, for example, Ifugaw *waqel* 'water', with cognates often associated with meanings like 'fresh water', reconstructed by Dempwolff as (in contemporary transcription) *wayeR, the main subject of this discussion.

Dempwolff's reconstruction of *e in *wayeR was dependent on his citation of an archaic Malay *ayar*, a form that could hardly have been the antecedent of the standard form /aer/ (orthog. *air*), no doubt from an earlier **air*. Dempwolff's *ayar* might rather have been a form that occurred in a dialect in which *i before a final consonant broke to *ia*—much like the breaking that produced Minangkabau *aiā* 'water' (but with the Malay retention of *r*). That *ia* might then have become *ya* after a vowel. Regardless of this concern, his reconstruction is justified by the finding of Tiruray *wayeg* 'water'.

In listing the cognates of members of West Central Papuan Network that he assigned to *wayeR, Ross (1994:458 f.) included among the latter the following words: Hula *wai* 'river', Motu (*sina*)*vai* 'river, water', Gabadi, Lala, Doura, Kuni *vei*, Roro *bei*, *babei*, East Mekeo *fei* 'water'. The vowel *e* in the words of this collection (hereafter referred to as the *e*-words) is presumably taken to reflect the *a of the reconstruction, which was (perhaps fronted and) raised in a partial assimilation to the following *y or to what may have become a following *i by way of *i < *yi < *ye; this *i could have continued into the *i* of the *e*-words above. The same second alternative change sequence could have led to the *i that yielded the *e* in Malay *aer* (usually written *air*, and sometimes *ayēr*) after the regular change of *i > Malay *e* before a final consonant.

Review Article

Australian Languages Reconsidered: A Review of Dixon (2002)

Nicholas Evans

UNIVERSITY OF MELBOURNE

Is the Australian linguistic area, because of its unique history, one in which the established methods of historical and comparative linguistics have limited appropriateness? Do neighboring languages in this situation come to share an "equilibrium level" of 50 percent basic vocabulary regardless of their degree of genetic relatedness? Is the Pama-Nyungan grouping totally without foundation and something that must be discarded if any progress is to be made in studying the nature of the linguistic situation in Australia? Are Australian scholars more hesitant than scholars elsewhere to criticize the work of colleagues? These and other "deliberately unorthodox" views of R. M. W. Dixon set forth in *Australian Languages* (Cambridge Univ. Press, 2002) are countered, while conceding that the book brings together an enormous amount of historically and typologically relevant material in one place.

1. INTRODUCTION.¹ Bob Dixon concludes his recent book, *Australian Languages* (2002) (henceforth AL), with the following provocative claim: "The Australian linguistic area poses problems of investigation and analysis unlike those found anywhere else in the world. The established methods of historical and comparative linguistics, which can be applied so successfully elsewhere, have limited appropriateness in Australia. The special nature of the Australian situation must be acknowledged for real progress to be made in describing the nature of this linguistic situation, and for an understanding to be attained concerning the nature of interrelations between its constituent languages" (699). On this characterization, Australian languages are not just one more family that will yield a reconstructed protolanguage and family tree, once enough descriptive materials have been gathered, and analyzed by enough well-trained comparativists: "The language situation in Australia is simply unlike that of Austronesian; or of Indo-European or Uralic or Uto-Aztecan. It is unique" (xx). Rather, its special characteristics, in Dixon's view, mark it as the ultimate result of an unimaginably long state of "equilibrium"—the likely result

1. I thank the following people for generously supplying information used in this paper and/or comments on earlier drafts: Barry Alpher, Barry Blake, Ian Green, Nikolaus Himmelmann, Harold Koch, Penny Johnson, Bill McGregor, David Nash, Rachel Nordlinger, Geoff O'Grady, Hitomi Ono, Peter Sutton, and Jean-Christophe Verstraete. Thanks are also due to Chandra Jaysuriya for her painstaking work producing the maps, to the Alexander von Humboldt Stiftung for fellowship support while writing this review, and to the editors of *Oceanic Linguistics* for their kind invitation to write it. Needless to say none of them should in any way be held responsible for the views expressed here, which are entirely my own.

of around forty millennia of undisturbed and exclusive coresidence of a whole continent by people who were in regular mutual contact and were united by cultural similarities that deny any one group significantly greater status or power.

Not only would this make the Australian situation an extreme test case for the comparative method, but it would condemn to futility the efforts of those scholars imperceptive enough to apply old methodologies in a situation whose special features render them barren and inappropriate, so that "a discipline becomes enmeshed in a cul-de-sac of its own making. One needs to make a sidestep in order then to continue to move forward" (xxi).

This is, of course, not the first time that Australia has been declared a special case. In a sagacious article, the late Terry Crowley (1997:276) quotes another giant of Australian linguistics, A. Capell, who had made rather similar claims half a century earlier: "the observed sound laws in Australia operate only within rather unpredictable limits. ... There does not appear to be the Indo-European consistency of laws" (Capell 1956:83–84). As Crowley puts it, "Capell was effectively declaring Australia exempt from the comparative method, making it a continent [that] was somehow off limits to principles of language change and reconstruction that applied in all other parts of the world." Those, like Capell and Dixon, who wish to treat one part of the world as a special case, face the challenge of giving a coherent account without using the standard methods that they claim not to be appropriate. To do this, they need to invent new theoretical frameworks—in Dixon's case, his theory of "punctuated equilibrium," developed largely to deal with the difficulties posed by the Australian situation. At the same time, they need to justify the "special case" status they are pleading for, by demonstrating that the established methods fail rigorous and competent attempts at application. But this special pleading brings severe risks. As Alpher (1990:169) puts it: "Any supposition that the Aboriginal languages of Australia are somehow special in regard to regularity of sound change or frequency of borrowing would appear ... to work against a sound heuristic procedure—in fact, to open the way for confusion."

In his preface (xx), Dixon laments what he perceives as a lack of robust debate on these topics: "It is a convention in academic society today (and perhaps slightly more in Australia than anywhere else in the world) that one should hesitate to criticise the work of colleagues." This review answers his call to join battle, taking issue with many of the book's arguments and, most centrally, with the issue just outlined. In most respects, I will argue for a diametrically opposing view: that a renewed interest in applying the comparative method by a number of Australianist scholars is actually succeeding in giving a more coherent account than that argued for in AL.

Inevitably, this means I will "accentuate the negative"—it would be demeaning the high stakes laid down by the author for his major claims if I were to fail to engage with them. As a result, in this review I will say disproportionately little about the many useful and worthy parts of AL. To get an idea of how good these can be, the reader should sample such sections as those on the consequences that Australian languages' lack of interest in volitionality has on lexical structure (57), on the many types of negation (83–86), and on the organization of affixed subject and object pronouns in double-agreement systems (370–401, and 437–47). Dixon's erudition throws up many interesting surprises, even for the pundit, such as his nice quote from the pioneer linguist

and doctor W. E. Smythe on the multipurpose interrogative / indefinite pronouns in Gumbaynggir (328), or his discussion (665) of how the distinctive system of tenses found in the Maningrida languages (non-Pama-Nyungan) has diffused into an adjoining Yolngu language, Djinang. And the over thirty detailed maps provide an invaluable distillation of huge amounts of specific information about linguistic features and their distribution across the continent.

The book's first and last pages define its main focus as being historical and comparative issues, with the concomitant goal of developing alternative models to better account for the Australian data, and show why they are needed—and the outer chapters directly address these issues. Chapter 1 discusses the "language situation in Australia," and chapter 2 "Modelling the language situation" (understood here as modeling the forces driving the differentiation and convergence of language varieties), while chapter 13 focuses on particular "genetic subgroups and linguistic areas" and chapter 14 closes the book with a "summary and conclusion" whose two sections give a clear idea of its intended diachronic focus: "outline of development" (section 14.1) and "diffusional patterns and cyclic changes" (section 14.2).

The overall organization of most of the inner chapters is on typological rather than comparative principles. Basically the book proceeds by taking various grammatical and phonological topics, a chapter or two at a time, and summarizing in great detail their patterning and distribution across the continent. Thus chapter 3 gives a structural overview of Australian languages, chapter 4 looks at "Vocabulary," chapter 5 at "Case and other nominal suffixes," chapter 6 at "Verbs," chapter 7 at "Pronouns," chapter 8 at "Bound Pronouns," chapter 9 at "Prefixing and fusion," chapter 10 at "Generic nouns, classifiers, genders and noun classes," chapter 11 at "Ergative/accusative morphological and syntactic profiles," and chapter 12 at "Phonology."

As is inevitable in a book that attempts to cover more than two hundred languages, the emphases reflect the author's personal foci of interest and in this sense do not always mirror topics that have seen enormous activity among researchers in the field. Perhaps as a result, it conveys a certain complacency about the issues, a feeling that all of the parameters are in place, and that future descriptive linguists will find only minor variants on old themes. For example, AL omits discussion of many issues in the syntax of Australian languages that have claimed center stage in the syntactic literature in recent years. Warlpiri syntax, at the center of so much discussion about the nature of non-configurationality (see #Hale,² Laughren, and Simpson 1995 for key references), receives just a single mention (88) in connection with its generalized subordinate clause structures. Nor, among many other comparable omissions, is there any mention of other important work on nonconfigurationality, such as that by Austin and Bresnan (1996).³

Though much more could be said about these matters, in this review I will concentrate on those aspects of the book that are relevant to comparativists and those whose appetites for the "Australia as a special case" view were whetted by the widely cited but programmatic claims in Dixon's earlier (1997) book *The rise and fall of languages*.

To do so with the thoroughness it deserves I will have to go into a level of nitty-gritty detail about Australian languages that some readers may wish to skip. So it is

2. See page 246 in section 2. for an explanation of the number sign or crosshatch ("#") as used here.

worth flagging which sections of this review are likely to be of most interest to the non-Australianist. These are section 2, which locates AL with regard to Dixon's previous work; section 4, where I take issue with the oft-cited but eminently unfounded claim that neighboring Australian languages, through rampant borrowing, reach an "equilibrium level" of 50 percent shared vocabulary, irreparably muddying the waters for applications of the comparative method; section 5, where I discuss the most important debate about subgrouping in Australia, concerning the "Pama-Nyungan" family, which most Australianists (including this author, but notably not the author of AL) believe to include the languages spoken over seven-eighths of the continent, at a relatively shallow level by continental standards; and section 7, where I take stock of the debate about facts and methods that the book raises. More aimed at the Australianist audience are section 3, which evaluates the classification in detail, and section 6, which looks at the much deeper-time traces of cognate morphology among the non-Pama-Nyungan languages crowded into the northwestern one-eighths of the continent, and whose great genetic diversity makes them crucial to understanding the relatedness of the Australian languages as a whole.

Before continuing, a note on orthography. AL, like most books on Australian languages, uses a practical orthography with extensive digraphs rather than special symbols. Except when quoting, I will largely follow that practice here, though my usage is not identical to that in AL: *r* before stops, nasals, and laterals indicates retroflexion (e.g., *m = ŋ*), though *r* represents a retroflex glide (*ɻ*) and *rr* an apical tap or trill; *h* after a stop, nasal, or lateral indicates lamino-dental articulation (thus *nh* is *ɲ*). The representation of laminopalatals is rather variable in the literature: AL uses *dj* and *nj*, while I will use *c* and *ny*, and *ng* indicates the velar nasal *ŋ*. Since voicing is not phonemic in most Australian languages, with voiced and voiceless allophones distributed across different phonotactic positions, the choice of voicing in stop symbols is rather arbitrary; AL uses voiced symbols, and I use voiceless. In languages with a voicing contrast, of course, such as the Western Torres Strait language, this is retained in the transcription.

2. THE ORIGINS OF AL. AL grows out of over four decades of scholarship on the indigenous languages of Australia. Dixon's grammars of Dyirbal (1972) and Yidiny (1977) not only brought Australian Aboriginal languages to life in their fascinating particularity, but also established a whole new tradition of grammar-writing. His editorship,

3. Likewise, the book ignores some major changes in the analysis of case that have taken place among most Australianists since LoA, maintaining the practice of setting up a "split case" system based on surface forms (nominative/accusative on pronouns vs. ergative/absolute on nouns), rather than following the more recent practice, more in line with the logic used to establish case in other parts of the world, of using an integrated "tripartite" analysis into three cases (ergative, nominative, accusative) such that all words in a NP agree in case. See Blake (2001:24–26) for a recent overview and #Mel'čuk (1979) and #Goddard (1982) for the original arguments. Given that the tripartite analysis—which is simply a return to the traditional logic for determining the number of cases in a paradigm in Indo-European languages (see Blake 2001:24–26)—has been widely adopted by Australianists writing grammars of languages with such systems in the last two decades, the failure to adopt it (or even mention it) in AL is puzzlingly at odds with other aspects of Dixon's recent work, such as his goal of promoting a "Basic Linguistic Theory" that consciously aims to draw together and codify a unified body of analytic practice across the descriptive traditions employed for different parts of the world.

with Barry Blake, of the five volumes of the *Handbook of Australian languages* (henceforth *HAL*; a sixth volume is still to appear), brought many fine grammars to the linguistic public, and his teaching at the Australian National University in the 1970s and 1980s attracted dozens of young linguists into the field (including this reviewer). The phenomenal reach and insight of his 1980 book *The languages of Australia* (LoA), sometimes affectionately known as the "green bible," then succeeded in setting the agenda for work on Australian languages by an ever-growing number of linguists in language description, typology, historical linguistics, and many other fields. But, as he states in the introduction to his new book (xvii), LoA was in some ways premature: in 1980 there were still fewer than a dozen really good grammars of Australian languages, no more than a couple of reasonable dictionaries, and the language map of Australia was still covered with huge blanks when it came to most descriptive and historical questions.

The work under review here is conceived as an updating of LoA in the light of the enormous body of work that has been unleashed in the two decades that followed—in large part due to Dixon's foundational efforts—with the added perspective that comes from his work in the Amazon through the 1990s. Though longer than LoA (734 as against 547 pages), it is not parallel in structure. No attempt has been made to repeat or update the first four chapters of LoA, which were more aimed at a general readership interested in such questions as the relation of language to social units, special speech and song styles, Aboriginal English, and bilingual education. Dixon (xxvi) refers readers interested in such questions back to LoA (now, unfortunately, out of print), with the odd statement that they have dated very little: in fact a great deal has appeared since (see, e.g., Walsh and Yallop 1993, #SSABSA 1996, #Laughren 2000).

In compensation, there is a greater focus on reconstructive and historical issues, and a leitmotiv of the book, as already indicated, is its detailed discussion of Dixon's "punctuated equilibrium" model as a response to what he regards as the unsuitability of the comparative method to the Australian situation. The book aims to flesh out the empirical basis for this rejection with more extensive data than could be provided in his shorter and widely publicized 1997 book *The rise and fall of languages*.

Even at more than 700 pages, though, and even with the excision of the more anthropologically and sociolinguistically oriented sections, AL seems truncated. The author plans a companion volume, *Australian languages: A complete catalogue*, described (xxi) as "in preparation (but still some way from complete)," and many parts of AL feel as if the job of giving evidence (e.g., for subgrouping) and of providing full scholarly referencing for its assertions has been delegated to this unavailable other half.⁴ Throughout this review I shall adopt the practice of placing a "#" before papers I cite that had appeared before 2000 but are not referenced in AL. This omission of references is a shame, both because the book would have benefited from drawing more on the community of Australianist scholars, and because many of the revisions Dixon proposes to the classification of Australian languages appear to come out of nowhere—more on this below. The lack of referencing makes it virtually impossible for the nonspecialist reader to check on the specific claims made in the book, assess the grounds for them, or to pick up on the sorts of errors that inevitably occur in a book of this size and scope. It is therefore imperative that the companion volume appear as soon as possible.

Ironically, AL has come out at a time of great activity in the field. Within fifteen months of its publication, two other edited books have appeared that are devoted to comparative studies of Australian languages, giving us an argumentative triangulation of competing views.

One is Bowern and Koch's (2004a) book *Australian languages: Classification and the comparative method*. This includes a number of case studies focusing on particular subgroups, as well as two opening chapters concerned with the application of the comparative method to the Australian situation (Bowern and Koch 2004b; Koch 2004). Each of these opening chapters engages directly with many of Dixon's claims, and the interested reader may find in them a useful check on the arguments I will make here. Three chapters of Bowern and Koch also confront the controversial issue of the proposed Pama-Nyungan family, which occupies seven-eighths of the continent (see section 5 of this review).

The other recent book, edited by the present reviewer (Evans 2003a), focuses on the non-Pama-Nyungan languages, located in the northwestern one eighth of the Australian continent, which—in the view of most scholars in the field—between them encompass over 90 percent of the genetic diversity to be found among Australian languages.

The appearance of these two books—containing, between them, the work of twenty-four scholars engaged in comparative work on Australian languages—is a barometer not just of the level of current activity in the field, but of the fact that, for many researchers, Australian languages are in no way beyond the reach of the comparative method, provided that it is practiced with sufficient care, patience, and judgment.

4. There are far too many of these to list them all, but I will take one language, Dalabon, as a yardstick for the accuracy of claims made in the book about individual languages. The 19 indexed references to Dalabon in the book include the following incorrect or dubious claims, some minor, others serious: (a) that its applicative prefix is *-mari* (637); I am aware of no recording of this form by any scholar who has worked on Dalabon; in work by Francesca Merlan and myself we have recorded it as *mari-* or *mari-* (see Evans, Merlan, and Tukumba 2004), with the *i* (*i*) realized as *u* by some speakers; Capell (1962) writes it as *-mari-*, using a different orthographic representation for the high mid-vowel, and ignoring the retroflexion on the *n*; earlier work by Alpher wrote the same vowel orthographically as *v* (sometimes as *u*) but still recognized its status as a sixth, high central vowel; the surrounding discussion in AL, imputing the form *i* to "assimilation of *a* to *i* before *nj* and then loss of final *nj*" makes it clear that this is not simply a typo, leaving a wrong form orphaned from any source against which it can be checked; (b) that its reflexive-reciprocal form is *-rra-* (322); in fact, it is *-rra-* (Evans and Merlan 2003: 276), though in this case there is at least an old source (Capell 1962:116) giving a form with *e* (which Capell writes as *e*); (c) that it has a locative suffix *-dja* (165), a form that is crucial to Dixon's claim that Dalabon is a prefixing language lacking the *-ngku* ~ *-ngka* allomorphs of the ergative and locative (see section 5), but retaining locative *-dja*; no source is given for this datum; in fact, Capell (1962:110) mentions such a form, though all his examples give it attached to the interrogative he writes as *mari* 'where'; no other investigators to have published on Dalabon mention this form—in fact the locative is *-kah* (where *h* represents a glottal stop in Dalabon orthography) and the word for 'where' is just *marrāh*; it is likely that Capell mistakenly parsed the following second person prefix *dja-*, which may be prosodically reattached to the preceding word; (d) that, in its bound pronominal system, the subject pronoun is a prefix but the object is a proclitic; the analysis of the object pronoun is a controversial point (though in this case I agree with Dixon's characterization): it was analyzed as a free pronoun by Capell (1962:190), as a prefix by Alpher (1982), and as a proclitic by #Evans, Brown, and Corbett (2001:191); no reference is made to any of these sources here; (e) strange claims are also made about the genetic status of Dalabon: I discuss these in 3.1 of the main text.

3. CLASSIFICATION. The section of the book that differs the most from existing scholarship is the part concerned with classification. This contains many radical departures—sometimes overtly justified, but often not—from established classifications such as those by #O'Grady, Wurm, and Hale (1966)⁵ and #Walsh (1981). Accepted scholarly names for subgroups are replaced with an idiosyncratic alphanumeric code, and even the spelling of language names often creates gratuitously neologistic forms;⁶ as a result even the experienced Australianist reader needs to keep referring back to the language coding scheme on xxx–xlII to see which languages are being talked about.⁷ Though some of these innovations are justifiable attempts to brush away old cobwebs, others—such as the reclassification of Arnhem Land languages to be discussed below—seem ad hoc and unfounded. The net effect, I would predict, is that scholars will continue to rely on the preexisting complete classifications, rather than employing the highly idiosyncratic classification presented in AL. Imperfect as they are, they at least have the merit of internal consistency, and can be patched up where relevant by more recent studies of particular subgroups.

Pages xxviii–xlII present a map, plus a complete classification, of all Australian languages except those of Tasmania. A letter-based classification system covertly recognizes the distinction between the dozen large-scale groupings of non-Pama-Nyungan languages, represented by binomials of the form NX, e.g., NC for the "Mindi" group. What most other scholars refer to as the "Pama-Nyungan"⁸ family (on which more in section 5) is represented by letters A–WM, though confusingly those starting just with N (without a second capital letter, e.g., Nc "Central Inland New South Wales subgroup") are what has been considered Pama-Nyungan, and the A–WM series includes, as group X, the Garrawan family that is often considered non-Pama-Nyungan and is most likely the nearest relative of Pama-Nyungan. Though sources on individual languages are ref-

5. In 1966 O'Grady published two (essentially identical) versions of his classification, each time with two colleagues: one, with Carl and Florence Voegelin, as a special fascicle of *Anthropological Linguistics* (this is referenced in AL), and a second, with Ken Hale and Stephen Wurm, as a wall map. The latter is not referenced in AL. Since the two are essentially identical in their classification, I will in places use the phrase "the O'Grady et al. classification" to refer to both.
6. To be sure, the spelling of language names is always going to be problematic, because they are regularly tugged in two directions by the competing orthographic principles of English and the vernacular orthography. The general sociolinguistic trend by indigenous communities has not been to follow standardized orthographic principles, but rather to use distinct orthographies in the same group-differentiating way that oral differences served traditionally, so that in many cases (Arrernte, Biniŋ Gun-wok) three or more orthographic systems are used across the various dialects, despite a speaker population of at most a couple of thousand. Nonetheless, the unnecessary introduction of new spellings in AL adds to the orthographic confusion rather than diminishing it, e.g., the spelling Njangumarta (xxxviii) for Nyangumarta, or the phonemically incorrect spellings Mawung and Iwaydja (see footnote 11 on page 251). To avoid undue confusion among readers who may not know many of the languages being discussed, in general I will keep to the versions used by the major published primary source(s) on the language in this review; sometimes this will necessitate two versions when I quote directly from AL or other sources.
7. Indeed, on p. xxv–vi "assiduous readers" are recommended "to photocopy the master map ... and perhaps also the List of languages and language groups—and to keep these on the side when studying the volume." Had more standard terminology been used for subgroups, this stratagem would not have been necessary, at least for Australianist readers.
8. Dixon gives the rationale for this as "to enable the reader to see that only one isogloss ... runs along the division between groups NA–NL, on the one hand, and the remaining groups (labeled A–Y and WA–WM), on the other hand.

erenced, unfortunately no sources are given for any of the higher-level groupings,⁹ except in the last chapter of the book, which is devoted to some of the individual groups.

Given the author's views on the inapplicability of the comparative method in many cases, he does not regard this as an exhaustive phylogenetic classification. Rather, it mixes "areal groups" and "subgroups" within the same classification. The motivation is understandable—namely to maintain an appropriately cautious stance about the genetic relatedness of groups of languages whose manifest similarities may reflect areal convergence, but which have yet to be shown to form a subgroup. But the move has an unfortunate effect: because it is an exhaustive grouping, it does not offer a consistent way of talking simultaneously about cross-cutting genetic and area groupings.

There is no sustained discussion, presumably for this reason, of the most celebrated linguistic area in Australia, Arnhem Land (Heath 1978, 1979, 1981a), where dozens of diffused features overlay members of several distinct genetic groups: Gunwinyguan, Maran, Maningrida, and Yolngu (Dixon employs different units for these, as we shall see). Another well-known linguistic area, the Lake Eyre Basin (see Austin, Ellis, and Hercus 1976), is presented (xxxvii) as "WA. Lake Eyre Basin Areal Group," comprising four "groups" or "areal groups." However, recent work by Bowern (2001) has demonstrated through the study of shared innovations that the first three of these belong within the Karnic subgroup (with areal patternings overlaid on an existing genetic unit), while the fourth, Maljangapa, belongs to a distinct genetic group (Hercus and Austin 2004). A further case, Dixon's "NH. Daly River Areal Group" (xli), results from work by Ian Green and others challenging the genetic unity of Tryon's (1974) "Daly Family," and breaking it into several distinct families united by a number of areal features. In this case Dixon's unit NH is thus an areal grouping of five genetic groupings, each of whose members lie entirely within the areal group.

The most persuasive examples of diffusion will necessarily involve languages belonging to different phylogenetic units—this is the only way we can be sure that the convergent traits are not inherited. Given that one of the main goals of the book is to demonstrate that it is often impossible to distinguish the units resulting from diffusion and inheritance in Australia, it would have made sense to work back from clear cases where the effects of diffusion and genetic inheritance can be distinguished. But the classification adopted, by confounding the two, makes this difficult.

It is impossible in an article of this length to assess Dixon's classification comprehensively, so I will limit myself to two sample cases, his "Arnhem Land" group (3.1), and the languages of the Torres Strait (3.2), where it is particularly important to distinguish

9. Ironically, the O'Grady et al. classification is criticized on p. 46 for precisely this reason: "[A]ll that was published was the classification. The data on which it was based were not specified, nor were the cognate densities between languages." In fact, this criticism is hardly warranted. O'Grady and Klokeid (1969) described the methodology used in the O'Grady et al. classification, give a 100-item word list for eight languages (and cognate densities with Wirangu), and cite (1969:299, n.2) three publications providing submatrices of cognate densities: O'Grady (1966) for 27 West Australian languages, Hale (1966) for 13 northern Paman languages, and Hale (1962) for 10 Arandic languages; only the first of these last three are acknowledged in AL. In addition, O'Grady's typescript of Capell's well-known "Vocabulary of 600 words in 40 north Australian languages" has been available in the Mitchell library (ZA6929 (CY2355)), and since 1993 in digital form in the ASEDA archive. (I am grateful to David Nash for bringing these sources to my attention.)

genetic and areal criteria. I will hold off on discussion of the most controversial higher-level grouping, Pama-Nyungan (which, as mentioned, Dixon rejects) until section 5.

3.1 THE "ARNHEM LAND" GROUPING. [NB, pp. xxxix–xl] Arnhem Land, forming roughly the eastern half of Australia's "Top End," is one of the most diverse parts of the continent linguistically. O'Grady et al., who divided the continent into around twenty-six coordinate families, identified eleven distinct family-level groupings within Arnhem Land alone, many of them isolates: Maran, Warray (isolate), Gunwinyguan,¹⁰ Nunggubuyu (isolate), Anindilyakwa (isolate), Mangarrayi (isolate), Burarran, Nakkara (isolate), Gunavidji (=Ndjébbana) (isolate), Iwaidjan, and Gaagudju, in addition to the Yolngu subgroup of Pama-Nyungan, which forms an enclave in the northeast. These classifications thus located close to half of the deep-level genetic diversity in Australia in this small region. Subsequent work by Heath (1978), though it charted many areal features of Arnhem Land as a whole, did not dispute the validity of the previous genetic classification, except to propose links between two of the isolates (Nunggubuyu and Anindilyakwa) and the easternmost members of the Gunwinyguan family (in particular, Ngandi).

Recent work by Rebecca Green (2003) has shown that three of these families—Burarran, Nakkara, and Gunavidji—should be grouped into a single family (the "Maningrida family"), on the basis of a large number of shared innovations and distinctive verb lexemes. Heath, in a number of articles, has argued for the relatedness of Nunggubuyu to Ngandi, a member of the Gunwinyguan family, and Harvey (2003a) and Alpher, Evans, and Harvey (2003) reach similar conclusions, though its exact position within Gunwinyguan remains unclear (see Baker 2004 for a plausible view). Heath (1997, *inter alia*) has also argued for the relatedness of Anindilyakwa to Nunggubuyu, though the evidence here is slender and in my view one should, for the moment, maintain the conservative position that it is a family-level isolate. The position of Mangarrayi remains controversial: the system of verb suffixes suggests it should be included within Gunwinyguan, but Merlan (2003) links it to Maran on the basis of shared irregularities in the system of demonstratives and nominal prefixes.

The scope of Gunwinyguan, the most extensive group in Arnhem Land, has undergone many revisions. Harvey (2003b) has clearly demonstrated that Warray should be added to it, in a subgroup with Jawoyn. Wagiman and Wardaman were originally placed within it, but Merlan (1994) views this as unwarranted and for the moment it seems safer to assign these to a separate group, often called Yangmanic. Harvey (2003a) and Alpher, Evans, and Harvey (2003) reconstruct aspects of Gunwinyguan lexicon/phonology and verb suffixation respectively, but Rebecca Green (2003) and Peiros (2002) have expressed skepticism about whether Gunwinyguan really is a family at all, and Rebecca Green (2003) goes on to make some proposals—based on shared systems of verb suffixation—that would unite many of the above languages in a single "Arnhem" family: the Maningrida languages, Gunwinyguan, Gaagudju, Maran, and Kungarakany (another language, treated as a family-level isolate by O'Grady et al.,

10. Then written Gunwinguan, based on the incorrect transcription of the palatal nasal /ɲ/ in the language name Kunwinjku (/gunwɪŋgu/) by earlier researchers such as Capell (1956) and Oates (1964).

that is spoken to the west of Arnhem Land). Interesting as they are, Green's proposals are still programmatic and do not go beyond a few suffixal categories on the verb.

The preceding paragraph summarizes the state of play for the languages of Arnhem Land. When the dust settles, we now have around nine families plus Yolngu, with the main current arguments concerning the composition of Gunwinyguan, and in particular whether it includes Mangarrayi, Anindilyakwa, and Wardaman/Wagiman.

Now let us return to the classification in AL. Surprisingly, given the author's general skepticism of higher-level groupings, he sets up a single "Arnhem Land group" for all of the above languages except Iwaidjan¹¹ and Yolngu. Though, as mentioned above, preliminary proposals for this move have recently been published by Rebecca Green (2003), AL neither justifies nor references the reasons for this highly adventurous lumping, which is about comparable to Austric in terms of the number of proven cognate morphemes involved. More disturbing, though, are the many unjustified splittings and lumpings that have been carried out within this new "Arnhem Land group." Maran is split into two, Alawa going into a new isolate branch ("NBm"), and Mara¹² and Wardarang into a different branch ("NBb"), against the clear views expressed by all linguists who have worked on Maran languages that they form a clear group,¹³ and without any arguments for this new classification being given. On a comparison of 152 basic vocabulary items, these two languages share 41 percent of their vocabulary, but have less than 8 percent shared vocabulary with any of the following other languages of the region (Wardarang was not included in the comparison): Mara has 7.6 percent with Ngandi, 6.7 percent with Gun-djeihmi, 4.1 percent with Dalabon, 4.7 percent with Ritharrngu, and 2 percent with Mawng, while Alawa has 7.5 percent with Gun-djeihmi, 6.4 percent with Ngandi, 3.7 percent with Ritharrngu, 3.0 percent with Dalabon, and 1.5 percent with Mawng.

Languages that all previous published classifications have placed within Gunwinyguan are now scattered across five branches of the new "Arnhem" grouping:

- NBC, containing Rembarnga and Ngalakan, which are certainly more closely related to each other than to anything else (Baker 2004);
- NBD, containing Ngandi, Nunggubuyu, and Anindilyakwa (Anindhilyagwa). As mentioned above, no solid evidence has yet been adduced to confirm the gut feeling many linguists have, on the basis of structural parallelisms, that Anindilyakwa is

11. Dixon introduces the term "North-west Arnhem Land subgroup" to replace the term "Iwaidjan," used by scholars since the 1960s (see Evans 2000), but without change to the internal content of the group. There is a judicious discussion of the evidence for and against this particular grouping on 667–68. Oddly, he also introduces the unwarrantedly neologistic spellings Iwayja and Mawung for two languages of this group, more conventionally spelled Iwaidja and Maung since work by Capell in the 1960s and 1970s. Certainly neither of these latter spellings is satisfactory from a phonemic point of view, but the new spellings in AL do not resolve these problems, and in fact create new inaccuracies, because phonemically the first is /iwaca/ and the second /mawŋ/. A practical orthographic spelling, Mawng, is now being used by that speech community, and there are current discussions under way about using Iwaja when writing that language's name in its own orthography.

12. Spelled Marra in AL, and now written Maarra by the community itself, though I follow Heath's spelling here.

13. E.g., Heath (1981b:4): "Within the Mara-Wardarang-Alawa subgroup, present indications based on preliminary historical analysis of inflectional paradigms suggest that Mara and Wardarang are somewhat closer to each other genetically than either is to Alawa."

related to any other language, and AL itself does not have any discussion of the grounds for this grouping in its 20+ mentions of Anindilyakwa;

- NBe, containing only Dalabon, despite the far-reaching similarities between it and Bininj Gun-wok (Kunwinjku);¹⁴ more on this below;

- NBg, containing Bininj Gun-wok (Kunwinjku) and Gunbarlang. The grouping of these two together goes back to O'Grady et al., though a close consideration of verbal morphology (pronominal prefixes and TAM suffixes) reveals them to be far more distinct from each other than generally thought;

- NBh, the "Jawoyn-Warray" group. The insight that Warray belongs within Gunwinyguan, and specifically with Jawoyn, is due to Harvey (2003b), though this is not referenced here.¹⁵ Grouping Jawoyn and Warray together at subgroup level is uncontroversial, but the substantial evidence for placing Jawoyn and Warray together within Gunwinyguan (see Harvey 2003a,b) is ignored.

These five groupings are, according to AL's system of numbering, regarded as no closer to one another than they are to the other eight groupings within the "Arnhem branch," a manifestly strange claim. To give some idea of how counter-intuitive this is, consider the following translations, in (1a-c), of the sentence 'the man hit the woman' in Dalabon (Nbe), Bininj Gun-wok (NBg1), and Mara (NBb).¹⁶ I also include parallel verbal words in Dalabon and Bininj Gun-wok to show the extent of similarity (in both structure and form) between these latter languages, differing (in this example) only in the presence of an additional prefix marking assertativity in Dalabon (which in any case has a cognate form in BGW, where it marks 'immediate aspect').

- (1) a. Mara
 Na-'riyi-mar raŋ+g-añi ŋ+a-na n-gamiñ-mar.
 3MAS.OBL-MAN-NPL hit+3SG/3SG-take FSG.NOM-DEM FSG.NOM-woman-NPL
 'The man hit the woman.' (Heath 1981b:81)
- b. Dalabon
 Biy(-yih) bûka-h-bo-ng kahnûn kirdikird.
 man(-ERG) 3SBJ/3SGHUM.OBJ-ASS-hit-PP DEM woman
 'The man hit the woman.'
- c. Bininj Gun-wok
 Bininj bi-bo-m ngal-eke daluk.
 MAN 3SBJ/3SG.HUM.OBJ-hit-PP FEM-DEM woman
 'The man hit the woman.'

14. A common terminological problem facing Australianists is what name to use for dialect chains; in this case the term Bininj Gun-wok has recently been coined as a solution; Kunwinjku, properly speaking, refers to just one dialect of this chain; see Evans (2003c).

15. Though Harvey's paper appeared a year after AL, it had been widely circulated in draft form for a number of years.

16. Word order is free in BGW and Dalabon but has arbitrarily been put in the order of the Mara example and its English translation to facilitate comparison. BGW and Dalabon examples are constructed on the basis of my own work on these languages; see Evans (2003c) for a grammar of BGW and Evans, Merlan, and Tukumba (2004) for a dictionary of Dalabon.

- (2) a. Bininj Gun-wok¹⁷
 Nga-yawoyh-madj-yi-na-ng daluk.
 1SG.SBJ/3SG.O-again-swag-COM-see-PP woman
 'I saw the woman again with the swag.'
- b. Dalabon
 nga-h-rawoyh-madj-ye-na-ng kirdikird.
 3PL.O.1SG.S-ASS-many-swag-COM-see-PP woman
 'I saw the woman again with the swag.'

According to the AL classification, these three languages should be equidistant members of 'NBb1'. But, notwithstanding the distinct forms for demonstrative bases in the three languages, and of the word for 'woman', the many points of similarity between Bininj Gun-wok (BGW) and Dalabon (D) on the one hand, and of differences of both from Mara on the other, should be readily apparent.¹⁸ Typologically, Mara differs from BGW and D in numerous ways:

(a) it has noun-class prefixes on nouns and demonstratives that vary with case, whereas D has no noun classes at all, and BGW has noun-class prefixes that are case-insensitive;¹⁹

(b) Mara has number-marking suffixes on nouns, absent from both D and BGW;

(c) the structure of the Mara verb is quite different from those in BGW and D. Most Mara verbs are constructed by combining an uninflecting coverb (like *rang* 'hit' in [1a]) with an inflecting verb prefixed for subject and object and with an involved system of showing TAM through prefixation, stem-suppletion, and/or suffixation according to the category. D and BGW both have a complex templatic verb structure, with a single verb (though this may be a compound), beginning with prefixes coding subject and object and followed by a long string of prefixal morphemes (some shown in [2a,b]) for applicatives, incorporated nominals, adverbial categories, and so forth; TAM is essentially encoded by verbal suffix, though with additional contrasts in the pronominal prefix set, restricted to two categories in BGW but with around six contrasts in D.

In terms of form, as well, BGW and D share many similarities not found at all in Mara: the root *bi* for 'person' (augmented to *bininj* in BGW), the root *bo* for the past perfective of 'hit' (alternating, in both languages, with *bu* in other tenses), and the special prefixal form *b* + high vowel that is used just in the combination of third person singular subject with third person singular human object.

These examples should give a feeling for the reasons why all previous classifications of Arnhem Land languages place BGW and D together within the Gunwinyguan group,²⁰ and Mara in a completely different one. Comparable objections, mutatis mutandis, can be made to most of the intermediate-level groupings found in Dixon's NB "group." (The lower-level groupings are mostly plausible, except for the position-

17. Here I use the Gun-djeihmi dialect of BGW, which is most westerly, and therefore most geographically distant from Dalabon. This is to avoid the risk of showing convergent features. The most easterly dialect, Kune, is even closer to Dalabon in its structure (see Evans 2003c for a sample text in both varieties).

18. According to my counts on the same basic list of 152 words used above, Bininj Gun-wok and Dalabon share around 49 percent of their lexicon; with Mara this drops to around 6.7 with Bininj Gun-wok (Gun-djeihmi dialect) and 4.1 percent with Dalabon.

19. With a residual locative set in the neuter and vegetable classes—see Evans 2003c.

ing of Anindilyakwa mentioned above, and the failure to group Gurrigoni more closely to Burarra than to the other Maningrida languages.) We are left—and without any justification for the reasons—with a misleading and idiosyncratic classification.

3.2 THE LANGUAGES OF THE TORRES STRAIT (“AI”). The Torres Strait separates Australia from New Guinea and contains what is normally regarded as the only “non-Australian” language spoken within Australia’s political borders: Meryam, spoken on the island of Mer (Murray Island) in the eastern part of the Strait, which is a Papuan language of the poorly known Trans-Fly family. On the western islands are various dialects (Kala Lagaw Ya, Kala Kawaw Ya) of a language that has traditionally been regarded as Australian (this is the view given in LoA) and, for many authors since O’Grady et al. (1966), as belonging to the Pama-Nyungan family. Its speakers, however, are culturally and physically very different from peoples on the Australian mainland, and the language itself has significant “un-Australian” features such as /s/ and /z/ phonemes, as well as other signs of mutual convergence with Papuan languages that we discuss below.

The AL classification, however, takes a strange further step, including both Meryam and the Western Torres Strait languages together under “A. Torres Strait Group” (see AL:129–30 for discussion). In the classificatory terminology of AL (see p. xxv), “group” is used “simply for languages grouped together on a geographical basis,” that is, without any implication of genetic relatedness. However, on p. xxx it is stated, of Meryam and the Western Torres Strait language (Dixon’s “AI”), that “these are Papuan languages, not closely related to each other. AI has a significant Australian substratum.”

An initial idea of the “Australianness” of the Western Torres Strait language compared to Meryam can be gained from table 1, which compares the pronoun system of Western Torres Strait (Kala Lagaw Ya dialect) with that of Meryam and of another Trans-Fly language, Gizra (data for the latter two from Piper 2001). Alongside, I give forms that have been proposed for Proto-Pama-Nyungan by Blake (1988) and Alpher (2004).²¹

The resemblance of form between the Meryam and Gizra pronouns is striking. On the other hand, many of the KLY forms have straightforward Pama-Nyungan cognates. Most obvious is 1SG *ngay*, and even more probative is the proportion *ngay*: *ngath*: *ngoena* between the nominative, ergative, and accusative forms. Once we allow for the descent of **nh* as *n* in Western Torres Strait, this clearly mirrors that reconstructed for Proto-Pama-Nyungan between NOM *ngay*, ERG *ngathu*, and ACC *nganha* (cf. Diyari NOM *nganhi*, ERG *ngathu*, and ACC *nganha*, which shows the latter two forms clearly).²²

Note further 2PL *nipel* as a cognate of *NHumpala*; the lack of a laminal nasal in Western Torres Strait (and consequent descent of *NH* as *n*) is a good candidate for Papuan influence. Another two clearly Pama-Nyungan pronouns are 3DU *palay* and 3PL

20. This is not to say that the genetic relationship of BGW and Dalabon is completely straightforward, because Dalabon has converged in some features with BGW and in others with Rembarnga, which belongs to a different group within Gunwinyguan. However, the point I am making is that, whatever their exact internal position, both clearly belong within the Gunwinyguan family.

21. It is currently unclear whether pPN had an inclusive/exclusive contrast, and if it did whether this included both dual and plural forms, and there are still unresolved problems with the initial laminal contrast that I avoid here by using the noncommittal representation *NH* to represent *ny* / *nh* and *TH* for *c* / *th*. See Alpher (2004) for a more sophisticated discussion of this problem.

22. I thank Barry Alpher for pointing out this particular parallelism.

thana; the correspondence between the two laminals, *c* and *th*, is widespread in Pama-Nyungan, though its specifics here remain to be worked out. Other KLY pronouns may also turn out to be relatable: the *ngal*-based exclusive forms to *ngali* (if one permits a flip from inclusive to exclusive), and if a consistent way can be found of realizing the laminal nasals, which are absent from KLY, it may be possible to regard *nuy* as a cognate of *nhu*-, *na*- as a cognate of *nha*-, and *ni*- as a cognate of *nyina*-.

Other Western Torres Strait lexical cognates with Pama-Nyungan include *kosar*, the word for ‘two’ (*kucarra* in Pama-Nyungan languages, but almost completely absent in other Australian languages), several others listed in AL (129–30), and, in the grammatical domain, ABL *-ngu* (ditto), and possibly the nonproductive masculine increment *-n* (Alpher 1997:17).

Now there is no doubt that there has been substantial areal convergence between the languages of the Torres Strait. Phonological evidence for this in the Western Torres Strait languages includes the substitution of *s* and *z* for lamino-palatal stops, and the simplification of the nasal and liquid inventories. Grammatical evidence includes the development in the Western Torres Strait language of number-based verb suppletions characteristic of Trans-Fly languages; even more specifically, both have an unusual contrast between a singular/dual form on the one hand versus a plural form on the other. In terms of physical type, it is clear that a good part of the Western Torres Strait Islanders’ ancestry is Papuan. Nonetheless, the balance of evidence suggests this is a case of significant convergence between two languages whose distinct deeper origins are still clearly discernible. Though Dixon asserts (xxx) that both “are Papuan languages, not closely related to each other,” and imputes the Pama-Nyungan features in the Western Torres Strait language to “a significant Australian substratum,” this requires us to ignore impressive paradigmatic parallels between Western Torres Strait and Pama-Nyungan, and to classify the former as “Papuan” without supplying any

TABLE 1. FREE PRONOUNS IN WESTERN TORRES STRAIT
(KALA LAGAW YA DIALECT) AND MERYAM,
COMPARED WITH GIZRA (PAPUAN) AND PROTO-PAMA-NYUNGAN

	Proto-Pama-Nyungan	Kala Lagaw Ya	Meryam	Gizra
1 SG	ngay(u) (obl. ngathu)	ngay (Erg ngath)	ka	ka
1 DU INCL	ngali	ngoeba/ngaba		
1 PL INCL	?	ngalpa	mi	mi
1 DU EXCL	ngana	ngalbe/ngalbay		
1 PL EXCL	?	ngoey	ki	ki
2 SG	nyina (Alpher 2004)	ni (erg nidh, acc. nin)	ma	ma
2 DU	NHumpalV	nipel		
2 PL	NHurra	nitha	wa	e (?)
3 MASC SG	NHu-	nuy/nuydh	e	wa (?)
3 F SG	NHan-	na/nadh		
3 DU	pula	palay		
3 PL	THana	thana	wi	i

Papuan language that it is supposed to be related to. The whole area is ripe for a proper typological study of convergence, complemented by an interdisciplinary approach that would begin to give clearer dates for the recolonization of the Torres Strait Islands from north and south.

3.3 OTHER ISSUES IN CLASSIFICATION. Fortunately, not all aspects of the classification are as strange as the two cases discussed above. Many other groupings are reliable, either incorporating recent advances (as is the case with Mindi, Ngarna, and Tangkic) or following long-established classifications: this is true for all the Kimberley families (Dixon's ND, NE, NF, and NG) though in the last three he introduces new nomenclature: Fitzroy River Subgroup instead of Nyulnyulan, South Kimberley Subgroup instead of Bunaban, and North Kimberley Areal Group instead of Worrorran.

There is a further overall problem with the classification, however, relating to its lack of any explicit proportionality in terms of degrees of embedding, at whatever level one considers. I shall term this "phylogenetic scale distortion."

First consider two examples at the highest level: Yolngu vs. Arnhem, and Tiwi vs. Umpithamu.

First, Y (Yolngu subgroup), a group of languages about as closely related as Romance, is treated as equivalent, in terms of taxonomic depth, to NB (Arnhem), which hasn't yet even been shown to comprise related languages and which, as mentioned above, is about as internally diverse as Austric.

In the case of Yolngu and Arnhem we are comparing two groups with complex internal structure. But we also encounter problems with languages treated as isolates at this highest level; we will exemplify this with Tiwi (NL) and Umpithamu (C). Tiwi has long been recognized as difficult to relate to other Australian languages: spoken on Bathurst and Melville islands, it is likely to have been isolated from the Australian mainland for around 8,000 years. In LoA, it was explicitly mentioned as one of the languages²³ that cannot be shown to be related to other languages of the continent,²⁴ a view also held by other scholars who disagree with Dixon on many other points of classification (e.g., O'Grady 1979). I am not aware of any Australianist scholar who would argue with the decision to maintain its isolate status. Umpithamu, however, is quite another case. In the O'Grady et al. classification it was placed in a highly embedded position: within Lamalamic, within Pama-Nyungan. Rigsby (1997), the foremost scholar of the Lamalamic languages, suggests that the similarities Umpithamu shares with the Lamalamic languages may reflect convergence rather than inheritance, but certainly does not suggest it should be treated as an isolate. Most recently, Verstraete (2005) has pointed out striking similarities in the pronoun paradigms of Umpithamu and Ayapathu (Ayabadhu), a language located in AL as Bc6, within the Wik subgroup (Bc) of the North Cape York subgroup (B). Once one allows for the fact that Umpithamu has dropped initial consonants, and that Ayapathu appears

23. Interestingly, the other language he mentions, Jingulu (Djingili), has since been brought into the fold through work by Blake, Chadwick, I. Green, and Nordlinger, and is now considered to be a member of the Eastern Mindi group, within the larger Mindi group, a reclassification reflected in AL, which classifies it as NCb1.

24. Though see Evans (2003b:19,21) for some intriguing similarities in the pronominal prefix and nominal prefix paradigms.

to have lost its original dual vs. plural category (except for the first inclusive), generalizing the dual to plural use, the formal similarities between the two systems are striking—see table 2. Though our information on Ayapathu is limited, so that the data comes from different speakers and does not cover a whole 100-word list, Verstraete calculates that it shares about 44 percent (27/61) of its vocabulary with Umpithamu.

No reasons are given in AL for the decision to treat Umpithamu as an isolate, and in fact, in two places, sound changes are mentioned that only make sense if Umpithamu is considered to share a common ancestor with other Cape York languages: lenition of initial stops (594), and the fact that "in Umpithamu, some p, t and k have been retained and some have been replaced by *ʔ*, e.g. *kauku* > *ʔauku* 'language' (615).²⁵ To classify Umpithamu as an isolate on the same level as Tiwi is to seriously distort the special significance that true isolate groups have to our understanding of the continental picture.

Now let us consider the second level of embedding. The "Southern Daly" group (NHD), contains two languages (Murrinh-Patha and Ngan-gi-tyemmerri) that share only around 8 percent of basic vocabulary, and that display "a paucity of formal correspondences in most areas of grammar" (Ian Green 2003:126). Until very recently they were considered to belong to completely different families. I. Green (2003) has recently made a convincing case for their relatedness based on far-reaching similarities across dozens of irregular prefixal paradigms, but this is not matched by significant similarities elsewhere in their grammar or lexicon, and seems to reflect the preservation of paradigmatic evidence for relatedness in a favored morphological environment while time has whittled away virtually all other similarities. Likewise, the Maningrida subgroup (NBf) contains Burarra and Ndjébbana, again sufficiently distinct to have been considered members of distinct families until quite recently, and sharing only 15.5 percent of basic nominal and 29 percent of verbal vocabulary (Rebecca Green 2003:369). On the

TABLE 2. COMPARISON OF SOME PRONOMINAL FORMS IN UMPITHAMU (U) AND AYAPATHU (A)[†]

	NOM (U)	NOM (A)	OBJ (U)	GEN (A)
1SG	ayu(wa)	ngayu	athunggu	ngathu
2SG	inu(wa)	nhinu	ungguna	nhingku
3SG	ilu(wa)	nhilu	unggu	nhingu
1+2	ali(ya)	ngali	alinggu	ngalingu
2 DU (U); 2 PL (A)	ipu(wa)	nhipu	ipunggu	nhipungu
3 DU (U); 3 PL (A)	ula	pula	ulanggu	pulangu

[†] I thank Jean-Christophe Verstraete for bringing these similarities to my attention (Verstraete 2005). The Ayapathu data come from Bruce Rigsby (n.d.), who extracted them from Donald Thomson's fieldnotes, recorded when he was working at Port Stewart with a group consisting of Ayapathu, Umpithamu, and Umbuygamu people.

25. Ian Green (pers. comm.) points out that one could always retort that initial dropping itself could be a diffused areal feature, which it may well be. But my point is that without assuming some form of the comparative method it is not clear how one is justified in imputing an earlier stage *kauku* to the Umpithamu data, unless ">" here means "is borrowed and in the process undergoes the following sound change."

other hand NAb, Dixon's "Kayardild/Yukulta subgroup" contains languages that are mutually intelligible despite their different grammatical structures, had earlier been described as dialects of a single language, have cognate forms for the majority of grammatical morphemes, and share around 80 percent of basic vocabulary, rising to 92 percent for verbs (Evans 1995:11).

The fact that groupings ostensibly at the same level of taxonomic embedding can differ so dramatically in their amount of similarity—80 percent (Tangkic) vs. eight percent (Southern Daly) common vocabulary; and no-brainer grammatical relatedness (Kayardild/Yukulta) vs. the need to overcome reader incredulity (Southern Daly) makes it impossible to use the AL classification for any purpose that requires that proportionate degrees of relatedness be preserved in the scheme, for example, for purposes of typological sampling. It also conceals the strikingly nonhomogeneous distribution of deep-level diversity across the continent, because the fifty or so primary groupings in AL vary so greatly in their degree of internal homogeneity.

4. THE MYTH OF THE 50 PERCENT EQUILIBRIUM LEVEL. A possible motive for Dixon to disregard shared-vocabulary figures in his classification is his oft-voiced view that, over time, neighboring languages come to share an 'equilibrium level' of 50 percent basic vocabulary, regardless of their degree of genetic relatedness, thanks to a combination of factors that includes word-taboo following death, and borrowing from neighboring languages to replace the tabooed word. This model, first published in Dixon (1972:331–36), has been repeated in a number of his subsequent publications (e.g., LoA:254, Dixon 1997:26–27, Dixon 2001:84) and gets another run here as well, in essentially unchanged form (AL:27–29).

Curiously, this claim, though widely cited, has never been based on clear published evidence that goes beyond the geographically circumscribed group of languages in the Cairns rainforest region which, *pace* Dixon, are all relatively closely related by continental standards. In the original discussion the closest reasonable case is the 46 percent shared between Warrungu (Maric subgroup) and Girramay (in the Herbert River group that includes Dyirbal). But even though this figure has been bolstered by borrowing, Maric and the Herbert River group are not particularly distant genetically: at the very least they are both Pama-Nyungan (according to those scholars who accept it) and may additionally share closer ancestry. Warrgamay, which shares 60 percent with its neighbor Girramay, was given as an example of shared vocabulary "at the upper end of the equilibrium range" but in fact the two languages are closely related, and are now placed in the same "Herbert River Group" in AL:xxxiii.

If we look at some figures from other parts of the continent, where we have better evidence for the genetic distinctness of the languages involved, the figures we find between neighboring languages drop dramatically. Consider the boundary between languages of the Nyulnyulan family and its Pama-Nyungan neighbors to the south, tabulated in Stokes and McGregor (2003), where "only two pairs involving a [Nyulnyulan] and another language share 30 percent or more core vocabulary" (Stokes and McGregor 2003:36), namely Ngumbal and Karajarri (30 percent) and Yawurru and Karajarri (37 percent) (35).²⁶ Here are some further examples:

- In the Barkly Tablelands, Wanyi (from the Garrwan family) shares only 21 percent with its neighbor Wambaya, despite sharing many grammatical morphemes suggestive of either long-term contact or even shared group membership, and with Wakaya, a Pama-Nyungan language adjoining it to the south, it shares only 12 percent (Breen 2003:430).

- Murrinh-Patha and Ngan'gityemerri have on all available evidence always been neighbors. Ian Green (2003), as mentioned above, has recently shown them to be related on the basis of scores of common irregularities in their complex verb paradigms, but they share only eight percent of basic vocabulary, and in fact Murrinh-Patha doesn't share more than 10 percent with any of its neighbors.

- In the Torres Strait, Mabuag (a dialect of the Western Torres Strait language) and Meryam Mir (a Papuan language with relatives like Gizra in the Fly River region) share only 11 percent of vocabulary, despite substantial mutual influence in grammatical structure, such that the AL classification assigns them to a single "group" (cf. 3.2 above).

- Mara (Maran) and Yanyuwa (Warluwarric branch of Pama-Nyungan),²⁷ according to Hale's calculations, share only two percent of basic vocabulary (Alpher and Nash 1999:27), though Blake (pers. comm.) calculates 11 percent.

The only case known to me where neighboring languages that are not closely related genetically approach anywhere near the 50 percent figure is the pairing Ngandi (Gunwinyguan) and Ritharrngu (Yolngu), which have particularly close social relationships and an asymmetry in size in precontact times (around 60–70 Ngandi but around 300–400 Ritharrngu). This pair is described by Heath (1979) as sharing "nearly 50 percent";²⁸ it shows that it is possible to get this high, but that normally special sociolinguistic circumstances are involved. Even here, though, the figure is likely to be lower: Heath did not, as far as I know, publish his figures, and a recent recount I performed on the same 152 word list mentioned above yielded the somewhat lower figure of 41 percent.

The 50 percent equilibrium model has been refuted in an important paper by Alpher and Nash (1999),²⁹ whose careful study shows that (a) the effects of word taboo in Australia are far less significant than had previously been thought, owing to the frequent "return" of tabooed words and that (b) the equilibrium percentage is half of the proportion of lexical replacement due to borrowing, with empirical evidence suggesting that the equilibrium level between adjoining languages is unlikely to exceed 25 percent (and even this lower level requires us to assume that borrowings can never be identified, for example). While not denying the effects of borrowing, they conclude

26. On p. 46 of AL, Dixon states that "between the 'Nyulnyulan phylic family' [my NE] and the 'Marrngu subgroup of the South-west group of the Pama-Nyungan phylic family' (WI) there is a c. 40 per cent cognate density." It is not stated where these figures come from, and they seem to be significantly inflated: the figures in Stokes and McGregor (2003:34) range from 9 percent to 37 percent, with a median of 11 percent.

27. AL accepts the reclassification of Yanyuwa into Ngarna (his WM) but not the reclassification of Ngarna into Pama-Nyungan.

28. Harvey (1997) states they "share 50 per cent," but this appears to be simply an inflationary restatement of Heath's original claim.

29. Though not published until 1999, this paper was originally presented at a meeting of the Australian Linguistics Society at Alice Springs in 1984, so its findings have been known to Australianists for some time.

that lexicostatistics remains a "blunt but useful instrument" in studies of Australian languages (48). See also #Black (1997) for similar arguments; his paper demonstrates that in Australia core vocabulary is, in fact, less prone to borrowing than other domains.

Though AL briefly mentions Alpher and Nash's paper on p. 30, the author's response is simply to reassert his own views: "A high proportion of long-term contact situations do show 40–60 per cent shared vocabulary, that is, the empirical facts support the model given above." However, he does not actually adduce any new examples illustrating the "40–60 percent" case, let alone consider enough cases to demonstrate that these do in fact constitute "a high proportion." The failure to give any new supporting evidence is striking given the panoply of facts and studies from across the continent that are marshalled in this book.

Lest I be misunderstood here, I certainly do not want to claim that borrowing is insignificant in the Australian context. Rather, I would stress that

(a) the extent of borrowing between neighboring languages varies significantly with the region and with the nature of the relationships between them, with high levels of borrowing being a special case (as with Ngandi-Ritharrngu), rather than the norm; both sociopolitical factors (particularly the closeness of relations between any pair of groups) and linguistic factors (the phonological proximity of the two languages, favoring or disfavoring the ready adoption of loans) are likely to play a role;³⁰

(b) methodologically, the assertion of higher-than-average levels of borrowing needs to be based on cases where there is clear evidence from the grammatical morphology that the languages aren't closely related—ideally, between languages of demonstrably different subgroups or families. It is not enough to simply assert that languages sharing close to 50 percent vocabulary are a "small linguistic area," because it may well be true that they are in fact a genetic group. This is the problem with several of the "small linguistic areas" considered in the final chapter of AL:

i. Arandic, where Arrernte and Kaytej "share about 44 percent vocabulary," as against rates between 2 and 22 per cent with their other neighbors. Though Dixon states on p. 672 that "the two languages cannot be shown to constitute a low-level subgroup," Koch (2004) provides a detailed and convincing reconstruction that confirms the O'Grady et al. classification of Arandic as a subgroup. The fact that Arrernte and Kaytej share about 44 percent is thus largely due to inheritance rather than borrowing.

ii. the "North Kimberley small linguistic area," where shared lexical similarities between neighbors run to 40–60 percent, has again elsewhere been considered to be a family (Worrorran). Dixon mentions some of the grammatical similarities between them (673) but claims the evidence is insufficient to consider them an innovation-defined subgroup. Since the appearance of AL, McGregor and Rumsey (2003) have presented convincing evidence for the relatedness of the languages of this group, so here again the percentage of shared vocabulary is at least in large part due to inheritance.

iii. Kalkatungu and Yalannga share about 43 percent core vocabulary and 10 percent of their verbs. Again, conventional classifications treat these as members of one subgroup, whereas Dixon argues in AL (679) that the evidence for subgrouping is insufficient, and that "few grammatical forms are similar." Among the distinctive

30. This point is due to Peter Sutton (pers. comm.).

shared similarities of these two languages, however, we can cite the following (drawn from Blake and Breen forthcoming): third person possessor suffix (Y-*yantja*; K-*intji* ~ *antji* ~ *untji*), the 'other' suffix (*-ngarra* in both languages), shared irregular inflections in the verbs 'to see' (present *nanyi* in both, past Y *nanga*; K *nanya*, future *nanyi* in both) and 'to give' (present Y *ngunyi*, K *anyi*; past Y *ngunga*, K *anya* ~ *anga*; future Y *ngungi*, K *angi*), the construction of nominalized verb inflections: agent-noun (Y-*ntjirri*; K-*ntjirr* ~ *tjirr*), dative applicative (Y-*nyama*; K-*ntjama* ~ *tjama*), participial (Y-*nyana* ~ *yana*; K-*nyin* ~ *tjin*), and the 'hence' suffix (*-nthu* in both). There are also regular correspondences between the two, with Kalkatungu showing a number of innovations such as loss of a number of consonants between identical vowels, the weakening of *l* to *y* (also between vowels), and the raising of *a* to *i* when flanked by a laminal consonant with *a* in the following syllable. Though it is always possible to claim that all the above morphological similarities are due to borrowings, the levels of shared patternings—particularly in the paradigms for nominalizations and the irregular verbs cited above—certainly do not rule out the interpretation that the similarities in these languages are simply due to shared inheritance;

(c) the levels of borrowing one finds in Australia are in general no higher than in such familiar cases as French–English, so that it is unclear why Australia needs to be treated as a "special case"; borrowing poses no greater problems to lexicostatistic classifications, or to the comparative method, than it does in Indo-European or Austro-nesian, for example.³¹

It is now time to reassess the 50 percent equilibrium claim, and downgrade its status from dogma to apocrypha. The heuristic and cautious reinstatement of lexicostatistics—obviously in conjunction with the other tools that the comparative method provides, as well as other little-used quantitative methods such as functor analysis³²—can help overcome some of the problems of "phylogenetic scale distortion" that are so damaging to the AL classification.

5. THE PAMA-NYUNGAN DEBATE. No other issue in comparative Australian linguistics has been as hotly disputed as the question of whether there exists a proveable high-level subgroup along the lines of 'Pama-Nyungan'. The Pama-Nyungan grouping that Hale came to recognize in the early 1960s and which first appeared in print, as far as I know, in O'Grady, Wurm, and Hale (1966),³³ spans seven-eighths of the continent. It is named after the words for 'person' in the northeastern (*pama*) and southwestern (*nyunga*) extremes of the continent.

An idea of just how polarized the Pama-Nyungan issue is among Australianist scholars can be obtained by comparing the following quotes:

31. I would add the caveat that the similarity of Australian phonological systems makes borrowing harder to detect on phonological grounds. But many studies have been able to overcome this through careful reasoning from sound changes, and in any case other lines of argument remain, e.g., from the presence of morphemes etymologizable in one language but not another. See Nash (1997) for a nice example.

32. For a rare application to Australian languages, see Zorc (1976).

33. Though Wurm (1963:136n2) reports Hale's proposing the name "Pama-Nyungan."

The 'Pama-Nyungan' idea is a pervasive one, used both by Australianists and by linguists at large. However, it is totally without foundation and must be discarded if any progress is to be made in studying the nature of the linguistic situation in Australia. [AL xx]³⁴

For decade after decade, Dixon (1970a, 1980, 1997, 2001, 2002) has persisted in the same wrong-headed assessment of the phylogenetic status of the large Pama-Nyungan group of Australian Aboriginal languages. His claim, which is extravagant and spectacularly erroneous, is that it has no genetic significance in the wider Australian linguistic context. Moreover he denies that the Comparative Method can be applied to Australian languages.

This approach is so bizarrely faulted, and such an insult to the eminently successful practitioners of Comparative Method linguistics in Australia, that it positively demands a decisive riposte. (O'Grady and Hale 2004:69)

Before continuing, we note that work by Blake (1988) and Evans (1988) has led to some revisions of the classification, as it affects languages in the southwestern Gulf of Carpentaria. These two publications remove Tangkic from Pama-Nyungan and treat it as a separate non-Pama-Nyungan group, and in exchange reclassify Yanyuwa, originally treated as a non-Pama-Nyungan isolate, into Pama-Nyungan, and more specifically into the subgroup known as Warluwaric (Dixon uses the term Ngama for this subgroup). The two languages of the Garrwan family have also been the subject of some debate, and have borderline status, but will here be regarded as the non-Pama-Nyungan group most closely related to Pama-Nyungan (see Evans and Jones 1997). In what follows, "Pama-Nyungan" should be taken to designate this revised grouping. Note that there are two important discontinuous blocs in addition to its main continental distribution, and that both adjoin the western half of the Gulf of Carpentaria: the Yolngu languages of Northeast Arnhem Land, and Yanyuwa along the southwestern Carpentaria coast. Note also that scholars who accept Pama-Nyungan as a construct assume that the Western Torres Strait language is a Pama-Nyungan language (see 3.2 above).

When one attempts to integrate the findings of historical linguistics with other disciplines concerned with the deep past, such as archaeology and genetics, the proposed Pama-Nyungan grouping poses many explanatory challenges, such as how to explain massive language expansion among small-scale, egalitarian social groups, when and how this expansion occurred, and whether there is any corroborating evidence in the archaeological record or in the genetics of modern populations. Though some ideas have been advanced (Evans and Jones 1997, Evans and McConvell 1998), these certainly do not constitute anything like a well-worked-out integrated scenario, and in this sense Dixon is correct in saying that we still lack any definitive answer to these questions: "no plausible cause presents itself for a wide-scale punctuation of the sort needed" (53). But the same criticism may be made, in equal measure, of the diffusion-based scenario advocated in AL, which requires us to scale up by a huge factor from the well-studied local linguistic areas to an immense zone occupying most of the continent.

34. So consistently does Dixon follow through the process of discarding the idea that the term "Pama-Nyungan" does not even appear in the indexes at the back of the book, though the primary section discussing it (44–54), entitled "The 'Pama-Nyungan' idea," does appear in the table of contents. See also xviii, xx, 276–82.

Further, a puzzle is not a disproof, and a word on method in diachronic anthropology is in order here. Although, ultimately, we need to give a "consilient" account, in the sense of E. O. Wilson (1998), that yokes together the scenarios offered by linguistics, genetics, archaeology, comparative ethnography, and other disciplines of the past, the case for or against a Pama-Nyungan language, like that for any linguistic subgroup, needs to be assessed on solely linguistic grounds. It is thus not a counter-argument against the Pama-Nyungan hypothesis to say that no convincing archaeological explanation for it has been found. For these reasons, in what follows I will concentrate on the strictly linguistic side of the debate.

The evidence for Pama-Nyungan has, in fact, been slowly adding up over the last four decades. Pama-Nyungan originated as a rough-and-ready lexicostatistical classification (with values of 10 percent or more of shared vocabulary between virtually all pairs of languages within PN, and almost always < 10 percent between any PN to any non-PN), though this was augmented by the informal use of other evidence where this seemed judicious. These origins seem to be the reason why Dixon comments, on p. 48, that "The lexicostatistical classification has been accepted by the majority of people working on Australian languages." However, my own take on the field is that the lexicostatistical evidence has been secondary, at best. More significant has been the gradually accumulating evidence from other areas, in particular innovative grammatical morphology, especially as organized in three paradigms:

- (a) free pronouns (O'Grady 1981a, Blake 1988);
- (b) case suffixes including distinctive formal alternations like the *-la* ~ *-ngka* set for locatives and the *-lu* ~ *-ngku* set for ergatives,³⁵ first pointed out by Hale (1976), but also accusative *-nya*, dative *-ku*, and ablative *-ngu* (Blake 1988);³⁶
- (c) tense/aspect/mood suffixes on verbs, particularly important because of the occurrence of arbitrary conjugationally determined variants.

The latter domain has a particularly interesting history. Following work by Alpher (1972) on the importance of conjugational irregularity in Western Cape York, Dixon (1980) in LoA then used evidence from verb conjugations as a key part of his argument that all Australian languages were related, reconstructing them to the "Proto-Australian" level. Reviewers of LoA, however, pointed out that the evidence for conjugation markers was, in fact, confined to Pama-Nyungan because the descriptive materials on which the reconstructions were based were all from Pama-Nyungan languages (O'Grady 1981b, Heath 1990:403). Since then, Alpher (1990) has strengthened the case for reconstructing inflected words with conjugational irregularities to the level of Pama-Nyung-

35. Sands (1996), in a monograph-length discussion of this problem, proposes a number of changes to this scenario, rehearsed and extended by Dixon in AL. Although some of her points are valid—in particular, her evidence for including an allomorph *-thu* in the ergative alternant set at the level of Pama-Nyungan—many of her other arguments are not persuasive. For example, her proposal that *-thu* is the original form, repeated in AL, depends on a number of irregular sound correspondences, such as her claim on pp. 40–41 that *-yi* or *-yi?* in Dalabon, Bininj Gun-wok, Rembarnga, and Ngalakan are cognates of *-thu*, made in the absence of any evidence of lenition of *th* to *y* in either of these languages, or of a change from *u* to *y* in this environment. (With Ngandi *-thu* ~ *-dhu* the situation is different and it is likely to be a Yolngu loan, in the light of the widespread borrowing between Ngandi and Ritharrngu.)

36. Dative **-ku*, unlike the others, has a significant number of non-Pama-Nyungan reflexes.

gan.³⁷ And Alpher, Evans, and Harvey (2003), by reconstructing TAM-inflected forms of a number of verbs in Gunwinyguan, have given some ideas about how the Pama-Nyungan system may have emerged. Most probably this involved the analogical extension of unpredictable consonant endings, which originally would have been scattered across the various TAM inflections rather than regularly present before the TAM exponent as in the putative pA consonant-final roots of Dixon.

Besides the morphological evidence from these paradigms, at least one phonological innovation has been attributed to the level of Pama-Nyungan, namely the laminalization of initial apical stops and nasals, thereby merging them with preexisting laminals (Evans 1988), and a slow accumulation of etymologies. O'Grady and his collaborators (see O'Grady and Hale 2004 and references therein) have published a number of etymological sets, now running into the thousands. These are certainly overinclusive, both on semantic and phonological grounds, and are best seen as a sort of "first sifting" of many terms that careful semantic or formal scrutiny will surely discard. Nonetheless, perhaps 25 percent of these etymologies are basically solid.³⁸ More recently, Alpher (2004) has published a list of several hundred Pama-Nyungan cognate sets with very careful phonological argumentation for each correspondence set in each word-position.

Dixon mentions most of the above data in the course of his book—in fact, AL contains a more detailed and far-reaching compilation of relevant data than any work that has gone before. The differences between him and the pro-Pama-Nyungan camp, then, do not turn so much on disagreements about data, but rather on what methodology should be used to interpret it, for example, on how to assess isoglosses in cases where relevant forms have been lost from large numbers of languages, and on how much evidence needs to be given in support of a claim of diffusion: is a form diffused until proven inherited, or inherited until proven diffused? According to one's position on these questions, one will either assert, as Dixon does, that only a single isogloss correlates well with the Pama-Nyungan / non-Pama-Nyungan boundary—the isogloss for the first person dual inclusive form *ngali* and its cognates—or will conclude that in fact there is a striking bundling of isoglosses that cannot be plausibly attributed to diffusion.

Let us review this issue by starting with *ngali*, then passing to several other cases, piling up isoglosses as we go. I draw on the maps in AL for most of the data, supplementing them with some additional material and superimposing them on what I believe to be a more plausible classification of Australian languages, basically that given in Blake (1988) and Bower and Koch (2004) with regard to the Pama-Nyungan border, and Evans (2003a) with regard to the classification of non-Pama-Nyungan languages. Map 1 gives the basic set of groupings I will be using.

37. This reflects a difference in methodological emphasis between Dixon and Alpher: Dixon's (1980) reconstruction posited combinations of invariant affixes with invariant conjugation markers (then requiring the assumption of some irregular sound changes to get from the postulated combinations to attested modern forms), whereas Alpher's (1990) reconstruction works back from inflected words, trying to maximize regularity of sound change, at the cost of producing a less tidy protoparadigm that is not completely segmentable into conjugation marker plus TAM desinence.

38. The problem of how to adjudicate on unfamiliar semantic changes—on what O'Grady (1979:129) called "the tangled web [of] Pama-Nyungan diachronic semantics" has given rise to a literature of its own, approaching plausibility from the angle of continent-wide typologies of lexical polysemy that harness a range of semiotic systems including special speech registers and sign language: see particularly Wilkins (1996) and Evans and Wilkins (2001).

The free pronoun *ngali* was first proposed as a diagnostic of Pama-Nyungan—and therefore as "a quite modern innovation on the Australian linguistic scene"—by O'Grady (1981a). As Dixon (2002:277) concedes, it "is found in the great majority of languages from groups A-Y, WA-WM [i.e., the languages considered Pama-Nyungan by many scholars, plus Garrwa and Wanyi, their nearest relatives, though there as an exclusive rather than an inclusive pronoun—N.E.] and in none at all from NA-NL."³⁹

MAP 1. MAJOR AUSTRALIAN LANGUAGE FAMILIES

39. We should mention, though, that Kayardild and Yukulta, in the non-Pama-Nyungan group Tangkic, have a form *ngal-* for the first person plural exclusive (and therefore different from *ngali* in both number and exclusivity). Comparison with its Lardil equivalent *nyali*, however (which has palatal-initial cognates further afield, such as Dalabon *nyel*), suggests the Kayardild/Yukulta form is innovative, with initial *ng-* analogized from other first person initials such as *ngada* 'I'; I therefore follow Dixon here in not considering it a cognate.

The shading on map 2 shows the distribution of this etymon, which can be seen to align very clearly with the Pama-Nyungan / non-Pama-Nyungan boundary, except for the presence of cognates of *ngali* (though with first exclusive meaning) in Garrwa/Wanyi, the family most closely related to Pama-Nyungan.⁴⁰

Examining the evidence, Dixon mentions two possible hypotheses: the Pama-Nyungan hypothesis, which would see it as an inherited form from Proto-Pama-Nyungan (retained in most descendants but lost in a few), and the 'diffusional hypothesis', that it 'has simply diffused over a continuous area'. Its presence in noncontiguous Yolngu is acknowledged as a problem for the diffusional hypothesis, to be resolved by the assumption that 'Y did form part of this diffusion zone at some time in the past'. Yanyuwa, not mentioned in AL, constitutes a similarly problematic case, though here the discontinuity is likely to be more recent. In favor of the diffusional hypothesis, Dixon points out that the

MAP 2. DISTRIBUTION OF 1ST PERSON INCLUSIVE DUAL PRONOUN
*NGALI AND ITS REFLEXES (ADAPTED FROM DIXON 2002:278)

40. The corresponding map in AL (278) shows the distribution of PN languages lacking the etymon: on this mode of presentation, white zones can have two interpretations: (a) they are non-PN (and, in fact, a *ngali reflex is absent) or (b) they are PN, and a clear *ngali reflex is present. In my version of this map shading indicates presence only. I have included those from his type (i) (containing 1nsg pronouns with *ngal-* plus an increment) but not the other types of absence.

PN languages lacking *ngali* largely lie at the extremes of the PN area, and as a point against the PN hypothesis, the need to postulate loss of an ancestral form in "at least nine distinct areas" (280). How serious this latter problem is depends on one's assumptions about how to account for loss—something not always made very explicit in reasoning about the comparative method—but if one assumes that loss is a stochastic process that can target any lexeme in principle, we should be surprised if there was less loss.

As far as the diffusional hypothesis goes, three disadvantages not mentioned in AL are (a) that it covers a huge area—larger than any clearly demonstrated case of diffusion in Australia, (b) that it does not coincide with any independently defined culture area, and (c) that it does not coincide with features that we know independently to display areal features (such as the tendency to use independent verb lexemes as opposed to coverb + inflecting verb combinations), as well as the fact that it has problems with the Yolngu discontinuity.

Turning now to the ergative allomorph *-ngku*, shown in map 3 (cf. map 5.1 on p. 160 of Dixon), we again find it confined to Pama-Nyungan, in a number of distinct and geographically separate subgroups. (I have added shading for Yolngu, not present in the AL

MAP 3. DISTRIBUTION OF THE ERGATIVE ALLOMORPH *-NGKU AND ITS REFLEXES (ADAPTED FROM DIXON 2002:160)

version, on the basis of Alpher's (2004) recent arguments that ergative *-ngu* in Yolngu demonstratives is cognate, with the simplification of *-ngku* to *-ngu* being regular.) Though Blake (1988) took this to imply a Pama-Nyungan-level innovation, Dixon (164) rejects this on the grounds that, because it "is attested for no more than a third of the putative Pama-Nyungan languages," ... "[t]here is no justification for taking 'the innovation of *-ngu* as an ergative marker' to be a defining feature for all languages in ... a high-level genetic subgroup."

Here, again, the argument turns on assumptions about how wide attestation needs to be before the reconstruction of an ancestral innovation is warranted. But because, in the application of the comparative method elsewhere in the world, the independent occurrence of a form in two or three daughter groups is normally deemed sufficient to attribute it to the common ancestor, I do not see this as a strong objection: cf. "Meillet's principle," a.k.a. the three-witness principle, "that apparently cognate words must be present in at least three different languages before the words can serve as the basis for a proposed reconstruction" (Trask 2000:209). If we followed similar principles for Indo-European to those being invoked in AL, we would not be licensed to attribute the lexeme *re:g-* 'king' to the protolanguage, because it is only attested in Italic (Latin *re:x*), Celtic (Germanic *reich* is borrowed from Celtic), and Indo-Iranian (Sanskrit *ra:jan-*) (cf. Benveniste 1969:307). Nor would we be licensed to reconstruct labiovelar consonants for Proto-Indo-European, because they are found only in Anatolian (Hittite *kuit* 'what'), Latin (*quid/quod*), and Germanic (English *what*, *queen*). Reflexes of *-ngku* occur in around sixteen distinct Pama-Nyungan subgroups, according to Dixon's lower-level subgrouping; and even according to an updated version of the O'Grady et al. classification, which would put several of the western subgroups together under the Nyungic branch, it is still attested in around ten distinct subgroups, in five separate geographical blocks. On any interpretation, this clearly satisfies the three-witness principle, so that to reject it on the grounds that it occurs in less than a third of the putative Pama-Nyungan family is to set the bar of evidence way higher than it is set for applications of the comparative method elsewhere.⁴¹

We now add in three more pronoun forms: 2PL *nhurra* in map 4 (AL map 7.3, p. 269),⁴² 2DU *nhunpalV* in map 5 (AL map 7.4, p. 270),⁴³ and 1PL.EXCL *ngana* in map 6 (AL map 7.6, p. 275; I include the forms where it has shifted its semantics to 1PL.EXCL). In each case we get essentially the same effect: it is found over most parts of the Pama-Nyungan area, taking in both Pacific and Indian Ocean coasts, the discontinuous Yanyuwa in each case, and discontinuous Yolngu in two out of three (*nhurra* and *ngana* but not *nhu(m)palV*). Garrwan, again, is the only non-Pama-Nyungan family to witness a somewhat related form, *nimbala*, though without an initial laminal.

41. See Koch (2003) for similar arguments regarding the reconstruction of Proto-Pama-Nyungan nominal morphology.

42. I deviate from Dixon in including Yolngu in the attestations, on the basis of its reflex in the 2nd nonsingular dative 2 stem *nhurrawambal* (see e.g., Morphy 1983:51).

43. I follow Dixon in including the Western Torres Strait language, whose form is *nipel* in KLY (though *ngipel* in KKY, probably an innovation), but deviate in including Yolngu on the basis of attestations in Dhuwal/Djapu, Dhuwala, Ritharrngu, Djinang, Djinba, and Yanyangu, once one allows for the effects of regular loss of the stop from homorganic nasal + stop clusters (Alpher 2004:122–23); e.g., the Djapu 2N.SG stem is *nhunala-* (Morphy 1983:52).

In each case Dixon argues, from the absence of descendant etyma in a significant number of languages, against the validity of attributing the form to a protolanguage. For the reasons already given above I do not regard this as a serious objection, because loss is to be expected in all linguistic systems. What is more striking, I would argue, is that *none* of these forms is ever found in a non-Pama-Nyungan language. This is readily explained on the Pama-Nyungan account: they were innovations at the level of Proto-Pama-Nyungan, and therefore only found in the daughter languages of that group (though lost in many other daughter languages). A diffusionist account, on the other hand, is left with many awkward facts to explain: why does diffusion always stop at the Pama-Nyungan border, which is happy to let many other types of diffusion pass,⁴⁴ and in the case of the discontinuous languages Yanyuwa and Yolngu, why is it always them that contain the attestations, and not some others?

MAP 4. DISTRIBUTION OF 2ND PLURAL **NHURRA* AND ITS REFLEXES (ADAPTED FROM DIXON 2002:269)

44. Among the many types of apparently diffused phenomena that do not align with the Pama-Nyungan boundary are the structure of the verb lexeme (single stem vs. light verb + coverb), the geographical patterning of a whole range of phonological features (e.g., phonotactics, phoneme inventories), and the distribution of many lexemes such as those for artifacts.

If our question, then, is what the actual boundaries of the phenomenon are in each case, then Dixon is literally correct when he says that the isoglosses do not coincide, because each of the above individual phenomena within Pama-Nyungan shows a geographically distinct pattern of retention. But if our question is why the relevant forms are always penned up inside and against the Pama-Nyungan boundary, with a wide distribution across the Pama-Nyungan zone, and a number of distinctively Pama-Nyungan forms repeatedly occurring in three discontinuous areas, then we have a very significant clustering indeed.

We could repeat the same arguments by mapping many other forms, such as third person dual *pula* (again this would appear in Garrwan as well as Pama-Nyungan), third person plural *thana*, the other ergative case allomorph *-lu*, locative allomorphs *-ngka ~ -la* and accusative *-nha*⁴⁵ mentioned above, and of course for many lexical items. In

MAP 5. DISTRIBUTION OF 2ND DUAL *NHU(M)PALA AND ITS REFLEXES
(ADAPTED FROM DIXON 2002:270)

45. It is sometimes said that this appears in non-Pama-Nyungan, in the form of the object-marking element *-n-* within the pronominal prefix system (e.g., Kunwinjku *nga-* '1SG subject', *ngan-* '1SG object [e.g., with $\emptyset$ third singular subject]'; see further examples in section 7. I do not regard this as a persuasive argument, because we are comparing an element within a bound prefixal system with a suffix found with free nominals (both pronouns and nouns), and the two should be kept apart. If, as the evidence appears to me, the *-n-* in the prefixal system is more ancient than the accusative *-nha* in the system of free nouns and pronouns, then it is invalid to derive the former from the latter.

each case a comparable pattern will be found—distribution over much (though never all) of the Pama-Nyungan area, including the discontinuous zones, and complete absence from the non-Pama-Nyungan languages.

It is for these reasons, rather than out of a "pat pigeon-holing" (AL:53) or any particular trust in lexicostatistics, that Pama-Nyungan is proving to be a useful genetic construct in comparative Australian linguistics. Of course, many details remain to be spelled out (see the various chapters in Bower and Koch 2004 for further information), its relationship to the accounts of Australian prehistory offered by other disciplines is still puzzling, and the relationship of Pama-Nyungan to the non-Pama-Nyungan languages has barely been tackled (more on this in the next section). We will have reached a mature and convincing account when we can show, not just that certain morphemes and paradigms can be reconstructed to the Pama-Nyungan level, but how they arose from formally related morphemes and paradigms outside Pama-Nyungan. We also need more intensive research on the internal structure of Pama-Nyungan. The northwest Queensland and Murray River areas appear to be the most differentiated, with obvious relevance to accounts of Pama-Nyungan spread, while the main stretch from Cape York

MAP 6. DISTRIBUTION OF 1SG PERSON PLURAL EXCLUSIVE *NGANA AND ITS VARIANTS
(ADAPTED FROM DIXON 2002:275)

to Perth, and down much of eastern Australia, seems much more homogeneous. But such intuitive proportionalities, though often voiced informally, have yet to receive support from more principled studies using quantitative techniques.

Overall, though, the arguments given in AL against Pama-Nyungan do not strike home, in this reviewer's opinion. They rest, on the one hand, on some unsustainable assumptions about the relation between survival rates (in terms of attestation in descendant languages) and reconstructability, and on the other, on the assumption that diffusion can simply be asserted to have occurred, escaping the burden of evidence that is needed by inheritance accounts.

6. THE PROBLEM OF PRONOMINAL PREFIXES. Bound pronouns are found in a large proportion of Australian languages, in various guises—prefixed or suffixed, proclitic or enclitic, to the verb or to an auxiliary element. Together with case morphology, noun-class prefixes, verbal suffixation for TAM, and verbal suffixation for valence-changing operations like reflexive, reciprocal, causative, and comitative, they constitute one of the major domains of grammar where we can use organized paradigmatic systems for evidence of historical relatedness.

AL devotes one and a half chapters to the topic (all of chapter 8, and the first half of chapter 9). In many cases Dixon is undoubtedly correct in seeing patterns of bound pronominal use as subject to areal influence, ebbing and flowing as old forms and systems dwindle and are replaced by new ones, often at a different grammatical site, such as the well-known shift from prefixation in the western Mindi languages to suffixation in Jingulu as an erstwhile prefixed verb reduces to an auxiliary which is then suffixed to a newly developed set of verb roots, which were originally uninflecting coverbs—see Blake (1990), Ian Green (1995), and Green and Nordlinger (2004).

However, there is one point where I would like to propose quite a different account to that given in AL, concerning the issue of pronominal prefixes to the verb in (most) non-Pama-Nyungan languages, and the antiquity and relatedness of these systems. On p. 354, Dixon states: "It is clear that at an earlier stage Australian languages simply had free form pronouns." Are bound pronouns in non-Pama-Nyungan languages, as Dixon maintains, simply convergent but independent developments, spread from one group to another by diffusion, or do they represent a complex inherited system? This question is crucial to arguments about whether all Australian languages are related and relevant also to higher-level groupings of non-Pama-Nyungan languages and to the relationship between Pama-Nyungan and non-Pama-Nyungan. In fact, the amount of shared, paradigmatically organized morphology across non-Pama-Nyungan pronominal prefixing systems is sufficient that deeper-level reconstructions are likely to prove rewarding.

I will now give a taste of the sort of evidence that points to the relatedness of nearly all non-Pama-Nyungan languages, and allows a reconstruction of this domain of verbal morphology. (I say "nearly all" because there remain a few languages of the Darwin region—Limilngan and Larrakiya—as well as many languages of the Daly River, in which the reflexes of the forms to be assembled below barely appear.) To avoid clutter I will select a few representative morphemes from half-a-dozen witness languages that represent most of the diversity found among the non-PN languages, as well as possessing a good geographical spread.

Most non-PN languages, and by presumption the protolanguage from which they descend, have the following basic verb structure:

(3) **Verb:**

S/O/IRR - Root - RR - TAM

The prefixal system encompasses prefixes for subject, object, and irrealis (sometimes manifested as futurity), as well as a suffix *-n* that mostly follows the object morpheme, if present. The ordering of the prefixal elements is complex: a constraint on the order of subject and object is rivaled by another, stronger constraint that first and second person morphemes precede others, while the placement of the irrealis morpheme *%pana%* (often reducing to *pa*, *na*, or *ana*)⁴⁶ depends on the syllabicity of the other prefixal elements and the placement of morpheme boundaries between them.

An idea of the similarities between different non-PN languages can be gained by comparing the following six forms of the verb 'hit' in Mawng (Iwaidjan) and Nunggubuyu (Gunwinyguan), the former spoken on the north Arfura coast of Arnhem Land, and the latter also in Arnhem Land, but more than five hundred kilometers away on its eastern coast. They belong to quite distinct non-PN families, and no investigator yet has proposed any genetic or areal link between them; even Dixon's far-reaching "Arnhem Group" does not include Mawng. The forms for 'he hit me', and 'she hit me' are given, in the future/irrealis and two nonfuture forms (M: masculine, F: feminine).

(4) 'he > me'

Mawng	ngani-wung	nganpani-wu	ngani-wuni
Nunggubuyu	ngani-wang	ngampani-wumana	ngampani-wini
	1OBJ.3M.SBJ-hit.P	1OBJ.FUT.3M.SBJ-hit.F	1OBJ.3M.SBJ-hit.P2
	'he hit me'	'he will hit me'	'he was hitting me'

(5) 'she > me'

Mawng	ngannga-wung	nganpanga-wu	ngannga-wuni
Nunggubuyu	ngangi-wang	ngampangi-wumana	ngampangi-wini
	1OBJ.3F.SBJ-hit.P	1OBJ.FUT.3F.SBJ-hit.F	1OBJ.3F.SBJ-hit.P2
	'she hit me'	'she will hit me'	'she was hitting me'

The root for 'hit', a reflex of *pu* as in most Australian languages, has (probably independently) lenited to *wu* in both these languages, although *pu* is still found in certain environments, not shown here, such as after nasals. And two of the three tense/aspect/mood suffixes are cognate: past 1 *-ng* and past 2 *-ni*; the two forms basically express a perfective vs. imperfective contrast in both languages. In Nunggubuyu the form for 'hit' has been somewhat disguised by vowel changes in the two past tenses,⁴⁷ but the original *u* is preserved in the future as well as in other tenses not shown here (nonpast 3 *wu:* and evitative *wumayun*).

46. Clendon (1999), in his discussion of features shared by Worrorra and Nunggubuyu, gives a form he reconstructs as **bwa(n)-* [i.e., **wa(n)-* alternating with **ba(n)-*] for a prefix with 'counterfactual' semantics; the forms match well with the Mawng prefix. A full-scale historical comparison of this prefix across non-Pama-Nyungan has yet to be undertaken, but the recent survey of irrealis prefixes in non-Pama-Nyungan languages by Verstraete (in press) contains a great deal of relevant data.

As can be seen, the prefixal morphemes are arranged with first person (*nga-*) preceding third person (*ni* if masculine, *nga-* [MA] or *ngi-* [NU] if feminine). An object marker *-n* is placed after the first person prefix, which is in object function here. In Mawng this *-n* disappears before another *n*, and in Nunggubuyu, where the morphophonemics is more complex, it assimilates to *m* before *p* and is lost before any other nasal; wherever it occurs, it is shown in bold for ease of identification. Finally, a future marker *pa-* (identical in both languages, at least in this environment) is placed (in these cases) between the object marker and the third person subject. In Nunggubuyu this future marker has been extended to a general nonpunctual marker and is also used in some nonfuture tenses, e.g., the 'past 2' which typically has an imperfective meaning. As a result of these changes, Mawng reuses prefixes from the first column in the third, while Nunggubuyu reuses prefixes from the second column instead. Despite these language-specific changes, the complex inflected words considered here show clear similarities between Mawng and Nunggubuyu in form, word structure, and the combinatorics of specific morphemes.

These forms are only a tiny fraction of the paradigm. The complete transitive paradigms may contain upwards of fifty elements in those languages with inclusive vs. exclusive plus a three-way number distinction in both subject and object, and some of the cells, such as the 'I > you' and 'you > me' combinations, are notoriously unstable thanks to the effects of "pronominal disguise" first identified by Heath (1991). Once we compare these across fifty or more languages it is easy to lose the thread and no one has undertaken this mammoth task.

However, to show that the resemblances are not simply restricted to a well-chosen pair of languages, I now give a slightly broader sample of eight languages (from six non-Pama-Nyungan families) and seven paradigmatic values (table 3).

TABLE 3. SELECTED PREFIX FORMS IN EIGHT NON-PN LANGUAGES[†]

	Mawng (IWA)	Tiwi (TIW)	Nung (GUN)	Kune (GUN)	Wam- baya (MIN)	Kwini (WOR)	Unga- rinyin (WOR)	Warda- man (WW)	pX
1SG	nga-	ngara-	nga-	nga-	ngi-	ngi-	nga-	nga-	nga-
2PL	kurr-	ngata-	nuru-	ngurri-	kirri-	kirri-	kurr-	nu-	kurrV-/ nVrrV-
3PL	awa-	pu-	wurru-	pirri-	irri-	pirr-	purr-	wurr-	pVrrV-
1SG/3*	ngi-/nga-	ngara-	nganu-	nga-	ngi-	anga-	anga-	nga-	nga-
3*/1SG	ngani-	yimani-	ngani-	ngan-	kini-ng-	ngin-	ngan-	ngan-	ngan(i)-
3PL/1SG	ngantu-	pumani-	ngampi-	nganti-	irri-ng-	ngunpirr-	nganta-	nganpurr-	nganpu-
1SG/3PL	ngawun-	ngawani-	ngarra-	ngapin-	ngi-	pirranga-	punga-	ngawun-	ngapun-

[†] Higher-level affiliations are given in parentheses: IWA = Iwaidjan (Mawng source: Capell and Hinch 1970), TIW = Tiwi (source: Osborne 1974), GUN = Gunwinyguan (Kune source: Evans 2003c; Nunggubuyu source: Heath 1984), MIN = Mindi (Wambaya source: Nordlinger 1998), WOR = Worrorran (Ungarinyin source: Rumsey 1982, Kwini source: McGregor 1993, pers. comm.), WW = Wagiman / Wardaman (Merlan 1994)

47. In the paper on Proto-Gunwinyguan verb inflections by Alpher, Evans, and Harvey (2003), this verb is reconstructed with ablaut in the past perfective (*pom ~ *pong). The Nunggubuyu form *-wang* represents the leveling of *a* and *o* that has occurred in Nunggubuyu phonology; we do not yet know enough about Iwaidjan historical phonology to know whether Mawng *-wung* derives from a merger of *u* and *o*, or contains an original *u* vowel.

Only the first combination mentioned above ('he > me') is included, in the fifth row, and in most languages this has the form *ngan-* rather than *ngani-*, possibly because in most languages the third person masculine pronoun is encoded by Ø rather than *ni-*; nonetheless, its cognacy in all languages except Tiwi and Wambaya is clear.⁴⁸ In this diagram I have bolded elements that, in a given language, appear to be ancestral and derivable from the postulated protoforms given in the right hand column (I label this 'pX', Proto-X, to emphasize that this may not go all the way back to "Proto-Australian," though this certainly is one possibility). Without going into the details, it should be clear that there is substantial comparability of forms across the seven representative languages, which were chosen to span the full non-PN area.

For a fuller consideration of the intransitive prefix forms, the reader is referred to Harvey (2003c), which postulates an eight-valued system, with four persons (first inclusive, first exclusive, second, and third) and a two-valued number system of the minimal-augmented type (so that he would gloss my 1SG, 2PL, and 3PL above as 1 minimal, 2 augmented, and 3 augmented). The two forms *kurrV-* and *nVrrV-* each have such widespread reflexes across non-Pama-Nyungan that Harvey argues both should be reconstructed as a second person plural prefix; the conditioning factor between these two forms (which may have been some sort of tense/aspect/mood category, for example) has yet to be worked out. For the transitive forms we await a systematic study, and the abovementioned phenomenon of "pragmatic disguise" (Heath 1991), which results in the rapid turnover and consequent lack of cognation of prefixes registering combinations of two speech act participants, means that we may only end up being able to reconstruct those parts of the transitive paradigm in which at least one participant is third person. Nonetheless, the apparent reconstructability of much of the complex pronominal prefix paradigm across a large number of non-Pama-Nyungan languages suggests (a) that the widespread distribution of pronominal prefixes in this area—contra Dixon—reflects shared inheritance rather than diffusionally driven convergent grammaticalization from free pronouns, and (b) that, consequently, it will be fruitful to attempt reconstruction of a higher-level unit that includes many, if not all, of the non-Pama-Nyungan languages. See Evans (2003a:20–21) for some further suggestions regarding formal similarities in verbal derivational suffixes, and in case-sensitive variants of noun-class prefixes.

A fundamental question in Australian linguistics concerns the relationship between the relationship of Proto-Pama-Nyungan to the protolanguage one reconstructs from non-Pama-Nyungan languages. (Dixon's model, as we have seen, rejects both these entities, but the widespread and detailed resemblances of form considered in the last two sections point clearly to genetic relatedness, at least within each of these units.)

One, first proposed by Heath (1978) and continued by him in a series of publications concerned with the reconstruction of non-Pama-Nyungan noun-class prefixes (1987), verbal prefixes (1990), and verbal suffixes (1990), adopts a first binary branching of a presumed "Proto-Australian" into a "Proto-Prefixing" and a "Proto-Pama-Nyungan" group (as in figure 1).

48. Though it is also possible it derives from *ngani* by loss of the final vowel.

In its favor, the model in figure 1 posits an entity to which the shared forms mentioned above (and many others) can be attributed, and it accounts for the striking typological difference between Pama-Nyungan and non-Pama-Nyungan languages. However, it fails to account for a number of aspects of the relationship between Pama-Nyungan and non-Pama-Nyungan. First, virtually all investigators have seen the Pama-Nyungan languages as less diverse than the non-Pama-Nyungan ones, a fact most clearly reflected in the large number of non-Pama-Nyungan families set up in the O'Grady et al. classification. Second, there is at least one phonological innovation attributable to Proto-Pama-Nyungan, which has merged the initial laminals and apicals that are distinct in most non-Pama-Nyungan languages (Evans 1988).⁴⁹ Third, as we saw in section 5, the growing evidence for the lack of various Pama-Nyungan features in all non-Pama-Nyungan languages has shifted many grammatical morphemes from the category of retentions from "Proto Australian" to innovations in Pama-Nyungan. For example, whereas the "Proto Australian" dative *-ku* has widespread non-PN attestation, the "Proto Australian" ergative/instrumental *-lu ~ -ngku* and locative *-la ~ -ngka* are looking more and more likely to be a PN innovation (see section 5 above). Further, some of these Pama-Nyungan innovations can now be given plausible sources based on their development from non-Pama-Nyungan precursors: an example is the development of the Pama-Nyungan system of "conjugation markers" by the analogical remodeling of a more irregular paradigm retained in the Gunwinyguan languages (see Alpher, Evans, and Harvey 2004).

Taken together, these considerations suggest the alternative model, shown in figure 2. This model treats Pama-Nyungan as an offshoot of a shared ancestor that also gives rise to some non-Pama-Nyungan languages. The advantages of the Pama-Nyungan offshoot model are that it accounts for the higher level of mutual resemblance among the complete set of Pama-Nyungan languages than among the set of non-Pama-Nyungan ones, and for the sharing of certain features (such as elements of the verbal suffix

FIGURE 1. NON-PAMA-NYUNGAN (=PREFIXING; A, B, C, ETC.) AND PAMA-NYUNGAN AS TWO EARLY BRANCHINGS OF PROTO-AUSTRALIAN (AFTER HEATH, 1990)

49. Dixon (2002:128-9) rightly points out a number of exceptions to this change, which means that it does not correlate perfectly with the Pama-Nyungan / non-Pama-Nyungan boundary. The correspondences are indeed more complicated than I proposed in my 1988 article; it has since been shown by Harvey (2003a) that three Gunwinyguan languages (Bininj Gun-wok, Dalabon, and Rembarnga), for example, have undergone a change in the opposite direction, delaminizing initial lamino-dentals to apico-dentals. The whole issue is too complex to go into further here, although Dixon (ibid.) nonetheless admits the idea is "basically sound."

system) between Pama-Nyungan and particular non-Pama-Nyungan branches. Its key disadvantage is that it needs to account for—and motivate—the disappearance of pronominal prefixes, though there are possible mechanisms for this, such as the resegmentation of erstwhile prefixes into second-position auxiliary.

The challenge facing the Pama-Nyungan offshoot model is to show how the suite of distinctively Pama-Nyungan morphemes can be given etymologies from non-Pama-Nyungan cognates with different functions, that serve as grammaticalization sources, and of how the distinctive Pama-Nyungan pronoun paradigm emerged from a previous free-form paradigm with different forms and a different logic. This task, which requires a more etymological approach than has characterized Australian linguistics to date, has barely been touched upon: until very recently, for example, reconstructions of pronominal systems have tended to mix free and bound pronoun forms as if they belong to a single system (see Harvey 2003). However, I believe that the balance of evidence has now reached the point where the "diffusion model" of similarities between non-Pama-Nyungan prefix systems can no longer be sustained, so that research needs to focus on evaluating the other two competitors.

7. PROSPECT. By way of drawing together the strands that have run through this review, let us return to three main themes: the applicability of the comparative method, the 50 percent equilibrium level, and the relation of AL to previous scholarship in the field.

A. Applicability of the comparative method. AL claims that Australian languages present a special case where the comparative method cannot apply, owing to such widespread diffusion over an incredibly long period of "equilibrium" that it is impossible to distinguish the effects of inheritance from diffusion. Against this, I have argued that the comparative method, applied carefully and patiently, is in fact beginning to yield divi-

FIGURE 2. THE PAMA-NYUNGAN OFFSHOOT MODEL, WITH PAMA-NYUNGAN AS AN OFFSHOOT SHARING IMMEDIATE ANCESTRY WITH SOME NON-PAMA-NYUNGAN GROUPS, AFTER O'GRADY (1979), EVANS, AND JONES (1997)

tends—brought together most clearly in the recent book by Bower and Koch (2004). Methodologically, using the comparative method has the great advantage that cases of borrowing stand out all the more clearly—McConvell's classic studies of the diffusion of subsection terms (McConvell 1985a,b, 1997) are a beautiful example of how the specific quirks and exceptions introduced by borrowing can be more clearly discerned against the basic assumption of regular sound changes, and his more recent work on "linguistic stratigraphy" using evidence from borrowed lexical items offers, for the first time in Australian linguistics, the chance of linking linguistic changes to datable changes in the archaeological record, such as the appearance of grindstone technology (McConvell and Smith 2003).⁵⁰ It also forces us to produce more finely articulated models of the historical relationships between languages, of the web of phonological correspondences between cognate sets, and of the etymological relationships between morphemes than we can get by simply assuming a vast muddy swirl of endless diffusion.

Of course, borrowing between neighboring languages has taken place, and this means that few of the sound changes that have been claimed apply in 100 percent of cases, but if Indo-Europeanists in the time of Grimm had simply declared the comparative enterprise hopeless because of a number of exceptions to Grimm's law, they never would have discovered Verner's law, nor been able to isolate the provable cases of borrowing that now stand out all the more clearly against a general pattern of regularity. Assuming the comparative method thus invites falsifiability—or refinement of general laws by the identification of borrowing—in a way that the "punctuated equilibrium" model generally does not. But we must be clear about what counts as falsification. As discussed in section 5, many of the claims AL makes against the applicability of comparative reconstruction to Pama-Nyungan, in particular, rest on misapplications of arguments from absence of attestation—assertions that forms are not reconstructable because a certain number of relevant languages lack reflexes, rather than proceeding to reconstruct them by the "three-witness principle." The principles employed in AL obscure the significant alignment of isoglosses that one finds in the case of Pama-Nyungan once loss is assumed to be a normal process (cf. Alpher 2004:124).

B. The "50 percent equilibrium" model. One specific prediction of the punctuated equilibrium model that is falsifiable is its prediction that languages that have been in contact for a long period will come to share 50 percent of their vocabulary. This claim, as I have argued in section 4, is manifestly false, a position already demonstrated in detail by Alpher and Nash (1999). There is not a single well-documented case in Australia where two languages that are not closely related genetically share 50 percent of their vocabulary. The closest clear case is Ngandi / Rithamngu, where a recount of shared vocabulary gives a figure of 41 percent, but this is an exceptional case, and it is rare for the percentage to exceed 30 percent, and common for it to be below 10 percent.

50. McConvell's study was possible because it drew on four types of evidence: (a) comparison of the structure of different systems (sections and subsections), (b) geographical distribution, (c) etymology, as a key to source languages, in particular the etymology of the gender prefixes, and (d) a relative chronology of regular sound changes, allowing us to place the borrowed subsection terms in a stratified sequence of historical changes for each language. Significantly, the otherwise sympathetic discussion of this work on pp. 16–18 of AL mentions the first three, but not the fourth.

Again, part of the reason for my view diverging so greatly from that in AL concerns initial assumptions. If one assumes that the genetic model is basically applicable, then one requires that the case for the 50 percent equilibrium model be based on examples where the languages are known not to be related, or at least only distantly so. If, on the other hand, one assumes the inapplicability of the comparative method at any reasonable depth, as is done in AL, then the claim is difficult to falsify: if languages share over 60 percent vocabulary, they are related; if they share less than 40 percent, they have not been in contact for long enough to have reached the equilibrium level; if they share between 40 percent and 60 percent, they support the model. It is because of the unfalsifiability of this latter approach that it is so important to begin with known cases of nonrelatedness, and once one does this, the supporting examples evaporate.

This is in no way to denigrate the interest or importance of studying areal convergence, and Heath's careful studies in the late 1970s (Heath 1978, 1979) remain unsurpassed for rigor and detail, at least as far as studies of genetically divergent languages. (Dench [2001] presents a persuasively skeptical case against the family-tree model in the Pilbara, but in relative terms the languages are all rather closely related.) What we particularly need, at this point in time where the indigenous languages of Australia are disappearing with frightening rapidity, are detailed field studies of multilingual speech communities and the way in which processes of convergence (and also divergence!) are played out in the grammars of multilingual individuals: a move to the micro-level where ongoing change is examined.

Once one abandons the reconstructive pessimism that comes with assuming the 50 percent equilibrium model, it becomes possible to reinstate some quantitative measures of language distance, provided that due caution is exercised. The wild discrepancies one finds in the AL classification in the degree of internal diversity of groups considered to be of equal order can only be rectified in a systematic way once some quantitative measures are brought back in. This is one of the many challenges that the publication of AL will hopefully provoke Australianists into meeting.

C. Fresh starts vs. the cumulation of scholarship. In many parts of its classification, AL takes a blank-slate approach to the problem, consciously holding off from adopting the conclusions—or accepting the premises—of other scholars, or from accepting the composition and naming of widely accepted subgroups. The reason for this, as outlined on p. xxi of AL, is to get out of the "cul de sac of its own making" in which Dixon perceives Australianist work to have become "enmeshed," and to "make a side-step in order then to move forward."

There certainly are particular difficulties in doing historical linguistics on Australian languages, and it will help us recapitulate if we spell out the three most important of them here. The first difficulty has been the lack of good descriptive materials. Dixon has done more than anyone to remedy this through his own work and that of the dozens of students he has trained or inspired. Nonetheless, the number of large dictionaries is still pitifully small, and it is therefore no wonder that we still lack a single etymological dictionary of any Australian subgroup.

The second difficulty is the phonological similarity of most Australian languages, something which blunts the edge of phonological comparison. This is certainly an area

where eons of "equilibrium"-style language contact are likely to have had a hindering effect on our ability to engage in phonological reconstruction. Nonetheless, as synchronic phonetic transcriptions and phonological analyses have become more precise, some of these problems have begun to be solved. A good example is Alpher's (2004:119) recent discovery that Proto-Pama-Nyungan contrasted heterorganic *nc with homorganic *nyc (=ñc) sequences: it is only recently (and still far from universal) that field-based investigators have been sufficiently tuned in to the phonology of Australian languages to record such contrasts and thereby to feed them into the reconstructive enterprise. Many veins of phonological regularity have been uncovered in the Australianist literature over the past decade, and the momentum is growing. Fine-grained etymological research has increased our ability to identify loan-words as it pays more attention to idiosyncratic, nonproductive morphemes, and this is also helping to filter out many cases of seeming irregularity.

The third difficulty is the enormous time-depth we appear to be facing in the Australian situation, though the stochastics of lineage extinction mean that even on the above scenario the common ancestor of all modern languages is likely to be substantially younger than the date of first settlement (again, this point is anticipated in O'Grady 1979). It seems quite plausible—though we can probably never prove it—that all today's indigenous Australian languages descend from the language(s) spoken by the first Aboriginal people to set foot on the continent forty or fifty thousand years ago, with no further demographic or linguistic input other than minor contacts with Austronesian speakers along the north coasts and with Papuan speakers in northern Cape York and possibly along the plains that once lay to the west of the then Lake Carpentaria. We do not need a new model of linguistic change to account for why it would be impossible to reconstruct Proto-Australian in these circumstances—O'Grady (1979) gives a graphic and plausible account of how the passage of time might have been played out, leaving just a few traces of related lexical and morphological items. Despite this, though, it is astonishing how much shared paradigmatically organized morphology, in particular, can be reconstructed.

However, to impute to diffusion the radical similarities in phonological organization, and indeed in typological profiles more generally, is to second-guess the question of whether such radical convergence would indeed be possible if the initial state had been more diverse, with unrelated languages that were more different in their typological cast than they are now. Again, the question needs to be tackled head-on, through case studies of known cases of really long-term convergence between distinct families, using the techniques of quantitative typology that Nichols (1992) and others have begun to develop, and taking them to a more rigorous and testable level.

The Australian situation does, then, present some notable special difficulties for historical linguists.⁵¹ But, in this reviewer's opinion, AL does not make a convincing case

51. A further disagreement I have with AL, however, is its characterization of the Australian situation as "unique," and as "certainly the longest-established linguistic area in the world" (55). This seems an overstatement: what about southern Africa, where the peoples who speak Khoisan (Khoisan) languages are likely to have been present for a longer time than humans have been in Australia? Traill and Nakagawa (2000) suggest that "the genetic data identifies a Khoisan lineage continuous with modern populations, of between 70,000 and 140,000 years."

that a conceptual "cul de sac" exists. Nor do the technical "sidesteps" it proposes lead forward, because they amount to an alternative null hypothesis rather than a new method, and they do not lead to the sort of articulated model of language history that enables an ever more detailed picture to be built up by the cumulative efforts of the scholarly community.

* * *

In this article I have voiced disagreements with just about every aspect of AL: with the claims it makes about the special status of Australian languages, about the inapplicability of standard methods to their historical study, about the operation of diffusional forces beyond what we encounter elsewhere, and about the classification of Australian languages. On all these issues, I have argued, AL represents a distinctly personal, and in my view debatable, view of the field.

Nonetheless, I believe this volume will have a constructive effect on the historical linguistics of Australian languages. No other book on Australian languages has brought together so much historically and typologically relevant material in one place, so that whatever differences of interpretation one may have, it gives a comprehensive compilation of data from across the continent. Most importantly, its deliberately unorthodox stand on virtually every topic is a bracing challenge to complacency. Whether other scholars react by deploying the comparative method with renewed rigor, by developing or renovating quantitative methods to deal with some of the scaling problems discussed in sections 3 and 4, or by setting out a synthetic picture of language relatedness that organizes the many low-level groups into a more coherent larger picture than AL provides, this publication will energize scholarly debate among Australianists.

REFERENCES

- Alpher, Barry. 1972. On the genetic subgrouping of the languages of Southwestern Cape York Peninsula, Australia. *Oceanic Linguistics* 11:67–87.
- . 1982. Dalabon dual-subject prefixes, kinship categories, and generation skewing. In *The languages of kinship in Aboriginal Australia*, ed. by J. Heath, F. Merlan, and A. Rumsey, 19–30. University of Sydney: Oceania Linguistic Monographs.
- . 1990. Some proto-Pama-Nyungan paradigms: A verb in the hand is worth two in the phylum. In *Studies in comparative Pama-Nyungan*, ed. by G. N. O'Grady and D. T. Tryon, 155–71. Canberra: Pacific Linguistics.
- . 1997. Fluctuating final *n* in noun-stems in Cape York languages. In *Boundary Rider: Essays in honour of Geoffrey O'Grady*, ed. by D. Tryon and M. Walsh, 11–20. Canberra: Pacific Linguistics.
- . 2004. Pama-Nyungan: Phonological reconstruction and status as a phylogenetic group. In *Australian languages: Classification and the comparative method*, ed. by Claire Bowerman and Harold Koch, 93–126. Amsterdam: John Benjamins.
- Alpher, Barry, Nicholas Evans, and Mark Harvey. 2003. Proto-Gunwinyguan verb suffixes. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 305–52. Canberra: Pacific Linguistics.
- Alpher, Barry, and David Nash. 1999. Lexical replacement and cognate equilibrium in Australia. *Australian Journal of Linguistics* 19(1): 5–56.

- Austin, Peter, and Joan Bresnan. 1996. Non-configurationality in Australian Aboriginal languages. *Natural Language and Linguistic Theory* 14(2): 215–68.
- Austin, Peter, R. Ellis, and Luise Hercus. 1976. 'Fruit of the eyes': semantic diffusion in the lakes languages of South Australia. *Papers in Australian Linguistics* 10:57–77. Canberra: Pacific Linguistics.
- Baker, Brett. 2004. Stem forms and paradigm reshaping in Gunwinyguan. In *Australian languages: Classification and the comparative method*, ed. by Claire Bowern and Harold Koch, 313–40. Amsterdam: John Benjamins.
- Benveniste, Emile. 1969. *Indo-European language and society*. London: Faber and Faber.
- Black, Paul. 1997. Lexicostatistics and Australian languages: Problems and prospects. In *Boundary Rider: Essays in honour of Geoffrey O'Grady*, ed. by D. Tryon and M. Walsh, 51–69. Canberra: Pacific Linguistics.
- Blake, Barry J. 1988. Redefining Pama-Nyungan: Towards the history of Australian languages. In *Aboriginal Linguistics* 1, ed. by Nicholas Evans and Steve Johnson, 1–90. Armidale: University of New England.
- . 1990. Languages of the Queensland/Northern Territory Border: Updating the classification. In *Language and history: Essays in honour of Luise A. Hercus*, ed. by Peter Austin, R. M. W. Dixon, Tom Dutton, and Isobel White, 49–66. Canberra: Pacific Linguistics.
- . 2001. *Case*. 2d ed. Cambridge: Cambridge University Press.
- Blake, Barry J., and J. G. Breen. Forthcoming. The relationship between Yalarnnga and Kalkutungu. Ms., LaTrobe University.
- Bowern, Claire. 2001. Karnic classification revisited. In *Forty years on: Ken Hale and Australian languages*, ed. by Jane Simpson, David Nash, Mary Laughren, Peter Austin, and Barry Alpher, 245–61. Canberra: Pacific Linguistics.
- Bowern, Claire, and Harold Koch. 2004a. *Australian languages. Classification and the comparative method*. Amsterdam: John Benjamins.
- . 2004b. Introduction: Subgrouping methodology in historical linguistics. In *Australian languages: Classification and the comparative method*, ed. by Claire Bowern and Harold Koch, 1–16. Amsterdam: John Benjamins.
- Breen, Gavan. 2003. Wanyi and Garrwa comparative data. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 463–71. Canberra: Pacific Linguistics.
- Capell, A. 1956. *A new approach to Australian linguistics*. Sydney: Oceania Linguistic Monographs 1.
- . 1962. *Some linguistic types in Australia*. Sydney: Oceania Linguistic Monographs 7.
- Capell, A., and H. E. Hinch. 1970. *Maung grammar*. The Hague: Mouton.
- Clendon, Mark. 1999. Worora gender metaphors and Australian prehistory. *Anthropological Linguistics* 41(3): 308–55.
- Crowley, Terry. 1997. Chipping away at the past: A northern New South Wales perspective. In *Archaeology and linguistics: Global perspectives on ancient Australia*, ed. by Patrick McConvell and Nicholas Evans, 275–95. Melbourne: Oxford University Press.
- Dench, Alan. 2001. Descent and diffusion: The complexity of the Pilbara situation. In *Areal diffusion and inheritance: Problems in comparative linguistics*, ed. by A. Y. Aikhenvald and R. M. W. Dixon, 105–33. Oxford: Oxford University Press.
- Dixon, R. M. W. 1970. Proto-Australian laminals. *Oceanic Linguistics* 9:79–103.
- . 1972. *The Dyirbal language of North Queensland*. Cambridge: Cambridge University Press.
- . ed. 1976. *Grammatical categories in Australian languages*. Canberra: AIAS.
- . 1977. *A grammar of Yidiñ*. Cambridge: Cambridge University Press.
- . 1980. *The languages of Australia*. Cambridge: Cambridge University Press.
- . 1997. *The rise and fall of languages*. Cambridge: Cambridge University Press.

- . 2001. The Australian linguistic area. In *Areal diffusion and genetic inheritance: Problems in comparative linguistics*, ed. by A. Y. Aikhenvald and R. M. W. Dixon, 64–104. Oxford: Oxford University Press.
- Evans, Nicholas. 1988. Arguments for Pama-Nyungan as a subgroup, with particular reference to initial laminalization. In *Aboriginal Linguistics* 1, ed. by Nicholas Evans and Steve Johnson, 91–110. Armidale: University of New England.
- . 1995. *A Grammar of Kayardild*. Berlin: Mouton de Gruyter.
- . 2000. Iwaidjan, a very un-Australian language family. *Linguistic Typology* 4(2): 91–142.
- . ed. 2003a. *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*. Canberra: Pacific Linguistics.
- . 2003b. Introduction: Comparative Non-Pama-Nyungan and Australian historical linguistics. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 3–25. Canberra: Pacific Linguistics.
- . 2003c. *Bininj Gun-wok: A pan-dialectal grammar of Mayali, Kunwinjku and Kune*. Canberra: Pacific Linguistics.
- Evans, Nicholas, Dunstan Brown, and Greville Corbett. 2001. Dalabon pronominal prefixes and the typology of syncretism: A network morphology analysis. *Yearbook of Morphology* 2000, 187–231.
- Evans, Nicholas, and Rhys Jones. 1997. The cradle of the Pama-Nyungans: Linguistic and archaeological speculations. In *Archaeology and linguistics: Global perspectives on ancient Australia*, ed. by Patrick McConvell and Nicholas Evans, 385–415. Melbourne: Oxford University Press.
- Evans, Nicholas, and Patrick McConvell. 1998. The enigma of Pama-Nyungan expansion in Australia. In *Archaeology and Language II: Correlating archaeological and linguistic hypotheses*, ed. by Roger Blench and Matthew Spriggs, 174–91. London: Routledge.
- Evans, Nicholas, and Francesca Merlan. 2003. Dalabon verb conjugations. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 269–83. Canberra: Pacific Linguistics.
- Evans, Nicholas, Francesca Merlan, and Maggie Tukumba. 2004. *A first dictionary of Dalabon*. Maningrida: Bawinanga Aboriginal Corporation.
- Evans, Nicholas, and David Wilkins. 2001. The complete person: Networking the physical and the social. In *Forty years on: Ken Hale and Australian languages*, ed. by Jane Simpson, David Nash, Mary Laughren, Peter Austin, and Barry Alpher, 493–521. Canberra: Pacific Linguistics.
- Goddard, Cliff. 1982. Case systems and case marking in Australian languages: A new interpretation. *Australian Journal of Linguistics* 2:167–96.
- Green, Ian. 1995. The death of 'prefixing': Contact-induced typological change in northern Australia. *Berkeley Linguistics Society* 21:414–25.
- . 2003. The genetic status of Murrinh-Patha. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 125–58. Canberra: Pacific Linguistics.
- Green, Ian, and Rachel Nordlinger. 2004. Revisiting proto-Mindi. In *Australian languages: Classification and the comparative method*, ed. by Claire Bowern and Harold Koch, 291–312. Amsterdam: John Benjamins.
- Green, Rebecca. 2003. Proto Maningrida within Proto Arnhem: Evidence from verbal inflectional suffixes. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 369–421. Canberra: Pacific Linguistics.
- Hale, Kenneth L. 1962. Internal relationships in Arandic of Central Australia. In *Some linguistic types in Australia*, ed. by A. Capell, 171–85. Sydney: Oceania Linguistic Monographs.

- . 1966. The Paman group of the Pama-Nyungan phylum family. In *Languages of the World: Indo-Pacific*, fasc. 6, ed. by G. N. O'Grady, C. F. Voegelin, and F. M. Voegelin. *Anthropological Linguistics* 8(2):176–97.
- . 1976. On ergative and locative suffixial alternations in Australian languages. In *Grammatical categories in Australian languages*, ed. by R. M. W. Dixon, 414–17. Canberra: AIAS.
- Hale, Kenneth L., Mary Laughren, and Jane Simpson. 1995. Warlpiri. In *Syntax: An International Handbook of Contemporary Research*, vol. 2, ed. by J. Jacobs, A. von Stechow, W. Sternefeld, and T. Vennemann, 1430–51. Berlin: Walter de Gruyter.
- Harvey, Mark. 1997. The temporal interpretation of linguistic diversity in the Top End. In *Archaeology and linguistics: Aboriginal Australia in global perspective*, ed. by Patrick McConvell and Nicholas Evans, 179–85. Melbourne: Oxford University Press.
- . 2003a. An initial reconstruction of proto-Gunwinyguan phonology. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 205–68. Canberra: Pacific Linguistics.
- . 2003b. Western Gunwinyguan. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 285–303. Canberra: Pacific Linguistics.
- . 2003c. Reconstruction of pronominals among the non-Pama-Nyungan languages. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 475–513. Canberra: Pacific Linguistics.
- Heath, Jeffrey. 1978. *Linguistic Diffusion in Arnhem Land*. Canberra: Australian Institute of Aboriginal Studies.
- . 1979. Diffusional linguistics in Australia: Problems and prospects. In *Australian linguistic studies*, ed. by Stephen A. Wurm, 395–418. Canberra: Pacific Linguistics.
- . 1981a. A case of intensive lexical diffusion: Arnhem Land, Australia. *Language* 57:335–67.
- . 1981b. *Basic materials in Mara: Grammar, texts and dictionary*. Canberra: Pacific Linguistics.
- . 1984. *Functional grammar of Nunggubuyu*. Canberra: AIAS.
- . 1987. Story of *-n-, *CV- vs *CV-n- noun-class prefixes in Australian languages. In *A world of language: papers presented to Professor S. A. Wurm on his 65th birthday*, ed. by D. C. Laycock and W. Winter, 233–43. Canberra: Pacific Linguistics.
- . 1990. Verbal inflection and macro-subgroupings of Australian languages: The search for conjugation markers in non-Pama-Nyungan. In *Linguistic Change and Reconstruction Methodology*, ed. by Philip Baldi, 403–17. Berlin: Mouton de Gruyter.
- . 1991. Pragmatic disguise in pronominal affix paradigms. In *Paradigms: The economy of inflection*, ed. by Frans Plank, 75–90. Berlin: Mouton de Gruyter.
- . 1997. Lost wax: Abrupt replacement of key morphemes in Australian agreement complexes. *Diachronica* 14:197–232.
- Hercus, Luise, and Peter Austin. 2004. The Yarli languages. In *Australian languages: Classification and the comparative method*, ed. by Claire Bowern and Harold Koch, 207–22. Amsterdam: John Benjamins.
- Koch, Harold. 2003. The case for Pama-Nyungan: Evidence from inflectional morphology. *Proceedings of XVII International Congress of Linguists, Prague*. (CD)
- . 2004. A methodological history of Australian linguistic classification. In *Australian languages: Classification and the comparative method*, ed. by Claire Bowern and Harold Koch, 17–60. Amsterdam: John Benjamins.
- Laughren, Mary. 2000. Australian Aboriginal languages: Their contemporary status and functions. In *Handbook of Australian Languages*, vol. 5, ed. by R. M. W. Dixon and Barry J. Blake, 1–32. Melbourne: Oxford University Press.

- McConvell, Patrick. 1985a. The origin of subsections in Northern Australia. *Oceania* 56:1–33.
- . 1985b. Time perspective in Aboriginal culture: Two approaches to the origin of subsections. *Aboriginal History* 9(1): 53–80.
- . 1997. Long lost relations: Pama-Nyungan and Northern kinship. In *Archaeology and linguistics: Global perspectives on ancient Australia*, ed. by Patrick McConvell and Nicholas Evans, 207–35. Melbourne: Oxford University Press.
- McConvell, Patrick, and Nicholas Evans, eds. 1997. *Archaeology and linguistics: Global perspectives on ancient Australia*. Melbourne: Oxford University Press.
- McConvell, Patrick, and Michael Smith. 2003. Millers and mullers. The archaeo-linguistic stratigraphy of technological change in holocene Australia. In *Language contacts in prehistory: Studies in stratigraphy*, ed. by Henning Andersen, 177–200. Amsterdam: John Benjamins.
- McGregor, William B. 1993. *Gunin/Kwini*. München/Newcastle: LINCOM EUROPA.
- McGregor, William B., and Alan Rumsey. 2003. Classification and subclassification of the Worrorran languages. Paper presented at XVIth International Congress of Historical Linguistics, Copenhagen.
- Mel'čuk, Igor A. 1979. *Studies in dependency syntax*. Ann Arbor: Karoma.
- Merlan, Francesca. 1994. *A grammar of Wardaman: A language of the Northern Territory of Australia*. Berlin: Mouton de Gruyter.
- . 2003. The genetic position of Mangarrayi: Evidence from nominal prefixation. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 353–67. Canberra: Pacific Linguistics.
- Nash, David. 1997. Comparative flora terminology of the central Northern Territory. In *Archaeology and linguistics: Aboriginal Australia in global perspective*, ed. by Patrick McConvell and Nicholas Evans, 187–206. Melbourne: Oxford University Press.
- Nichols, Johanna. 1992. *Linguistic variation in space and time*. Chicago: University of Chicago Press.
- Nordlinger, Rachel. 1998. *A grammar of Wambaya*. Canberra: Pacific Linguistics.
- Oates, L. F. 1964. *A tentative description of the Gunwinggu language (or western Arnhem Land)*. Sydney: Oceania Linguistic Monographs.
- O'Grady, Geoffrey N. 1966. Proto-Nganyarda phonology. *Oceanic Linguistics* 5:71–130.
- . 1979. Preliminaries to a proto Nuclear Pama-Nyungan stem list. In *Australian linguistic studies*, ed. by S. A. Wurm, 107–139. Series C-54. Pacific Linguistics.
- . 1981a. The genesis of the pronoun *ngali in Australia. *Working Papers of the Linguistic Circle, University of Victoria* 1(1): 152–73.
- . 1981b. Review of Dixon, R. M. W., 1980, *The languages of Australia*. *AUMLA* 54:273–76.
- O'Grady, Geoffrey N., and Kenneth L. Hale. 2004. The coherence and distinctiveness of the Pama-Nyungan language family within the Australian linguistic phylum. In *Australian languages: Classification and the comparative method*, ed. by Claire Bowern and Harold Koch, 69–92. Amsterdam: John Benjamins.
- O'Grady, Geoffrey N., and Terry Klokaid. 1969. Australian linguistic classification: A plea for coordination of effort. *Oceania* 39(4): 298–311.
- O'Grady, Geoffrey N., Carl F. Voegelin, and Florence M. Voegelin. 1966. Languages of the world: Indo-Pacific, fasc. 6. *Anthropological Linguistics* 8(2).
- O'Grady, Geoffrey N., Steven A. Wurm, and Kenneth L. Hale. 1966. Aboriginal languages of Australia (a preliminary classification). Map, drawn by Robert M. Water, Department of Linguistics, Victoria, B.C.
- Osborne, C. R. 1974. *The Tiwi language*. Canberra: AIAS.
- Peiros, Ilia. 2002. Is Gunwinyguan a language family? Unpublished Ms.

- Piper, Nicola. 2001. Meryam—a language of the Torres Strait. Handout for lecture presented in course "Language and Society in Aboriginal Australia," Dept. of Linguistics and Applied Linguistics, University of Melbourne.
- Rigsby, Bruce. 1997. Structural parallelism and convergence in the Princess Charlotte Bay languages. In *Archaeology and linguistics: Aboriginal Australia in global perspective*, ed. by Patrick McConvell and Nicholas Evans, 169–78. Melbourne: Oxford University Press.
- . n.d. Ayapathu linguistic and sociocultural relations. Unpublished consultancy report.
- Rumsey, Alan. 1982. *An Intra-sentence grammar of Ungarinjin, North-western Australia*. Canberra: Pacific Linguistics.
- Sands, Kristina. 1996. *The ergative in proto-Australian*. München: LINCOM EUROPA.
- Simpson, Jane, David Nash, Mary Laughren, Peter Austin, and Barry Alpher, eds. 2001. *Forty years on: Ken Hale and Australian languages*. Canberra: Pacific Linguistics.
- SSABSA [Senior Secondary Assessment Board of South Australia]. 1996. *Australia's Indigenous Languages*. Wayville, S.A.
- Stokes, B., and William B. McGregor. 2003. Classification and subclassification of the Nyulnyulan languages. In *The non-Pama-Nyungan languages of northern Australia: Comparative studies of the continent's most linguistically complex region*, ed. by Nicholas Evans, 29–74. Canberra: Pacific Linguistics.
- Traill, A., and H. Nakagawa. 2000. A historical !Xoo-/Gui contact zone: Linguistic and other relations. In *The current state of Khoesan language studies in Botswana*, ed. by H. Batibo and J. Tsonope, 1–17. Gaborone: IRD.
- Trask, R. Larry. 2000. *The dictionary of historical and comparative linguistics*. Edinburgh: Edinburgh University Press.
- Tryon, Darrell. 1974. *Daly family languages*. Canberra: Pacific Linguistics.
- Tryon, Darrell, and Michael Walsh, eds. 1997. *Boundary rider: Essays in honour of Geoffrey O'Grady*. Canberra: Pacific Linguistics.
- Verstraete, Jean-Christophe. 2005. Some data on the genetic status of Umpithamu. Unpublished MS.
- . In press. The semantics and pragmatics of composite mood marking: The non-Pama-Nyungan languages of northern Australia. *Linguistic Typology*.
- Walsh, Michael. 1981. Maps of Australia and Tasmania. In *Language atlas of the Pacific area*, pt. 1, *New Guinea area, Oceania, Australia*, ed. by Stephen A. Wurm and Shirō Hattori. Canberra: The Australian Academy of the Humanities, in conjunction with The Japan Academy.
- Walsh, Michael, and Colin Yallop. 1993. *Language and culture in Aboriginal Australia*. Canberra: Aboriginal Studies Press.
- Wilkins, David. 1996. Natural tendencies of semantic change and the search for cognates. In *The comparative method reviewed*, ed. by Mark Durie and Malcolm Ross, 264–304. New York: Oxford University Press.
- Wilson, Edward O. 1998. *Consilience: The unity of knowledge*. New York: Vintage Books.
- Wurm, S. A. 1963. Aboriginal languages: The present state of knowledge: Research projects. In *Australian Aboriginal Studies: A symposium of papers presented at the 1961 research conference*, ed. by Helen Shiels, 127–48. Melbourne: Oxford University Press for the Australian Institute of Aboriginal Studies.
- Zorc, R. David. 1976. Functor analysis: a method of quantifying function words for comparing and classifying languages. In *Fifth LACUS Forum*, 510–21. Columbia, S. C.: Hornbeam Press.

nrde@unimelb.edu.au

Book Reviews

Ger P. Reesink, ed. 2002. *Languages of the Eastern Bird's Head*. No. 524. Canberra: Pacific Linguistics. ISBN 0-85883-494-4. ix + 340 pp. Aus\$77.00, cloth.

Languages of the Eastern Bird's Head (LEBH) is an interesting, though challenging book to review. It does not fit the mold of many edited volumes these days. It is a book that is too rarely seen: no "last words" (except for the last chapter—more on this later), no exhaustive studies, but solid material to make a typologist delight, data to make a formalist ponder, and comparison both synchronic and diachronic to make anyone interested in the languages of New Guinea sit up.

The volume consists of five parts: the introduction, by R, detailing some broad comparative issues concerning the Eastern Bird's Head languages, both sociolinguistic and typological; the central chapters, in which we find grammatical sketches of Mpur (by Cecilia Odé), Meyah (by Gilles Gravelle), and Sougb (by R); a salvage sketch of Borai by R; and a lexical overview of the area. The content, then, focuses on the languages of the Eastern Bird's Head (not, as the back cover states [or implies] all of the peninsula: "This book is the first detailed introduction to languages of the Bird's Head peninsula of Indonesia, [sic] Irian Jaya"). I shall (approximately) appropriate the division of labor on the back cover to represent the division of labor in this review: coverage of the sketches, but more attention paid to the documentary aspects of the presentations, and of the introduction.

To review a book, the bulk of which is a collection of sketch grammars, I must examine the point of a sketch description. This is not trivial: who is a sketch grammar intended for? There has, thankfully, been a flood of sketch grammars on the market in the last decade, so we might have some idea of *what* a sketch grammar is; but not such a good idea about *why* it is. This question is addressed in the next section. I then devote considerably more space to a summary and critique of the argumentation and conclusions in R's introduction. There follow highlights of some constructions of particular theoretical interest that are described in the book, and in the conclusion I summarize the historical argumentation.

The point of a sketch grammar. We might illustrate the two opposing positions in a hypothetical discussion of theory, linguistics, and sketch grammars. On the one hand we have work such as Klamer's (1998) description of Kambera. This is not a comprehensive description of the grammar of the language, covering all the major aspects of the syntax, but it does go into considerable detail on selected topics, to an extent that is rare in most comprehensive grammars. It is this attention to detail that makes it all the more valuable for (nondescriptivist) phonologists and syntacticians, in a way that many more comprehensive grammars are not. Many of the questions that formal theory-inclined linguists, but not necessarily run-of-the-mill typologists, would want to raise have been