

TAWALA DERIVATIONAL PREFIXES:

A SEMANTIC PERSPECTIVE

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This thesis is the original work of the author unless otherwise acknowledged.

Bryan Gard.

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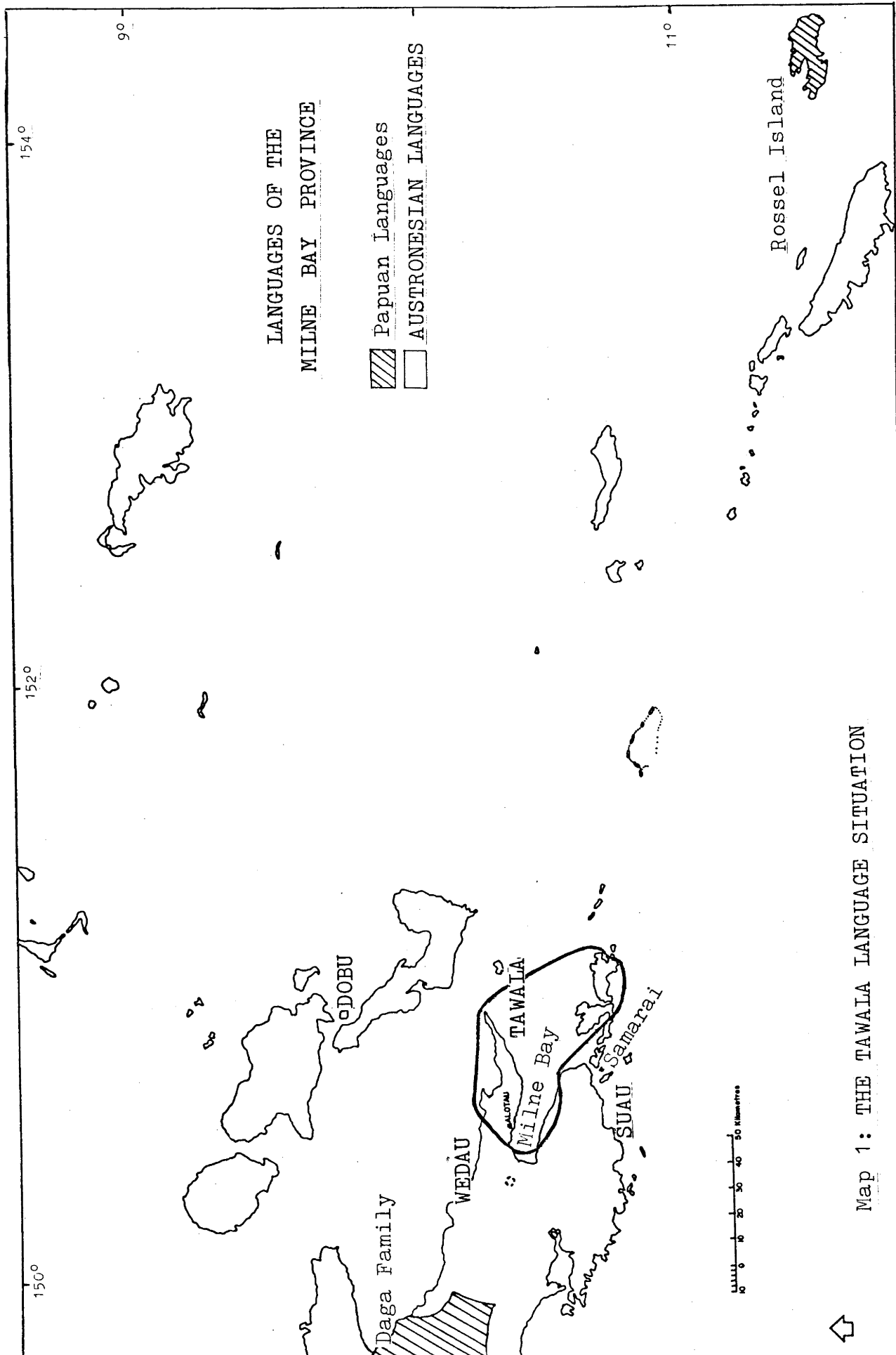
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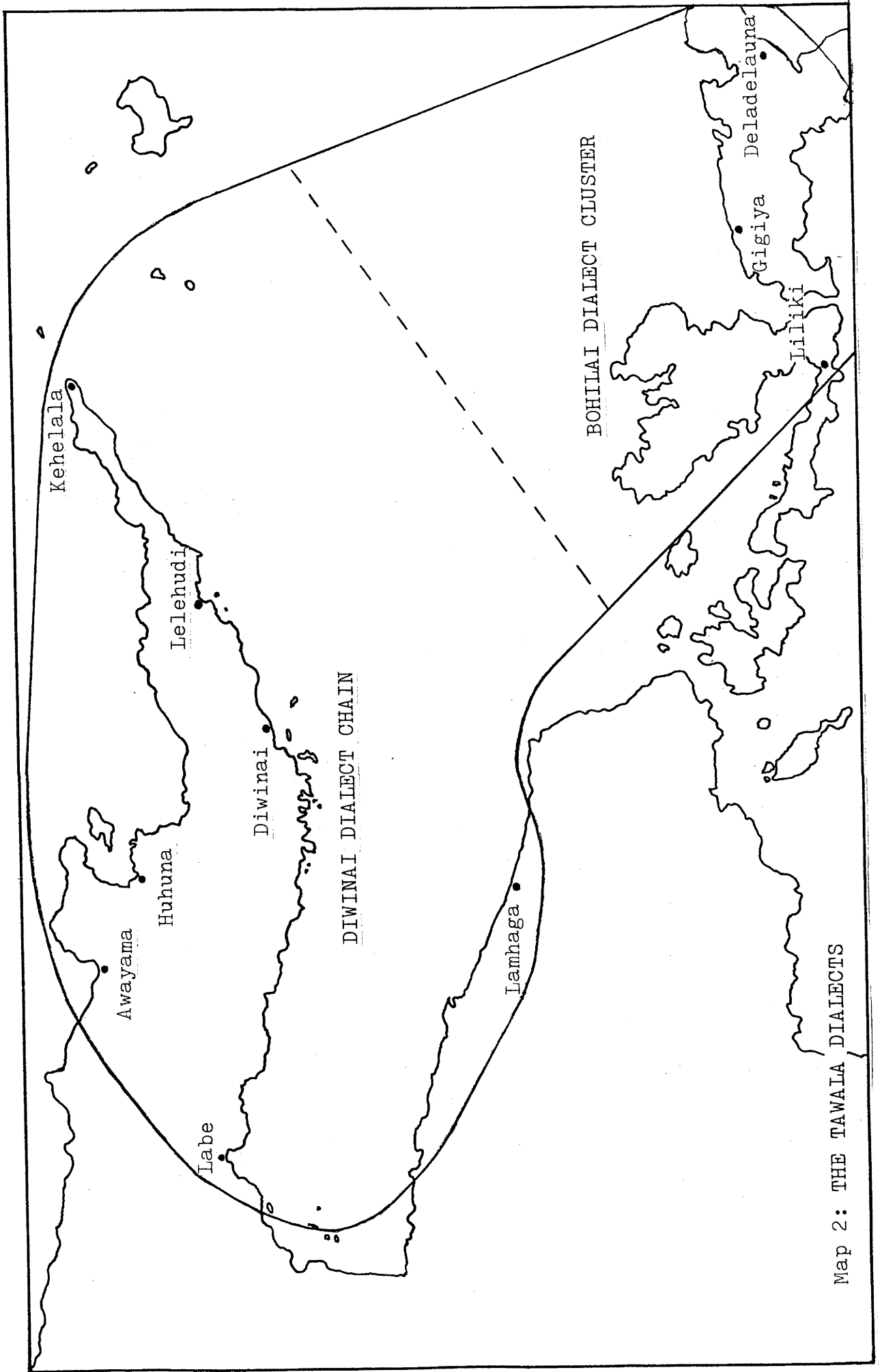
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ABBREVIATIONS

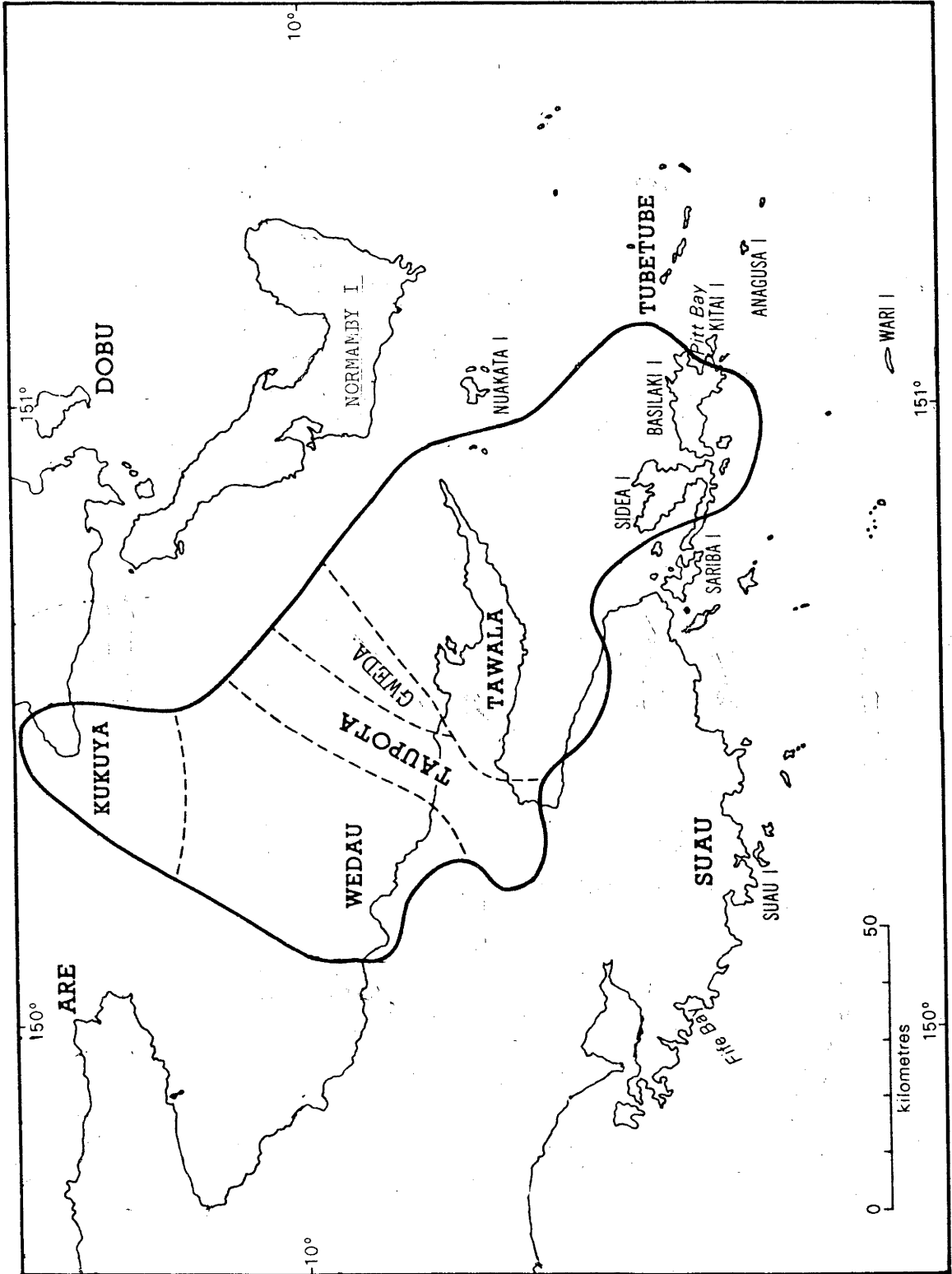
CP	Classificatory Prefix
D	Dative
DP	Derivational Prefix
(exc)	exclusive
(inc)	inclusive
INST	Instrument
IO	Indirect Object
FUT	Future
n.	noun
NEG	Negative
no.	number
pl/PL	plural
(PRES)	Present
PROG	Progressive aspect
R	Root
RED	Reduplicated section of root or stem
RF	Referent Focus
RFX	Reflexive
sg	singular
s-o.	someone
s-t.	something
TC	Transitive Concord
v.	verb



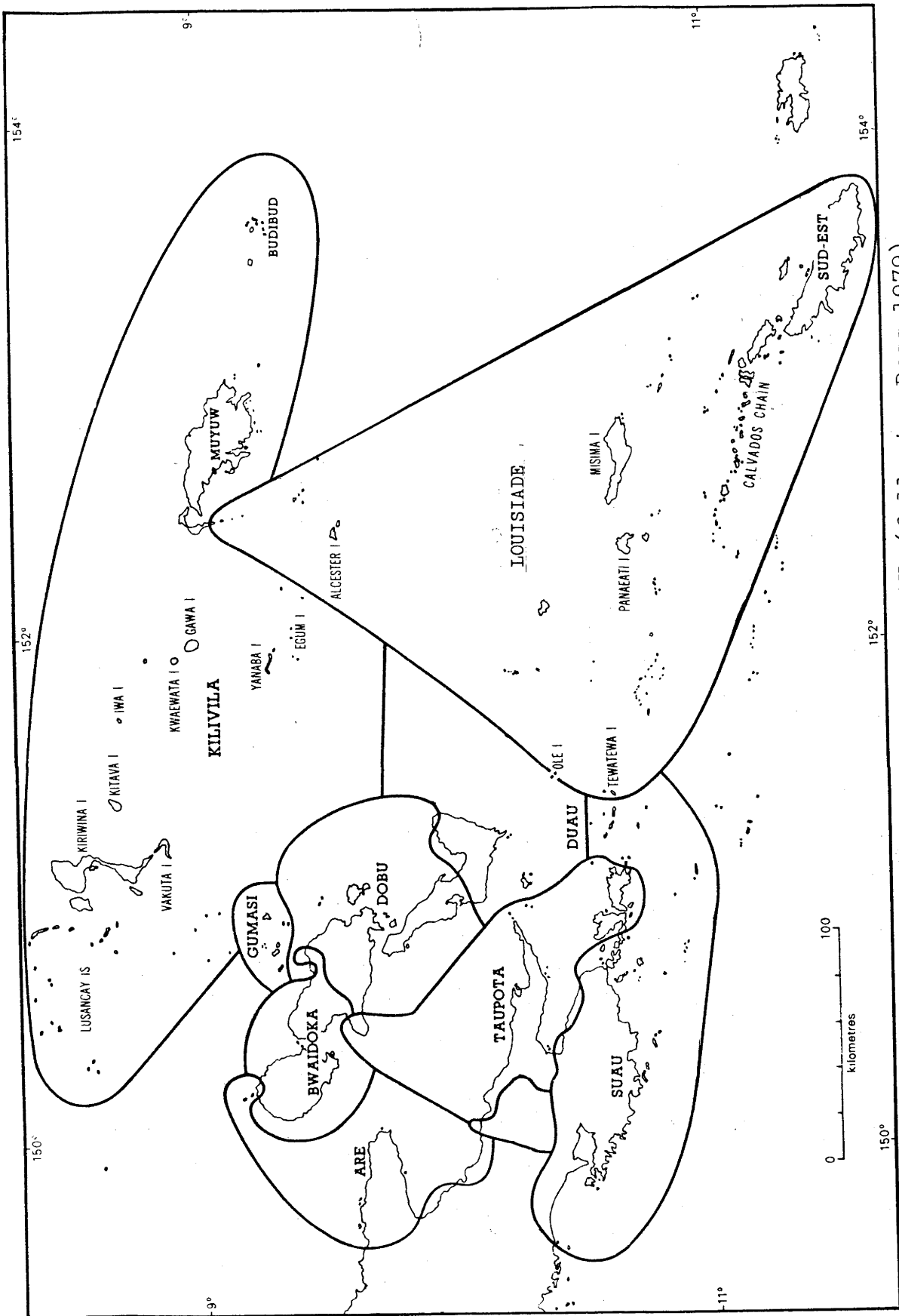
Map 1: THE TAWALA LANGUAGE SITUATION



Map 2: THE TAWALA DIALECTS



Map 3: THE TAUPOTA FAMILY (adapted from Lithgow 1976)



Map 4: MAJOR LANGUAGE DIVISIONS OF MILNE BAY (following Ross 1979)

The most urgent need in semantics is for fresh empirical evidence obtained by painstaking study of concrete lexical data. (Weinreich)¹

0 INTRODUCTION

Derivational prefixes are probably the most complex aspect of Milne Bay languages. Even though they are central to a thorough knowledge of these languages, they have often received only cursory treatment by linguists. This present study is the first systematic treatment of these prefixes.

The Austronesian languages of the Milne Bay area have a reputation for being rather simple - and this is probably true enough for 90% of day-to-day communication. However, mastery of the remaining 10% involves an effort out of all proportion to its low frequency. An examination of the dictionaries of Milne Bay and beyond (details are given in appendices II to VII) reveals that a single root with two or more different prefixes is commonly recorded without any clear distinction in its glosses. The dictionaries and grammars also reveal a trite treatment of the derivational prefixes, with little or no effort being made to give accurate definitions, and little or no attention being paid

¹ Quote taken from Wierzbicka n.d.

to data which do not conform to the usual "causative" definition. This thesis, then, reveals something of the detail that needs to be controlled in order to productively use the Tawala derivational prefixes.

The Tawala derivational prefixes (wi, lu, li, wo and om) are added to roots in order to derive new verbs. There appear to be no restrictions as to which part of speech can be "verbalised" by the addition of one of these prefixes. A general meaning associated with the respective prefixes has been suggested in chapter 4 (cf. table 9) but these meanings do not enable us to predict the precise meaning a root should have with a given prefix. Although the general meanings of derivational prefixes are not productive in a formal way, all is not chaos, because a given prefix usually has a precise meaning when applied to a specific semantic class. The discovery of the correspondence between the meanings of the prefixes and the various semantic classes has thus reduced a formidable array of data to a manageable corpus (chapters 3 and 4).

This present study handles not much more than the tip of the iceberg. Or, to use a more appropriate metaphor suggested by my language helper, Yailo, we have criss-crossed the jungle with a few paths and discovered the general topography of the area, while many details remain hidden, waiting for future discovery. There are various reasons why linguists have avoided the study of derivational prefixes and these are discussed in chapter 2. While I am aware that much work remains undone, the very fact of exposing a difficult area will hopefully encourage others to take up the challenge. Tawala prefixes need a treatment as detailed as Wierzbicka's (1980) treatment of the Russian instrumental case which seeks the general core meaning of the case and the patterns divergent from the general meaning.

0.1 The Tawala Situation

The data presented in this paper are predominantly from the Diwinai dialect, the central dialect (cf. 0.2) of the Tawala language. Tawala is spoken by some 10,000 people living around the shores of Milne Bay and nearby islands of the easternmost tip of Papua New Guinea (see map 1). It includes the dialects referred to in earlier literature as the separate languages of Basilaki, Bohila[?]i (Bohira[?]i¹), Kehelala (Keherara¹) and Tavara¹, but does not include Maiwara as suggested by Dutton 1973, which is a dialect closely related to the Taupota language, though most Maiwara people have some knowledge of Tawala as a second language.

To understand the growing importance of the Tawala language we need to look briefly at the history of the Milne Bay Province from the time of European settlement. In the early days, a number of forces worked against the use of Tawala (the people themselves say the language was dying). This attitude is seen in the constant misspelling of place names by outsiders - see above paragraph and footnote below. Today however, the language is undergoing a revival, and may well become a lingua franca of the Province in the years to come.

The first consistent contact with the outside world began in the last decades of the 19th century with the commencement of three Christian missions, each working in the Tawala language area but not using the Tawala language (see map 1). From the south, the Kwato mission (an offshoot of the London Missionary Society) moved into Milne Bay using the Suau language. From the north-west the Anglicans moved along the northcoast towards East Cape using the Wedau language. From the north came the Dobu-speaking Methodists establishing work first on the East Cape Peninsula, and later extending to the islands to the south. Though some efforts were made at producing Tawala literature, work was predominantly in the three church languages. The Tawala people thus began to look on their own language

¹ r and y do not appear in any present-day Tawala dialects; these sounds reflect Dobu and Suau spelling.

as unimportant. This conclusion was reinforced by the government operations being centred at Samarai in the Suau language area, with Suau commonly used by government officers having contact with the people. In the early 1930's Catholic work began in the area, centred at Sideia. Over the years some work was done by them in the Tawala language, but only in a token way in comparison with the literature available in the other church languages of the area. However, later moves in government circles changed the scene.

In the mid 1960's the hopelessly overcrowded island of Samarai was abandoned as the administrative headquarters of the Milne Bay Province in favour of the mainland centre of Alotau on the north coast of Milne Bay. This changeover was completed in 1976 with the opening of the international wharf at Alotau. The transfer of power to indigenous leadership at Independence (1975) has relegated Samarai to the colonial past. There have been many results of this change of location, but none more important than the effect it had on the Tawala people, who have a new-found sense of the importance of their language. A United Church minister active in the Alotau area during the early changeover period reported a swing to the use of the vernacular in church services (personal communication). Today the swing is almost complete, with Tawala hymns and parts of the Bible available and popular, and church services mostly in the Tawala language. In 1981 some young people published the first Tawala newspaper - Geka Tuwega (This is News). What is more, people from other language areas are increasingly using Tawala in their contacts with the local people.

0.2 The Tawala Dialects

Throughout this thesis I use the term "dialects" to refer to variant forms of a single language. Unfortunately it is not so easy to define the meaning of "language". Just what is meant by the term "language" in connection with the Tawala language? How do we determine whether a village speaks a dialect of the Tawala language or belongs to a separate language? Several lines of investigation

have converged to give a clear picture of the boundary of the Tawala language.

In recent years scholars have pointed out the extensive problems with lexicostatistics as a classificatory method (e.g. McElhanon 1971, cf. Ezard 1977a). However, as an initial analysis of the synchronic situation of the languages of the Milne Bay Province, the method has proved its usefulness (cf. 0.4).

According to Swadesh (data from Gudschinsky 1964), two speech communities constitute a single language if they share more than 81% cognates, in a basic word list; 80% and below constitute separate languages. The section on lexicostatistics below shows the Tawala speech communities form a change of dialects for the most having well above 81% shared cognates (cf. table 1 below), whereas the highest relationship between Tawala villages and adjoining villages outside the Tawala language is 75% (cf. table 2, section 0.4).

Swadesh's 81% figure seems to correspond to the cut-off point at which communication between monolingual speakers of two villages would no longer be possible. It represents the approximate point at which communication would cease. In the process of collecting the basic word lists for this survey I constantly questioned people as to their concepts of who spoke the "Tawala" language, and I found that their view, which is based on mutual intelligibility, agrees precisely with the lexicostatistical data.

Ezard 1981 presents a detailed treatment of the Tawala dialects, and includes relevant lexicostatistical, phonological, grammatical and sociolinguistic data. The lexicostatistical results, based on Ezard 1977b are an accurate reflection of the synchronic situation and are presented in table 1 below. No diachronic conclusions are here drawn from these data, though I have no doubt that all the Tawala dialects are as closely related genetically as these figures would indicate. The statistics are displayed in such a way as to demonstrate two dialect groupings: the Diwinai dialect chain (single-lined box) and the Bohilai dialect cluster (double-lined box). The average internal cognate relation-

ships within these two dialect groups is 91% and 93% respectively. On the other hand, the average relationship of cognates taken across from members of one group to the other is only 86%. The data which form a basis for these statistics is presented in detail in Ezard 1981. Map 2 shows the locations of these villages.

Awayama							
91	Labe						
93	95	Diwinai					
90	90	95	Huhuna				
87	93	95	93	Lelehudi			
86	93	93	91	91	Lamhaga		
88	85	90	89	94	91	Kehelala	
80	87	87	86	85	86	86	Deladelauna
79	85	85	86	86	86	86	92 Gigiya
78	85	85	86	87	85	86	93 93 Liliki

Table 1 - The Tawala Dialects - lexicostatistical relationships

0.2.1 The Diwinai dialect chain

This major dialect division includes all the Tawala villages on the mainland. Diwinai is the most central dialect both geographically and linguistically. Sociologically, Diwinai has been an important centre, but not as important as East Cape, which has been a major mission centre and had some materials published in the Kehelala dialect. In recent years Labe has also outshone Diwinai due to the placing of the Milne Bay Local Government Council there. The newly established administrative centre at Alotau has established a firm place for the Labe dialect in the Tawala world. In spite of these factors, there seem to be no antagonistic feelings against the Diwinai dialect. Recent publications of Mark's and John's Gospels in that dialect have been well accepted by all dialects within the

Diwinai dialect chain, including Labe.

0.2.2 The Bohilai dialect cluster

Only three word lists were taken on Basilaki and Sideia and these are all approximately 93% cognate with each other. Doubtless further figures would fill in the gaps between them and reveal some sort of dialect chaining.

The people recognise the unity of their language with the Diwinai dialect chain, but they refer to their own dialect as Bohilai. Several Bohilai speakers have expressed the "heaviness" of Mark's Gospel in the Diwinai dialect, and it may prove beneficial for Basilaki and Sideia to have their own translated materials. This heaviness is not only due to the use of different lexical items; phonologically, the Bohilai dialect has three labialised consonants (mw, bw and pw) not found in the Diwinai dialect. (Thus 'if' becomes ipwai (or upwai) instead of ipa.) There are also a few commonly used grammatical morphemes which are different from the Diwinai dialect. E.g. the reflexive pronoun is tuyawa- instead of tunawa-, and the irrealis particle hamai is found in the Bohilai dialect in addition to the Diwinai apo form (Bohilai data from Baldwin c1950).

0.3 Tawala Phonology

The following 20 phonemes are found in the Diwinai dialect. A justification of these phonemes is set forth in Ezard, B. & J. 1974.

<u>Consonants</u>		Bilabial	Dental	Velar
Plosives	voiceless	p	t	k
	voiced	b	d	g
Labialised plosives	voiceless			kw
	voiced			gw
Grooved fricative			s	
Nasals		m	n	
Alveolar				
Retroflex lateral			l	
Semi-consonants		w	y	h
<u>Vowels</u>		Front	Central	Back
High		i		u
Low		e	a	o

Table 2 - Tawala Phonemes - point and manner of articulation

Notes:

- 1) The s/t distinction has been recently introduced as a result of contact with English. Historically, s/___i and t elsewhere.
- 2) There is negligible phonetic variation of Tawala phonemes.
- 3) Tawala has only one closed syllable type, ending in m. No mu syllables are found, and the m closed syllable has historically developed from mu. (The Yamalele language of Fergusson Island has mu in some dialects with corresponding m in others - Ezard, J. 1970).

O.4 Wider Linguistic Relations

Much work waits to be done on the classification of Tawala, and of Milne Bay languages generally, however, the overall position can be presented in outline. At the lowest level Tawala's closest relations lie along the north-east coast of eastern Papua (cf. map 3). Table 3 represents the lexicostatistical summary from Ezard 1977b (cf. Ezard 1981 for data). These data appear to reflect a close diachronic relationship as grammatical comparisons also show many close and unmistakable parallels of form, and the people recognise the similarities between their languages.

Wedau

63 Tawala

59 75 Gweda (Garuwahi)

60 71 66 Maiwara (Taupota dialect)

Table 3 - Percentages of shared cognates between Tawala and some closely related languages

These data agree well with Lithgow's (1976) Taupota family which seems to be a genuine genetic grouping.

Lithgow (1976) assigned 40 Milne Bay languages to 12 families. While non-lexical data were referred to by Lithgow, his classification rests predominantly on the basis of lexicostatistics. The statistics, no doubt, reflect the synchronic situation well enough, but require corroborating phonological and grammatical evidence before being applied to a genetic classification. In addition, no attempt has been made to account for extensive and widespread borrowing through the Kula and other trading ventures (Ezard 1977c) and for word taboo (Simons 1981), not to mention other fundamental problems involved in lexicostatistical studies themselves (McElhanon 1971).

Lynch (1976) questions Lithgow's interpretation of his data, and proposes a re-analysis in which all the languages of Milne Bay belong to a single family - the Papuan Tip Family, "which appears to have two sub-groups". However, as stated above, it is highly questionable as to whether valid

genetic conclusions can be drawn from purely lexicostatistical data. The value of Lunch's criticism is that it points out that whatever the relationship between the languages of Milne Bay, they are probably too closely related to warrant classification into separate "families".

Ross (1979) seeks to establish sub-groupings within Milne Bay on the basis of phonological, grammatical and lexical innovations. His classification is presented in table 4 and map 4. While Ross proposes his classification as only "tentative", it is certainly the best we have to date.

At the highest level, Milne Bay languages along with all the Austronesian languages of Papua New Guinea and island Melanesia, belong to a major subgroup of Austronesian set up by Dempwolff on a comparative phonological basis, and in recent years referred to as "Oceanic". Dyen (1965) questioned the cohesiveness of the Oceanic subgroup, but his lexicostatistics failed to take into account the extreme distortion of the Melanesian data caused by word taboo (Simons 1981), small isolated societies, and contact situations involving disparate Papuan languages.

Two large-scale subgroupings within Oceanic have been suggested: Eastern Oceanic, a group established by Pawley (1972) and the New Guinea Cluster (including Milne Bay languages) proposed by Milke (1965). Chowning (1973) throws Milke's "cluster" into question and Pawley (1978) has shown the need for new evidence if the subgrouping is to be taken seriously.

Grace (1955) proposed a classification of Oceanic languages in which the Milne Bay languages (along with Arifama and Miniafia of the Oro Province) were treated as one of 20 first level subgroups of Oceanic. While Grace's empirical evidence for this subgrouping has not yet been published, considerable evidence has been presented in favour of the various groupings (for details see Pawley 1978:112f). Pawley (1975) argues for the probable inclusion of the languages of Central Papua with the Milne Bay languages in a single subgrouping of Oceanic. This then brings

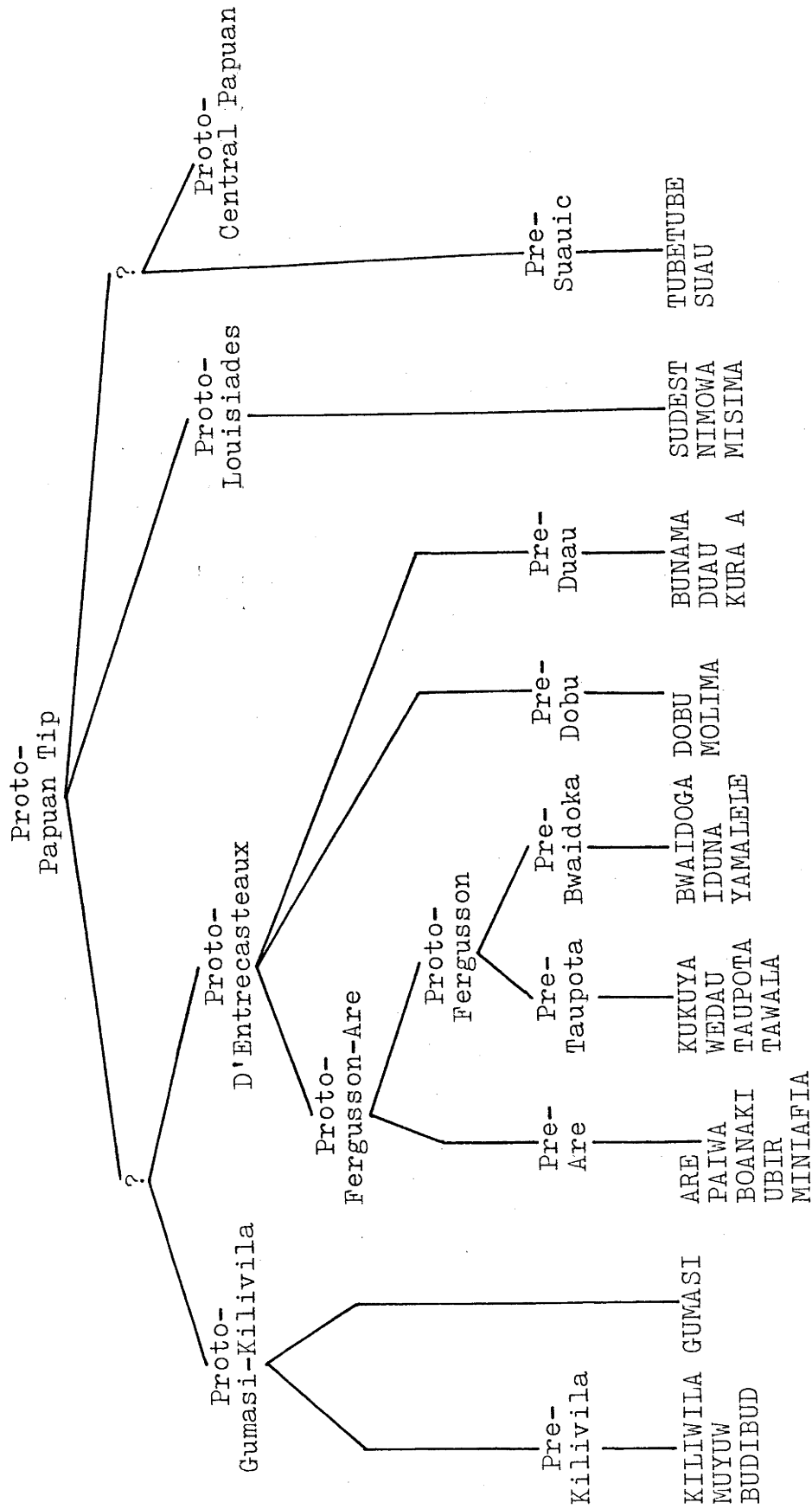


Table 4 - Tentative Family Tree of Milne Bay Languages (adapted from Ross 1979)

us to the Proto-Papuan Tip proposed by Ross (1979) who found Proto-Suau more closely aligned to Proto-Central Papuan than to any of the other proto-languages of Milne Bay.

0.5 Method

Too many supposedly empirical studies of language employ an "anecdotal" approach, where a hypothesis is considered established if a half dozen good examples are culled from the vast stock of possible examples. Under this method counter examples are simply ignored. Oftentimes relatively few counter examples are even discovered; the research worker in seeking to prove the theory he is working on elicits supportive material without any thought as to whether he is dealing with central, peripheral or even slightly aberrant language material.

Of course there will always be the need for broad studies which look at the universal features of a large number of languages. But such studies will always be plagued with superficiality and, like an earlier breed of Latin-based studies, an inescapable bias.

The Tawala derivational prefixes, not to mention the relationship between semantics and syntax, are so exceedingly complex that every effort needs to be taken to avoid theoretical and cultural bias. Every effort must also be made to let the language speak for itself, and avoid forcing data into an alien mould. Accordingly, I chose to work from a corpus of 30 texts which had previously been transcribed and reduced to a concordance by computer, in November 1979. After excluding the main person/number markers, 14,441 entries appear in the concordance, representing the multiple occurrence of 2,021 key words. Once the various forms in which a word may appear is accounted for, I estimate that the corpus consists of a vocabulary approaching 1,000 words. In all, the corpus contains 460 different verbs, 383 of which I studied in an earlier paper (Ezard 1980b). The 87 verbs I omitted, occur for the most part only once in the text, and not enough was known of their semantics to make their inclusion profitable.

The texts represent a wide variety of male and female speakers, from teenagers to a very old man respected for his "pure" speech. This, together with three distinct dialects (Kehelala, Diwinai and Labe) and a wide variety of discourse genre (stories, instruction, narrative etc.) guarantees a fairly representative cross-section of the Tawala language forms. Because of the difficulty of recording spontaneous conversations, most of the texts are "formal" monologues spoken into the tape-recorder. However a number of impromptu speeches at public gatherings are also represented.

The 383 verbs were sorted into semantic classes with methods and results reported in Ezard 1980b; a summary is presented in section 4.3 below. This was the situation when I commenced work on this present study.

From the list of 460 verbs, I then noted all those with derivational prefixes:

<u>wi</u>	81
<u>lu</u>	56
<u>li</u>	20
<u>wo</u>	16
<u>om</u>	35

With a total of 208 out of 460 verbs, we get an idea of the important role played by derivational prefixes in Tawala verb derivation. I examined each prefix to determine its area of meaning but drew no fresh conclusions. I then compared the lists with an eye to the use of more than one prefix to a root. I drew up a chart (similar to those in section 4 below) of the 55 roots which I knew to occur with more than one prefix. This included all the material I had collected in connection with a previous paper (Ezard 1978). At this stage 124 boxes were filled in, averaging only $2\frac{1}{4}$ prefixes per root. Keeping in mind that only roots with two or more prefixes were placed on this chart, this was not an encouraging score. In fact, I was advised at this stage that my search may prove vain, as the prefixes appeared to be non-productive. It was at this point that I returned to the field to collect more data, and to find, if possible, a key that would enable me to use the derivational prefixes

productively; a key that would unlock some pattern in the function of the prefixes. I had several lines of enquiry in mind, but the one which was to prove successful was the concept of "the priority of semantics" in which the prefixes function in patterns according to their semantic fields (cf. chapter 3).

My initial aim of trying to fill in the blanks on the chart was greeted with success (at least for the four main prefixes, - om did not pattern well with the others) with an increase to an average of more than three prefixes per root. It soon became obvious, however, that I could not contain all the relevant data for each root in a single line of a chart so I devised and had duplicated blank charts (appendix I) which enabled me to collect over 100 pieces of relevant information for each root. The filling in of these charts proved very time-consuming but was eventually completed for the original 55 roots, plus 23 other roots which suggested themselves in the course of the investigation. I then devoted several weeks to an examination of these data, from various theoretical standpoints, including the priority of semantics (see chapter 3) which began to show a little promise at this stage, as I attempted to bring together charts from the same semantic fields.

The next period of elicitation proved to be very exciting with almost daily discoveries of new semantic fields in which the prefixes functioned in a regular manner (as listed in chapter 4). At this point, Yailo, my language helper, who had previously had little idea of what I was trying to achieve, began to actively cooperate in discovery procedures. As soon as I could suggest two parallel forms belonging to a single semantic field he would be able to suggest further examples - proving the practical value of the "priority of semantics" concept. By this method the corpus increased to 562 verbs derived from 162 roots, all of which are listed in chapter 4 (charts 1-19).

Increasingly the picture became clear, that insofar as two roots share significant semantic components so the verbs derived from the application of the derivational prefixes

were completely predictable. In line with this insight, the data were again transferred, this time onto charts in which roots belonging to a single semantic field could be displayed together, similar to those in chapter 4. The meanings a given prefix has with the various roots of a semantic field were then checked for homogeneity. One problem became apparent with the method at this point. Often a prefix can be used with a semantic field with more than one meaning. However, once a particular meaning has surfaced in an elicitation session, it is difficult to change focus. Only by returning to a list at a later date is there much likelihood of discovering new areas of meaning. I have taken this step only in a handful of cases.

Another caution needs to be stated about some of the meanings contained in chapter 4. Many of these derived verbs are of low frequency of occurrence and probably represent the personal idiolect of Yailo. He would sometimes preface his remarks by saying something like, "I think it probably means such-and-such". Checking some of the material with other language speakers confirmed the individual nature of some material. However, as these checks were made in the Labe dialect, the distinctions may be dialectal.

A final problem is also apparent. It is not easy for anyone, untrained in the art, to define words, especially obscure words, in his own language. I constantly encouraged Yailo to illustrate the differences between words by putting them into sentences or even stories. Doubtless, at many points I may have missed the point of the story and have biased the meaning by failing to understand the full cultural significance of what I was told. Exposure of this problem will probably have to wait until Tawala linguists begin to write about their own language from an internal cultural perspective.

Whatever the weaknesses may be, this thesis outlines how hundreds of derived verbs can be controlled, and texts interpreted. That much work remains to be done is obvious, but at least a start has been made.

0.6 Terminology

Various terms used throughout the paper are in need of definition and explanation. Unfortunately there are many discrepancies in the terminology of linguists. For my own terminology I revert to some of the fundamental works in the field of morphology of the Tagmemic school.

0.6.1 Roots and stems

In their chapter on "Tagmemes and Construction below the Word Level", Elson and Pickett (1964:79) define "roots" as "single morphemes which function as the nucleus of words." The term "stem", "is used to refer to either single morphemes (roots, simple stems) or to morpheme sequences (derived stems)". Hence a single morpheme carrying the basic meaning of the resultant word is a root. A Tawala illustration may be helpful:

- (1) I-lata. 'He grew.'
 he-grow

Lata is the root carrying the basic meaning of the word, and also forms the simple stem in this word. If we now add a derivational prefix to the root we derive the form wi-lata 'to cause to grow'. This is a transitive stem:

- (2) I-wi-lata-ya. 'He emphasised the point.'
 he-DP-grow-it

In example (1) the word is built by adding an inflectional prefix i to a simple stem lata. In example (2) the word is built by adding an inflectional prefix i and suffix ya to a derived stem wilata which is composed of a derivational prefix wi and a root lata.

0.6.2 Derivational and inflectional prefixes

We now turn to the distinction we have assumed above between derivational and inflectional prefixes. Halle (1973:6) calls into question the theoretical relevance of the distinction between derivational and inflectional morphology:

The examples discussed above have been chosen from the domain that traditionally has been called derivational morphology. As far as I can tell, facts that traditionally have been treated under the separate heading of inflectional morphology must be handled in completely parallel fashion to those discussed above.

In Tawala it is essential to distinguish derivational from inflectional prefixes (cf. 1.5.2) and it thus seems wise to follow the traditional terminology. The distinguishing features between the two classes of affix as outlined in Nida (1949:99) proved useful in establishing the distinction for Tawala prefixes. A summary of these (and other) features relevant to the Tawala distinction is presented in table 5. However it is not my purpose to pursue the matter further, as the theoretical distinction is largely irrelevant to the main argument of derivational prefixes. Within the body of this thesis the inflectional prefixes are largely set forth in chapter 1 and the derivational prefixes in chapter 4.

As derivational prefixes generally have a low frequency of occurrence in Austronesian languages, the wealth of types in Tawala and other Milne Bay languages must be seen as a divergence from the norm.

	Inflectional prefixes	Derivational prefixes
Semantic features	<ol style="list-style-type: none"> 1) Never involve a change in word class membership 2) Single predictable¹ meaning 3) Uniform meaning with all roots they occur with 4) Their domain extends beyond the word i.e. they show relationships between words 	<ol style="list-style-type: none"> 1) Often change word class membership 2) Meaning dependent on semantics of root (cf. chapters 3 & 4) 3) Derive new stems 4) Their domain does not extend beyond the word
Morpho-syntactic features	<ol style="list-style-type: none"> 1) Unrestricted to specific roots 2) Belong to the outer periphery² 3) Single invariant form 	<ol style="list-style-type: none"> 1) Restricted to certain roots 2) Inner periphery² - never occur first in word 3) Multiple form depending on aspect (cf. 1.5.2)

Table 5 - Summary of Distinguishing Features of Tawala Inflectional and Derivational Prefixes

1 "Predictable" needs qualifying - it is predictable within the framework of the culture - not necessarily cross-culturally.

2 "Inner" and "outer" periphery refer to the position affixes take in relation to the core or root of a word.

1 GRAMMATICAL FOUNDATIONS

Owing to the word-class-changing nature of the derivational prefixes it is essential to start by setting up the major word classes (1.1).

Certain features of the verb morphology also need to be outlined in this chapter to facilitate an understanding of derivational prefixes and the examples which illustrate their usage, due to the fact that inflectional prefixes are always present in Tawala sentences (1.2-1.7).

1.1 Word Classes

From earliest times linguists have been aware of the fluid nature of many Austronesian roots which are used here as a verb, there as a noun or perhaps an adjective. Codrington (1885:102) comments:

It is not that there is a complete absence of such special forms of Verb or Noun; but that the same word (i.e. root - Ed.) without any change of form, may be in use as almost any of the Parts of Speech. The use of the word, not its form, commonly declares its character...

This phenomenon is apparently a language universal (cf. Bloomfield 1933:196), however its high frequency of occurrence in Austronesian forces itself on the linguists' attention. A Tawala example using a borrowed word ('putty') illustrates the situation nicely:

(3) (a) stative verb:

Wam i-pati.
boat it-putty
'The boat has been patched.'

(b) transitive verb:

Kuka u-na-pati-∅.
sail you(sg)-INT-putty-RF
'Patch the sailing boat!'

(c) noun:

Dimdim hai pati u-na-waya.
foreigner their putty you(sg)-INT-take
'Take the foreigners' glue.'

(d) adjective:

Wam patipati-na. 'A patched boat.'
boat putty-its

A second example illustrates the same phenomenon using a common Tawala root bagibagi 'work':

(4) (a) intransitive verb:

Ta-bagibagi.
we(inc)-work

'Let's do some work.'

(b) transitive verb:

Nima-hi-yei hi-bagibagi-ye-ya.
hand-their-INST they-work-D-RE

'They worked it with their hands.'

(c) noun:

Hai bagibagi i-kokoe.
their work it-finish

'Their work is finished.'

(d) adjective:

Meyagai bagibagi-na.
village work-its

'Work for the village.'

Sapir (1921:117ff) noted that traditional classification of words into parts of speech "is only a vague, wavering approximation to a consistently worked out inventory of experience." Thus, the part of speech "outside the limitations of syntactic form is but a will o' the wisp." Consequently, he considers that inter-language correspondence of parts of speech is not "of the slightest interest to the linguist". Dixon (1977:19) however, considers that such relationships are not entirely arbitrary. "It is a fact," he observes, "that inter-language class correspondences are made, on an intuitive basis, and are valuable."

The unrestricted data of a living language are so vast that in setting up word classes it is essential to distinguish between data which are typical of their part of speech and those which are atypical. In other words, we need a working hypothesis which enables us to handle all the data but at the same time distinguish basic data from that which is non-basic. Dixon 1976:347 suggests a suitable tool for our purpose:

...a language contains a set of basic norms - semantic, morphological, and maybe even phonological norms - from which it deviates in different ways and to different degrees a great deal of the time.

An application of this type of reasoning to parts of speech is given in Lyons 1977:440 (cf. Schachter 1978):

The thesis that will be maintained here is that the semantic...part of the traditional definitions of the parts-of-speech define for each part-of-speech, not the whole class, but a distinguished subclass of the total class. Each such semantically defined subclass is focal within the larger class...

Failure to observe basic norms in language results in great confusion. Without the concept a single counter example is sufficient to destroy an argument. However, by observing basic norms we are able to sort out relevant counter examples from those which are aberrant and mere red-herrings.

It is true that certain nouns have underlying verbal notions, but this does not detract from the fact that the core notion of nouns in English is "persons, places and things".

Thus we conclude that a part of speech is established on the basis of a characteristic subset of the whole class. Having defined the subset most characteristic of the class, we are then able to define the entire class as the class which includes the defined subset, and all other words which behave in the same way as the described subset.

To consider each use of a root as a separate lexeme, in line with traditional views to destroy the unity of the root. Rather there is a need for a thorough examination of all word roots in order to ascertain the potential performance and restrictions of each one, and accordingly assign each to a particular subclass. Lack of space prohibits such a classification in this thesis.

We now look briefly at the core notional content of Tawala nouns, adjectives and verbs, setting up classes which will later correlate with various morpho-syntactic data presented in the relevant sections of chapter 4.

1.1.1 The core notional content of nouns

Concrete "objects" form the core notional content of nouns, functioning ^{only} as nouns. In order for these noun roots to function as verbs, a derivational prefix must be added to them (4.1). On the other hand abstract nouns function as verbs or nouns without the use of derivational prefixes. The following noun classes are clearly distinguished in Tawala.

- (a) Persons only function as nouns. These include proper names (Mika, Yailo), person referent words (lawa 'person', bada 'man') and relationship terms (amau 'my father', natuta 'our (inc) child'). Human referent and relationship terms are typically reduplicated for plural.

<u>keduluma</u>	'woman'	<u>kedukeduluma</u>	'women'
<u>oloto</u>	'male'	<u>ololoto</u>	'males'
<u>hinau</u>	'my mother'	<u>hinahinau</u>	'my mothers'
<u>nouwe</u> ¹	'my sister'	<u>nounouwe</u> ¹	'my sisters'

Relationship terms are marked for inalienable possession:

<u>goga-u</u>	'my grandparent/grandchild'
<u>nou-we</u>	'my sister'
<u>amama-ta</u>	'our(inc) fathers'

- (b) Places also only function as nouns. Included here are proper names (Diwinai, Labe) and place referent words (meyagai 'village', huhuna 'bay').

- (5) Mika e-ge-gae u meyagai.
Mika he(PRES)-PROG-ascend to village
'Mika is going to the village.'
- (6) Tauna Diwini-yei i-nei.
him Diwinai-from he-come
'He comes from Diwinai.'
- (7) Ta-nae hoi tawali.
we(inc)-go to reef
'Let's go to the reef.'

¹ u → we/u__

- (c) Body parts of persons and things also only function as nouns. Like human relationship terms (a) they are re-duplicated for plural and marked for inalienable possession:

<u>ae-u</u>	'my leg'	<u>aeae-u</u>	'my legs'
<u>nima-na</u>	'his hand'	<u>nimanima-na</u>	'his hands'
<u>lugu-na</u>	'its leaf'	<u>lugulugu-na</u>	'its leaves'
<u>laga-na</u>	'its branch'	<u>lagalaga-hi</u>	'their branches'

- (d) Things (animate or inanimate) are signalled by referent terms (neula 'coconut', motamota 'worms'). They have no special inflectional morphology.

1.1.2 The core notional content of adjectives

The Tawala open class of adjectives includes all the universal semantic types (per Dixon 1977) with the exception of "human propensity" class which forms a special closed class of words (4.4).

Most adjectives form opposition sets:

- (a) Value:

<u>dewadewana</u>	'good'	<u>apapoena</u>	'bad'
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- (b) Dimension:

<u>baneina</u>	'big'	<u>habuluna</u>	'small'
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- (c) Age:

<u>odubona</u>	'old'	<u>wouna</u>	'new'
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- (d) Speed:

<u>bambamna</u>	'slow'	<u>sagesagena</u>	'fast'
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- (e) Physical property:

<u>hayahayana</u>	'dry'	<u>niginigina</u>	'wet'
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Colour and some physical property adjectives form complementary sets:

{	<u>wakewakekena</u>	'white',	<u>waididibalena</u>	'black'
{	<u>kayakayana</u>	'red'	etc.	
{	<u>gugouna</u>	'sweet',	<u>waigolana</u>	'bitter',
{	<u>tululuwana</u>	'sour'	etc.	

1.1.3 The core notional content of verbs

(a) Events (actions and processes) are typically expressed by verbs in Tawala.

- (8) Lawa i-nae.
 person he-go
 'The man went.'
- (9) Logaloga he-lupalupa.
 children they(PRES)-PROG-jump
 'The children are jumping.'
- (10) Liyapa i-lalana.
 mat it-dry
 'The mat dried.'
- (11) Mayau amaka i-lata.
 tree already it-grow
 'The tree has already grown up.'

(b) States are typically expressed by the use of stative verbs (a verbal form of adjective).

- (12) Amaka i-dumalu.
 already it-straight
 'It (the problem) has already been fixed.'
- (13) A-togo po a-yeuyeu.
 I-wash and I-clean
 'I washed and I am clean.'
- (14) Dobu i-gobu.
 village it-dirty
 'The village is dirty.'
- (15) Lawa hi-dewadewa.
 person they-good
 'The people are good.'

1.2 Inflectional Prefixes

The distinction between Tawala inflectional and derivational prefixes was established in the introduction (0.6.2). The verbal inflectional prefixes are used for the categories of person, number, tense and aspect, and are given only cursory treatment here as a full treatment is irrelevant to the purpose of this present thesis.

1.2.1 Person, number and tense

	Number	Singular	Plural
Person			
1		a	ta incl. to excl.
2		u (e)	o
3		i (e)	hi (he)

Table 6 - The Person/Number Prefixes

The above table sets out the various prefixes associated with person and number. These prefixes are obligatory whenever a stem is used as a verb. The forms in brackets are used when the situational context is in the present tense. Person/number categories not marked for present tense are distinguished purely on contextual grounds.

Only two examples of these prefixes are given at this point as there are numerous examples elsewhere in the thesis.

(16) Awai i yam e-an-ani?
 what our(exc) food it(PRES)-PROG-eat
 'What keeps eating our food?'

(17) To-hopu u Modewa.
 we(exc)-descend to Modewa
 'We went down to Modewa.'

Tense is further marked by the particles apo "future" and amaka "completed". Apo marks a probable state, as opposed to apega improbable state (from apo "future" and ega "negative", but is also important in marking tense especially in the 1st person.

- (18) Amaka i-nei.
already he-come
'He has already come.'
- (19) Apo a-ne-hi.
FUT I-come-towards hearer
'I will come.'
- (20) Apega a-peu.
FUT/NEG I-fall
'I won't fall.'

1.2.2 Aspect

There are three aspects in Tawala marked by prefixes which follow the person/number prefixes:

- na intentive aspect including commands
ta irrealis aspect including negatives
∅ realis aspect

The remaining aspect (progressive) is marked by reduplication and is handled in a separate section (1.5). The irrealis aspect ta is marked with all persons and numbers, but intentive aspect na does not productively occur with 1st person prefixes¹. The unmarked form, being a zero is normally omitted from the examples.

(a) Intentive aspect (na):

- (21) Ap(o) u-na-peu!
FUT you(sg)-INT-fall
'You'll fall!'
- (22) U-na-hopu!
you(sg)-INT-descend
'Get down!'

(b) Irrealis aspect (ta):

- (23) Apo a-ta-nei?
FUT I-IRR-come
'Can't I come?' ('I couldn't come, could I?')

¹ The na occurs in vestigial form with the om prefix, e.g. ta-n(a)om-hoe 'let's go'. The word to-na-i-baabani 'we will chat' (Labe dialect) may also be an example of a vestigial form, or it may be another morpheme I have not yet tracked down, e.g. Hau malatom to-na-i-baabani yaka a-paliweleya. 'If we talk tomorrow I will tell him.'

- (24) Ega a-ta-peu.
 NEG I-IRR-fall
 'I didn't fall.'
- (c) Simple realis aspect (unmarked)
- (25) I-peu.
 he-fall
 'He fell.'
- (26) Amaka to-hopu.
 already we(exc)-descend
 'We already went down.'

1.3 Derivational Prefixes of Verbs

Derivational prefixes (wi, lu, li and wo) attach directly to the root in order to form derived verb stems:

<u>wi-neula</u>	'rub oil on'	(<u>neula</u> 'mature coconut')
<u>lu-mayau</u>	'collect firewood'	(<u>mayau</u> 'fire/firewood')
<u>li-dao-ya</u>	'lengthen s-t.'	(<u>daodao-</u> 'long')
<u>wo-geleta</u>	'be revealed'	(<u>geleta</u> 'arrive')

Only cursory treatment is given the stative prefix (om) which is far less productive and apparently less complex than the other derivational prefixes.

Derivational prefixes have often been referred to as "causative" prefixes. As these prefixes are often clearly not causative it seems wiser to avoid this traditional usage in preference for a more generic term to refer to them; hence the choice of "derivational" prefixes. I have previously (Ezard 1978) referred to them as "modal" prefixes following Capell (2.6), however even Capell recognised that the term was "not satisfactory". Pawley (1972:39) uses the term "transformative affixes" for a broader class than the Tawala derivational prefixes. This term would be adequate, however the term "derivational" is useful in pointing out the syntactic nature of these prefixes in deriving new verbs.

As the initial part of the stem (simple or derived) normally undergoes reduplication (1.5) for progressive aspect, the derivational prefixes are involved in morphological change. However, they are quite irregular in this respect (1.5.2).

Derivational prefixes are, of course, the central interest of this thesis, and they are elucidated in great detail, especially in chapter 4.

1.4 Classificatory Prefixes

In a previous paper (Ezard 1978) I outlined the form and function of Tawala classificatory prefixes which do not entirely fit into either the inflectional or derivational class of prefix (0.6.2 table 5). The following examples illustrate something of the range of classificatory prefixes (data from Ezard 1978):

(a) Instrumental prefixes:

tu-hedali 'break s-t. by knocking' (hedali 'break s-t.')

guna-loloya 'tear by itself' (loloya 'tear s-t.')

(b) Declaration prefixes:

kawa-moina 'proclaims-s-t. true' (moina- 'true')

pali-weleya 'tell s-t.' (wele 'give')

(c) Movement prefixes:

welu-lui 'disappear inside' (lui 'enter')

tu-hopu 'descend a little' (hopu 'descend')

Tawala classificatory prefixes share the semantic features of inflectional prefixes:

- 1) They do not normally involve a change in word class membership
- 2) They have completely predictable meaning
- 3) They have a uniform meaning with all roots
- 4) Some show relationships between words

However, morpho-syntactically, the classificatory prefixes are akin to the derivational prefixes in that:

- 1) They are restricted to certain roots - they are even more restricted than derivational prefixes
- 2) They belong to the inner periphery
- 3) They change form according to the aspect of the verb

The main morphological distinction between classificatory and derivational prefixes is that the latter do not follow the regular forms for reduplication which apply elsewhere in

the language (1.5.2) whereas the classificatory prefixes follow normal reduplication patterns (1.5.1).

The greatest affinity of the classificatory prefixes is to compound verbs, however this present paper is not the place to develop this theme; they are included here only because of their relationship to derivational prefixes. Data on classificatory prefixes are included where relevant in chapter 4 (e.g. motion verbs 4.3.1) as it strengthens the 'priority of semantics' thesis.

1.5 Reduplication

As outlined in Ezard (in press), reduplication is used for a number of separate functions in Tawala. For the purposes of this present thesis we are interested in one function only: progressive aspect (1.2.2). All active verbs have a special form for progressive aspect, which for most stems, including most derived stems (formed with compound stems or classificatory prefixes) have a reduplicated form. On the other hand, for derived stems formed with the derivational prefixes, the progressive aspect consists not of a reduplicated form, but by the substitution of a separate form of the prefix.

1.5.1 Standard verbs

The actual form of reduplication of normal verbs is determined by the phonetic shape of the stem.

(a) Complete reduplication

Verbs whose roots commence with a CVCV pattern normally reduplicate the first two syllables. As most Tawala roots have this pattern, this is the most common form of reduplication.

<u>hopu</u>	'go down'	<u>hopuhopu</u>	'be/keep going down'
<u>hune</u>	'praise'	<u>hunehune</u>	'keep praising'
<u>geleta</u>	'arrive'	<u>gelegeleta</u>	'be/keep arriving'
<u>hagu</u>	'help'	<u>haguhagu</u>	'keep helping'
<u>wele</u>	'give'	<u>welewele</u>	'keep giving'

(b) Partial reduplication

There are two types of partial reduplication, firstly for verbs which commence with CVV and secondly for verbs which commence with a vowel (V).

1) Verbs which have a CVV pattern at the beginning of the root, where the second vowel is higher than the first, are normally reduplicated by prefixing the root with the consonant plus the second (high) vowel. (The aspectual meanings have been omitted in the following examples, but they follow the same pattern as the examples above.)

<u>gae</u>	<u>gegae</u>	'go up'
<u>houni</u>	<u>hunouni</u>	'put s-t.'
<u>beiha</u>	<u>bibeiha</u>	'search'
<u>tou</u>	<u>tutou</u>	'cry'

However, a few verbs take a vowel other than the second vowel of the root:

<u>nei</u>	<u>nenei</u>	'come'
<u>peu</u>	<u>pipeu</u>	'fall'

The small number of verbs having both vowels at the same level (both high or both low, cf. 0.3) show complete reduplication:

<u>hoe</u>	<u>hoehoe</u>	'open'
<u>woe</u>	<u>woewoe</u>	'paddle'
<u>bui</u>	<u>buibui</u>	'turn over'

To keep the exceptions together, the following CVCV verbs have partial reduplication:

<u>hale</u>	<u>hahale</u>	'throw'
<u>niye</u>	<u>niniye</u>	'bring s-t.'
<u>waya</u>	<u>wiwaya</u>	'take s-t.'

2) Verbs which commence with a vowel form their reduplication by repeating the first VC:

<u>apuya</u>	<u>apapuya</u>	'cook s-t.'
<u>eno</u>	<u>eneno</u>	'sleep'
<u>am</u>	<u>amam</u>	'eat'
<u>uma</u>	<u>umuma</u>	'drink'
<u>atuna</u>	<u>atatuna</u>	'rain'

(c) Vowel reduplication

When the first two syllables of a stem are the same, the first vowel is lengthened to form the progressive aspect:

<u>totogo</u>	<u>tootogo</u>	'be ill'
<u>guguya</u>	<u>guuguya</u>	'preach'
<u>tatawa</u>	<u>taatawa</u>	'tremble'
<u>teteya</u>	<u>teeteya</u>	'cross/bridge s-t.'
<u>kiki</u>	<u>kiiki</u>	'strangle s-t.' (dog)

1.5.2 Derived verbs

All verbs form their progressive aspect following the above rules except those with derivational prefixes. The verbs in Tawala incorporating derivational prefixes distinguish between punctiliar and progressive aspect by use of a separate set of prefixes, as in the following table:

Punctiliar aspect	Progressive aspect
wi	i
lu	lau
li	lai
wo	woo
om	yam

Table 7 - Prefixes marking Aspect Change on the Verb

Examples:

<u>hi-wi-tona</u>	'they fought'
<u>he-i-tona</u>	'they are fighting'
<u>hi-i-tona</u>	'they were fighting'
<u>hi-lu-mayau</u>	'they gathered wood'
<u>hi-lau-mayau</u>	'they were gathering wood'
<u>hi-li-bolu</u>	'they sat talking'
<u>hi-lai-bolu</u>	'they were sitting talking'
<u>hi-wo-dadani</u>	'they touched it'
<u>hi-woo-dadani</u>	'they were touching it'

<u>hi-(o)m-poya</u>	'they applied heat/magic'
<u>hi-yam-poya</u>	'they were applying heat/magic'

For full paradigms and further details of the progressive aspect of derivational verbs see Ezard 1978.

1.6 Focus of Verbs

When I set out to write this thesis I had in mind handling the derivational prefixes from a syntactic point of view, placing special emphasis on the causative nature of the prefixes. However, I became so engrossed by the insights gained from the concept of the priority of semantics (chapter 3) that I soon found I had more material than I could adequately handle without even touching on syntax. Consequently, the syntax of Tawala derivational prefixes must wait for another paper. However an outline of certain problems needs to be presented here to facilitate an understanding of the Tawala data in section 4.

Tawala verbs are of three basic types: stative, intransitive and transitive. The following definitions depend in part on Pawley 1973 (p.126f).

(a) In stative verbs the subject undergoes or is in the state of the verb, e.g. 'good', 'happy', 'soft', 'red'. These verbs are usually closely related to a cognate adjectival form:

- | | |
|--------------------------------------|----------------------------|
| (27) <u>Dobu</u> <u>gobugobu-na.</u> | <u>Dobu</u> <u>i-gobu.</u> |
| village dirty-its | village it-dirty |
| 'A dirty village.' | 'The village is dirty.' |
| (28) <u>Houga</u> <u>daodao-na.</u> | <u>Houga</u> <u>i-dac.</u> |
| time long-its | time it-long |
| 'A long time.' | 'It is a long time.' |

(b) With intransitive verbs the subject not only experiences the action, but with animate beings, can be thought of as causing it as well. Most intransitive verbs involve movement or posture, e.g. 'jump', 'go', 'walk', 'stand', 'fly', 'lie down', 'sleep'. These verbs do not have a related adjectival usage:

(29) Tewela i-eno.
 child it-sleep
 'The child slept.'

(30) Wam i-nae.
 boat it-go
 'The boat went.'

(c) Transitive verbs may be defined as those verbs which potentially have an object - the experiencer of the action, e.g. 'love', 'obey', 'eat', 'cut', 'kick', etc. There are two distinct forms of many verbs which have, in the past, been referred to as transitive and intransitive forms of a root. The problem with this traditional interpretation is that many of the "intransitive" forms can take objects!

(31) Ta-nae polo ta-lugowada.
 we(inc)-go pig we(inc)-steal
 'Let's go pig-stealing.'

(32) Ta-nae Kama a polo ta-lugowad(a)-i.
 we(inc)-go Kama his pig we(inc)-steal-RF
 'Let's go and steal Kama's pig.'

(31) is the "intransitive" and (32) the "transitive" form of the sentence. The real distinction here is obviously not between transitive and intransitive verbs, but between a definite and indefinite object. In example (31) there is no definite object in mind, but in (32) there is. In discussing this same phenomenon in Misiman, Callister (1979) uses the terms "action focus" (31) and "referent focus" (32), which seem to capture the distinction nicely. Where relevant I use these terms in the presentation of Tawala data (chapter 4). When the anaphoric reference to the object is understood from the context, then the overt object is often omitted and the verb marked for definite object.

However, the situation is further complicated by the fact that many transitive verbs do not have an action focus form and hence are always marked with referent focus, which as a result loses its markedness and becomes simply a transitive object agreement marker.

There are various classes of transitive verb, depending, to a large degree, on the phonetic shape of the root involved. These classes are briefly as follows:

(a) Verb roots ending in i; these have no indefinite object form. The plural is formed by adding hi to the unchanged root:

Singular	Plural	
<u>lawi</u>	<u>lawi-hi</u>	'hit something'
<u>hapi</u>	<u>hapi-hi</u>	'cut/chop something'
<u>houni</u>	<u>houni-hi</u>	'put something'
<u>gowadi</u>	<u>gowadi-hi</u>	'hide something'

(b) Roots ending in ta; these form the definite object form by replacing ta with hi in the singular, and adding a second hi for the plural:

action focus	referent focus	
<u>limaamata</u>	<u>limaamahi-hi</u>	'wake s-t.'
<u>ugota</u>	<u>ugohi-hi</u>	'plant s-t.'
<u>momota</u>	<u>momohi-hi</u>	'hold s-t. tightly'

(c) In the Labe dialect, two-syllable roots add -ya for singular and -hi for plural definite object. In the Kehelala dialect -ni is added for the singular instead of -ya. Lying midway between these two dialects, Diwinai shows a good deal of fluctuation between these two forms. Certain words show a definite preference for one form or the other, but many have free fluctuation between speakers or even between utterances of a single speaker. Wherever possible my language helper has accommodated himself to the Labe dialect, as that is where we have done most of our language and translation work in recent years. A small number of roots with more than two syllables follow this pattern; however as most Tawala roots have two syllables, this is by far the most common morphological pattern:

singular	plural	
<u>gale-ya</u>	<u>gale-hi</u>	'see s-t.'
<u>tala-ya</u>	<u>tala-hi</u>	'cut s-t.'
<u>wilupa-ya</u>	<u>wilupa-hi</u>	'let s-t. go'
<u>gwae-ya</u>	<u>gwae-hi</u>	'make water muddy'

(d) Three-syllable roots replace the final vowel with i for definite object forms and add hi for the plural object:

action focus	referent focus	
<u>toula</u>	<u>touli-hi</u>	'load s-t.'
<u>tagona</u>	<u>tagoni-hi</u>	'cross over s-t.'
(<u>wi</u>) <u>towolo</u>	(<u>wi</u>) <u>towoli-hi</u>	'stand s-t. up'
(<u>lu</u>) <u>yadaga</u>	(<u>lu</u>) <u>yadagi-hi</u>	'hit s-t.'

One of the common functions of Tawala derivational prefixes is to transform stative and intransitive verbs into causative (and thus transitive) verbs. Hence many of the data contained in chapter 4 have endings falling into the classes just described.

1.7 The Dative Suffix

Sometimes Tawala verbs do not have a direct involvement with their "object" but a more indirect relationship. This indirect relationship is marked with the dative suffix e, which is a first order suffix followed by a transitive suffix (1.6). The dative involves indirect relationships including actions carried out with an instrument and also reflexive action upon oneself. The phonetic output of e changes according to environment in the following ways:

- (a) $e \rightarrow \begin{cases} ye \\ ge \end{cases} / i _ _$ (ye ~ ge may be a dialectal distinction - most examples in my data have ye)

$$\rightarrow ge \left\{ \begin{array}{l} \left[\begin{array}{c} V \\ +grave \end{array} \right] \\ \left[\begin{array}{c} C \\ +grave \\ +nasal \end{array} \right] (V) \end{array} \right\} _ _$$

- (b) Assimilation also takes place before the dative prefix:

$$\left[\begin{array}{c} V \\ -high \\ -back \end{array} \right] + e \rightarrow e$$

Examples:

<u>bagibagi-ye-ya</u>	'work at s-t.'
<u>pali-ye-ya</u>	'scold s-o.'
<u>luwohepali-ge-hi</u>	'hit four items (with spear)'

<u>geno-ge-ya</u>	'worry about s-t.'
<u>otu-ge-ya</u>	'call to s-o.'
<u>wiwom-ge-ya</u>	'warm s-t.'
<u>winima-ge-ni</u>	'put gloves on (hands)'
<u>lugowad(a)-e-ya</u>	'hide oneself'
<u>widakul(e)-e-ya</u>	'gravel an area'

Something of the force of the dative/transitive distinction can be seen with the two minimal pairs that have come to light:

{ <u>widewadewa-ya</u>	'repair s-t.'(make s-t. good)
{ <u>widewedew(e)-e-ya</u>	'be feeling good'
{ <u>wiluwaga-ya</u>	'make s-t. second'
{ <u>wiluwag(a)-e-ya</u>	'put two things together'

While the following examples are not minimal pairs they do illustrate various meanings of the dative:

{ <u>winima-ge-ni</u>	'put gloves on (hands)'
{ <u>lunima-ni</u>	'hit his hand'
{ <u>wigapola-ya</u>	'make s-o. rich'
{ <u>lugapol(a)-e-ya</u>	'become rich'
{ <u>luwohepali-ge-hi</u>	'hit four items (with spear)'
{ <u>wowohepali-ge-ni</u>	'gather/hold four'

It will be noted that a large proportion of the above examples involve derivational prefixes, and more examples are to be found in the charts of chapter 4. However, in line with the purpose of this thesis, no systematic treatment of this aspect of the syntax is attempted.

2. PREVIOUS STUDIES OF DERIVATIONAL PREFIXES

The history of the treatment of derivational prefixes is one of general neglect and superficial analysis. There are a number of reasons for this poor state of affairs which are outlined in the following paragraphs.

Linguists of the 20th century have studiously attempted to avoid the use of a latin model in their descriptive work, seeking rather to "let the language speak for itself". Yet it is easier to identify a difficulty than to eradicate it. The heart of the problem lies in the fact that we linguists are often not aware just how pervasive a hold the Indo-European model has over us. This is explicitly illustrated in the linguistic treatment of derivational prefixes.

Because traditional grammars have generally given verbal prefixes a rather cursory treatment, modern-day linguists tend to assume that the grammar of stem formation is a relatively insignificant affair. My training in Koiné Greek unconsciously encouraged me to complacency. One of the leading Greek grammarians of the 20th century comments in relation to prepositional prefixes to Greek verbs (Funk 1961:62):

It is not proposed in the following sections to treat the subject either exhaustively or in logically flawless categories...

Instead, the grammar opts for an anecdotal approach (op.cit.)

...those categories and individual cases which merit special attention are to be presented by a method of classification in which, for practical reasons, the formal and logical principles are mixed.

It is not my purpose to sit in judgement on Funk or any other Indo-European grammarian, but rather to simply show that my expectations in the study of Tawala were predisposed to ignore derivational prefixes. Only my chagrin at being unable to productively handle the prefixes in everyday conversation jolted me out of my complacency and forced me to seriously examine "the pesky particles". Studying the history of the treatment of derivational prefixes reveals that here indeed is a virgin forest almost totally unexplored.

Generative grammar with its aim of producing a grammar which is a formal representation of what a speaker must know about his language has come to face the fact that word formation processes must be a part of the grammar. Halle (1973:3) comments:

...the assumption has been made quite generally that a grammar must include a list of morphemes as well as rules of word formation or morphology. The character of these rules and their relationship to other parts of the grammar, in particular, to the rules of syntax and of phonology, has been studied only to a very limited extent.

A further factor which has hindered progress in the Milne Bay area is the extreme complexity of the derivational prefixes. Exploratory studies early reveal some obvious causative prefixes, but attempts to systematically apply this meaning to other roots are hindered by idiosyncratic uses. A concerted effort on the part of the linguist to find patterns reveals what appears to be an impenetrable jungle. The course of least resistance is to assign the idiosyncracies to the lexicon, learn them individually, and be satisfied with anecdotal notes about the derivational prefixes of the language. It is more or less this situation which prevails up to the present.

A possible added problem obstructing the analysis of derivational prefixes was the 20th century linguistic bias against semantics. In my own early analytical attempts it occurred to me in passing that word classes were in some way involved, but I had at that time no training to enable me to make use of this crude insight. It is possible that others had similar insights. For example Wolff (1982:88) reaches a similar conclusion in his study of Tagalog affixes, but includes the insight only in a footnote:

Roots of a similar meaning tend to have similar sets of affixes which occur with them.

A final factor which has hindered analysis is that the semantic categories of the various prefixes are often outside the framework of the usual categories discussed in grammars, which brings us full circle, to the Indo-European bias with which we started.

In turning to the actual achievements of the various linguists who have worked on Milne Bay languages down the years, it will prove useful to keep in mind the various insights which were to be revealed:

- (1) Many of the derivational prefixes are not just alternations of form, but separate prefixes.
- (2) The prefixes have multiple rather than single meanings.
- (3) The use of prefixes results in word class changes - this aspect has received only scant attention.
- (4) The distinction between classificatory and derivational prefixes has a morphological base in some languages.
- (5) The geographical extent of the complex - I handle this facet in chapter 5.
- (6) The aspectual change associated with prefixes - in a limited number of languages only.

2.1 R. H. Codrington

In 1885 the Rev. R. H. Codrington published "The Melanesian Languages", a monumental treatment of more than 30 languages from the Solomon Islands, Vanuatu, Fiji and associated islands.

Codrington, along with all subsequent researchers, distinguished "verbal prefixes" from "verbal particles", the latter including tense and mood. In all, Codrington found four principal types of verbal prefix (page 183):

...those of Causation, Reciprocity, Condition and Spontaneity. The first is when a Verb comes to signify the making to do or be; the second when a double action, one upon another, or of many on one another is indicated; the third when a thing is shewn to be in or to have arrived at a certain condition; the fourth when that condition has come about of itself.

Codrington then lists the appropriate forms for each language. The description which follows the list is more a comparative treatment showing parallel forms in a wide range of languages from Malagasy to Polynesia, than a detailed synchronic treatment of the prefixes themselves; this aspect is handled in the section under the specific languages.

As the first step in understanding the verbal prefixes, Codrington's work represents an important step upon which subsequent comparative work has been based. It is included here because of the influence it has had on Milne Bay Comparative studies. Unfortunately subsequent studies have tended to perpetuate the weaknesses as well as the strengths of the work. Several problems with Codrington's analysis are worthy of note:

(1) Codrington appears to have confused two levels of affixation. The Causative and Condition prefixes are true derivational prefixes, while the Reciprocal and Spontaneity prefixes are probably inflectional prefixes. The latter are more open to conscious reflection, thus more subject to change, and hence it is not surprising that they appear to have few if any cognates in Milne Bay languages.

(2) The derivational prefixes have more than one form in about half the languages listed. Lumping them together has led to the assumption that the distinctions are insignificant. Mota, the language best known by Codrington, has two causative (va, vaga) and two condition (ma, ta) prefixes. He does not distinguish the meaning of the first pair but makes a slight distinction in referring to the second (p.187):

There is no difference, however, in meaning, except that ta in most of the languages, more than ma, signifies that a thing has come into the condition the word describes, of itself, and not by some known cause from without.

(3) Codrington has simplified the data for presentation. An examination of the Mota prefixes (pp.282-284) reveals that the situation is more complex than indicated by the simple list. He comments in respect to the causatives va and vaga which he considers a single prefix (p.282):

This prefix is in very frequent use, but yet the Verb ge or na "to make" is often used in place of it...
The Verb va "to go" combined with another word, may sometimes appear like the Causative.

He does not say how he distinguished the causative va "to go" from va "causative". If we assume meaning distinctions between the four separate forms va, vaga, ge and na and a bipartite division within va, then we have a complex situa-

tion - perhaps not as complex as the Tawala situation described in this paper, but at the very least an interesting aspect of Mota requiring full elucidation.

2.2 S. B. Fellows

The first details of Milne Bay derivational prefixes were published on the Misima language in the 1894 Annual Report on British New Guinea under the title, "Grammar of the Pannieti Dialect...", by the Rev. S. B. Fellows.

From the very beginning Fellows' data revealed that the situation was somewhat complex and in need of detailed study. The following material represents the essence of the four "particles" listed and illustrated by Fellows:

By the use of the causative particles pa (\sim pi \sim po) and lo some intransitive verbs may be turned into transitive:

boru 'to be extinguished' → paboru 'to extinguish (fire)'
nogogo 'to come together' → logogoir 'to gather people together'

By prefixing the causative particle a, some adverbs may be used as verbs:

panak 'badly' → apanak 'to do badly'

Some of the verbs, which express the action of breaking, tearing, separating, etc., of materials take the causative particle pi to denote the operation:

hawan ' ? ' → pihawan 'to bore through'

The following points are of interest in respect to these prefixes:

- 1) Fellows takes the step of giving the meaning according to word class, a step rarely taken again in Milne Bay, presumably because more data would have required semantic fields within the word classes.
- 2) The pi particle is apparently listed as having two separate functions (one a variant of pa).
- 3) The change of forms nogogo → logogoir obviously needs more explanation than the simple addition of a causative particle.

2.3 Copland King

"The Grammar and Dictionary of the Wedau Language" by the Rev. Copland King was published in 1901 and is of special interest because of the close relation of Wedau to Tawala. King alerted the linguistic world to the complex nature of the verbal prefixes of the Milne Bay area, listing 17 prefixes (p.15) not including his person-number and tense prefixes:

ai, am, au, go, rau, ravi, ta, tavi, tu, tupa, vi, viai,
viam, vo, vovai, wana

Not all the prefixes are illustrated or given meanings but those that are, reveal that there are at least three classes of prefix included here, but not distinguished by King:

(a) Inflectional prefixes:

ai first
au towards speaker

(b) Classificatory prefixes:

tu poking motion or action done with foot
tupa poking a hole in
vo with the hands
ta, ravi, tape action of rouching

(c) Derivational prefixes:

vo modifies verb
rau condition in sense; also has a passive signification
vi makes an intransitive verb transitive; before a noun signifies 'to become...'
viai, vovai causative
viam to do repeatedly

Several points are worth noting about King's verbal prefixes:

1) While more than one form is listed without differentiation of meaning, there are also examples of prefixes with more than one meaning, an essential step in understanding the derivational prefixes, but one which linguists were slow

in taking, in respect to Milne Bay languages at least.

2) The "passive signification" mentioned by King is not a true passive, but rather what linguists would now refer to as a stative verb. The example given by King is raugatuei 'to be invited'. The dictionary gives the meaning of qatuei as 'to call (out)'.

3) It is amazing that though Wedauan has been learned by numerous expatriates as the official church language of the "north-east" coast area, no subsequent progress has been made in the analysis of the verbal prefixes.

2.4 Sidney H. Ray

Sidney Ray had a long and fruitful association with Milne Bay languages. According to Lithgow (1976:160) "Ray's relevant published works extend from 1893 to 1938". In 1907 Ray published a work which did for British New Guinea what Codrington 1885 did for the island world to the east. "The Languages of British New Guinea" was part of the multi-volume, multi-disciplinary, "Report of the Cambridge Anthropological Expedition to Torres Straits and New Guinea". That Ray followed Codrington, in assuming that each prefix should have but a single meaning, is revealed in the following paragraph (p.460):

In Wedau vo- is also used, but the meaning is not clearly shown. In vo-g[?]arai, dig with the hands; vo-buibui, clench the fist; vo-dadani, feel, it has the meaning "with the hands", but in other examples it modifies the root as in vo-mairi, stand up (mairi, stand); vo-bagibagi, be stiff (bagibagi, hard).

Ray seeks, somewhat unsuccessfully, to describe the derivational prefixes of the area in terms of the four prefixes proposed by Codrington 1885:

(a) The Causative Prefixes:

Table 8 lists the verbal prefixes of Milne Bay languages recorded by Ray (though not as set out by him). Of special significance is his listing, for the first time, of the four Tawala derivational prefixes studied in this present thesis, along with cognate forms in selected Milne Bay languages.

Dobu	Kiriwina	Misima	Mukawa	Wedau	Tawala	Suau
a ¹	vaka ¹	a	bai~bi	vi	wi	he
-	-	-	bo	vo	wo	-
-	-	-	-	-	li~lei	-
lo	lo	rau	rau	rau	lou	rau
gie ²	ka ²	-	-	-	-	-

Table 8 - Causative Prefixes Cited in Ray 1907

Notes:

¹ The first line of prefixes are the common Oceanic "causative" which in Codrington's data is mainly va or vaga.

² Ray does not equate the Dobu gie with Miriwinan ka (ka~ko~ki~kata)

It is interesting that Ray did not use the published data listed in the sections above under Fellows 1894 (2.2) or King 1901 (2.3), otherwise he would have been able to slightly expand his list.

Apart from the fact that Ray introduced new data from a number of languages, he made no real contribution to our understanding of derivational prefixes.

(b) The Reciprocal Prefixes:

The data presented for Milne Bay do not show any good examples of a reciprocal prefix. Ray shows that the causative listed first above may perhaps be interpreted as having a reciprocal meaning with certain roots, but he appears to have had a diachronic relationship in mind. As an example, the Tawala data is presented as follows:

In Tawala wi- (also used as a causative) shows a reciprocal relation in such words as wi-mulitagoi, follow, wi-atatie, teach, wi-babani, discuss, wi-wasawasa, be chief, rule.

Apart from the fact that none of these words has a reciprocal meaning (wi-baabani means 'to speak' or 'to talk' in the singular) only the last listed word has wi as a productive prefix, with wasawasa 'a rich or powerful man' as the only (synchronically) meaningful root.

(c) Condition Prefixes:

Ray's evidence here is less convincing than for the reciprocal prefix. The evidence cited would appear to offer not even a diachronic relationship to the Island data.

(d) Spontaneous Prefixes:

Ray finds no data resembling that in "The Melanesian Languages".

2.5 John K. Arnold

The Dobu grammar of the Rev. John Arnold published in 1931 under the title of "A Grammar of the Language of Edugaura" is notable not only for its length (31 prefixes) but also for an openness to multiple meanings found in few published works from Milne Bay. In the following quote, only examples illustrating the latter point have been included. As with so many linguistic works on Milne Bay languages, the force of the prefix is lost because the meaning of the root without the prefix is not given.

Verbal Particles. These are prefixes and enlarge or specify the meanings of the words or they convert other parts of speech into verbs. This list is not intended to be exhaustive nor is it suggested that these particles do not possess other shades of meaning.

?ara, by means of heat; ?arapwaila, burst.

?ara, by means of pressure; ?araupa, bite lip.

e, sign of the passive, par. 121.

e, sign of reciprocity, par. 125.

e, to become; emanua, to become an animal.

e, to cause to; edena, cause to escape.

lo, plural prefix; lo?utu, wash; lo?ara, carry (several things).

lo, to do a thing; lokaiyone, to say farewell.

mia, to move a short distance; miadoro, move seawards slightly

mia, to abide; miamawari, to stay all night.

Again we have a language which has been learned by many capable expatriates, but none has ever sought to elucidate the derivational prefixes presented by Arnold.

2.6 A. Capell

Arthur Capell's "The Linguistic Position of South-Eastern Papua" of 1943 is undoubtedly the highest achievement published to date on the comparative situation of Milne

Bay languages. To reach this height Capell stood on the shoulders, not only of the Codrington and Ray (and most other) published works on the area, but also much contemporary work of the period found only in missionary notebooks or rough manuscripts. Perhaps the greatest weakness of Capell's work was also the result of this same dependence on others. As Chrétien (1956:88) pointed out:

Unfortunately Capell's sources varied greatly both in quality and in the quantity of the data which they presented.

Certainly, the Tawala data is often of a very poor quality as pointed out in Ezard 1978 (note 4 pp.1176f.).

Capell (1943:237) was the first to distinguish two classes within "prefixes to verbs":

These may be subdivided into (a) modal and (b) classificatory prefixes, though the former term is not satisfactory. A classificatory prefix shows how an action is done - whether by hand, by the foot, by speaking, or in other ways; a modal prefix shows the particular mode of relationship expressed by the verb - condition, state, causality, reciprocity, spontaneity, etc. are possible modes.

Unfortunately for this present paper Capell concentrated more heavily on the classificatory prefixes, presenting much new data on the subject. As indicated in the above quote, Capell had little to add to the work of Codrington and Ray on the subject of the "modal" prefixes. What is more, Capell's interest is in the diachronic objecting of "finding and establishing the linguistic history of south-eastern Papua" (p.15). Thus Capell is mainly interested in the reflexes of the Austronesian causative *pa, omitting, for the most part, references to the other derivational prefixes. This list of the Milne Bay reflexes of *pa is the most extensive ever published. I present them here according to form:

he¹- Suau, Bunama, Nuakata
ya- Tubetube

¹ The letter e is an open e, written ä by Capell.

<u>ve-</u>	Kurada, Bwaidoga ¹
<u>e-</u>	Dobu
<u>vi-</u>	Kukuya, Wedau, Paiwa, Kiriwina
<u>wi-</u>	Tawala, Kehelala, Wedau, etc.
<u>i-</u> ²	Bohila?i, Mukawa, Ubir
<u>bi-</u>	Mukawa, Ubir
<u>va-</u>	Kiriwina, Tugula, Sud Est
<u>pa-</u>	Misima, Sabari
<u>a-</u>	Misima
<u>apa-</u>	Misima
<u>ha-</u>	Sabari

The only remaining point worth mentioning about Capell's work is his assigning of certain modal prefixes to his classificatory section. For instance, he assigns the lu~lo~lau~rau etc. prefix to classificatory prefixes because he confuses a diachronic relationship and the synchronic reality.

Capell felt this prefix probably arose from the serial verb construction 'to go and do an action'. This however is only a historical explanation and is no longer a productive feature of the Milne Bay languages I have studied. Capell himself gives the general meaning for this prefix as "assumption of state" which fits his "modal" definition. Similarly the am~kam prefix is usually given the same gloss, but is also included among the classificatory prefixes, possibly on the basis of a mistaken notion that the Tawala am primarily means "action by chewing", whereas it too is primarily a stative prefix (Ezard 1978:1168). Finally, Capell assigns the vo~wo prefix to the classificatory prefixes on the basis of its meaning "action by hand" even though he notes that in Tawala "the meaning weakens as in Wedau" and gives examples which have nothing to do with the hands.

¹ The Bwaidogan correspondence was taken from the body of the text as it was omitted from Capell's list.

² The i- is probably an aspectual variant of wi- (Bohila?i is a Tawala dialect) and bi- (Mukawa and Ubir).

Thus Capell effectively reduces the "modal" prefixes of Milne Bay to a single causative. However, what he takes away with one hand he brings back with the other by introducing material from "languages in which the causatives are more numerous". There follows a discussion of ten Kiriwinan prefixes and four Bwaidogan prefixes, some of which are clearly cognate with the prefixes discussed in the previous paragraph.

2.7 Baldwin and Williams

The special significance of these two works is that they present material on two of the Tawala dialects, and thus have a direct bearing on this present paper.

Fr. B. Baldwin's (c.1950) manuscript grammar on the Bohilai dialect is brief but contains some valuable insights. The section on "the commonest verb-building prefixes" does not distinguish classificatory from other derivational prefixes, nor does it clearly distinguish the aspect changes of the prefixes. Worst of all it confuses the lu/li and wo/wi prefixes as being "variations". Obviously Baldwin was struggling with a rather difficult aspect of the Tawala language.

The Rev. H. T. Williams (1962?) manuscript dictionary with grammar notes of the Keherara dialect proved very useful in my own initial study of Tawala. As I pointed out in a previous paper (op. cit. p.1162) Williams lists only five prefixes which he calls "verbal particles". However, his dictionary, which runs to several thousand words, contains most of the prefixes I have subsequently described. But he failed to recognise the fact that a single prefix can have several forms according to its aspect; hence a single word is often found in the dictionary in two or even three places.

In fairness to Baldwin and Williams, it needs to be stated that they never had publishing in mind for their notes, nor need we assume that their insight into Tawala did not exceed their notes.

2.8 "Classificatory Prefixes"

While my paper (Ezard 1978), presented to the Second International Conference on Austronesian Linguistics, was primarily on classificatory prefixes, the paper also contained some new insight into the derivational prefixes of the Milne Bay area.

Morphological evidence was presented for the semantic distinction between classificatory and modal prefixes. In addition, the paper presented, for the first time, something of the true complexity of the "modal" (derivational) prefixes of one Milne Bay language, with each prefix displaying two or more clear areas of meaning, although what was presented at that time proved to be only a distant view of the tip of the iceberg.

3. THEORETICAL FOUNDATIONS

This chapter looks briefly at three theoretical questions upon which this thesis rests; firstly, the relationship between syntax and semantics; secondly, the concept of semantic fields; finally, the problem of cross-cultural studies, with reference to world-view.

3.1 The Priority of Semantics

In seeking to unravel the complex world of Tawala derivational prefixes, I set as one of my goals to examine them in the light of possible underlying semantic strata - investigating whether the syntax of the prefixes is in some way dependent on the underlying semantics of words. It was with increasing excitement that I realised that this was indeed the nature of the case, and that I had discovered a key to unlock at least some of the mysteries of derivational prefixes. But this is to anticipate our conclusion.

American linguists from Bloomfield to Chomsky were fascinated with the ideal of autonomous grammar - grammar which could be enunciated without recourse to meaning. To study the objective forms of language was considered the truly scientific method, and as "most linguists are... anxious...to lay claim to being scientists..." (Haas 1978: 207), this model has had a pervasive influence on the course of linguistic events. In his "Syntactic Structures" Chomsky (1957)

...took the view that the grammatical rules could be established and formalized without making any appeal to sameness and difference of meaning or to any other semantic notions. In this respect, grammar was held to be autonomous and independent of semantics.
(Lyons 1977:409)

Chomsky (1957:15) distinguished grammatical from meaningful sentences with his now famous example:

Sentences (1) and (2) are equally nonsensical, but any speaker of English will recognise that only the former is grammatical.

(1) Colorless green ideas sleep furiously.

(2) Furiously sleep ideas green colorless.

It is important to keep in mind a second aspect presented in Syntactic Structures. Not only did Chomsky stress the independent nature of syntax, he also stressed the importance of the Syntactic-semantic relationship (op.cit.p.93):

There is no aspect of linguistic study more subject to confusion and more in need of clear and careful formulation than that which deals with the points of connection between syntax and semantics.

While Chomsky defined the connection between syntax and semantics in narrow terms, assigning only a secondary role to semantics, and biased research "heavily in favour of syntactic solutions to problems" (Jackendoff 1972:2), yet he did open the door to semantics. The result has been an ever increasing world-wide interest in semantics both within the generative framework and from those working along totally separate lines.

One such line of research is that outlined by Dixon in his seminal paper, "Where have all the adjectives gone?". The underlying principle of his paper is "the priority of semantics". Dixon (1977:24) outlines this principle:

We work from the assumption that the syntactic properties of a lexical item can largely be predicted from its semantic description. Semantics is thus held to be prior to syntax. The ways in which syntactic properties can be predicted on the basis of semantic representation are complex, and are not yet fully understood...

The correlation between semantics and syntax is seen from the fact that once the meaning of a new word is learnt, we are able to use it in a variety of syntactic structures with a high degree of accuracy. Chomsky himself was forced on the basis of this correlation to postulate a language-acquisition device which enables the child to master the complexities of generative grammar in his daily life (1965: 58):

It seems plain that language acquisition is based on the child's discovery of what from a formal point of view is a deep and abstract theory - a generative grammar of his language - many of the concepts of which are only remotely related to experience by long and intricate chains of unconscious quasi-inferential steps.

Instead of postulating a language acquisition mechanism by which the complexities of experience are mapped onto an infinite set of sentences, Dixon (1977:24) starts with a totally different model in which the mature speaker

On the basis of his semantic competence, and his understanding of the general connections between semantic types and semantic properties in that language... immediately knows how to use the word in a syntactically acceptable manner. That is, he is able to predict its syntactic properties on the basis of the semantic specification.

The following chapter presents some strong empirical evidence from the Tawala language in support of Dixon's thesis. The data suggest the general principle that: insofar as two words share significant semantic components so their syntax overlaps. This principle is given detailed treatment in chapter 4, along with a presentation of the Tawala data.

3.2 Semantic Fields

In the first passage quoted from Dixon 1977 above, we find the term "semantic description" ("the syntactic properties of a lexical item can largely be predicted from its semantic description.")

The semantic description of lexical items is a complex matter which has exercised the minds of many capable scholars this century. For the purposes of this thesis it is necessary to examine 3 areas of semantic description:

(a) The part of speech from which each verb is derived is relevant in determining the meaning of derived forms. Word classes are set up on the basis of a cluster of morpho-syntactic features associated with a core notional meaning. This aspect of the semantic description has been partially handled for the open word classes in the grammar section (1.1). Throughout chapter 4, data are presented on the basis of the part of speech of the underlying root, (for a summary cf. table 11) commencing with the three open word classes, followed by three closed word classes. In the process of this presentation further aspects of the word classes are presented.

(b) The valency of roots and the changed valency of derived forms is handled briefly in the introduction to chapter 4 (cf. table 12 for a summary). The magnitude of the subject and the already bulging dimensions of this thesis mean that a systematic treatment of this aspect of the prefixes must wait for a future paper.

(c) The semantic field of roots is also of vital importance. While we look at this aspect in detail in chapter 4 (cf. table 9 for a summary) we turn now to examine the terminology of the subject.

A semantic field (or domain) consists of a set of words which are related to each other by sharing a common significant component. It is quite feasible for a single word to belong to more than one domain, as illustrated by Lehrer (1974:7):

...glass 'a container' would be studied along with cup, bowl, mug, vase, and other container words to see how these items contrast. Glass 'the material' is compared to brick, concrete, plastic, wood, etc.

The Tawala word gaima 'stone' belongs to 3 semantic fields, and in each case it takes at least one derivational prefix appropriate to the domain.

1). As a type of ground-covering gaima falls into the same semantic field as dakule 'gravel' and bubu 'sand' etc. By prefixing the derivational prefix wi to these roots we get stative stems indicating 'a condition of being covered by something':

(33) Dobu i-wi-gai-gaima.
village it-DP-PROG-stone
'The village is very stony.'

(34) Niha i-wi-dakule.
salt it-DP-gravel
'The beach is pebbly.'

(35) Numa i-wi-bubu.
house it-DP-sand
'The floor is covered with sand.'

2). As a type of weapon gaima takes the derivational prefix wo indicating 'to hold in the hand ready for throwing':

(36) Hewa-hewali he-woo-gaima.
 PL-youth they(PRES)-DP(PROG)-stone
 'The youths are holding stones.'

(37) Bada e-woo-higeyala.
 man he(PRES)-DP(PROG)-spear
 'The man is holding a spear.'

3). As a common legendary item into which culture heroes often turned, gaima is used with li- (-ya) indicating 'to turn into something'.

(38) Bada i-li-gaima-ya.
 man he-DP-stone-RFX
 'The man became a stone.'

(39) Neula i-li-ginah(i)-i.
 coconut it-DP-sago-RFX
 'The coconut palm became a sago palm.'

(40) Yakoyako i-li-gumaguma-ya.
 shell it-DP-hermit crab-RFX
 'The shell-fish became a hermit crab.'

Perchonock and Werner (1969)¹ conducted studies in Navaho food classification which led to the conclusion that there are usually several legitimate classifications of words into semantic fields within a speech community:

It is interesting that people, without exception so far, agree to the rightness of another person's classification even though it differs considerably from their own. This seems to indicate that there are several different culturally accepted ways of categorizing Navaho food, and that each member of the society is implicitly aware of nearly all of them.

It is not my purpose to become embroiled in the semantic field debate. Suffice to say that my exposure to the Tawala data has led me to a strong affirmation of Spence (1961:105)¹ when he states that the association of words is "looser, more complex, and more unpredictable than most field theorists are prepared to admit." Whilst the concept of "the priority of semantics", along with that of semantic fields, has unlocked considerable areas of Tawala syntax, yet there are sufficient "idiomatic" exceptions and residue data (4.7)

¹ Data are taken from Lehrer (1974:18).

to forestall complacency and remind us that I may have done little more than scratched the surface in seeking to fully understand the semantic-syntactic connection of just one small area of grammar.

3.3 Semantic Fields: Indices of World-view

Each language draws a magic circle round the people to which it belongs, a circle from which there is no escape save by stepping out of it into another.
(Humboldt)

In examining the semantic fields of an exotic culture, one becomes acutely aware that the domains have little in common with one's native language. Lyons (1977:250) agrees that the grammatical and lexical structure of a language will reflect the specific interests and attitudes of the culture in which it operates. He warns us, however, against thinking.

that every grammatical and lexical distinction must be correlated with some important difference in the patterns of thought of the society using the language.

While keeping this warning in mind we can feel more confident in dealing with semantic fields than with isolated words as an index of world-view. An example of a domain which introduces us to something of the emotional world of the Tawala people is the domain which I refer to as "the ritual chants" domain. Prior to discovering this linguistic domain I had experienced certain emotionally charged chants in the Tawala culture, but did not realise that they were tied together into a single semantic field (by a unique usage of a derivational prefix) until I was collecting the data for this thesis. I hope the following brief account of these words reveals something of the Tawala world, so strange to an outsider. In each case the prefix lu is used with the reduplicated form of the root.

lu-hoehoe (literally 'to make hoe')

The chant is used when making sago, in order to keep up rhythm and morale during long hours of chopping. "Hoe...hoe...hoe..." The importance of this cultural trait has been immortalised in the sago myth:

...Lizard's adze was chopping and he was chanting (luhoehoe), "Hoe...hoe...hoe...hoe...". His friend stood listening and exclaimed, "Wow, whose voice sounds so good?" Then Possum went down to his friend and said..."Oh Friend, your voice sounded really good; perhaps we should follow this custom of yours since it is so good. Your voice sounded melancholic and your chopping beautiful." (Yailo Robert)

lu-bahabaha (literally 'to make words')

A ritualised boasting or denouncing of another party. For several minutes the boaster keeps throwing one hand and leg into the air and yelling at the top of his voice sentiments such as, "You complete and utter idiots, how could you fail in such a simple thing? When we (exclusive) did it last year it was a complete success. You idiots, you complete imbeciles..."

lu-otuotu (literally 'to make calls')

This high-pitched call, somewhat akin to the Australian "cooee" is used to communicate short messages through the jungle. "My friend." Reply, "Ooo". "I'm going down to the river." Reply, "Oooo" ('I understand - I got your message').

lu-hiyahiyawa (literally 'to make countings')
or tou-baha ('to cry words')

The ritualised wailing, accompanied by tears, practised at the death of a friend or relative. The mourner recounts the past glories that the two shared. "Oh my brother, we walked the trails together; my brother, we hunted pigs in the bush. Oh, my brother, my brother..."

wi-lulougo¹ (literally 'to make singing')

A ritualised call, used either to notify one's arrival at a hamlet, or used as a kind of yodelling by a group of young men walking along the jungle trails. Even as I wrote these notes the bush was reverberating with such beautiful two-part harmonies, but it is in the middle of the night that these calls are especially beautiful.

¹ The prefix wi replaces lu here, as the reduplicated form of lougo already involves one lu prefix to the root.

It should be noted that these examples illustrate a semantic field of a set of derived verbs, whereas our main interest in this thesis is the semantic fields of underived roots. These fields are discussed in detail in the next chapter. Semantic fields are of two kinds. Firstly there are those areas of meaning which are based on the nature of things: numbers, colours, size, body parts etc. These will tend to have recognisable parallel focal points in all cultures (cf. Berlin and Kay 1969, Dixon 1977). However, where the human mind is less tied by the nature of things, and allowed to construct its own world we discover divergent paths which have little or nothing in common across unrelated cultures. An exceptionally good illustration of this point is the fusion of person and deixis in Kawi (Becker and Oka 1974).

The area of verbs gives ample freedom for thought and language-specific approaches, particularly in the types of semantic domains functioning as grammatical groups. We would not expect the categories set up for English to be more than a very rough guide to the categories of another language. This is certainly true for Tawala, where almost all the residue data belong to the verb class. Doubtless there are a number of interesting semantic fields, which when discovered, will reduce these data to a degree of order.

4 TAWALA DATA

In this chapter we examine Tawala derivational prefixes in detail. In particular we investigate the meanings attached to these prefixes when used with various roots to derive verbs. In discussing the priority of semantics (3.1) the general principle was stated that: insofar as two words share significant semantic components, so their syntax overlaps. The data listed in chart form in this chapter illustrate this thesis.

We can identify a general meaning for each prefix, but these meanings are not sufficient to predict the semantic effect a prefix will have with a given root. However, in addition to assigning general meanings for each prefix, the roots are divided into sixteen semantic fields with which each prefix has separate specific meanings. Thus while the general meaning of the lu prefix is to derive a verb which 'involves physical contact or movement', the specific meaning of lu with body parts is 'to hit a body part', or with a cultural item it is 'to collect an item'. The general meanings are set out in table 9 at the head of each column under the respective prefixes. The specific meanings for each prefix are contained in the cells corresponding to the various semantic fields listed in the left hand column. Each line represents a semantic field, with the specific meanings listed under the respective prefixes.

The positing of general meanings facilitates discussion in the following sections, as specific meanings need to be related to the general meaning. In her discussion of cases, Wierzbicka (1980) warns against the idea of a single "common meaning" as being "too general to have any productive value". This is a valid observation, and it will be noted that on more than one occasion two quite distinct meanings have been proposed. This process is taken a step further in table 11 where separate common meanings are proposed for each of the six word classes involved.

While table 9 appears rather complicated, it is in fact considerably simpler than the data it represents, which consist of almost 500 derived verbs (based on 135 separate

general meaning associated with derived semantic root field of root	<u>wi-</u>	<u>lu-</u>	<u>li-</u>	<u>wo-</u>
	1) v. involves being/ becoming like s-t. - socially 2) cause condition or action	v. involves physical contact or physical movement	v. involves s-t. new coming into being	v. involves hands or persistent action
OPEN WORD CLASSES				
A. <u>NOUNS</u>				
1. Body parts (hand, head)	cover, protect or aid n.	hit n.	-	hold n.
2. Relationships (child, father)	enter or adopt new relationship with n.	-	(multiply well)	-
3. Human reference (youth, man)	become/ behave like n. - socially	act like n. - physically	change s-o. into n.	-
4. Cultural items (stone, wood, pigs)	be covered (area) by n. spread area with n.	collect/catch n.	be transformed into n.	(a) hold n. for throwing (b) steal n. (c) be loaded with n. for feast
B. <u>ADJECTIVES</u>				(<u>woi-</u>)
5. Dimension (big, small)	cause condition - socially	-	cause condition - literally	manipulate s-t. - by hand
6. Physical property (straight, thick)	(cause condition - socially) (stative verb)	cause condition - physical action	cause condition	cause condition - by hand
7. Age (old, young) Value (good, bad) Speed	change condition - socially change condition - socially -	(idiomatic) (idiomatic) -	(change condition - physically) change condition - physically -	- (cause condition - by hand) -
8. Colour - basic (red, black, white) - non-basic	- (stative verb)	wear uniform colours 1) wear uniform colours 2) manufacture colour	manufacture a colour -	(idiomatic) -
C. <u>VERBS</u>				
9 (a) Basic motion (intrans) (go, go up)	(idiomatic)	miss mark in direction of v.	-	move a little each day in direction of v.
9 (b) Basic motion (trans) (take, take up)	carry s-t. in direction of v.	cause by exertion or obvious action	-	move s-t. in direction of v. - by hand
10. Manner of motion (fly, fall)	cause s-t. to act	(idiomatic)	cause action - physically	(1) persistent action) 2) cause v. by hand
11. Rest (sit, stand)	cause s-t. to take position	wait in position	force s-t. into position - using instrument	move self into new position
12. Carrying (on head, back) Cutting (cut, chop) Fighting (pierce, separate)	load s-o. up - state of hostility	- involves instrument or obvious action	- - -	repeat action over period of time
13. Corporeal (eat, sleep)	cause s-o. to act	(idiomatic)	(idiomatic)	perform action in stages
CLOSED WORD CLASSES				
A. <u>HUMAN PROPENSITY</u>				
14. (be angry, sad)	1) demonstrate a state - by words	cause a state - physically	1) cause a state 2) empathy - (idio)	persistently demonstrate a state
B. <u>NUMBERS</u>				
15. (one to five)	make s-t. a n.	grow in bunch as no./hit a no.	-	gather no. hold n. in hands
C. <u>LOCATIONAL</u>				
16. Static (in, on, at) Dynamic (before, after)	(idiomatic) move in relation to s-t. moving	pile in location pile in location	- -	put hand in location -

Table 9 - Semantic Fields and Tawala Derivational Prefixes

roots). These data, together with the residue data of 68 derived verbs (based on 27 roots) are listed individually in charts 1-17, and represent an almost impossible memory load, if they had to be individually learned. Charts 1-16 present 90% of the Tawala data in systematic form, and these data are summarised in table 9, with the numbers in the left hand column corresponding to the charts where the data are presented.

What is posited in table 9 is that every semantic field has its own unique syntactic-semantic combination of derivational prefixes associated with it. Table 10 sets out how the system works. X, Y and Z represent three semantic fields, and A, B, C and D represent the form-function complex of the resultant derived verbs. A always represents the presence of the same prefix etc. The subscript number represents the same or different meaning with a given prefix depending on whether the same or a different number is used with a given letter. Thus A₁, A₂ represents the same prefix but a different meaning; A₁, B₁ would of course involve a different meaning because a different prefix is involved.

X	A ₁	B ₁	D ₁
Y	A ₁	B ₁	D ₂
Z		B ₂	C ₁ D ₂

Table 10 - A Formal Representation of the Semantic-syntactic Relationship

Table 10 demonstrates that semantic fields X and Y have a very similar use of prefixes. They not only use the same set of prefixes (A, B and D, with C absent), but also have the same meanings with A and B, though a different meaning with D prefix. If X and Y did not have separate D meanings it would be possible to collapse the two semantic fields into a single XY domain. As it is, the "priority of semantics" hypothesis would lead us to expect that X and Y do in fact belong to closely related semantic fields, and this is the very type of situation which occurs over and over again in the Tawala data.

When Y is compared with Z we appear to have two very different semantic fields. Only at one point (D_2) do the two sets of derived verbs overlap. This would be typical of a situation where the semantic domains have almost nothing in common. Again the Tawala data present this type of data at many points.

Thus the lines in table 9 should be viewed as a type of code for each semantic field, listing the combination of prefixes used with that field together with the resultant meanings. Table 12 presents the supplementary syntactic side of the relationship, but more details on that aspect are given below.

Certain generalisations which may be stated about the use of derivational prefixes are contained in table 9, but tend to be overlooked in the mass of detail. Table 11 captures these generalisations by listing a common meaning for each prefix with each part of speech. These meanings are not as vague as the general meanings presented in table 9, however they are not as complex as the specific meanings either.

Working cross-culturally, it is often difficult to know how far to press various common meanings. For example, in table 9 the verbs, derived from nouns, with the wi prefix (top left-hand cells) mostly share the common meaning of 'become like item'. These include 'the covering of a body part' - a glove for example appears to become like a hand; similarly when 'an area is covered with items' it becomes like the item - e.g. sandy or stony. In a similar vein it is tempting to think of developing new relationships, including adoption as also in some way involving a 'becoming like the real relationship'. Insights of this nature are discussed under the respective semantic classes below, but should be regarded as hypotheses rather than data, as they present data according to my analysis and not as presented by a native speaker of the language.

Table 11 is an advance on table 9 as it presents a separate common meaning for each word class, instead of attempting to give a single general meaning for all word classes.

	<u>wi</u>	<u>lu</u>	<u>li</u>	<u>wo</u>
general meaning/ Word class	v. involves being/ becoming like s-t. (often socially) or causative action	involves physical contact or physical movement	v. involves s-t. new coming into being	involves hands or persistent action
<u>Open classes:</u> NOUNS	be/become like item	physical manifest- ation of item	be transformed into item	involves handling item
ADJECTIVES	cause condition (socially)	cause condition (physically)	cause new condition	cause by hand
VERBS	cause action	action in position or direction of v.	(force s-t. into position)	persist in action (intransitive) cause by hand (transitive)
<u>Closed classes:</u> HUMAN PROPENSITY	be in a state	cause a state (physically)	cause a state (empathy)	persistently demon- strate a state
NUMBERS	make a number	grow/hit a number	-	hold number
LOCATIONALS	move in relation to moving item	make a pile in location	-	put hand in location

Table 11 - The Common Meanings of Derivational Prefixes

Having mastered this relatively simple table, the students would have at their command some 90% of the specific meanings contained in table 9, and would be in a strong position to tackle the more idiomatic meanings found in the 16 semantic fields. All this is in line with the theoretical claim made above (3.1) that once the meaning of a new word is learnt the speaker of the language is able to use it in a variety of syntactic structures with a high degree of accuracy. The fact that a table of common meanings is able to be drawn up on the broad basis of word classes is a confirmation of the thesis that this chapter seeks to affirm: that insofar as two words share significant semantic components so their syntax overlaps. The very fact that two words belong to the same word class is an indication that they do share significant components: the nouns (of this chapter) are all "concrete" objects; the adjectives, qualities; the verbs mostly events etc.

Table 12 (below) is to be read parallel to table 9, and presents the syntactic data including the valency changes involved in the use of derivational prefixes. The syntactic formulae represent the forms in which data were collected and no claim is made with respect to other possible formulae; in fact, I have discovered since returning from the field that some data collected previously in texts have different syntax from the more recently collected data. Hence, examples occasionally differ from the systematic presentation of data.

This thesis concentrates largely on the semantics of the Tawala derivational prefixes, leaving aside their syntax. While no attempt is made to systematically handle the syntax, clues to its nature are presented at the head of each column of each chart, throughout this chapter, summarizing the syntax of the listed forms:

- (a) RED (Reduplication) is used when the resultant verb involves a group of items or group activity. The various forms which reduplication takes are set out in section 1.5.
- (b) RF at the end of the syntactic formula shows that the resultant verb has referent focus (where the object is

	<u>wi-</u>	<u>lu-</u>	<u>li-</u>	<u>wo-</u>
NOUNS				
1. Body parts	wi-R-D-RF	lu-R-RF	-	wo-R-RF
2. Relationship	wi-R-na wi-R-D-RF wi-RED-R-na	-	(li-RED-R- ^{D-RF} na)	-
3. Human reference	wi-R	lu-RED-R	li-R-RF	-
4. Cultural items	wi-(RED)-R	lu-R	li-R-RFX	(a)&(b) wo-R (b)&(c) wo-R-RFX
ADJECTIVES				
5. Dimension	wi-R-RF	-	li-R-RF	woi-R-RF
6. Physical property	wi-R wi-RED-R-RF	lu-R-RF	li-R-RF	wo(i)-R-D-RF
7. Age Value Speed	wi-R-me ^{me} RFX	(lu-R-(D-RF))	li-(RED)-R-RF	(woi-R-RF)
8. Colour: basic non-basic	- wi-R	lu-R lu-R lu-R-D-RF	li-R-RF -	wo-R -
VERBS				
9(a) Basic motion (intransitive)	(wi-(RED)-R)	lu-R	-	wo-R
9(b) Basic motion (transitive)	wi-R-(D)-RF	lu-R-(D)-RF	-	wo-R-(D)-RF
10. Manner of motion	wi-R-RF	lu-R lu-RED-R-D-RF	li-R-RF	wo-R-(D-RF)
11. Rest	wi-R-RF	lu-R lu-R-(D)-RFX	li-R-RF	wo-R woi-R-RF
12. Carrying Cutting Fighting	wi-R (wi-RED-R) wi-(RED)-R	(lu-R-RF) lu-R-RF lu-R-RF	- - -	wo-R-RF wo-R-RF wo-R-RF
13. Corporeal function	wi-R-(RF)	lu-RED-R	li-R-RF	wo-R
14. HUMAN PROPENSITY	wi-S-(RF)	lu-S-(D)-RF	li-S-RF	wo-R-(^{D-RF} RF)
15. NUMBERS	wi-R-na wi-R-D-RF	lu-R-(na) lu-R-D-RF	-	wo-R-D-RF
16. LOCATIONALS				
Static	(wi-R)	lu-R	-	(wo-R)
Dynamic	wi-R	(lu-R)	-	-

Table 12 - Syntactic Summary of Tawala Derivational Prefixes

Abbreviations: R 'root' RED 'reduplication' (x) item x occurs with some roots
D 'dative' RFX 'reflexive' x either x or y
RF 'referent focus' y
(formula) formula found with only a minority of roots

definite) or a transitive suffix. Unmarked verbs have action focus; they may be intransitive or transitive (with an indefinite object). Further details, including the suffixes associated with the various verb classes are set out in section 1.6.

(c) D before RF marks the dative suffix - for details see section 1.7.

(d) The na suffix which occurs with a number of the derived forms seems to be a vestigial suffix of the prederived root.

(e) me $\left\{ \begin{array}{l} \text{me} \\ \text{RF} \end{array} \right\}$ adverbial particle meaning 'again'. meme is the action focus form and meRF the referent focus form.

(f) woi- is a stronger form than wo-, typically used with adjective roots and always resulting in referent focus verbs. wo- typically, but not always results in a transitive or action focus verb. For example:

<u>wo-towolo</u>	'to assume standing position'
<u>woi-towoli</u>	'to stand something up'

Table 12 is thus a convenient presentation of the syntactic formulae in one place in order to facilitate comparison and further study of the problem.

A full list of abbreviations used in the tables of this chapter is given underneath table 12.

4.1 Noun Classes

All the Tawala nouns taking derivational prefixes belong to those concrete nouns which make up the core notional content of the word class. The derivational prefixes make use of four semantic fields within Tawala nouns: body parts, relationship terms, human reference and cultural items. This list differs in detail from the noun classes set up on the basis of a core notional content (1.1.1) in that 'places' is omitted and 'persons' is subdivided into relationship terms and human reference. Independent evidence for the empirical nature of these classes is presented in table 13 where the morpho-syntactic distinctions between these four noun classes are tabulated.

Semantic type	1) obligatory "inalienable possession" marker	2) reduplication of root for plural
1. Body parts	+	-
2. Relationship terms	+	+
3. Human reference	-	+
4. Cultural things	-	-

Table 13 - Morpho-syntactic distinctions of Semantic Noun Classes

The details of the morpho-syntactic data are discussed under the respective noun classes below.

Verbs derived from nouns show a high degree of homogeneity in their resultant meaning. Wi indicates a becoming like the item, lu involves a physical manifestation or bringing forth of the item, li involves a transformation into the item and wo involves handling the item. The specific outworking of these common meanings is discussed under the respective semantic fields (4.1.1 - 4.1.4).

There is thus considerable evidence for the priority of semantics in verbs derived from nouns. In all cases, the absence of a form is explainable on the grounds of a missing significant semantic component; e.g. while one can 'hold stones, sand and gravel in the hand to throw' it is not possible to hold water in the same way (4.1.4). In a similar vein, animals, being a rather homogenous group, are more closely aligned morpho-syntactically than the list of human reference terms (4.1.3) which, as we would expect, show a number of morpho-syntactic discrepancies.

4.1.1 Body parts

Most Austronesian languages are characterised by at least two classes of possession:

...some nouns take a possessive suffix added directly to the stem, others add it not to the stem but to a particle placed usually before it. (Capell 1976:16)

Items which take the possessive suffix are usually referred to as "inalienable possessions" (Lynch 1973). Included in this semantic class are body parts, personal attributes and biological relationships. In Tawala, the set of suffixes are as follows:

	Singular	Plural
1	u ~ we ¹	ta (inc)
		iyai (exc)
2	m	mi
3	na	hi

Table 14 - The Inalienable Possession Suffixes

Something of the range of meaning of this class can be seen in the following examples. The term 'biological relationships' is used for the parts of plants as well as for kinship terminology.

<u>nima-u</u>	'my hand'
<u>lugu-na</u>	'its leaf'
<u>hina-ta</u>	'our(inc) mother'
<u>nou-we</u>	'my sibling of opposite sex'
<u>gowa-hi</u>	'their name/s'
<u>kamna-na</u>	'his health, disposition'

We note that the concepts of name, health and disposition are considered body parts by the Tawala people, and not as abstract nouns we would consider them in English.

The body part class of nouns is further characterised by a unique set of derivational prefixes as set out in chart 1. It will be noted that the meanings on the chart are consistent, so that a Tawala speaker would easily be able to productively use any body part not listed in chart 1.

The wi prefix with body parts is used to derive verbs which involve placing a cover, protection or aid on a body part:

¹ u → we/u__.

wi-ae-ge-ni 'put on a shoe etc.' (ae 'foot/leg')

Thus used with 'leg' the combination can mean 'the use of shoes, underwater flippers and also cricket pads (there is no separate word for foot). In line with the proposed common meaning 'become like item', a cover, protection or aid used with a body part, does indeed become like the body part.

The lu prefix with a body part is used to derive a verb which refers to hitting that body part:

lu-tanigan-i 'hit his ear' (tanigana 'his ear')

The footnotes on chart 1 refer to three additional idiomatic meanings. This combination of lu with a body part relates to the common meaning 'the physical manifestation of item' in that hitting a body part is to draw everyone's attention to that part, thus point it out in an obvious way.

There are no examples of li used with a body part.

The wo prefix with a body part is used to derive verbs in which the animal or human is held by that body part:

wo-giun-i 'hold its tail' (giuna 'its tail')

As it is not possible to hold an animal by its eye, there is a gap in the data at this point. The common meaning 'involves handling item' differs little from the specific meaning, 'to hold body part'.

Typical examples:

(41) Natani unuhau i-wi-ununu-ge-ni.
Nathan hat he-DP-head-D-RF

'Nathan put the hat on.'

(42) Am kwasikwasi-gei u-na-lu-giun-i.
your(sg) machete-INST you(sg)-INT-DP-tail-RF

'Hit it on the tail with your machete!'

(43) Polo-na hi-wo-ae-ni.
pig-that they-DP-leg-RF

'They held the pig's leg(s).'

root (R)	meaning	wi-R-D-RF	lu-R-RF	li	wo-R-RF
		to cover, protect or aid	to hit a body part	-	to hold a body part
<u>ae-</u>	'leg'	<u>wiaegeni</u> put on shoes, etc.	<u>luaeni</u> hit its leg	-	<u>woaeni</u> hold its leg
<u>taniga-</u>	'ear'	<u>witanigageni</u> put on hearing aid etc.	<u>lutanigani</u> ¹ hit its ear	-	<u>wotanigani</u> hold its ear
<u>mata-</u>	'eye'	<u>wimatageni</u> put on glasses, etc.	<u>lumatani</u> ² hit its eye	-	-
<u>giu-</u>	'tail'	-	<u>lugiuni</u> hit its tail	-	<u>wogiuni</u> hold its tail
<u>ununu-</u>	'head'	<u>wiununugeni</u> put on hat	<u>luunununi</u> hit its head	-	<u>wounununi</u> hold its head
<u>nima-</u>	'hand'	<u>winimageni</u> put on gloves etc.	<u>lunimani</u> ³ hit its hand	-	<u>wonimani</u> hold its hand
<u>hipu-</u>	'buttocks'	-	<u>luhipuni</u> hit its buttocks	-	<u>wohipuni</u> hold its buttocks
<u>tolotolo-</u>	'ribs'	-	<u>lutolotoloni</u> hit its side	-	<u>wotolotoloni</u> hold its side

Chart 1 - Derivational prefixes with body parts

1 The form lutanigana is an idiom 'to listen'.
 2 This verb has an idiomatic meaning 'to talk face to face'. POC *mata is reconstructed with the meaning 'face' as well as 'eye', so this type of idiom has been around a long time.
 3 The form lunimana is an idiom 'to hold hands'.

4.1.2 Relationship terms

The subclass of nouns involving human and animal relations is distinguished by inalienable possession suffixes (for details cf. 4.1.1) and by reduplication. Reduplication is used with nouns referring to humans, to mark plural. Reduplication morphology is productive for all open word classes and the details have been handled in section 1.5. Some examples of reduplication with relationship terms:

<u>amana</u>	'his father'	<u>amamana</u>	'his fathers'
<u>gogata</u>	'our(inc) grandparent'	<u>googata</u>	'our g-parents'
<u>natum</u>	'your(sg) child'	<u>natunatum</u>	'your children'

The derivational prefixes are not highly productive with this semantic field; wi is the only productive prefix, though li has a two-fold idiomatic use.

Chart 2 presents 3 separate, though related, uses of wi with relationship terms, involving the concepts:

(a) to enter a new biological relationship

wi-ama 'become a father' (ama 'father')¹

(b) to call someone by a kin term or to adopt a new relationship.

wi-amana 'call s-o. father' (amana 'his father')

(c) to develop relationships with others - Church term

wi-amamana 'gain new fathers' (amamana 'his fathers')

The distinction between these three meanings rests on only slight differences of form, and a thorough treatment of the grammar would perhaps reduce these to productive grammatical distinctions. While example (46) does not appear to have anything to do with the church, it is so connected, however, in the minds of the people, as such wandering around in the dark was unthinkable in pre-Christian times. The form *wi-tulana for 'becoming a friend' (biological relationship) is omitted as it would involve a logical contradiction. The absence of the forms *wi-tugona 'become older brother' and *wi-tewela 'become younger brother' reflect the relative

¹ ama 'father' and hina 'mother' are the only exceptions to the rule that relationship terms cannot occur without the possessive suffix.

unimportance of these relationships in the Tawala culture. The relationships of all these meanings to the common meaning 'become like item' is quite obvious, in that adopting a new relation, say a child, is for that person to become like one's child.

Li occurs with two roots ('child' and 'grandchild') in reference to the progeny of pigs, if they have bred prolifically:

li-go-o-gana 'have many grandchildren' (gogana 'his grandchild')

When a person dies, a female pig is set aside for producing a family which will all be used at a mortuary feast in honour of the dead person. If in two generations the pigs number over twenty the original hog and sow will be said to have produced a large progeny. Even though these uses are idiomatic, they are in line with the common meaning of 'being transformed into item' or in this case, into many items.

The retention of the 3rd person singular suffix na with most of the intransitive examples of chart 2 is apparently a vestigial affix reflecting the fact that relationship terms never occur by themselves. We cannot have 'a sister' in Tawala, but only 'someone's sister'.

Typical examples:

(44) Ega nou-we ma a-wi-nouna.
not sister-my but I-DP-sister

'She's not my sister, but I call her sister.'

(45) Bada-na amaka wawine i-wi-gogan-e-ya.
man-that already woman he-DP-grandparent-D-RF

'The man treated the woman as his grandmother.'

(46) I-didibal-ei meka po meka ta-nae po
it-dark-at where and where we(inc)-go and
ta-wi-tula-tulana...
we(inc)-DP-RED-friend

'When it is dark, wherever we go we are all friends...'

(47) Polo hi-li-natu-natu-e-hi.
pig they-DP-RED-child-D-RFX

'The pigs (hog and sow) have a large progeny.'

root(R)	wi-R-(na)	1) wi-R-D-RF ³ 2) wi-R-na	wi-RED-R-na	lu-	li-RED-R-na	D-RF na	wo-
	to enter new biological relationship	1) to adopt new relationship 2) to call s-o. by kin term	church term, develop a new relationship with others	-	terms used of pigs who are multiplying well	-	-
<u>ama-</u>	'father' wiamā become a father	wiamā adopt a father	wiamamā gain fathers	-	-	-	-
<u>natu-</u>	'child' winatuna ² have a child	winatuna adopt a child	winatunātuna gain children	-	linatunātunehi have many children	-	-
<u>goga-</u>	'grandparent, grandchild' wigogana become g'parent	wigogana adopt g'child	wigogana gain g'children	-	ligogana have many g'children	-	-
<u>nou-</u>	sibling of opposite sex winouna become sister	winouna adopt sister	winounouna gain sisters	-	-	-	-
<u>hina-</u>	'mother' wihina become mother	wihina adopt mother	wihinahinana gain mothers	-	-	-	-
<u>tula-</u>	'friend' witulana adopt friend	witulana adopt friend	witulatulana gain friends	-	-	-	-
<u>tugo-</u>	older sibling same sex witugona adopt brother	witugona adopt brother	witugotugona gain brothers	-	-	-	-
<u>tewela¹</u>	younger sibling same sex witewela adopt brother	witewela adopt brother	witewetewela gain brothers	-	-	-	-

Chart 2 - Derivational prefixes with relationship terms

- 1 tewela 'child-brother' is used with alienable possession only. ² cf. wigunaguna 'to give birth'.
- 3 The referent focus forms (wi-R-ne-ya) have been omitted from the table.

4.1.3 Human reference terms

As with relationship terms (4.1.2), human reference terms are generally reduplicated for plural. The reduplicated forms are incorporated into chart 3 as they are somewhat irregular.

This semantic field is less homogenous than those we have examined so far, as is revealed by the number of gaps in the data and the idiomatic meanings presented in chart 3. The semantic shift between 'man' and 'male' is greater than between the two body parts 'arm' and 'leg'. Hence it is not surprising that the human reference terms should prove to be less regular than the body part terms.

The prefix wi with human reference terms has two distinct meanings:

(a) to become the item

wi-bada 'become a man' (bada 'man')

(b) behave like the item (socially)

wi-keduluma 'be like a woman' (child with a deep cough)
(keduluma 'woman')

In both cases we see a direct relationship between these specific meanings and the common meaning, 'become like item'. Chart 3 presents data which mostly have the first meaning above; however, this meaning is not possible with 'female' and 'male' and hence the second meaning is the only possibility with these items. When the second meaning is used, the implication is that the "action" is verbal or some other social form of behaviour, as opposed to the lu form which would imply physical action. The only word for acting like a foreigner is that of physical action rather than a social adaptation. This seems to embody the insight that most cross-cultural adaptation is a fairly superficial affair.

The prefix lu with human reference terms has the meaning 'act like the item':

lu-hewahewali 'act like a youth' (swing arms etc.)
(hewali 'youth')

As has just been mentioned, this implies physical action - often a caricature of the way the thing is normally done.

This is very close to the common meaning, 'physical manifestation of item.'

The prefix li with human reference terms involves the meaning of 'someone being turned into someone else':

li-wawineya 'change into a women' (wawine 'woman')

With the male/female items, the meaning necessarily involves a change of sex. Once again these meanings are very close to the common meaning 'be transformed into item'.

No occurrence of wo with human reference terms has been found.

Typical examples:

- (48) E-lau-gonu po amaka i-wi-keduluma.
 she(PRES)-DP(PROG)-cough and already she-DP-woman
 'She has a (deep) cough and sounds like an old woman.'
- (49) Dawida amaka i-wi-hewali.
 David already he-DP-youth
 'David has already become a young man.'
- (50) Bada i-wi-hewali-meme
 man he-DP-youth-again
 'The man appeared as a youth again.'
- (51) Lectures hi-wawala po kikeina dobu i-wi-lawa.
 lectures they-start and little village it-DP-person
 'The lectures started and gradually the place became more populated.'
- (52) Tu manini a baha-gei polo i-li-lawa-ya.
 person power his word-from pig it-DP-person-RFX
 'At the magician's word the pig became a person.'

root (R)	meaning	RED-R	wi-R	lu-RED-R	li-R-RF	wo-R
<u>bada</u>	'man'	<u>babada</u>	<u>wibada</u> become a man	<u>lubabada</u> act like men	<u>libabaya</u> make s-o. a man	-
<u>keduluma</u>	'woman'	<u>kedukeduluma</u>	<u>wikeduluma</u> become a woman	<u>luketukuluma</u> act like women	<u>likedulumaya</u> make s-o. a woman	-
<u>hewali</u>	'youth'	<u>hewahewali</u>	<u>wihewali</u> become a youth	<u>luhewahewali</u> act like youths	-	-
<u>guguhini</u>	'maiden'	<u>guguhini</u>	<u>wiguhini</u> become a maiden	<u>luguhuhini</u> act like maidens	-	-
<u>tewela</u>	'child'	<u>logaloga</u>	<u>witewela</u> become a child	-	<u>litewelaya</u> make s-o. a child	-
<u>lawa</u>	'person'	-	<u>wilawa</u> become a person	-	<u>lilawaya</u> make s-o. a person	-
<u>wawine</u>	'female'	<u>wiwine</u>	<u>wiwawine</u> be effeminate	<u>luwawine</u> ¹ dress prettily	<u>liwawineya</u> change to female	-
<u>oloto</u>	'male'	<u>ololoto</u>	<u>wioloto</u> behave as male	<u>luoloto</u> dress handsomely	<u>liolotohi</u> change to male	-
<u>(mi)dimdim</u>	'foreigner'	-	-	<u>lumidimdim</u> act like foreigners	<u>lidimdim</u> give s-o. white skin	-
<u>meyameya</u>	'infant'	-	<u>wimeyameya</u> become an infant	<u>lumeyameya</u> act like infants	-	-

Chart 3 - The derivational prefixes with human reference terms

¹ luwawine also has a transitive form luwawineya 'to rape a woman'

² The concept involves work on the part of an agent.

4.1.4 Cultural items

The final semantic field within the noun class is a large class of "cultural items". Items belonging to this group share no special morpho-syntactic features apart from the distinctive set of derivational prefixes (chart 4). Semantically, the cultural items are natural resources which involve no cultivation and are complete entities in themselves and not parts of constructions. Thus the group does not include cultivated food items or materials used in the construction of houses etc. Coconuts are not an exception to the cultivation rule as the planting of coconuts is a remote process carried out years before their collection and use.

Subclasses along mineral, vegetable and animal lines are required to explain distinctive uses with the derivational prefixes, but are not sufficiently distinctive to set up separate noun classes, nor is there any independent morpho-syntactic evidence for their status as independent noun classes.

Chart 4 summarizes the use of derivational prefixes with cultural items. The wi prefix derives intransitive verbs with the meaning of an area covered by the item - mineral and vegetable sub-class:

wi-gai-gaima 'be covered with stones' (gaima 'stone')

or an area containing an excessive number of the item - animal sub-class:

wi-itala 'be infested with rats' (itala 'rat')

A transitive form of this verb involves covering an area with the item - mineral sub-class only, as the ^{other} semantic fields do not lend themselves to being "spread out":

wi-bubu-ge-ya 'spread sand on ground' (bubu 'sand')

The common meaning 'be like item' corresponds to the fact that if an area is covered with an item, then it is indeed like the item.

The prefix lu with cultural items always involves collecting the items:

lu-mayau 'collect firewood' (mayau 'tree')

In English we use the separate lexical items 'catch' and 'hunt' when "collecting" animals:

lu-polo 'hunt pigs' (polo 'pig')

The common meaning of 'physical manifestation of item' is achieved with this class by bringing the collected items back to the village for all to see.

The prefix li has the single meaning 'be/become transformed into item' with this group of items:

li-gaima-ya 'become a stone' (gaima 'stone')

This meaning is the proto-typical common meaning of li with nouns.

The prefix wo has a distinctive use with each of the sub-classes.

(a) Mineral - 'hold item for throwing' - these are typical weapons:

wo-gaima 'hold a stone' (gaima 'stone')

(b) Vegetable - 'steal item' - these items, particularly betel nut, are the most commonly stolen items in the culture:

wo-beda 'steal betel nut' (beda 'betel palm')

(c) Animal - 'be loaded with item to take to a feast' - meat is always the most popular food at a feast:

wo-iyana-ya 'be loaded with fish' (iyana 'fish')

Meanings (a) and (b) are intransitive and (c) is transitive with a reflexive suffix. It is also possible to use (b) items with a transitive sense similar to (c) meanings, but not vice versa. All three of these meanings conform directly to the common meaning 'involves handling item'.

Meanings have not been supplied under each derived stem in chart 4 as the meanings generally conform to those at the heading of the column; exceptions are recorded in the footnotes.

Typical examples:

(a) Mineral:

- (53) Dobu i-wi-gai-gaima.
village it-DP-RED-stone
'The village ground is covered in stones.'
- (54) Hi-gale-ya ma bada amaka i-li-gaima-ya.
they-look-RF but man already he-DP-stone-RFX
'They looked but the man had turned into a stone.'
- (55) Ta-nae ta-lu-dubu.
we(inc)-go we(inc)-DP-sand
'Let's go and get sand.'
- (56) Hewali i-wo-gaima.
youth he-DP-stone
'The youth held a stone (ready to throw).'

(b) Vegetable:

- (57) Naka dobu i-wi-ginahi duma.
that area it-DP-sago really
'There are many sago palms at that place.'
- (58) Yakoyako i-li-gumaguma-ya.
shell it-DP-hermit crab-RFX
'The shell became a hermit crab.'
- (59) To-nae to-lu-mayau.
we(exc)-go we(exc)-DP-tree
'We are going to collect firewood.'
- (60) To-lu-mayau-pahi-yai.
we(exc)-DP-tree-very-RFX
'We really loaded ourselves with wood.'

(c) Animal:

- (61) Dobu i-wi-hagwai duma.
village it-DP-possum really
'The village is really infested with possums.'
- (62) Bada i-baha po kedewa i-li-polo-ya.
man he-talk and dog it-DP-pig-RFX
'When the man spoke the dog became a pig.'
- (63) Pusi i-lu-itala po i-(a)m-am.
cat it-DP-rat and it-PROG-eat
'The cat caught the rat and was eating it.'

root (R) meaning	wi-(RED)-R (intrans)	wi-(RED)-R-D-RF (trans)	lu-R	li-R-RFX	(a)&(b) wo-R (c) wo-R-RFX
	(a)&(b) (area) to be covered by item (c) (area) to support an excessive no. of item	to spread item on ground	(a)& (b) to collect item (c) to hunt/catch item	to be/become item	(a) to hold item for throwing (b) to steal item (c) to be loaded with item to take to a feast
(a) Mineral					
<u>gaima</u> 'stone'	<u>wigaigaima</u>	<u>wigaigaimeya</u>	<u>lugaima</u>	<u>ligaimaya</u>	<u>wogaima</u>
<u>bubu</u> 'sand'	<u>wibubu</u>	<u>wibubugeya</u>	<u>lububu</u>	<u>libubuya</u>	<u>wobubu</u>
<u>dakule</u> 'gravel'	<u>widakule</u>	<u>widakuleya</u>	<u>ludakule</u>	<u>lidakuleya</u>	<u>wodakule</u>
<u>goila</u> 'water'	<u>wigoigoila</u>	<u>wigoileya</u>	<u>lugoila</u>	<u>ligoilaya</u>	-
(b) Vegetable					
<u>ginahi</u> 'sago'	<u>wiginahi</u>	-	<u>luginahi</u> ³	<u>liginahi</u>	<u>woginahi</u>
<u>mayau</u> 'tree'	<u>wimayau</u>	-	<u>lumayau</u>	<u>limayauya</u>	<u>womayau</u>
<u>beda</u> 'betelnut'	<u>wibeda</u>	-	<u>lubeda</u>	<u>libedaya</u>	<u>wobeda</u>
<u>gaga</u> 'pepper' ¹	<u>wigaga</u>	-	<u>lugaga</u>	<u>ligagaya</u>	<u>wogaga</u>
<u>neula</u> 'coconut'	<u>wineula</u> ²	-	<u>luneula</u>	<u>lineulaya</u>	<u>woneula</u>
(c) Animal					
<u>polo</u> 'pig'	<u>wipolo</u>	-	<u>lupolo</u>	<u>lipoloya</u>	<u>wopoloya</u>
<u>hagwai</u> 'possum'	<u>wihagwai</u>	-	<u>luhagwai</u>	<u>lihagwaiya</u>	- ⁶
<u>sigapa</u> 'wallaby'	<u>wisigapa</u>	-	<u>lusigapa</u>	<u>lisigapaya</u>	<u>wosigapaya</u>
<u>kiu</u> 'bird'	<u>wikiu</u>	-	<u>lukiu</u>	<u>likiuya</u>	<u>wokiuya</u>
<u>bunebune</u> 'pigeon'	<u>wibunebune</u>	-	<u>lubunebune</u>	<u>libunebuneya</u>	<u>wobunebuneya</u>
<u>iyana</u> 'fish'	<u>wiiyana</u>	-	<u>luiyana</u> ⁴	<u>liiyanaya</u>	<u>woiyanaya</u>
<u>yakoyako</u> 'shell'	<u>wiyakoyako</u>	-	<u>luyakoyako</u> ⁵	<u>liyakoyakoya</u>	<u>woyakoyakoya</u>
<u>kamkam</u> 'chicken'	<u>wikamkam</u>	-	<u>lukamkam</u>	<u>likamkamya</u>	<u>wokamkamya</u>
<u>kedewa</u> 'dog'	<u>wikedewa</u>	-	<u>lukedewa</u>	<u>likedewaya</u>	<u>wokedewaya</u>
<u>itala</u> 'rat'	<u>wiitala</u>	-	<u>luitala</u>	<u>liitalaya</u>	<u>woitalaya</u>
<u>gumaguma</u> 'hermit crab'	<u>wigumaguma</u>	-	<u>lugumaguma</u>	<u>ligumagumaya</u>	<u>wogumagumaya</u>

Chart 4 - Derivational prefixes with cultural items

¹ 'pepper' refers to the vine, whose hot fruit and leaves are eaten with betel nut.

² wineula also has the meaning 'to rub oil on something'.

³ 'to process sago'.

⁴ 'to pull fish in'.

⁵ 'to gather and break open shell for eating'.

⁶ wo- prefix with hagwai does not take reflexive suffix, and means 'to act like a possum' - Tarzan iwohagwai nae. 'Tarzan flies like a possum.'

(64) To-wo-polo-pahi-yai.
 we(exc)-DP-pig-many-RFX

'We are really loaded with pigs (for the feast).'

4.2 Adjective Classes

Adjectives form a distinctive open word class in Tawala, already introduced on semantic grounds (1.1.2). There is morpho-syntactic evidence for distinguishing between the universal semantic classes set up by Dixon (1977:31). A summary of the data is included in table 16. The type of semantic opposition has also been included on the table as these data help to distinguish the classes. The data on which table 16 is based are set out in the remainder of this introductory section. Following that, the distinctive use of derivational prefixes with each of the adjectival classes is demonstrated (4.2.1-4.2.4). In all, six adjectival classes are recognised: physical property, dimension, value, age, speed and colour. A seventh, aberrant class set up by Dixon (op.cit.) - the human propensity class - has been assigned to its own closed class (4.4) as this class has nothing to do with adjectives in Tawala.

Adjectives follow the noun, if one is present, and they always mark the person/number of the noun they refer to, c.f. table 15. The form of these suffixes is identical to the inalienable possession suffixes (cf. table 14). Thus Tawala adjectives can be viewed as an extension of the concept of "body parts" to include a person's attributes.

	Singular	Plural
1	u ~ we ¹	ta (inc) iyai (exc)
2	m	mi
3	na	hi

Table 15 - Adjectival Suffixes

¹ u → we/u__.

- (65) Bada dewadewa-m.
man good-your(sg)
'You are a great man.'
- (66) Lawa moina-u.
person true-my
'I am a truthful person.'
- (67) Keyalu banei-hi.
casuarina big-their
'They are large casuarina trees.'

Semantic type	A. MORPHO-SYNTAX			B. SEMANTIC OPPOSITION	
	Reduplicated form	Plural form	Use with <u>wai-</u>	Antonym pair	Complement sets
Physical property	+	-	$\bar{+}$	+	$\bar{+}$
Dimension	+	+	-	+	-
Value	+	-	-	+	-
Age	-	-	-	+	-
Speed	+	-	-	+	-
Colour	+	-	+	-	+

Table 16 - Some Distinguishing Features of Tawala Adjectives

Key: + all; \pm most; $\bar{+}$ few; - none.

A. Morpho-syntactic data

(a) Reduplicated forms

By far the majority of Tawala adjectives have a reduplicated form. (For morphological details of reduplication see section 1.5.) Many adjectives are synchronically still derived from unreduplicated stems:

<u>dewa</u>	'custom'	<u>dewadewana</u>	'good'
<u>tahaya</u>	'path'	<u>tahatahayana</u>	'first' (lead)
<u>hogoya</u>	'to be full'	<u>hogohogoyana</u>	'full'

The fact that the age class of adjectives and also certain other adjectives do not have a reduplicated form is not accidental. Reduplication in Tawala typically refers to repetition of activity or a plural number of items (Ezard in press). The age adjectives do not fit this classification - 'old' and 'new' are single events, happening only once. Similarly the unreduplicated nature of many other items can be explained within this framework. 'Big' and 'small' are unreduplicated whereas items which have the qualities 'good', 'bad', 'fast', 'slow' demonstrate these qualities over and over again - hence the reduplicated forms.

(b) Plural forms

Dimension adjectives are distinguished in that they do not have lexical reduplication in the singular, but do have reduplicated forms for plural marking. The situation is somewhat complicated by the use of suppletive forms which make it impossible to say whether we are dealing with lexical or morphological reduplication:

<u>habulu-na</u>	'small' (sg)	<u>muhomuho-hi</u>	'small' (pl)
<u>banei-na</u>	'big' (sg)	<u>balubalu-hi</u>	'big' (pl)

(c) Use of intensifier wai-

wai- has the general meaning 'to be in the extreme or permanent condition of...'. It is thus roughly equivalent to the English 'very' when used with adjectives. Two usages need to be distinguished:

1) Obligatory use of wai-

Colour and certain physical condition adjectives have the prefix as an adjectiviser. The following examples have been noted:

Physical property

<u>wai-dubudubuna</u>	'sandy'	(<u>dubu</u>	'dust')
<u>wai-goigoilana</u>	'watery'	(<u>goila</u>	'water')
<u>wai-donadonana</u>	'horny/thorny'	(<u>dona</u>	'tusk/horn')

Colour

<u>wai-didibalena</u>	'dark'	(<u>didibala</u>	'night')
<u>wai-idaidagana</u>	'green'	(<u>idagana</u>	'unripe')
<u>wai-kanikaniyogana</u>	'yellow'	(<u>kaniyogana</u>	'ginger used for yellow dye')

2) Optional use of wai-

Certain adjectives take wai- as an intensifier with the implication 'to be in a more permanent or extreme condition of...' or 'to have the intrinsic nature of...'

Physical property

<u>gigeimana</u>	'stony'	(<u>gaima</u> 'stone')
<u>wai-gigeimana</u>	'completely covered with stones'	
<u>gomugomuna</u>	'broken'	(<u>gomu</u> 'to snap')
<u>wai-gomugomuna</u>	'hinged, swinging'	
<u>holiholina</u>	'wound (fish line)'	(<u>holi</u> 'to pull in')
<u>wai-holiholina</u>	'wound (spring)'	

Colour

<u>wakewakekena</u>	'whitish'
<u>wai-wakewakekena</u>	'completely white'
<u>dubadubana</u>	'blackish'
<u>wai-dubadubana</u>	'completely black'
<u>kayakayana</u>	'reddish' (e.g. cow)
<u>wai-kayakayana</u>	'completely red' (e.g. car)

Note that the distinction between obligatory and optional use of wai- with colour fits neatly into the Berlin and Kay (1969) hierarchy (cf. 4.2.4).

B. Semantic Oppositions

(a) Antonyms

The denial of one term implies the assertion of its opposite. The following antonym pairs are typical, but not exhaustive. It will be noted that the opposites are not necessarily parallel to English antonym pairs (e.g. Tawala 'smooth - hard', English 'smooth - 'rough').

Physical property

<u>bigabigana</u>	'muddy'	<u>gigimeina</u>	'stony'
<u>hegohegoyana</u>	'smooth'	<u>kapakapalana</u>	'hard'
<u>koyakoyana</u>	'flat'	<u>bibituna</u>	'spherical'

Dimension

<u>awawana</u>	'thin'	<u>potopotona</u>	'thick'
<u>daodaona</u>	'long'	<u>kukuna</u>	'short'
<u>baneina</u>	'big'	<u>habuluna</u>	'small'
		(cf. kikeina)	

The following three sets are exhaustive:

Value

<u>dewadewana</u>	'good'	<u>apapoena</u>	'bad'
<u>yeuyeuna</u>	'clean'	<u>gobugobuna</u>	'dirty' ¹

Age

<u>odubona</u>	'old'	<u>wouna</u>	'new'
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Speed

<u>sagesagena</u>	'fast'	<u>bambamna</u>	'slow'
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Antonym pairs can also be formed by negativising the topic-comment clause, but this falls outside the realm of this paper.

(b) Complementary sets

Here we have a set of words forming a contrastive set. Only two sets are presented here, but others would not be difficult to elicit.

Colour

<u>waididibalena</u>	'black'	<u>waiuguguwana</u>	'dark'
<u>kayakayana</u>	'red'	<u>waikanikaniyogana</u>	'yellow'
<u>waidaidagana</u>	'green'	<u>wakewakekena</u>	'white'
<u>waikulikulina</u>	'mottled'		

Taste

<u>gugouna</u>	'sweet'	<u>tululuwana</u>	'tart/sour'
<u>tomatomana</u>	'tasteless'	<u>dagidagihana</u>	'tasty'
<u>wainihana</u>	'salty/tasty'	<u>waigolana</u>	'bitter/salty' (excessive)

¹ This opposition literally belongs to physical property, but in value judgements of a person's worth and customs these words are normally used.

Dixon (1977:31) remarks:

...complements provide absolute descriptions, antonym pairs...are always 'relative' to some implicit norm.

While there is truth in this comment, the word "absolute" is perhaps a little strong to describe the amount of salt in a particular bowl of soup. Some sets are better regarded as continuums.

4.2.1 Dimension adjectives

The semantic field of dimension adjectives has a distinctive set of derivational prefixes, with closest affinities to the related semantic field of physical property. Chart 5 sets out the use of three derivational prefixes with dimension adjectives.

Wi is a causative prefix when used with dimension adjectives:

wi-dao-ya 'to lengthen s-t.' (dao 'long')

The derived verb has social overtones - it is a talk or a meeting which is prolonged or cut short. These verbs are thus a proto-typical example of the common meaning 'cause condition - socially'.

No examples of this semantic field used with the prefix lu have been discovered.

The prefix li results in another causative verb:

li-habulu-ya 'to reduce s-t.' (habulu 'small')

This time the derived verb is to be taken literally - it is a house which is extended, or a canoe which is reduced in size. This specific meaning agrees well enough with the common meaning of li 'to cause new condition'.

The prefix woi¹ involves manipulating an item by hand:

woi-dao-ya 'let out a line' (dao 'long')
(i.e. lengthen it)

This meaning is in line with the common meaning 'cause by hand' in that a translation of this type (e.g. 'cause the line to grow by hand') would be accurate enough even if

¹ For an explanation of the i morpheme see page 65 (f).

	wi-R-RF	lu-	li-R-RF	woi-R-RF
root (R) ¹ meaning	cause condition - socially	-	cause new condition -(physical)	manipulate s-t. by hand
<u>daodaona</u> long	<u>widaoya</u> lengthen s-t. (e.g. talk)	-	<u>lidaoya</u> lengthen s-t. (e.g. house)	<u>woidaoya</u> to let s-t. out
<u>kukuna</u> short	<u>wikukuya</u> run s-t. short (e.g. meeting)	-	<u>likukuya</u> shorten s-t. (e.g. canoe)	<u>woikukuya</u> take s-t. in
<u>baneina</u> ² big	<u>wilataya</u> emphasize s-t. (e.g. point of view)	-	<u>lilataya</u> increase s-t. (e.g. land)	<u>woilataya</u> ⁴ adopt child (cause it to grow)
<u>habuluna</u> ³ small	<u>wihabuluya</u> make light of s-t.	-	<u>lihabuluya</u> reduce s-t. (e.g. payment)	<u>wohabuluya</u> take s-t. in

Chart 5 - Derivational prefixes with dimension adjectives

- 1 The root is underlined
- 2 The adjective baneina (plural balubaluhi) is a suppletive form; lata is the productive root.
- 3 Plural muhomuhohi.
- 4 The intransitive form wolata means 'to grow a little each day'.

somewhat awkward.

Typical examples:

- (68) A baha i-wi-dao-ya.
his talk he-DP-long-RF
'He spoke for a long time.'
- (69) A numa i-popo-ya po i-li-dao-ya.
his house he-join-RF and he-DP-long-RF
'He joined a section onto his house and lengthened it.'
- (70) Boga i-dao duma, yawai a-woi-kuku-ya.
sea it-long really line I-DP-short-RF
'The line went down too deep so I shortened it.'
- (71) Lampa u-na-woi-habulu-ya.
lamp you(sg)-INT-DP-short-RF
'Turn the lamp down!'

4.2.2 Physical property adjectives

This semantic field is quite close to the dimension adjectives discussed above (4.2.1). The main distinguishing features involve some small morpho-syntactic details discussed in the introduction to this chapter (cf. table 16) and the use of the lu prefix with physical property adjectives. Other distinctions of meaning can be seen by comparing charts 5 and 6. Chart 6 sets out the uses of the derivational prefixes with dimension adjectives.

The wi prefix has two meanings each applying to only two out of six roots:

- (a) to cause a condition - socially:

wi-kadidili 'to strengthen a relationship' (kadidili 'strong')

- (b) to be in a temporary condition:

wi-bigabiga 'to be muddy' (bigabiga 'muddy')

The first of these meanings agrees with the most common meaning, 'cause condition - socially'. The second (stative) meaning of wi does occur from time to time and is productive with some semantic fields.

The prefix with physical property adjectives involves more than the common meaning 'cause condition - physically' as the items in our data involve 'a strenuous or violent action in order to cause the condition':

lu-pilipili 'crumple a hard object' (pilipili 'crumple')

The li prefix involves 'causing a condition' but does not always follow the common meaning 'to cause a new condition'. Sometimes the derived verb is to be taken literally (e.g. 'to sharpen something') at other times metaphorically (e.g.

li-dumalu-ya 'pay off debt' - (dumalu 'straight')
(literally - 'straighten it')

The wo(i)¹ prefix normally follows the common meaning 'to cause by hand':

wo-kadidili-ye-ni 'hold s-t. tightly' (kadidili 'strong')

But on one occasion there is no causative sense:

wo-kamkam-ya 'feel s-t. sharp' (kam 'sharp')

Typical examples:

(72) Nugonugo-na i-wi-kapala-ya.
heart-his he-DP-hard-RF

'He resolutely made up his mind.'

(73) Fael-gei a-li-kam-ya;
file-with I-DP-sharp-RF

'I sharpened it with a file.'

(75) Om keliko u-woi-bigabiga-ya.
your(sg) cloth you(sg)-DP-mud-RF

'You muddied your clothes (with your dirty hand)'

(76) Pepa nima-u-gei a-wo-pilipili.
paper hand-my-with I-DP-crumple

'I screwed up the paper with my hands.'

¹ For an explanation of the i morpheme see page 65 (f).

root (R) ¹	1) wi-R-RF 2) wi-R	lu-(RED)-R-RF	li-R-RF	wo(i)-(RED)-R-(D)-RF
meaning	1) cause condition socially 2) temporary condition (stative verb)	cause condition -violent action	cause new condition	cause condition - involves hands
<u>kamkamna</u>	-	-	<u>likamya</u> sharpen s-t.	<u>woikamkama</u> feel s-t. sharp
<u>bigabigana</u>	<u>wibigabiga</u> be muddy	<u>lubigabigaya</u> make s-t. muddy	<u>libigabigaya</u> cause s-t. to be muddy	<u>woibigabigaya</u> muddy s-t.
<u>dumadumaluna</u>	-	-	<u>lidumaluya</u> pay off debt	<u>woidumaluya</u> straighten s-t.
<u>kapakapalana</u>	<u>wikapalaya</u> harden s-t.	-	<u>likapalaya</u> harden s-t. (by the sun)	<u>woikapakapalaya</u> harden s-t.
<u>kadikadidilina</u>	<u>wikadidili</u> strengthen s-t.	<u>lukadikadidili</u> hit s-t. hard	<u>likadidili</u> cause s-t. to harden by adding s-t.	<u>wokadidiliyeni</u> hold s-t. tightly
<u>pilipilina</u>	<u>wipilipili</u> be tangled	<u>lupilipili</u> crumple a hard object	<u>lipilipili</u> cause s-o. problems	<u>wopilipili</u> crumple a soft object

Chart 6 - Derivational prefixes with physical property adjectives

¹ The root is underlined.

4.2.3 Age, Value and Speed adjectives

The age, value and speed adjectives are three quite distinct classes, but are handled here in a section as they are each a small closed class of items and hence conveniently fit on a single page chart. The three classes are distinguished by the absence or presence of the various derivational prefixes (as well as morpho-syntactic distinctions - introduced above, table 16), rather than by distinct meanings attached to the prefixes.

The speed adjectives are the only class of adjectives to take no derivational prefixes at all. The age adjectives do not take the wo(i)¹ prefix, but otherwise share the same prefixes as the value adjectives.

The wi prefix is used with age and value adjectives to signify a changed condition:

wi-wou-meme 'be renewed' (wou 'new')

This is a stative verb with the age adjectives but a causative verb with the value adjectives:

wi-yeuyeu-ne-ya 'make s-t. clean' (yeuyeu 'clean')

Thus the latter semantic field agrees more closely with the common meaning 'cause condition - socially' than does the former. All these verbs do have strong social overtones.

The lu prefix occurs with only a minority of age and value adjectives and the resulting verbs have distinctly idiomatic meanings:

lu-gobu 'be unkempt' (gobu 'dirty')
lu-odubo-ge-ni 'follow tradition' (odubona 'old')

These are only indirectly related to the common meaning 'to cause condition (physically)'.

The li prefix is used in line with its common meaning and involves 'to cause something to enter a (new) condition!'

li-wou-ya 'renew something' (wou 'new')

¹ For an explanation of the i morpheme see page 65(f).

The wo(i) prefix is used only with the value adjectives and the examples have meanings in line with the common meaning 'to cause something with the hands'.

woi-gobu-ya 'dirty something' (gobu 'dirty')

Typical examples:

- (77) Ita kamna ta-buini-hi
 our(inc) disposition we(inc)-turn over-them
ta-wi-wou-meme.
 we(inc)-DP-new-again
 'Let's change our ways and start again.'
- (78) Ta-wi-gobu-ge-na-me-ta.
 we(inc)-DP-dirty-D-TC-again-RFX
 'We corrupt ourselves (by bad thoughts).'
- (79) Gibson meyagai i-li-yeuyeu-ya.
 Gibson village he-DP-clean-it
 'Gibson kept the grounds tidy.'
- (80) Hi-lu-odubo-ge-ni.
 they-DP-old-D-RF
 'They follow the old (traditional) ways.'
- (81) Hiwape i-lu-gobu babana ago-na i-hilage.
 widow she-DP-dirty because spouse-her he-die
 'A widow neglects her appearance because her husband has died.'
- (82) Om luilui u-woi-gobu-ya nima-gei.
 you(sg) shirt you(sg)-DP-dirty-RF hand-INST
 'You have dirtied your shirt with your hands.'

root (R) ¹	meaning	wi-R-me me RFX	lu-R-(D-RF)	li-(RED)-R-RF	wo(i)-R-(RF)
	change condition - socially		idiomatic	cause new condition to s-t.	cause s-t. with hands
Age					
<u>wouna</u>	new	wiwou-meme be renewed	-	<u>liwouya</u> renew, repair s-t.	-
<u>odubona</u>	old	wiodubo-meme return to old custom	<u>luodubogeni</u> follow tradition	-	-
Value					
<u>gobugobuna</u>	dirty	wigobugena-meya ² dirty oneself	<u>lugobu</u> be unkempt	<u>ligobugobuya</u> dirty s-t.	<u>woigobuya</u> dirty s-t.
<u>yeuyeuna</u>	clean	wiyeyeyu-meya clean oneself	-	<u>liyeyeyuya</u> clean s-t.	<u>woyeyeyu</u> make s-t. clean
<u>dewadewana</u>	good	widewadewaya make s-t. good (with magic)	-	<u>lidewadewaya</u> make s-t. good	<u>woidewadewaya</u> fix s-t.
Speed					
<u>bambanna</u>		-	-	-	-
<u>sagesagena</u>		-	-	-	-

Chart 7 - Derivational prefixes with Age, Value and Speed adjectives

¹ The root is underlined.
² meya is the reflexive form and represents the only examples I have. gena (transitive concord marker) is required before the reflexive form.

4.2.4 Colour adjectives

As pointed out in section 4.1 colours form a clearly distinguished class of adjectives on morpho-syntactic as well as semantic grounds. Further evidence for the distinctive nature of adjectives is presented in chart 8 which reveals a number of fundamental differences from the above data on the other classes of adjectives:

(a) The roots, and hence the derived forms are always reduplicated in form.

(b) The meaning 'to be dressed in uniform' is a unique usage of the lu prefix, confined to the semantic field of colour.

The prefixes show clearly a distinction between the primary colours: red, black and white (there is even a word for 'coloured':

lugilugiluma literally means 'to be red, black and white') and the secondary colours: green/blue, yellow, mottled etc. Thus Tawala preserves as a grammatical distinction what in some languages is a lexical distinction (Berlin and Kay 1969). In addition, the secondary colours all have the fossilised prefix wai before their root in their basic lexical form, whereas wai with other adjectives is more typically an intensifier as it is in fact with the primary colours (cf. 4.2 A(c)).

The distinctive set of derivational prefixes is set forth in chart 8.

The wi prefix does not occur with the primary colours, and with the secondary colours does not occur with the most common meaning, but with a secondary stative meaning which occurs occasionally throughout the data, but at this point occurs systematically with all the secondary colours:

wi-idaidaga 'to be green' (waiidaidagana 'green')

The lu prefix is used intransitively with all colours to refer to a group of people dressed in uniform:

lu-wakewakeke 'be dressed in white' (cricketers) (wakewakekena 'white')

In addition, the secondary colours have a transitive use of

lu being a causative verb:

lu-idaidageya 'make s-t. green' (waiidaidagana 'green')

Only the second of these meanings concurs with the 'common meaning 'to cause condition (physically).'

Curiously, the gap left in the primary colour verbs by not using lu in the transitive sense 'to make something a colour' is filled by li:

li-kayakaya-ya 'make something red' (kayakayana 'red')

Li is the causative verb with primary colours. This agrees well enough with the common meaning 'to cause new condition' but I can offer no explanation as to why the two semantic fields should have a different form at this point.

Only two verbs occur with wo:

wo-kayakaya 'hold firebrand in the dark' (kayakayana 'red')

wo-dubadubana 'become black' (dubadubana 'black')

These appear to be completely idiomatic with little relationship to the common meaning 'to cause by hand'. Even though the former meaning involves holding something, the verb appears rather to emphasise the fact that the colour shines brightly in the dark.

Typical examples:

(83) Yada i-wi-gomigomida duma.
sky it-DP-green/blue really
'The sky is really blue.'

(84) I-li-wakewakeke-ya kabudala uyahinei.
it-DP-white-RF sun from
'It was bleached from the sunlight.'

(85) Tu wipanipani hi-lu-kayakaya.
people bound they-DP-red
'The prisoners were all dressed in red.'

(86) A-wi-neula po a-wo-dubaduba.
I-DP-coconut and I-DP-black
'I rubbed oil on myself and became black.'

root (R)	meaning	state	wi-R	lu-R	lu-R-(D)-RF	li-R-RF	wo-R
				wear uniform colours	make a colour	make a colour	idiomatic
Primary Colours							
<u>kayakayana</u>	red	-		<u>lukayakayaya</u> be dressed in red	-	<u>likayakayaya</u> make s-t. red	<u>wokayakaya</u> hold fire-brand in dark
<u>dubadubana</u>	black	-		<u>ludubadubaya</u> be dressed in black	-	<u>lidubadubaya</u> make s-t. black	<u>wodubaduba</u> become black
<u>wakewakekena</u>	white	-		<u>luwakewakeke</u> be dressed in white		<u>liwakewakekeya</u> make s-t. white	-
Secondary Colours							
<u>waiidaidagana</u>	blue/ green		<u>wiidaidaga</u> be green	<u>luidaidaga</u> be dressed in green	<u>luidaidageya</u> make s-t. green	-	-
<u>waigomigomidana</u>	blue/ green		<u>wigomigomida</u> be green	<u>lugomigomida</u> be dressed in green	<u>lugomigomidaya</u> make s-t. green	-	-
<u>waikanikaniyogana</u>	yellow	-		<u>lukanikaniyoga</u> be dressed in yellow	<u>lukanikaniyogaya</u> make s-t. yellow	-	-
<u>waimagomagololona</u>	orange		<u>wimagomagololo</u> ¹ be orange	<u>lumagomagololo</u> ³ all be dressed in dance skirts	-	-	-
<u>waikulikulina</u>	mottled		<u>wikulikuli</u> ² be mottled	<u>lugilugiluma</u> be dressed in mottled colours	<u>lugilugilumeya</u> ⁴ make s-t. mottled		

Chart 8 - Derivational prefixes with colour adjectives

¹ Used of bright sunsets.

² Used of pigs, dogs and cats that have mottled patches of colour.

³ Orange die is used in making magololo - special dancing skirts.

⁴ I am not sure whether this is a suppletive form, separate words, or a mixing of dialects. It means to paint something red, black and white. The two forms are diachronically related.

4.3 Verb Classes

Much more work needs to be done on verbs. The following data reveal a few patterns with very basic verbs, but the general picture beyond these is rather messy, especially when the residue (chart 17) is included in the picture. In addition, while there is some evidence for derivational prefixes being used along semantic lines, there is very little evidence that these semantic fields are verb classes which play any other function in the grammar.

While linguists are in general agreement as to the presence of verbs in all languages (Sapir 1921:119, Bloomfield 1935:198), work on subclasses within verbs, as part of a general theory of language, has been largely neglected.

Dixon 1971:461 presents seven sets of verbs distinguished on the syntactic as well as the semantic properties of 250 Dyirbal verbs:

- (1) Verbs of position, including 'go', 'sit', 'lead', 'take', 'throw', 'pick up', 'hold', 'empty out', and so on.
- (2) Verbs of affect, including 'pierce', 'hit', 'rub', 'burn', and so on.
- (3) Verbs of giving.
- (4) Verbs of attention: 'look', 'listen', 'take no notice'.
- (5) Verbs of speaking and gesturing: 'tell', 'ask', 'call', 'sing', and so on.
- (6) Verbs dealing with other bodily activities; a residue set including 'cry', 'laugh', 'blow', 'copulate', 'cough', and so on.
- (7) Verbs of breaking, that are 'meta' with respect to verbs in other sets, and can also have specific meanings: 'break', 'fall', 'peel'.

Subsequent work by Dixon has led to an extended semantic listing, based largely on English, but useful in the search for verb classes in other languages as well. I include the rather extensive list at this point in order to indicate something of the range of meaning intended by the subsequent terminology of this section. I present this list from my own classroom notes taken during a semester-long seminar on syntax and semantics led by Professor Dixon at the Australian National University in 1980.

PRIMARY VERBS

- (1) motion - run, fly, climb, ride, return, meet, bring
- (2) rest - sit, stand, float, live, stay, enclose, hold
- (3) affect - hit, pierce, cover, twist, cook, stir, smash, build
- (4) meteorological - rain, windy, blow
- (5) corporeal - eat, sniff, spit, sleep, cry, die, hurt, cuddle
- (6) giving - give, buy, exchange, rent, get, receive
- (7) attention - see, watch, appear, listen, show, search
- (8) speaking - praise, command, talk, ask, answer, discuss, boast, teach
- (9) thinking - reflect, consider, assume, trust, decide, anticipate, forgive
- (10) liking - love, fancy, worship, loathe, pity, envy
- (11) amusement - play, act
- (12) competing - win, race, lose

SECONDARY VERBS

- (1) modifying - begin, finish, try, succeed, practise
- (2) modals - can, could, might, shall, will, ought to
- (3) desiring - want, covet, dread, plan, scheme, dare, need
- (4) causation - make, force, get, have, provoke, let, stop
- (5) value judgement - seem, appear, happen, look like

In seeking to apply this list to Tawala verbs (Ezard 1980) I discovered a "remarkable correlation between the phonetic form of many words and their underlying semantic relationships." This means that a speaker would not need to fully understand the semantics of a given verb to employ it correctly in context. The shared features of phonetic shape within a semantic field must make life easier for the generation learning the language. Certainly, as a non-native speaker of the Tawala language I have, at times, found myself using the correct forms without having learned them.

The following examples are selected from among the best data correlating semantics with phonetic shape in Tawala (Ezard 1980). It will be noted that the categories tend to be far more specific than those presented from Dixon (above). In applying derivational prefixes in the following sections, it has also been necessary to posit small, specialized subclasses within these classes. While the lists are tentative they are not anecdotal in that Ezard (1980) systematically presents all 383 verbs of the pilot study in one list or another.

A. Verbs of Motion

These verbs mostly require an animate subject, and rarely take an object.

(a) Generic verbs of motion involve a CVV pattern, which is relatively rare (only about 10 words) in Tawala. These words are among the most common in everyday use:

<u>nae</u>	'go'
<u>nei</u>	'come'
<u>gae</u>	'go up, ascend'
<u>gei</u>	'come up'

These can be presented in the following table:

	Away from speaker	Towards speaker
neutral	nae	nei
ascending	gae	gei

Table 17 - Motion With Respect to Speaker

In addition, the motion-towards-speaker verbs distinguish motion towards speaker from motion towards hearer:

	Towards speaker	Towards hearer
neutral	nei	nehi
ascending	gei	gehi

Table 18 - Direction of Motion With Respect to Speaker and Hearer

These verbs are all + control; there is also a CVV motion verb which is - control:


<u>peu</u>	'fall'
------------	--------

(b) Specific verbs of motion (two-syllable intransitive words):


<u>hala</u>	'dance'
<u>dala</u>	'crawl'
<u>lupa</u>	'jump, fly'
<u>hopu</u>	'go down, descend'

(c) Specific verbs of motion involving speed (three-syllable intransitive words ending in lili):


<u>bulili</u>	'run'
<u>kalili</u>	'hurry westwards'

(d) Motion involving a starting point  (a rather random group):

<u>lowo</u>	'run away'
<u>gelu</u>	'get on board'
<u>wi-yoli</u>	'sink, drown'
<u>wo-mahili</u>	'leave' (involves speed?)

(e) Motion involving a specific end point  (another fairly random group - though a preference for two-syllable words is evident):

<u>talū</u>	'land (on perch)'
<u>yato</u>	'land (on perch, airstrip)'
<u>gota</u>	'arrive (at beach)'
<u>geleta</u>	'arrive (generic)'
<u>wialoni</u>	'meet (storm)' (negative connotation)

(f) Verbs involving passing a middle point  (three-syllable words ending in na - a rare form):

<u>tagona</u>	'go across (mountain)'
<u>damana</u>	'go across (bay)'

B. Verbs of Effect:

These verbs mostly involve a human subject, and are controlled action verbs.

(a) Intransitive verbs involving action on many small objects. We here meet with the remaining derivational prefix (om) in one of its productive domains:

<u>om-giluma</u>	'carve, write'
<u>om-hiyawa</u>	'count, read'
<u>om-datu</u>	'collect shells'
<u>om-hapi</u>	'pound sago'
<u>om-dine</u>	'comb hair'
<u>om-bulumu</u>	'sweep'
<u>om-goda</u>	'stir sago pudding' (sago is cut in tiny pieces)

<u>om-printing</u>	'print'
<u>om-tepo</u>	'bail out'
<u>om-apu-ge</u> <u>ni</u>	'burn it' (rubbish)

(b) Transitive verbs involving a radical transformation of the object (-i transitive form):

<u>boli</u>	'chop a piece off'
<u>tahi</u>	'carve' (non-animate)
<u>hapi</u>	'pound sago palm'
<u>tawi</u>	'dig'
<u>uni</u>	'kill, catch for killing'
<u>pani</u> , <u>tami</u>	'tie' (traditionally for killing - animate)
<u>pe</u> <u>li</u>	'exchange places'
<u>lawi</u>	'hit, kill'
<u>launi</u>	'hit'

(c) Transitive verb involves isolating part from whole - often takes a non-animate object (two-syllable words with -ya transitive form):

<u>toneya</u>	'spear'
<u>kahaya</u>	'separate'
<u>hepaya</u>	'lift up'
<u>pohaya</u>	'put in a basket'
<u>talaya</u>	'cut (lengthenwise)'
<u>teleya</u>	'leave (food) for later'
<u>libeya</u>	'throw (rubbish) into the sea'
<u>guduya</u>	'shut, close'
<u>hoeya</u>	'open'
<u>dewaya</u>	'make, do'
<u>higuya</u>	'fill'
<u>humaya</u>	'wrap'
<u>buyoya</u>	'squeeze out'
<u>buhuya</u>	'drill'
<u>gutaya</u>	'share'
<u>wogoya</u>	'hold'
<u>wilaya</u>	'mix'

(d) Repeated actions involving an instrument (another use of CVV pattern):

<u>woe</u>	'paddle'
<u>wao</u>	'dig holes for planting'

(e) Verbs involving prolonged activity. I think the intransitive forms are statives with the subject referring to the patient. The addition of the transitive suffix i also marks the fact that the patient is now the object; (three-syllable words with i transitive form):

(87) <u>I-ulona.</u>	'It is cooking.'
<u>it-cook</u>	
<u>A-ulon-i.</u>	'I am cooking it.'
<u>I-cook-it</u>	
<u>ulona</u> - <u>i</u>	'cook'
<u>lelega</u> - <u>i</u>	'line up'
<u>toula</u> - <u>i</u>	'collect, load up'
<u>yaluma</u> - <u>i</u>	'mend fish net'
<u>upuma</u> - <u>i</u>	'pile up'
<u>hiyawa</u> - <u>i</u>	'count, read'
<u>hiwoga</u> - <u>i</u>	'pour out, unload'
<u>giluma</u> - <u>i</u>	'carve, write'
<u>didina</u> - <u>i</u>	'sew'
<u>guluwa</u> - <u>i</u>	'bury'

C. Corporeal Verbs

(a) Life-sustaining functions - there are to my knowledge only three VCV verbs, and these are the following set which belong to a single semantic field of life-sustaining functions:

<u>eno</u>	'sleep'
<u>uma</u>	'drink'
<u>ani</u>	'eat' (intransitive form <u>am</u>)

(b) Verbs involved in taking something into the body (verbs involving a special use of the lu prefix):

<u>lu-bogahu</u>	'smoke (tobacco)'	(<u>bogahu</u> 'smoke')
<u>lu-haba</u>	'chew (betel nut)'	(<u>haba</u> 'red')
<u>lu-yawahi</u>	'breathe, inhale'	(<u>yawata</u> 'breath')
<u>lu-tanigana</u>	'listen, hear'	(<u>taniga-</u> 'ear')

(c) Verbs involving a slowing down of bodily activity; (the wi prefix in these examples is no longer productive as there is no meaning attached to the root apart from them):

<u>wiyuwa</u>	'pain'
<u>wiyagohina</u>	'rest'
<u>wiyohi</u>	'fast'
cf. <u>wikamna dewadewa</u>	'to get better'

These data reveal that seemingly random features such as syllable patterns, word length, and transitivising patterns are used with certain semantic fields, whilst other related semantic fields systematically use different patterns. Thus we see evidence for a correlation between form and meaning. To know the form of a word is to limit the semantic fields to which it could belong. To know the semantic field of a word that is "on the tip of the tongue" is to be able to predict its likely form - thus we see further evidence for the priority of semantics. The following sections dealing with the derivational prefixes make use of a number of the semantic fields illustrated in the above lists, demonstrating further the value of these semantic-syntactic correlations.

4.3.1 Motion verbs

Three classes of motion verbs are distinguished in charts 9 (a) and (b) on the basis of morpho-syntactic distinctions. Two of these classes agree closely with the semantic fields set up above on a phonetic-syntactic-semantic basis. The remaining class involves an irregular lui 'enter' which did not occur in my original data, though luiya 'to put on clothing' was placed in a semantic field, but not with the motion verbs. The area of motion verbs is one of the most complex areas of Tawala verb morphology as charts 9 (a) and (b) show.

In the first place there is a fully productive set of transitive and intransitive derived verbs with most of the prefixes. In the second place the transitive forms distinguish between transitive and dative forms. Finally, there are numerous classificatory prefixes associated with this group of words. Two of these prefixes have been included on the charts owing to their irregular nature and idiomatic usage with class II and class III. The common meaning of these prefixes are:

- hu 'to move deliberately, or with effort'
tu 'to move a little or move something with the foot'

It is possible that these prefixes are moving in the direction of becoming productive derivational prefixes, as they have more complex meanings than the usual classificatory prefixes and their single syllable form is more typical of derivational prefixes than the usual two syllable classificatory prefixes. In addition hu has a parallel form to lu for the progressive aspect (hau). However, these prefixes are not highly productive, occurring mainly with the motion verbs listed in this section.

Each of the three classes has a quite distinct use of the derivational prefixes. These prefixes with basic motion verbs, intransitive forms, are set out on chart 9(a). The transitive forms are found on chart 9(b) (cf. 1.6).

(a) The prefix wi is not highly productive and has a series of meanings:

<u>wi-ne-nae</u>	'try to go'	(<u>nae</u>	'go')
<u>wi-gae</u>	'to thatch'(house)'	(<u>gae</u>	'ascend')
<u>wi-ge-gae</u>	'argue'	(<u>gae</u>	'ascend')

These are only connected to the common meaning 'to cause action' in a vague way.

On the other hand lu is a highly productive prefix, except with class III motion verb. With class I the derived verb has a meaning closely related to the common meaning 'action in direction of verb'.

<u>lu-gae</u>	'shoot high'	(<u>gae</u>	'ascend')
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There are no examples of the use of the li prefix.

The wo prefix is fully productive with all roots. With class I roots this involves 'moving a little each day', which is in line with the common meaning for verb roots 'persist in action'.

<u>wo-hopu</u>	'move down a little each day'	(<u>hopu</u>	'descend')
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Class II roots have a variety of idiomatic meanings:

<u>wo-geleta</u>	'reveal something'	(<u>geleta</u>	'arrive')
<u>wo-damana</u>	'hand things over'	(<u>damana</u>	'cross bay')

wo-tagona 'follow' (tagona 'cross mountain')

(b) The use of derivational prefixes with the same set of basic motion verb roots, but this time with referent focus, transitive forms (cf. 1.6) are set out on chart 9(b).

The prefix wi is highly productive (in contrast to the action focus forms). With most roots these verbs involve carrying an item in the direction indicated by the verb (i.e. 'cause something to go') and are thus in line with the common meaning 'to cause verb':

wi-hopu-ni 'put s-t. down' (hopu 'descend')

With a few roots the meaning is somewhat idiomatic:

wi-gelete-ya 'sing an item' (geleta 'arrive')
(cause s-t. to appear)

wi-tagon-i 'wind twine over s-t.' (tagona 'cross moun-
(cause s-t. to go over) tain')

wi-gei-ni 'put roof up' (gae 'ascend')
(cause s-t. to go up)

A distinction which is found a number of times on chart 9(b) is between transitive (referent focus) and dative forms; normally the dative involves an instrument or a less direct contact with the object (cf. 1.7):

wi-daman-i 'bridge a gap' (transitive)

wi-daman-e-ya 'carry something across' (dative)

The prefix lu involves an exerted or obvious action which is an extension of the common meaning 'action in direction of the verb':

lu-hopu-ne-ya 'push something down' (hopu 'descend')

Only one of these verbs is idiomatic:

lu-gelet-e-ya 'be revealed/understood' (geleta 'arrive')

As with the intransitive forms there are no transitive motion verbs with the prefix li. Transitive motion verbs which take the dative ending usually are able to replace this with an ablative form:

lu-hopu-ne-ya 'push something down' (dative)

lu-hopu-niyai 'pull something down' (ablative)

The prefix wo is used with the sense 'to move something

by hand in the direction of the verb', which conforms to the common meaning of wo for transitive verbs 'cause by hand':

wo-hopu-ne-ya 'push something down' (hopu 'descend')

Again a single idiom is found in this group:

wo-tagon-i 'follow someone' (tagona 'cross mountain')

Typical transitive and intransitive examples of the prefixes with the three classes of motion verbs are as follows:

Class I

- (88) Tau a-ne-nae numa a-wi-gae.
 myself I-PROG-go house I-DP-ascend
 'I am going to (thatch) a house.'
 (In answer to question, 'What are you going to do?')
- (89) Numa ta-wi-gei-ni.
 house we(inc)-DP-come up-RF
 'Let's thatch the roof!'
- (90) U-na-tu-hopu.
 you(sg)-INT-DP-descend
 'Move down a bit!'
- (91) U-na-tu-hopu-ne-ya.
 you(sg)-INT-DP-descend-TC-RF
 'Shove it down!' (with your feet)
- (92) A-lu-hopu duma po polo a-lupate-ya.
 I-DP-descend really and pig I-miss-RF
 'I shot too low and missed the pig.'
- (93) Nima-m u-na-lu-hopu-ne-ya.
 hand-your(sg) you-INT-DP-descend-TC-RF
 'Put your hand down a bit!'

Class II

- (94) Hiyamoni tapu-na i-lu-gelet-e-ya.
 grass different-its it-DP-arrive-D-RF
 'A different type of grass appeared.'
- (95) Amaka ta-lu-gelet-e-ya.
 already we(inc)-DP-arrive-D-RF
 'We already understood it.'
- (96) Lawa i-wo-gelet-e-na-me-ya.
 person he-DP-arrive-D-TC-again-RF
 'The man showed himself.'

		wi-(RED)-R	lu-R	li-	wo-R	tu-R	hu-R
root(R) meaning		idiomatic	I miss mark in direction of v. II idiomatic	-	I move a bit each day II idiomatic	I move a little II unknown III idiomatic	I move deliberately. II involves stepping
Class I							
<u>nae</u>	go	<u>winae</u> try to go	<u>lunae</u> shoot further	-	<u>wonae</u> move on	<u>tunae</u> move on	<u>hunae</u> move away
<u>nei</u>	come	-	<u>lune-i/hi</u> ¹ shoot towards	-	<u>wone-i/hi</u> ¹ move towards..	<u>tune-i/hi</u> ¹ move towards...	<u>hune-i/hi</u> ¹ move towards...
<u>gae</u>	ascend	<u>wigae</u> thatch	<u>lugae</u> shoot high	-	<u>wogae</u> move up	<u>tugae</u> move up	<u>hugae</u> move up
		<u>wigegae</u> argue	<u>lugegae</u> be bigheaded				
<u>gei</u>	come up	-	<u>luge-i/hi</u> ¹ shoot high, shoot closer	-	<u>woge-i/hi</u> ¹ move up towards...	<u>tuge-i/hi</u> ¹ move up towards...	<u>huge-i/hi</u> ¹ move up towards...
<u>hopu</u>	descend	-	<u>luhopu</u> shoot down	-	<u>wohopu</u> move down	<u>tuhopu</u> move down	<u>huhopu</u> move down
Class II							
<u>geleta</u>	arrive (up)	-	<u>lugeleta</u> arrive after long walk	-	<u>wogeleta</u> reveal s-t.	<u>tugeleta</u> ²	<u>hugeleta</u> walk home
<u>damana</u>	cross (bay)	-	<u>ludamana</u> inherit, cross over	-	<u>wodamana</u> hand things over	<u>tudamana</u>	<u>hudamana</u> step across
<u>tagona</u>	cross (mountain)	-	-	-	<u>wotagona</u> follow	<u>tutagona</u>	<u>hutagona</u> step over
Class III							
<u>lui</u>	enter	-	-	-	<u>wolui</u> ²	<u>tului</u> move into bush	-

Table 9(a) - Intransitive basic motion verbs with derivational prefixes

¹ For -i/hi distinction see 1.6.1 a.

² Meanings have been omitted with certain verbs as I am not sure what the combination means.

		wi-R-(D)-RF	lu-R-(D)-RF	li-	wo-R-RF	tu-R-RF	hu-R-RF
root(R)	meaning	carry s-t. in direction of v. idiomatic	cause by exertion or obvious action	-	move s-t. in direction of v. by hand	move s-t. by foot	use effort to move s-t.
Class I							
<u>nae</u>	go	} <u>wineeneni</u> take/bring	<u>luniyeni</u> push s-t.	-	<u>woniyeni</u> push s-t.	<u>tuniyeni</u> push s-t.	<u>huniyeni</u> push s-t.
<u>nei</u>			<u>luneyai</u> pull s-t.	-	<u>woneiyai</u> pull s-t.	<u>tuneyai</u> pull s-t.	<u>huneiyai</u> pull s-t.
<u>gae</u>	ascend	} <u>wigeini</u> put roof up (cause s-t. to ascend)	<u>lugiyeni</u> push s-t. up	-	<u>wogiyeni</u> push s-t. up	<u>tugiyeni</u> push s-t. up	<u>hugiyeni</u> push s-t. up
<u>gei</u>	come up		<u>lugeiyai</u> pull s-t. up	-	<u>wogeiyai</u> pull s-t. up	<u>tugeiyai</u> pull s-t. up	<u>hugeiyai</u> pull s-t. up
<u>hopu</u>	descend	<u>wihopuni</u> put s-t. down	<u>luhopuneya</u> push s-t. down	-	<u>wohopuneya</u> push s-t. down	<u>tuhopuneya</u> push s-t. down	<u>huhopuneya</u> push s-t. down
			<u>luhopuniyai</u> pull s-t. down		<u>wohopuniyai</u> pull s-t. down	<u>tuhopuniyai</u> pull s-t. down	<u>huhopuniyai</u> pull s-t. down
Class II							
<u>geleta</u>	arrive (up)	<u>wigeleteya</u> sing an item	<u>lugeleteya</u> be revealed, understand s-t.	-	<u>wogeleteya</u> reveal s-t. in hands	<u>tugeleteya</u> ¹	<u>hugeleteya</u> sing a number of items
<u>damana</u>	cross (bay)	<u>widamani</u> bridge a gap	<u>ludamani</u> cross on s-t.	-	<u>wodamani</u> carry across	<u>tudamani</u> step across	<u>hudamani</u> jump s-t., step across
		<u>widamaneya</u> carry s-t. across	<u>ludamaneya</u> pour from one to another	-	<u>wodamaneya</u> pass s-t. across	<u>tudamaneya</u> push s-t. across	<u>hudamaneya</u> lift s-t. across
<u>tagona</u>	cross (mountain)	<u>witagoni</u> wind twine over s-t.	-	-	<u>wotagoni</u> follow s-o.	<u>tutagoni</u> follow s-o. ²	<u>hutagoni</u> jump over s-t.
			<u>lutagoneya</u> throw s-t. over	-	<u>wotagoneya</u> push hands over s-t.	<u>tutagoneya</u> push s-t. over	<u>hutagoneya</u> lift s-t. over
Class III							
<u>lui</u>	enter	<u>wiluiya</u> wear clothes	-	-	-	-	-

Chart 9(b) - Transitive basic motion verbs with derivational prefixes.

¹ Meaning is omitted because I omitted to elicit it.

² The expected meaning 'to step over something' is carried by the verb tulagoni.

- (97) A-hu-geleta u yu numa.
 I-DP-arrive my at house
 'I am going home.'
- (98) Wam-gei (*tete-gei) e-lau-daman-i.
 boat-by bridge-by he(PRES)-DP(PROG)-cross-RF
 'He is crossing the bay by boat (*bridge).'
- (99) Wam-gei (tete-gei) e-hau-daman-i.
 boat-by bridge-by he(PRES)-DP(PROG)-cross-RF
 'He is using the boat to get across' ('He is using
 the bridge to go across.')

Class III

- (100) Polo i-tu-lui.
 pig it-DP-enter
 'The pig went into the bush.'
- (101) Am pilipou u-na-lui-ya.
 your(sg) trousers you(sg)-INT-enter-RF
 'Put on your trousers!'

4.3.2 Manner-of-motion verbs

A small class of motion verbs, perhaps belonging to a manner-of-motion sub-class of motion verbs, is presented in this section. A comparison of these data with the basic motion verbs reveals some similarities in that they also take the classificatory prefixes discussed in connection with basic motion verbs, and yet there are some basic differences. The most basic one is the lack of a productive transitive/intransitive relationship. In addition these manner of motion verbs are highly productive with the li prefix, whereas none of the basic motion verbs were at all productive with li. The four verbs seem to belong to three or even four separate semantic fields on the basis of the distinctive use they make of the derivational prefixes. These data are set out on chart 10.

The wi prefix occurs with two of the manner-of-motion verbs with the meaning 'to cause something to act' which conforms with the common meaning 'to cause action:

wi-lupa-ya 'let something go' (lupa 'jump')
 (cause it to jump)

The lu prefix is used intransitively with only a single root:

lu-dala 'creep forward' (dala 'crawl')

This meaning conforms to the common meaning 'action in position of verb'.

The transitive use of lu occurs with two of the four roots under examination, both of which appear to be idiomatic, having little to do with the common meaning quoted in the previous sentence.

lu-dala-ge-ya 'drop one's hand' (dala 'crawl')

lu-bulili-ye-ya 'hit faster' (bulili 'run, hasten')

The li prefix involves causing an action violently, which conforms to the common meaning 'force something into position':

li-dala-ya 'knock to crawling position' (dala 'crawl')

However, in one case it is the resulting action which is violent:

li-lupa-ya 'spring something' (lupa 'jump')
(cause s-t. to jump)

The wo prefix conforms to the common meaning for intransitive forms 'persistent action':

wo-lupa 'keep going up' (lupa 'jump')

and for transitive forms 'cause by hand':

wo-peu 'drop something' (peu 'fall')
(cause s-t. to fall)

This last example is an action focus form of the transitive verb and hence has no definite suffix (cf. 1.6).

Typical examples:

(102) Kiu nima-u-gei a-wi-lupa-ya.
bird hand-my-from I-DP-jump-it
'I let the bird go.'

(103) U-na-lu-dala.
you(sg)-INT-DP-crawl
'Crawl forward!'

root(R)	wi-R-RF	lu-R	lu-(RED)-R-D-RF	li-R-RF	wo-R-(D-RF)
	cause s-t. to act	action in position of v.	action in position of v.	cause violent action	persistent action (intransitive) hands involved (transitive)
<u>lupa</u>	fly, jump	-	-	<u>lilupaya</u> spring s-t.	<u>wolupa</u> keep going up
<u>dala</u>	crawl, lean	<u>ludala</u> creep forward	<u>ludalageya</u> drop one's hands	<u>lidalaya</u> knock to crawling position	<u>wodala</u> (nae) grope (forward) in the dark
<u>peu</u>	fall	-	-	<u>lipeuya</u> topple s-t. or s-o.	<u>wopeu</u> drop s-t.
<u>bulili</u>	run, hasten	-	<u>lubulibuliyeya</u> hit faster	-	<u>wobulibuliyeya</u> grab s-t. quickly

Chart 10 - Derivational prefixes with manner-of-motion verbs.

- (104) Ega u-na-wo-buli-bulili apo nima-m
 NEG you(sg)-INT-DP-PROG-run FUT hand-your(sg)
i-na-ala-hi
 it-INT-burn-RF

'Don't grab it too quickly, it will burn your hand!'

- (105) Premier hi-li-peu-ya.
 premier they-DP-fall-RF

'They have toppled the Premier (from office)!

4.3.3 Verbs of rest

Our data contain five "verbs of rest" which function as a fairly homogenous group. A comparison with motion verbs reveals that these two semantic fields overlap. Though I have no data for how this class functions with classificatory prefixes, my feeling is that a Tawala analyst may well assign these verbs to a sub-class of motion verb, because the concept of motion is strong especially when used with derivational prefixes. However, the meanings associated with these prefixes have their own quite distinctive uses.

Eno with the meaning 'to lie down' clearly functions with this group; it is also found with a different set of meanings with the corporeal function verbs (4.3.5).

The use of the derivational prefixes with the verbs of rest are set out on chart 11.

The wi prefix is used with the sense 'to cause something to take a position'. The common meaning 'cause action' seems appropriate enough in view of the fact that these are "verbs of rest":

wi-towol-i 'stand something' (towolo 'be standing')

The lu prefix with verbs of rest has two almost contradictory meanings. When the verb is intransitive it has the meaning 'to wait in a position':

lu-tugula 'sit (fishing)' (tugula 'be sitting')

With a transitive form (reflexive) the meaning is 'to move quickly to a position':

lu-tugul-i 'sit quickly' (tugula 'be sitting')

This distinction seems to capture both aspects of the

common meaning 'action in position and direction of verb'.

The li prefix with verbs of rest incorporates not only the common meaning 'force something into position' but the added dimension of implying the use of an instrument:

li-towol-i 'lever up s-t.' (towolo 'be standing')

The wo prefix involves a unique meaning 'to move into a new position'. Here the "persistence" involves the ongoing result of the action, rather than the repetition of an action usually involved in the wo prefix. A set of transitive forms associated with the verbs of rest take the stronger woi prefix, normally associated with adjectival roots (cf. note (f) page 65). This is presumably because these verbs have a stative component found also with the adjective class. This is a good example of a shared semantic component even across word classes resulting in shared syntactic components. These forms have the meaning 'to move something by hand', in line with the normal common meaning associated with transitive verbs, 'to cause by hand':

wo-eno-ya 'lie something down' (eno 'be lying down')

Typical examples:

(106) Kiwou-gei a-li-towol-i.
stick-with I-DP-stand-RF

'I stood it up with my stick.'

(107) Gaima a-lu-tugul-e-u.
stone I-DP-sit-D-RFX

'I dodged the stone.'

(108) Motaka a wili i-wi-tage-tagel-i.
car its wheel it-DP-PROG-swivel-RF

'He was turning the driving wheel.'

(109) Kedewa a-lau-laun-i po a-li-eno-ya.
dog I-PROG-hit-RF and I-DP-liedown-RF

'I kept hitting the dog and eventually I knocked it down.'

root(R)	wi-R-RF	lu-R	lu-R-(D)-RFX	li-R-RF	wo-R	wi-R-RF
	cause s-t. to take position	wait in a position	move quickly to position	forces-t, in- to position - instrument involved	move into new position	move s-t. by hand
<u>towolo</u> be standing	<u>witowoli</u> stand s-t.	<u>lutowolo</u> stand poised with spear etc.	<u>lutowologeni</u> stand quickly	<u>litowoli</u> lever up s-t.	<u>wotowolo</u> assume stand- ing position	<u>woitowoli</u> stand s-t.
<u>tugula</u> be sitting	<u>wituguli</u> sit s-t.	<u>lutugula</u> sit fishing	<u>lutuguli</u> sit quickly	<u>lituguli</u> force down	<u>wotugula</u> assume sit- ting position	<u>woituguli</u> sit s-t.
<u>tagela</u> swivel on fixed point	<u>witageli</u> swivel s-t.	<u>lutagela</u> lean to one side	<u>lutageli</u> move quickly to one side	<u>litageli</u> knock over	<u>wotagela (nae)</u> stagger (along) side	<u>woitageli</u> push to one side
<u>wahala</u> be leaning	<u>wiwahali</u> lean s-t.	<u>luwahala</u> lean on s-t.	-	<u>liluwahali</u> knock down to leaning position	-	<u>woiluwahali</u> lean s-t.
<u>eno</u> be lying down	<u>wienoya</u> lie s-t. down	<u>lueno</u> rest head on hand	<u>luenogeya</u> be "woken" when almost asleep	<u>lienoya</u> knock s-t. down	<u>woeno</u> begin to sleep	<u>woienoya</u> lie s-t. down

Chart 11 - Derivational prefixes with verbs of rest

4.3.4 Verbs of effect

All the verbs of effect have been placed on a single chart (12) for convenience of comparison. There are three distinct semantic fields involved; verbs of carrying, cutting and fighting, and even these divisions seem to be too broad to account for the distinctive use of prefixes. Derivational prefixes are not over-productive with verbs of carrying and cutting, hence the numerous blanks in these sections of the chart. The fighting verbs appear to be more of a cohesive group with all forms being fully productive, except with li which is never used with verbs of effect.

Chart 12 list data from all three semantic domains.

The wi prefix has separate meanings with each class of effect verbs. With the carrying verbs it occurs only with those verbs which list specific ways of carrying. With these verbs it means 'to load someone up'. This usage is in line with the common meaning 'to cause action':

wi-awal-i 'load on shoulder' (awala- 'shoulder')
 (cause s-o. to carry)

There is only a single idiomatic use of wi with verbs of cutting:

wi-talatala 'cut area of grass' (tala 'cut')

The fighting verbs have a stative meaning with the wi prefix. While this is not the most common meaning, it is not the first time we have met this meaning with verb roots:

wi-tona 'to be fighting' (tona 'pierce')

The lu prefix has a single idiomatic use with verbs of carrying:

lu-awal-i 'carry on shoulder' (awala- 'shoulder')

This verb is derived from the body part awalana 'his shoulder', and the lu is required because awali is often used in a generic sense 'to carry' and thus lu-awali is used in line with the common meaning of lu 'action in position of verb' to stress the use of the shoulder.

With verbs of cutting and fighting lu is productive and its meaning involves the use of an instrument or an open obvious action. This is a distinctive use of lu and is limited to

verbs of effect:

lu-gomu-ya 'break s-t. with a stick' (gomu 'snap')

lu-kaha-ya 'separate s-t. into piles' (kaha 'separate, divide')

As stated above li is never used with verbs of effect.

The wo prefix is used with all verbs of effect to indicate that an action is repeated over and over. This meaning is of course in line with the common meaning 'persist in an action':

wo-boli 'keep cutting pieces off' (boli 'cut off')

Typical examples:

- (110) Kopala u-na-wi-awali-u.
copra you(sg)-INT-DP-shoulder-RF(me)
'Put this bag of copra on my shoulder!'
- (111) Wam-gei apo a-wo-toul-i.
boat-with FUT I-DP-collect-RF
'I will collect the load with my boat.'
- (112) Yailo nugonugo-u i-wo-waya.
Yailo mind-my he-DP-take
'Yailo persuaded me.'
- (113) Kasi u-na-wele-u po a-wi-tala-tala.
sarif you(sg)-INT-give-RF and I-DP-PROG-cut
'Give me a sarif and I will cut (the grass).'
- (114) Ginahi a-wo-hapi ma o-na-nae po
sago I-DP-chop and you(pl)-INT-go and
o-na-lu-neula.
you(pl)-INT-DP-coconut
'I'll chop the sago so you go and collect coconuts.'
- (115) Baubau hi-wo-boli.
bamboo they-DP-cut
'They cut the bamboo (over several days).'
- (116) Lawa-na ago-na mite-hi
person-that spouse-his together-them
hi-woo-gawi-ye-na-me-hi.
they-DP(PROG)-fight-D-TC-again-RFX
'The man and his wife are always fighting.'

	I II & III	wi-R wi-(RED)-R	lu-R-RF	li-	wo-R-RF
root(R) meaning	I	load s-o. up	I idiomatic	-	repeat action over period of time
	II	idiomatic	II&III involves instrument or obvious action		
	III	"state" of s-t.			
I Carrying					
(a) specific					
<u>awali</u>	carry on shoulder	<u>wiawali</u> load on shoulder	<u>luawali</u> carry on shoulder	-	<u>woawali</u> carry a number of things
<u>naba</u>	carry on head	<u>winaba</u> load on head	-	-	<u>wonabaya</u> carry a number of things
<u>gedu</u>	carry on back	<u>wigedu</u> load on back	-	-	<u>wogedu</u> carry a number of things
(b) on vehicle					
<u>touli</u>	collect	-	-	-	<u>wotouli</u> keep collecting things
(c) generic					
<u>waya</u>	take	-	-	-	<u>wowaya</u> take
<u>houni</u>	put	-	-	-	<u>wohouni</u> put
II					
(a) cutting					
<u>hapi</u>	chop	-	<u>luhapi</u> 1) cut oneself, 2) beckon s-o. ¹	-	<u>wohapi</u> (keep) chopping sago
<u>boli</u>	cut off	-	-	-	<u>woboli</u> keep cutting things off
<u>tala</u>	cut	<u>witalatala</u> cut area of grass	<u>lutalaya</u> cut s-t.	-	<u>wotalaya</u> keep cutting things
(b) snapping					
<u>gomu</u>	snap	-	<u>lugomuya</u> break s-t. with stick	-	<u>wogomuya</u> keep breaking things
III Fighting					
<u>tona</u>	pierce	<u>witona</u> be fighting	<u>lutronaya</u> poke with stick	-	<u>wotonaya</u> keep poking things
<u>kaha</u>	separate, divide	<u>wikahakaha</u> be separated (fight)	<u>lukahaya</u> separate into piles	-	<u>wokahaya</u> keep separating things
<u>gawiya</u>	fight	<u>wigawiya</u> be warring/at war	<u>lugawiyeya</u> fight in a pack	-	<u>wogawiya</u> keep fighting

Chart 12 - Derivational prefixes with verbs of effect

¹ The hand is dropped from above the head to one's side.

4.3.5 Corporeal function verbs

The three verbs of corporeal function show a reasonable degree of homogeneity. A certain degree of divergence is to be expected from the diverse semantics incorporated in the three verbs.

Chart 13 sets out the uses of derivational prefixes with the members of this semantic field.

The wi prefix always involves causing someone to act, which is in line with the common meaning 'to cause action':

wi-eno-ya 'put someone to sleep' (eno 'sleep')

The lu prefix is used in only a single idiomatic sense with this group:

lu-eno-eno 'lazy person' (eno 'sleep')

The uses of the li prefix are also idiomatic:

li-eno-ya 'lay out a dead body' (eno 'sleep')

li-uma-ya 'cause someone to choke
by hitting them' (uma 'drink')

The wo prefix is fully productive 'to do something little by little', which is in line with the common meaning 'to persist in action':

wo-ani 'eat s-t. in stages' (ani 'eat s-t.')

Typical examples:

(117) Logaloga iyana a-wi-ani-hi.
children fish I-DP-eat-RF
'I fed the children fish.'

(118) Hi-nae hi-li-eno-ya.
they-go they-DP-lie-RF
'They sent to lay out the dead body.'

(119) Hanali uyahina yaniyani o-n(a)-upum-i
food-house at food you(pl)-INT-heap-RF
ma o-na-wo-am.
then you(pl)-INT-DP-eat
'Pile the food in your storehouse to eat over the following months.'

(120) Hi-wo-uma po hi-buuwa.
they-DP-drink and they-mad
'They kept drinking and got drunk.'

	wi-R-(RF)	lu-RED-R	li-R-RF	wo-R
root(R) meaning	cause s-o. to act	idiomatic	idiomatic	do s-t. little by little
<u>ani</u> ¹	<u>wiani</u> bite, eat s-t. <u>feed</u> s-t. to s-o.	-	-	<u>woani</u> eat s-t. in stages
<u>am</u> ¹	<u>wiam</u> eat, dine	-	-	<u>woam</u> eat in stages i.e. feast
<u>eno</u>	<u>wienoya</u> sleep, lie down <u>put</u> to sleep	<u>luenoeno</u> lazy	<u>lienoya</u> lay out dead body	<u>woeno</u> sleep in stages
<u>uma</u>	<u>wiumaya</u> give s-o. drink	-	<u>liumaya</u> cause s-o. to choke on liquid by hitting them	<u>wouma</u> drink in stages i.e. get drunk

Chart 13 - Derivational prefixes with verbs of corporeal function

¹ The ani line is the referent focus form. The am line is the action focus form. This is the only case in Tawala where this distinction is lexicalised.

4.4 Human Propensity Class

With human propensity words we begin looking at closed word classes - classes which are no longer open to the productive introduction of new items, unlike nouns, adjectives and verbs (cf. example (3) page 19). The human propensity class is treated by Dixon (1977) as one of his seven universal classes of adjectives. The remaining six adjective classes all appear as adjectives in Tawala, and have been handled above (4.2).

Human propensity is expressed in Tawala by a unique class of idiomatic words. Each lexical item is composed of a compound stem in which the first element is a body part and the second a descriptive root. There are over 70 lexical items connected with nugo 'heart', e.g.

<u>nugo-gului</u>	'forget'	('heart-bury')
<u>nugo-dubu</u>	'be sad'	('heart-dust')
<u>nugo-dumoli</u>	'be tranquil in oneself'	('heart-calm')
<u>nugo-hegohegoya</u>	'be unruffled by others'	('heart-smooth')
<u>nugo-apapoe</u>	'be angry'	('heart-bad')
<u>nugo-kadidili</u>	'have strong convictions'	('heart-hard')

Caution is needed in the translation of such idioms. It would be all too easy to think (as early missionaries did) of nugo-kadidili (heart-hard) as '*lacking in pity' and thus being an undesirable quality, whereas it really means just the opposite - 'to have a stable character'. Once, at a funeral, I heard a man from a neighbouring language saying over and over again that he was nugo-apapoe (heart-bad) 'angry' when he meant nugo-dubu (heart-dust) 'sad'. I later discovered that the equivalent idiom (heart-bad) in his language did in fact mean 'sad'.

There are about 10 words connected with hini 'skin', e.g.

<u>hini-dagihana</u>	'have sexual desire'	('skin-tasty')
<u>hini-doodola</u>	'be promiscuous'	('skin-touchy?')
<u>hini-maya</u>	'be ashamed'	('skin-feel?!')

There is an even smaller number of words connected with mata 'eye':

<u>mata-kaya</u>	'be fighting sleep'	('eye-red')
------------------	---------------------	-------------

<u>mata-maga</u>	'be promiscuous'	('eye-many')
<u>mata-pota</u>	'be sleep'	('eye-shut')

These words should probably be considered a formal part of speech in their own right, as they are unique in semantics, form and morpho-syntactic structure.

A weakness of Dixon's paper (op.cit.) arises from the shortage of languages with an open class of adjectives as his sample. In his data only Djirbal and English had open classes. There appears to be no a priori reason why all languages with open adjectival classes should follow English and Dyirbal in assigning all seven semantic types to the adjective semantic class. Yet for a strongly adjective-dominated language, Dixon (op.cit.p62) believes "the seven types are exclusively associated with a single part of speech, the adjective class."

However, Tawala and other language of Milne Bay assign human propensity to a special class which probably should be regarded as a separate part of speech in its own right. A study of the properties of the human propensity class in English (for summary see Dixon 1977:32, table 1) reveals that this class differs from the other classes in a number of important ways:

- (a) Unlike all other adjective semantic classes, human propensity does not typically form antonym pairs of complement sets.
- (b) Derivation with un- is highly productive only with the human propensity class (e.g. 'unkind', 'unhappy' etc.)
- (c) The use of the -ish suffix is rare with the human propensity class, but productive elsewhere.

There are other distinct differences presented in Dixon's paper, but sufficient has been said to show that we are dealing with a distinct sub-class of adjectives in English.

In a footnote (51) Dixon (op.cit.p78) makes reference to Yidin^y, a northerly neighbour of Dyirbal:

This language has an open class of adjectives, covering almost exactly the same semantic ground as the Dyirbal class. But Yidin^y has some HUMAN PROPENSITY nouns - e.g. birmbir 'jealousy' - from which adjectival forms can be derived by the comitative suffix -dYi 'with'.

Again we find a language giving special treatment to the human propensity class.

The Tawala data may thus point us in the right direction to correctly interpret the English, Dyirbal and YidinꞤ. It is possible that human propensity may occur as a sub-class of verbs or nouns, even in an adjective dominated language; or that the properties of the class may be such that it requires being assigned to a part of speech of its own, which is how I have placed Human Propensity in Tawala. This also helps solve the problem of classifying this class as verbs, when a number of the stems are in fact nouns, and can only function as verbs by the addition of derivational prefixes.

The psychological words in chart 14 have been chosen to illustrate the human propensity class. They fall into two classes:

Class I are stative verbs, and all undergo a transformation similar to the following example:

<u>a-nugo-apapoe</u> I-mind-bad 'I am angry'	→	<u>nugonugo-u i-apapoe</u> mind-my it-bad 'I am angry'
--	---	--

In the second form, the "agent" takes less responsibility; and literally means 'My mind is angry.'

Class II are nouns and can only function as verbs by the addition of a derivational prefix, e.g.

<u>nugoneina</u> ignorance 'ignorance'	→	<u>i-wi-nugoneina</u> he-DP-ignorance 'he was ignorant'
--	---	---

These two classes are useful in distinguishing various uses of derivational prefixes as seen in chart 14.

The wi prefix with class I seems to mean 'to demonstrate a state by words'. This is an extension of the common meaning 'to be in a state':

wi-nugodewadewa-hi 'show them peace' (nugodewadewa
 'show peace')

With class II words the wi prefix is used with the common meaning 'to be in a state':

wi-nugoneina 'be ignorant' (nugoneina 'ignorance')

The lu prefix means 'to cause a state - by actions' which is the common meaning as it applies to all human propensity words which take the prefix:

lu-nugoapapoe-ge-hi 'make them angry' (nugoapapoe 'anger')

The li prefix is used with class I stems with the meaning 'to cause a state - by empathy' which is also the common meaning for this prefix. "Empathy" involves the inspiration and encouragement of seeing an example, and hence the encouragement of others to follow that example:

li-nugohegoya-hi 'cause contentment' (nugohegoya 'contentment')

With class II stems li is not productive and meanings are idiomatic:

li-nugoneina-hi 'be ignorant about things' (nugoneina 'ignorance')

li-nugoemota-hi 'bring them together' (nugoemota 'unity of mind')

With the wo prefix both class I and class II stems have the common meaning 'to persistently demonstrate a state':

wo-nugodubu 'keep mourning' (nugodubu 'sadness')

wo-nugoneina 'be slow in learning' (nugoneina 'ignorance')
(persist in ignorance)

Typical examples:

(121) Ma lawa ugoli-hi tauna i-wi-nugodubu po
also people to-them himself he-DP-sadness and
ugoli-n-ei lawa hi-nugodubu.
to-it-from people they-sadness

'He was so sad that he made the people sad.'

(122) Tu wi-nugototogo o-na-lu-nugotootogo.
person DP-poor you(pl)-INT-DP-mercy

'To the poor, show mercy.'

(123) Tauna tu nugodewa yaka
himself person peace consequently

i-wi-nugodewadewa-hi.
hi-DP-peace-RF

'He is a peaceful person and so showed them how to be peaceful.'

stem(S)	meaning	wi-S-(RF ¹)	lu-S-(D)-RF	li-S-RF	wo-S ² -($\frac{D-RF}{RF^1}$)
		I demonstrate a state by words ² II stative verb	cause state - by actions	I cause a state - by empathy II idiomatic	persistently demonstrate a state
Class I					
<u>nugodewa</u>	peace	<u>winugodewadewa(hi)</u> show peace	<u>lunugodewadewahi</u> make them peaceful	<u>linugodewadewahi</u> cause peace	<u>wonugodewa(ya)</u> keep showing peace
<u>nugoapapoe</u>	anger	<u>winugoapapoe(nihi)</u> show anger	<u>lunugoapapoegehi</u> make them angry	<u>linugoapapoehi</u> cause anger	<u>wonugoapapoe(geya)</u> keep showing anger
<u>nugohegoya</u>	contentment	<u>winugohegoya(hi)</u> show contentment	<u>lunugohegohegoyahi</u> make them content	<u>linugohegoyahi</u> cause content	<u>wonugohegoya(ya)</u> keep showing contentment
<u>nugogului</u>	forget	<u>winugogului</u> forget words	<u>lunugoguluihi</u> make them forget	<u>linugogului</u> cause things to be forgotten	<u>wonugogului</u> forget little by little
<u>nugodubu</u>	sadness	<u>winugodubu</u> show sadness	-	<u>linugodubui</u> cause sadness	<u>wonugodubu(geya)</u> keep mourning
Class II					
<u>nugoneina</u>	ignorance	<u>winugoneina</u> be ignorant of word	-	<u>linugoneinahi</u> be ignorant of things	<u>wonugoneina</u> be slow to learn
<u>nugoemota</u>	singleness	<u>winugoemota</u> agree	<u>lunugoemoti</u> work together	<u>linugoemotahi</u> bring them together	<u>wonugoemota(hi)</u> bring people closer together
<u>nugoluwaluwaga</u>	uncertainty	<u>winugoluwaluwaga</u> be uncertain of right thought	<u>lunugoluwaluwaga</u> be uncertain about actions	-	<u>wonugoluwaluwaga</u> follow two paths, be schizophrenic
<u>nugototogo</u>	poverty	<u>winugototogo</u> be needy	<u>lunugotootogo</u> show mercy	-	-
<u>nugotuhu</u>	thought	<u>winugotuhu</u> think	-	-	<u>wonugotuhu(ya)</u> keep thinking

Chart 14 - Derivational prefixes with human propensity class

¹ hi is plural form 'them' i.e. 'people'.

² These have an optional transitive form, given in brackets.

- (124) Bada i-wi-nugohegoya-u.
 man he-DP-content-RF
 'The man calmed me down.'
- (125) A-laun-i po a-li-nugoapapoe-ya.
 I-hit-RF and I-DP-anger-RF
 'I hit him and made him angry.'

4.5 Numbers

Tawala numbers are a small closed class of words somewhat aligned to adjectives, but showing several distinctive features (cf. 4.2):

(a) They are not marked for subject-person agreement, as all adjectives are:

- (126) Bada banei-hi hi-nae.
 man big-their they-go
 'The big men went.'
- (127) Bada tonuga hi-nae.
 man three they-go
 'The three men went.'

(b) They do not have a reduplicated form as most adjectives do.

(c) They function as nouns, both by themselves and with alienable possession clitics:

- (128) Luwaga he-ma-mae.
 two they(PRES)-PROG-stay
 'There are two remaining.'
- (129) Omi wohepali o-na-nae.
 your(pl) four you-INT-go
 'You four will go.'

There are five basic numbers in Tawala.

<u>emosi/emota</u> ¹	'one'
<u>luwaga</u>	'two'
<u>tonuga</u>	'three'
<u>wohepali</u>	'four'
<u>nim(a) i-tutu</u>	'five'
hand it-joint	

¹ Dialect/age group distinction, but also the two forms have separate usage with prefixes.

Grammatically, any number higher than that is referred to as gogo-na 'together-its'. Referentially it is possible to continue counting by combinations of these basic numerals plus the concept of oloto i-hilage 'twenty' (literally, 'male he-finish'):

<u>nim(a)</u>	<u>i-tutu</u>	<u>po</u>	<u>emosi</u>	'six'	
hand	it-joint	and	one		
<u>nima</u>	<u>luwaga</u>	<u>hi-tutu</u>	<u>po</u>	<u>luwaga</u>	'twelve'
hand	two	they-joint	and	two	
<u>nima</u>	<u>tonuga</u>	<u>hi-tutu</u>	<u>po</u>	<u>tonuga</u>	'eighteen'
hand	three	they-joint	and	three	
<u>oloto</u>	<u>emosi</u>	<u>i-hilage</u>	<u>po</u>	<u>wohepali</u>	'twenty-four'
male	one	he-finish	and	four	

Numbers represent the most perfect semantic-syntactic correlation I have discovered in Tawala. In chapter 3 the general principle was proposed: insofar as two words share significant semantic components so their syntax overlaps. The corollary is also true: insofar as two words have significantly separate components, to that extent their syntax is likely to diverge. Tawala numbers are a paradigmatic example of these principles. The numbers 'two' to 'five' do not differ in any significant way, semantically, and consequently they do not differ in their grammar. Nor are there any of the idiomatic uses found in most charts in this chapter. The number 'one' differs significantly from the other numbers, semantically involving such significant components as 'leadership', 'priority', 'excellence' as well as 'number'. The resultant grammatical forms also differ at a number of points. Also the number 'beyond five' is a different, more generic concept than the specific numbers 'one' to 'five', and its grammar diverges quite significantly in line with the semantic distinction.

Charts 15(a) and 15(b) set out the details of the grammatical forms derived from derivational and classificatory prefixes respectively.

(a) Derivational prefixes

The wi prefix with a number forms an ordinal number which functions as an adjective, agreeing with the noun it follows in person and number:

wi-emosi-na¹ 'first' (emosi 'one')

wi-luwaga-na 'second' (luwaga 'two')

The wi prefix also derives a transitive verb meaning 'to make something a number' which is considered the common meaning for these roots. These meanings are similar to the 'cause action' meaning common to verbs derived with wi.

wi-emot-e-ya 'pile things together' (emota 'one')

wi-luwag-e-ya 'make something second' (luwaga 'two')

The prefix lu is used with two different syntactic frames involving the meaning 'to grow together in a bunch' and 'hit or spear a number'. These uses are similar to the meaning associated with nouns, 'to hit noun' and 'to collect item':

lu-luwaga-na 'grow in a bunch of two' (luwaga 'two')

lu-luwag-e-hi 'hit or spear two' (luwaga 'two')

The prefix li does not occur with numbers.

The prefix wo is used with the meaning 'to gather a number' or 'to hold a number in that hand'. This latter meaning is a common meaning of wo with a number of word classes:

wo-luwag-e-ya 'gather two' (luwaga 'two')

(b) Classificatory prefixes

Data are included on chart 15(b) for the use of numbers with classificatory prefixes and the little-used om derivational prefix, because of the distinctive nature of these prefixes with numbers. Thus while there is nothing particularly distinctive in the use of derivational prefixes in distinguishing this semantic field of roots, there certainly is with the following prefixes:

¹ cf. tahatahayana 'lead, go first'

The prefix om is, of course, a derivational prefix, largely omitted from this thesis because of its failure to be productively used with most of the roots introduced in this chapter. With numbers it is productive, and has the distinctive meaning 'number to be caught on a hook':

hi-(o)mluwaga 'two were caught' (luwaga 'two')

The four classificatory prefixes are used with the following meanings:

tu 'step on a number, cover number with feet'

tape 'break something a number of times, break a number'

hage 'number go alone'

ne 'number go along together'

tu-luwag-e-hi 'step on two items' (luwaga 'two')

tape-luwag-e-ya 'break it twice' (luwaga 'two')

hage-luwaga 'two go alone' (luwaga 'two')

ne-luwa-luwaga 'two go together' (luwaga 'two')

Typical examples:

- (130) He-ne-nae mi dimdim po
 they(PRES)-PROG-go from across the sea and
he-tu-tu-luwa-luwaga.
 they(PRES)-PROG-CP-RED-two
 'They (husband and wife) are acting like Europeans
 and walking together.'

- (131) Iyeta emosi i kokoe ma wi-luwaga-na uyahina...
 day one it finish then DP-two-its at
 'On the second day...'

- (132) Mika iyana i-lu-tonug-e-hi.
 Mika fish he-DP-three-D-RF
 'Mike caught three fish with one throw of the spear.'

- (133) Kama ma Yailo hi-hage-luwaga.
 Kama and Yailo they-CP-two
 'Kama and Yailo have gone alone.'

	wi-R-na	wi-R-D-RF	lu-R- na	D-ya na	lu-R-D-RF	li-	wo-R-D-RF ⁸
cardinal no. (R)	ordinal n.	make s-t: no.	grow in bunch ⁵	hit or spear no.	-	gather no. hold no. in hands	
<u>emosi/</u> <u>emota</u> ¹	<u>wimosina</u> ²	<u>wiemoteya</u> ³	<u>luemotana</u>	<u>luemosigeya(-ni)</u>	-	<u>woemoteya</u>	
<u>luwaga</u>	<u>wiluwagana</u>	<u>wiluwageya</u>	<u>luluwagana</u>	<u>luluwagehi</u>	-	<u>woluwageya</u>	
<u>tonuga</u>	<u>witonugana</u>	<u>witonugeya</u>	<u>lutonugana</u>	<u>lutongehi</u>	-	<u>wotonugeya</u>	
<u>wohepali</u>	<u>wiwohepalina</u>	<u>wiwohepaligeya</u>	<u>luwohepalina</u>	<u>luwohepaligehi</u>	-	<u>wowohepaligeni</u> ⁹	
<u>nimitutu</u>	<u>winimitutuna</u>	<u>winimitutugeya</u>	<u>lunimitutugeya</u>	<u>lunimitutugehi</u>	-	<u>wonimitutugeya</u>	
<u>gogona</u>	-	- 4	- 6	<u>lugogonehi</u> ⁷	-	<u>wogogoni</u>	
to- gether							

Chart 15(a) - Derivational prefixes with numbers

- 1 Dialect/age-group distinction, but also the two forms have separate usage with prefixes.
- 2 tahatahayana is used for 'to go first, to lead'.
- 3 wiemoteya means 'to pile things together'.
- 4 This concept is handled by muli-na 'behind' (literally 'back-its').
- 5 These have stative meaning - wiluwageya 'two gres together' etc.
- 6 This concept is handled by puli-na 'bunch' (literally 'bunch-its').
- 7 lugoluhi is used for 'felling a bunch of coconuts with a stone'.
- 8 The identical paradigm applies to hana 'to hold n. with teeth' or 'to bite no.'.
- 9 This ni is only a free variant (dialectal) but I have maintained the irregularity as that is how I collected the data.

root(R)	(o)m-R ²	tu-R	tape-R-D-RF ⁴	hage-R	ne-RED-R ⁷
	meaning no. to be caught on hook	step on no., cover no. with feet	break s-t. no. of times, break no.	no. to go alone	no. to go along together
<u>emosi/emota</u> ¹	one	<u>tuemoteni</u>	<u>tapeemoteya</u>	<u>hageemota</u>	<u>neemoemota</u>
<u>luwaga</u>	two	<u>tuwagehi</u>	<u>tapeluwageya</u>	<u>hageluwaga</u>	<u>neluwaluwaga</u>
<u>tonuga</u>	three	<u>tutonugehi</u>	<u>tapetonugeya</u>	<u>hagetonuga</u>	<u>netonutonuga</u>
<u>wohepali</u>	four	<u>tuwohepaligehi</u>	<u>tapewohepaligeya</u>	<u>hagewohepali</u>	<u>newohewohepali</u>
<u>nimitutu</u>	five	<u>tunimitutugehi</u>	<u>tapenimitutugeya</u>	<u>hagenimitutu</u>	<u>neniminimitutu</u>
<u>gogona</u>	together	<u>tugogonehi</u>	<u>tapegogoni</u> ⁵	<u>gelugelu</u> ⁶	<u>negogona</u> ⁵

Chart 15(b) - Some classificatory prefixes with numbers

- 1 Dialect/age-group distinction, but also the two forms have separate usage with prefixes
- 2 ona 'no. to be caught in net' substitutes for om but does not suffer vowel loss.
- 3 I have included the fully inflected form because of vowel loss and the change from singular to plural.
- 4 The paradigm also applies to tupa 'to hit number'.
- 5 gogona, not being a number, does not always follow the formulae for numbers.
- 6 gelugelu - probably from the root gelu 'to get on board'.
- 7 ge 'to cling, go up together' substitutes for ne.

4.6 Locationals

This small closed class of words are those referred to as "position adjectives" by Dixon. He notes (1977:74):

POSITION can be justified as a further semantic type associated with the class Adjective in English but is most frequently dealt with through Adverbs in other languages, even, when they do have an open Adjective class.

In Tawala they are neither adjectives nor adverbs, but a closed class in their own right. Like adjectives, abstract nouns, inalienable nouns etc. they are suffixed for person and number agreement of the noun they follow. However, they also stand absolutely as locational nouns by the addition of the prefix u 'to, in, at'. The following examples demonstrate something of the range of usage of locationals:

numa hine-na 'the inside of a house'
house inside-its

...numa u-hine-na '(it is) inside the house'
house at-inside-its

I-nae u-hine-na. 'He went inside (it).'
he-go to-inside-its

u-hine-u 'inside me'
in-inside-my

There are two separate classes of locationals:

Class I static relationship locations

depict the relationship between items which are stationary.

Class II dynamic relationship locationals

depict the relationship between items which are moving.

This semantic distinction is paralleled by separate use of derivational prefixes.

Chart 16 sets out the distinctive use of derivational prefixes with the locationals.

With stative locationals the wi prefix is used with a single root and has an idiomatic meaning:

wi-tepa 'pretend' (tepa 'on top')

However, with the dynamic locationals the wi prefix is productive and means 'move in relation to something':

wi-muli 'follow' (muli 'behind')

The lu prefix is productive with both classes of locationals in the sense 'to make a pile in location':

lu-hine-ni 'pile inside' (hine 'inside')

The dynamic aspect is retained with the class II locationals in that the pile is made in respect to (i.e. after) the marriage process:

lu-muli 'pile (gift) made after marriage' (muli 'behind')

The li prefix is never productive with these roots.

The wo prefix is used only with static locationals and has the sense 'to put hand in location':

wo-gabola 'put hand underneath' (gabola 'under')

Typical examples:

(134) U-na-tahae-ya po a-wi-muli.
you(sg)-INT-lead-RF and I-DP-behind
'You go first and I will follow.'

(135) Ba-bada hi-wo-tepa-ni.
RED-man they-DP-top-RF
'The elders laid hands on him.'

(136) Yaniyani hi-lu-tepa-ne-ya.
food they-DP-top-D-RF
'They piled food on top.'

root(R)	meaning	wi-R	li-	lu-R	wo-R
		I idiomatic II relationship to moving item	-	pile in location	put hand in location
I Static relationship					
<u>hine</u>	inside	-	-	<u>luhineni</u> pile inside	<u>wohine</u> put hand inside
<u>gabola</u>	underneath	-	-	<u>lugabola</u> pile underneath	<u>wogabola</u> put hand underneath
<u>tapa</u>	on top	<u>witapa</u> ¹ pretend	-	<u>lutepaneya</u> pile on top	<u>wotepani</u> lay hands on
<u>liyaliya</u>	near	-	-	<u>luliyaliyani</u> pile near	<u>woliyaliyani</u> place hand near
II Dynamic relationship					
<u>muli</u>	behind	<u>wimuli</u> be behind s-t. moving	-	<u>lumuli</u> pile made after marriage (gifts)	-
<u>nao</u>	in front	<u>winao</u> be in front of s-t. moving	-	-	-

Chart 16 - Derivational prefixes with locationals

¹ This is probably tapa used in the sense of 'face' i.e. wi-tapa 'to make a face'.

4.7 Residue

Chart 17 contains those roots which have been found to be productive with the derivational prefixes, but have not, as yet, been assigned to classes such as have been handled in charts 1-16.

An examination of the data contained in chart 17 reveals that the roots consist almost entirely of verbs (both transitive and intransitive) and that many of the meanings of the derived forms are similar to those encountered with the more regular data, though there are also many idioms. With the "priority of semantics" hypothesis, we would expect roots coming from a wide range of semantic fields to appear to have an almost random use of derivational prefixes with a wide variety of form and meaning, and this is indeed what we have with chart 17, which contrasts sharply with the order found in all the charts based on items from a single semantic field. Thus we find here a negative confirmation of the hypothesis in the lack of correlation between semantics and syntax.

Almost half of the roots contained in the residue are among the verbs of highest occurrence in every-day conversation. In addition the verbs derived from these roots often have quite distinctive meanings not yet encountered in the regular data. The combination of these two facts was largely responsible for early lack of progress in controlling derivational prefixes. With a systematic approach to a larger corpus of data the residue was able to be viewed in perspective and assigned a relatively unimportant role in the resultant schema.

As detailed comments on all twenty-seven roots of chart 17 would involve a very lengthy and somewhat tedious end to this data chapter, I have, instead, selected four of the most common roots to illustrate the major conclusions which can be drawn from these data.

(a) bagibagi 'work'

This word is so common that it is often the first word people recognise as a recurring partial when listening to Tawala for the first time. It is basically the noun 'work'

though it does occur in restricted contexts as a verb:

- (137) Ta-bagibagi.
 we(inc)-work
 'Let's work!'
- *Hi-bagibagi
 they-work

The wi prefix is used with the unique meaning of 'to use a tool' and includes the sense of the English 'to borrow':

- (138) Ilama a-wi-bagibagi-ye-ya mayau ugoli-na.
 axe I-DP-work-D-RF tree at-it
 'I am using the axe to cut the wood.'

This meaning has been found with only one other word. It is another residue word belonging to a closely related semantic field:

wi-hagu-ge-ya 'to use something' (hagu 'help')

The root bagibagi does not occur with the lu and li prefixes, however it does occur with wo where it functions as a verbaliser. The usual meaning, where the derived verb 'involves hands or persistent action' has been lost, and the verb is simply the generic verb 'to work':

- (139) Apo lawa ega i-na-wo-bagibagi...
 FUT person NEG he-INT-DP-work
 'If a person won't work...'
- (140) Kewokewou a-wo-bagibagi-ye-ni.
 canoe I-DP-work-D-RF
 'I made a canoe.'

(b) baha 'talk'

This root does not occur with the wi prefix, however it does with the other three prefixes. The form derived with lu means 'to boast' and in line with the general meaning 'verb involves physical movement' the person 'boasting' uses wild gesticulations (cf. 3.3 for a fuller definition).

- (141) Bada e-lau-baha-baha.
 man he(PRES)-DP(PROG)-RED-talk
 'The man is boasting.'

With the li prefix baha is used with the meaning 'cause someone to start talking':

- (142) Natani ba-bada e-lai-baha-hi.
 Nathan RED-men he(PRES)-DP(PROG)--talk -RF
 'Nathan caused the men to start talking.'

This meaning of 'to start something' is found with only one other root, which also belongs to the residue:

li-dagu-ya 'start something' (dagu '?'
widagudagu 'wriggle')

The wo prefix with baha is used in line with the common meaning 'persist in action' and means 'to continually boast or complain':

- (143) Bagibagi e-woo-bahe-bah-e-ya.
 work he(PRES)-DP(PROG)-RED-talk-D-RF

'He is always complaining about the work (to be done).'

(c) hilage 'be finished, die'

This root has a distinction between the wi and li prefixes not attested with any other roots:

wi-hilage 'kill by sorcery'
li-hilage 'kill physically'

The first meaning is in line with the common meaning which occurs with adjectives 'to cause condition (socially)' as "social" action often involves the spoken word, which is also true of sorcery. However, it is most unusual to have li used for 'physical contact' which is the general meaning of lu. However, this maybe because lu already had an idiomatic meaning of its own:

lu-hilage 'be exhausted'

The meaning with wo is also similar to that with lu except that the implication in line with the common meaning is that the state is the result of persistent action:

wo-hilage 'be worn out'

The following examples present all four prefixes in the order presented above:

- (144) Lawa tula-na balau-gei i-wi-hilage-ni.
 person friend-his sorcery-INST he-DP-die-RF
 'The man killed his friend by sorcery.'
- (145) Mika kamkam ilama-gei i-li-hilage-ni.
 Mika chicken axe-INST he-DP-die-RF
 'Mika killed the chicken with an axe.'
- (146) A-lu-hilage.
 I-DP-die
 'I am exhausted' (after pushing a car)
- (147) Wiyuwa-na a-wo-hilage.
 pain-that I-DP-die
 'I am worn out with the pain.'

(c) hogoya 'be full'

The prefixes wi and li with this root change the stative verb into the active form:

wi-hogoya }
li-hogoya } 'fill something'

The distinction between these two forms is difficult to pin down, but lihogoya, in addition to meaning 'to fill something' also means 'to pour out':

- (148) Goila hipuli i-li-hogoya babana tanki i-gunanagili.
 water ground it-DP-fill because tank it-break
 'The water poured out on the ground because the tank got a hole in it.'

The following examples illustrate the distinction between these two verbs:

- (149) Goila/baketi u-na-wi-hogoya.
 water/bucket you-INT-DP-fill
 'Fill the water/bucket.'
- *Goila/baketi u-na-li-hogoya.
 water/bucket you-INT-DP-fill
- (150) Goila hoi baketi u-na-wi-hogoya/*u-na-li-hogoya.
 water in bucket you-INT-DP-fill/you-INT-DP-fill
 'Fill the bucket with water.'
- (151) Baketi goil(a)-ei u-na-li-hogoya/*u-na-li-hogoya.
 bucket water-INST you-INT-DP-fill you-INT-DP-fill
 'Fill the bucket with water.'

The prefixes lu and wo do not occur with this root.

		<u>wi-</u>	<u>lu-</u>	<u>li-</u>	<u>wo-</u>
<u>bagibagi</u>	work	<u>wibagibagi</u> use a tool	-	-	<u>wobagibagi</u> work
<u>baha</u>	talk	-	<u>lubaha</u> boast	<u>libahaya</u> start someone talking	<u>wobahabaha</u> continually boast, complain
<u>daada</u>	dawdle	<u>widaadaya</u> walk someone	-	-	<u>wodaada</u> practise walking
<u>dadana</u>	inspect	<u>widadani</u> try something	<u>ludadani</u> test someone	-	-
(<u>dagu</u>)	-	<u>widaguya</u> move something	-	<u>lidaguya</u> start something	-
<u>gayo</u>	be in water	<u>wigayoya</u> immerse s-t.	-	<u>ligayoya</u> wet something	-
<u>guyau</u>	chief	<u>wiguyougeya</u> treat as chief	<u>luguyoguyougeya</u> ridicule, mock	-	-
<u>hagu</u>	help	<u>wihagugeya</u> use something	-	-	<u>wohaguya</u> help s-o. in task
<u>haleya</u>	throw s-t.	<u>wihaleya</u> remove s-t.	<u>luhaleya</u> exchange places with someone	-	<u>wohaleya</u> let something go
<u>hepa</u>	beach boat	<u>wihepaya</u> run boat aground	<u>luhepaya</u> dig up vegetables	-	<u>wohepaya</u> raise something
<u>hilage</u>	die, be finished	<u>wihilageni</u> kill - sorcery	<u>luhilage</u> be exhausted	<u>lihilageni</u> kill - physically	<u>wohilage</u> be worn out
<u>hiyawi</u>	count s-t.	<u>wihiyawi</u> read something	<u>luhiyahiyawa</u> recount the past	-	<u>wohiyahiyawa</u> read/count rapidly
<u>hoeya</u>	open s-t.	-	<u>luhoehoe</u> be untied	-	<u>wohoeya</u> dismantle s-t.
<u>hogoya</u>	be full	<u>wihogoya</u> fill something	-	<u>lihogoya</u> pour out on ground	-
<u>holi</u>	pull in	<u>wiholahola</u> sexual intercourse	<u>luholi</u> furl a sail	<u>liholi</u> scatter s-t. to multiply it	<u>woholi</u> take something from a hole
<u>hunaya</u>	urge s-o. on	-	-	<u>lihunaya</u> urge s-o. by actions	<u>wohunahunaya</u> urge with whispers
<u>lawi</u>	jerk s-t.	<u>wilawi</u> hit/kill s-t.	<u>lulawi</u> break s-t. off with hooked stick	-	<u>wolawi</u> break s-t. off by hand
<u>lougo</u>	sing, yank a line	<u>wilougo</u> knock	-	<u>lilugoya</u> hit s-t. again	<u>wolougo</u> persist in hitting
<u>pati</u>	be patched	<u>wipati</u> stick s-t.	-	<u>lipati</u> stick s-t. up	<u>wopati</u> stick many things
<u>pili</u>	be rolled	<u>wipilipili</u> speak riddles	<u>lupilipili</u> hit with instrument	<u>lipilipili</u> make mistakes	<u>wopilipili</u> crumple something
<u>popoya</u>	join s-t.	-	<u>lupopoya</u> join string	-	-
<u>poyaya</u>	heat s-t.	<u>wipoya</u> be/become hot	<u>lupoyaya</u> apply heat/medicine to someone	<u>lipoyaya</u> heat s-t. on fire	<u>wopoyaya</u> heat s-t. by hand
<u>tomatoma</u>	be inspired	-	<u>lutomatoma</u> talk like foreigner	<u>litomatomaya</u> lack s-t. (salt)	-
<u>wiwila</u>	go round	-	<u>luwilawila</u> ask many questions	-	<u>wowilawilaya</u> mix things together
(<u>yadaga</u>)	-	-	<u>luyadagi</u> hit s-t. blindly	-	<u>woyadaga</u> search in the dark
<u>yagiyagina</u>	quickly	<u>wiyagiyagineya</u> bring s-t. fast	<u>luyagiyagina</u> do s-t. in a hurry	-	<u>woyagiyagineya</u> carry s-t. quickly

At one extreme of the second continuum are sets of derived verbs which share identical syntactic-semantic functions. The proto-typical examples are the derived verbs which are formed from the semantic field containing number roots (4.5). Thus the highly predictable end of the derived verb continuum corresponds to the homogenous end of the semantic field continuum.

The other extreme of the second continuum consists of derived verbs from isolated roots with unique syntactic-semantic functions. The prime examples are the derived verbs associated with the residue. Little or no correspondence is found to exist between these derived forms (4.7). It is no accident that these unpredictable sets of derived verbs correspond to the heterogenous semantic fields of their roots, for in both the irregular data and the regular data we see clear evidence for the thesis stated above, and a confirmation that there is indeed a priority of semantics in the operation of Tawala verb derivation.

5 THE GEOGRAPHICAL EXTENT OF DERIVATIONAL PREFIXES

Evidence has been presented in the previous chapter for a rather complex set of derivational prefixes in one language, Tawala. The question naturally arises as to how widespread this phenomenon is. This chapter is devoted to exploring this question, commencing with an examination of the Milne Bay situation (5.1). We then examine one or two possible candidates for a system comparable to the Milne Bay derivational prefixes, from the surrounding languages in Melanesia (5.2).

Data have been taken only from "reliable" sources. By "reliable" I mean that the author in question had a long-term exposure to a single language, rather than research workers in the field of comparative studies, such as Capell. Data have been taken from both dictionaries and grammars. Relevant material was culled from a number of dictionaries by comparing recurring prefixes with similar entries without the prefix in question. When approximately ten such examples had been found, I considered the prefix to have been established as a productive prefix. A dictionary needed to be about 5,000 words long, before it would produce this sort of result. A summary of these data is presented in various appendices at the end of this volume.

That derivational prefixes are not in all Oceanic languages is seen from the fact that certain authors have addressed themselves specifically to the problem and have been unable to find any productive derivational prefixes at all. Hooley (1970:147) comments with respect to Mapos Buang:

Many of the initial unstressed syllables of these verbs recur again and again, for example s-, k-, ma, p-. It is therefore very probable that these represent old prefixes which have now become fused and inseparable from the roots...So far it has not been possible to assign any particular meaning to these units.

In her grammar of Patep, another Morobe Province language of Papua New Guinea, Lauck (1979) discusses the process by which verbs are derived, but these always consist of two roots and never a prefix with a root.

The languages of Oceania present a continuum between the Morobe languages, with their absence of synchronic derivational prefixes and the Milne Bay languages with their highly productive systems. It is not my purpose to outline the details of this continuum but rather to examine potential candidates for the highly productive end in order to point out the need for serious study of derivational prefixes in Milne Bay and beyond.

5.1 Derivational Prefixes in Milne Bay Languages

In discussing the history of the treatment of derivational prefixes, evidence has been presented (chapter 2) for the widespread nature of derivational prefixes within Milne Bay. This present section attempts to discover in a systematic way, the answers to three questions.

- 1) How widespread is the phenomenon of derivational prefixes?
- 2) How widespread is the phenomenon of multiple meanings attached to these prefixes?
- 3) How widespread is the aspectual change in form associated with these prefixes? (cf. section 1.5.2)

In table 4 (page 11) 26 languages of the Milne Bay Province are grouped into 9 language families. The data presented in this chapter are selected from 5 of these families, including three of the four primary divisions of the "proto-Papuan Tip". No positive evidence is available for the prefixes in the Suau family. Being the language of the Samarai area, Suau was the most accessible language to men like Ray and Capell, so it can probably be assumed that the absence of data (apart from the he causative prefix) is due to the relative simplicity of Suau prefixes. Thus Suau clusters with Motu and Central Province languages and not with the remainder of Milne Bay, confirming Ross's classification (table 4).

The remainder of Milne Bay families seem to share the more complex situation of multiple derivational prefixes.

5.1.1 Kiliwila family

Evidence here comes primarily from Lithgow's (1974) "Muyuw Dictionary". However Lawton's (1978) "Some Aspects of the Language of Kiriwina" presents the same prefixes with certain sound changes¹.

There are five derivational prefixes in Muyuw: v/va, ya, ka, ta and the combination form kata. While the exact areas of meaning of these prefixes are not clear, the data presented in Appendix II make it clear that the meanings are far from being homogenous.

5.1.2 Taupota family

Evidence is chiefly from this present paper (especially the previous chapter). King's (1901) Wedau grammar and dictionary presents data of a parallel nature (cf. 2.3).

There are five derivational prefixes in Tawala: wi, lu, li, wo and om. Each of these has multiple meanings of a complex nature (chapter 4).

5.1.3 Bwaidoga family

Evidence is mainly from Hockett's (1982) manuscript dictionary. Jenness and Ballantyne's (1928) grammar presents a slightly different set of "causative" prefixes, but is in substantial agreement with the material I present from Iduna². My experience with Yamalele would confirm parallel data for that language (Ezard 1971).

Iduna has four basic derivational prefixes: ve, lu, ki and ai, and three combination ones: luve, kive and ive (ai + ve ?). The meanings of each of these prefixes varies

¹ Lawton presents 20 separate prefixes (some homophonous forms) divided on general semantic grounds (e.g. 'to do violently'). He does not distinguish derivational and classificatory prefixes nor even productive and nonproductive examples. As he has not glossed the roots, the copious examples lose their impact on non-Kiriwinan speakers.

² Jenness and Ballantyne present four basic causative prefixes: lu, ve, ki and se (or si) and three combination causatives: luve or velu, kive and sive. If the Bwaidoga se is equivalent to the Iduna ai then the agreement is almost complete.

a good deal from root to root as can be seen from the data presented in Appendix III. These data seem to indicate that the Iduna situation may well be more complex than the Tawala situation.

5.1.4 Dobu family

Data from the Dobu situation has been predominantly culled from Dixon's (1970) dictionary. My findings are in agreement with the list presented by Lithgow (1976) which contains three basic derivational prefixes: e, lo and gi and two further combined forms loe and gie. The data supporting these forms are presented in Appendix IV. An unmistakable parallel exists between these forms and the Iduna ones presented in the previous list, bringing Ross's genetic classification (table 4) into question at this point, as Ross makes the Iduna-Dobu relationship much more distant than the Iduna-Tawala relationship. Of course, it is possible that we are here dealing with areal features.

5.1.5 Louisiade family

The sole source of data here is Callisters' (1979) grammar of Misima. In a fine paper, the Callisters present 28 prefixes, of which 21 are classificatory. Three of the remaining prefixes: pa, lo and awa, derive action verbs, and the remaining four prefixes: ma, samwa, tamwa and tama derive stative verbs. Examples presented in Callister (1979) reveal some range of meaning, particularly for the active prefixes, though the situation does not appear as complex as that found in other Milne Bay languages. Unfortunately, there is no dictionary of sufficient size against which I can test these observations. However the situation is obviously complex enough to align the Misima language with other mainstream Milne Bay languages.

5.1.6 Conclusion

The data outlined thus far in this chapter indicate that derivational prefixes play an important role in most Milne Bay languages, and researchers in the area would do well to pay considerable attention to this rather neglected area of

language. That there may be a continuum between languages which have a very complicated system (with the Bwaidogan family as the proto-typical example) and languages with a more regular and more simple system (with the Louisiade family as the possible contender here) is suggested by the data. However, care needs to be taken lest broad generalisations be made on insufficient data.

Nothing has been said so far about the third question mentioned in 5.1 as to the geographical extent of multiple forms associated with aspect change (1.5.3). Very little data is available on the subject. However, Paisawa et al (1976) make mention of the situation in passing:

Verbs which take -bi- in the Present, take -i- in the Past Perfect e.g.
a-bi-gia ; a-i-gia 'scratch skin'
a-ti-susou; a-i-susou 'jump'

One further shred of evidence is contained in the Mukawa data of Sidney Ray (see table 1, page 6) where the alternate forms of bi and bai are presented.

These data suggest that the feature may be a feature of the north coast languages of mainland Milne Bay Province.

5.2 Derivational Prefixes Beyond Milne Bay

Evidence is discussed, in this section, for the existence of derivational prefixes in three widely-spaced geographical locations, each remote from the Milne Bay languages: Mota (Vanuatu), Arosi (Solomon Islands) and Duke of York (East New Britain).

5.2.1 The Mota Language

In the historical section of this thesis we looked at the contribution made by Codrington (2.1) to the study of derivational prefixes. One conclusion reached was that Codrington 1885 presents the data in a simplified form. This simplification is most clearly seen in respect to Mota, the language which Codrington knew best.

In all, Codrington lists some 10 prefixes (his data are

presented in Appendix V) of which 6 are of interest to us, being derivational prefixes. In particular, Codrington lists 5 ways of forming causatives:

<u>va-</u>	'causative'
<u>vaga</u>	'causative'
<u>ge</u>	'make'
<u>na</u>	'make'
<u>va-</u>	'go'

ge and na appear before the verb root but are not connected to it in Codrington's examples.

I would not like to make a definite claim that Mota has derivational prefixes of the Milne Bay type - Codrington's data are too sketchy for that. I will make a lesser claim, that the data raise some interesting questions that seem to indicate that Mota's derivational prefixes may be quite complex; certainly they need a thorough examination.

5.2.2 The Arosi Language

An examination of Fox (1978) reveals that there are probably 9 Arosi prefixes which lay claim to being verbal derivational prefixes according to the definition and data culled from Fox:

<u>?a</u>	'prefix forming verbs'
<u>ha</u>	'prefix to verbs'
<u>ha?a</u>	'causative prefix'
<u>ma</u>	'conditional prefix'
<u>tai</u>	'prefix of condition with verbs'
<u>tari</u>	'a prefix to verbs'
<u>tata</u>	'a prefix of condition'
<u>wai</u>	'a prefix to verbs'
<u>hari</u> (probably)	'reciprocal prefix...but in some cases the sense is altered'.

Two examples for each prefix culled from the dictionary, together with complete definitions, are presented in Appendix VI.

In the case of the "causative" prefix Fox is quite explicit as to its multiple meanings:

...often the meaning appears to be unaltered by the prefix, but also in other cases the meaning of the verb is considerably altered. In the remaining cases the meaning is causative.

It is not clear whether the scarcity of examples for some of the Arosi prefixes is because the prefix is no longer very productive, or because Fox has omitted the examples feeling that they are more akin to inflectional prefixes.

In summary, I would say that the evidence is strong in the case of Arosi, for a fairly complex set of derivational prefixes that would amply repay any systematic study.

5.2.3 The Duke of York Language

The Duke of York data were culled from Brown and Danks 1882 and are listed in some detail in Appendix VII. The language has three prefixes (wa, we and ta) very much akin to the derivational prefixes of the Milne Bay languages. In each case a prefix demonstrably has several distinct meanings similar to the types of meaning common in Milne Bay.

In addition two verbs pam 'work, do' and pet 'about to do' are used in serial constructions with causative-type meanings. Brown and Dank usually write these constructions as two separate verbs and not as prefix plus verb.

Although I have only uncovered five potential derivational prefixes for the Duke of York language, the evidence is stronger than with Mota and Arosi, due to the wide range of meaning attested in the available examples. Thus, in the case of the Duke of York language I have little doubt that we are faced with a productive system of derivational prefixes that will prove to be quite complex when thoroughly investigated.

5.3 Future Studies

It has not been my purpose in this chapter to make authoritative pronouncements about the derivational prefixes in Milne Bay languages or beyond - rather I have presented sufficient data to show that the prefixes are in need of

being treated seriously by linguists. No longer will the anecdotal approach of a single definition with a couple of examples be an adequate treatment of these prefixes. Rather a corpus of, say, a hundred derived forms for each prefix should be systematically studied and the results presented, taking account of all the data.

Just how widespread this phenomenon of multiple prefixes is, remains to be seen; but even where a language has only a single "causative" prefix there is still need for a systematic presentation of the range of meanings of the prefix, along with the usual "general" definition.

6 CONCLUSION

It has not been possible in a thesis of this size to handle all aspects of Tawala derivational prefixes. The main casualty has been the syntactic treatment of the derived verbs. However, insights have been gained into even this aspect of the subject, pointing to fruitful avenues for future research

The main advance has been in the systemization of derived verbs in relation to the semantic field of their roots. For while efforts directed at finding the "general" meanings for the derivational prefixes proved only marginally successful, the meaning of each prefix when combined with roots from a specific semantic field were found to be highly predictable. In addition, the general agreement of these meanings within the various word classes enabled me to successfully posit "common" meanings for each prefix as used with all the roots within a word class. Divergences from this common meaning were noted where appropriate, however these divergences were found only in a minority of data, and often only one or two idiomatic examples. Thus the data were reduced from chaotic to manageable proportions, making language-learning within the grasp of the outsider.

Now that I have reached the end of this research I see the value of the systematic over the anecdotal approach more clearly than I did when I wrote the introduction (0.5). One of the main problems hindering progress in understanding the Tawala data was the fact that a number of the derived verbs in most common use are aberrant. Giving these aberrant forms equal value with regular forms resulted in confusion and failure to unlock the system. With a growing corpus of data, the exceptions were seen for what they are, and thus lost their tyrannical sway over the analysis.

Besides unlocking some of the mysteries of Tawala data, I hope that this thesis may also inspire some of my colleagues working on Milne Bay languages, and perhaps even further afield, to take up the challenge and pay more rigorous attention to an area of language so easily dismissed in a trite fashion. I am sure that such studies will

be amply rewarded, for I am aware that this thesis is far from being the last word on the subject.

Appendices

Appendix II

Muyuw Derivational Prefixes

Material culled from Lithgow 1974(stress omitted):

a) v/va¹

<u>vasus</u> (<u>vsés</u>)	'suckle a child'	(<u>sus</u>	'breast')
<u>vatow</u> (<u>vtow</u>)	'stand it up'	(<u>tow</u>	'stand, stand away')
<u>vvag</u>	'keep doing it'	(<u>vag</u>	'do, make')
<u>vtok</u>	'criticise, slander, complain about him'	(<u>tok</u>	'bury, lead by hand')
<u>vtam</u>	'ask permission for it'	(<u>tam</u>	'agree, consent')
<u>vnavek</u>	'become a senior/old woman'	(<u>tovek</u>	'grow old')
<u>vapel</u>	'cross it on foot, step over s-t.'	(<u>pel</u>	'jump')
<u>vakun</u>	'tread in his foot- prints'	(<u>kun</u>	'trade in kula')
<u>vanoy</u>	'farewell him on foot'	(<u>noy</u>	'go on that road')
<u>vap(w)</u>	'step on it and break it'		
<u>vapwapwel</u>	'stand on it and squeeze stuff out of it)	(<u>pwapwas</u>	'soft, easy')

b) ya

<u>yakawn</u>	'praise'	(<u>kaves</u>	'praise')
<u>yabin</u>	'crowd round and force'	(<u>sibin</u>	'force into a corner')
<u>yabik</u>	'dirty it'	(<u>bik</u>	'to be dirty')
<u>yabol</u>	'make a mistake and spoil it'	(<u>bol</u>	'confused, wrong')
<u>yadumwal</u>	'to discipline'	(<u>dumwal</u>	'go straight')
<u>yagay</u>	'scoff, jeer'	(<u>yeg</u>	'scoff, jeer')
<u>yageg</u>	'spoil, damage'	(<u>geg</u>	'to be bad')
<u>yamlik(w)</u>	'start s-t. moving'	(<u>lik(w)</u>	'untie')
<u>yamov</u>	'save s-o.'s life'	(<u>katimov</u>	'hit but not kill s-o.')
<u>yamwen</u>	'lift'	(<u>mwen</u>	'ascend')
<u>yasiblut</u>	'startle someone'	(<u>sibilut</u>	'startle')
<u>yatapip</u>	'sleep on floor'	(<u>tapip</u>	'lie on floor')

¹ va- may be simply a classificatory prefix and v- a derivational prefix.

c) ka

<u>kabak</u>	'bald'	(<u>bak</u>	'baldness')
<u>kabut</u>	'summons, call for work'	(<u>but</u>	'make noise')
<u>kalag</u>	'harvested food'	(<u>lag</u>	'go up')
<u>kalog</u>	'gather food'	(<u>log(w)</u>	'pile in heaps for distribution')
<u>kawot</u>	'wave breaks'	(<u>wot</u>	'cut big logs')
<u>kabalawein</u>	'mad, senseless, stupid'	(<u>balawein</u>	'mad')
<u>kabayay</u>	'wide opening'	(<u>babayay</u>	'wide opening')
<u>kadumwal</u>	'show the right path'	(<u>dumwal</u>	'go straight')
<u>kalgutan</u>	'one pile divided in portions for distribution'	(<u>lagutan</u>	'one pile')
<u>kalouvat</u>	'meet'	(<u>louvat</u>	'meet')

d) kata

<u>katabuyav</u>	'make to bleed'	(<u>buyav</u>	'blood')
<u>katadumwal</u>	'make it straight, go straight'	(<u>dumwal</u>	'go straight')
<u>katagayay</u>	'scatter'	(<u>gayay</u>	'disintegrate, disappear')
<u>katageg</u>	'not hit him properly'	(<u>geg</u>	'to be bad')
<u>katagimeg</u>	'clean dirt off s-t.'	(<u>gimagim</u>	'clean')
<u>katagulek</u>	'wreck, destroy'	(<u>katagulek(w)</u>	'wreck, destroy')
<u>katakin</u>	'choose, sort out'	(<u>kin</u>	'look at')
<u>kataligèn</u>	'listen'	(<u>ligen</u>	'hear, heed')
<u>katamkul</u>	'make s-t. sink'	(<u>mukul</u>	'submerge')
<u>katavis</u>	'burst open'	(<u>vis</u>	'strip s-t. into shreds')

e) ta

<u>tamav</u>	'do nothing'	(<u>simav</u>	'stay doing nothing')
		<u>mav</u>	'without reason')
<u>tabod</u>	'block it off'	(<u>sibod</u>	'block, obstruct')
<u>taboul</u>	'cut a hole in it'	(<u>kayboul</u>	'poke a hole through it')
<u>tabwed</u>	'block it'	(<u>sibwed</u>	'block, obstruct, stand in road of')
<u>tadadog</u>	'weigh him down with heavy load'	(<u>dadog</u>	'crooked')

<u>tadamoms</u>	'stand erect'	(<u>damoms</u>	'taut, straight, unsagging')
<u>tadidul</u>	'scratch it'	(<u>kaydidul</u>	'scratch')
<u>tagiyeil</u>	'demolish hill'	(<u>giyeil</u>	'landslide')
<u>takop(w)</u>	'scrape rubbish into heaps'	(<u>kop(w)</u>	'get pregnant')
<u>takwen</u>	'exchange'	(<u>kwen</u>	'catch with rope or sorcery')
<u>tamumug(w)</u>	'leader'	(<u>mug</u>	'go ahead')
<u>tasinal</u>	'avoid someone'	(<u>sinal</u>	'avoid s-o.')
<u>tasiyas</u>	'those people'	(<u>siyas</u>	'those')
<u>tawlat</u>	'teenage boy'	(<u>wlat</u>	'teenager dressed up')

f) Multiple use of a single root:

<u>dumwal</u>	'go straight'
<u>kadumwal</u>	'show the right path'
<u>katadumwal</u>	'make something go straight'
<u>yadumwal</u>	'to discipline'

Appendix III

Iduna Derivational Prefixes

Material culled from Hockett 1982:

a) ve

<u>ve?abaga</u>	'live with s-o'	(<u>abaga</u>	'place of doing things')
<u>ve?afa</u>	'go down into soil'	(<u>afana</u>	'seed')
<u>ve?agetoga</u>	'become a servant'	(<u>agetoga</u>	'menial servant')
<u>ve?avalana</u>	'load s-o. up'	(<u>avalana</u>	'carry on shoulder')
<u>vebalauma</u>	'become a spirit'	(<u>balauma</u>	'spirit, ghost')
<u>vebe?una</u>	'drop s-t. from hand'	(<u>be?u</u>	'fall down')
<u>vebulubulu</u>	'get black'(of yam)	(<u>bulubulu</u>	'black pig')
<u>vebwaneni</u>	'become dirty'	(<u>bwanene</u>	'dirt')
<u>vedamana</u>	'adopt, copy'	(<u>damana</u>	'to cross river etc.')
<u>vehifuga</u>	'conceive'	(<u>hifuga</u>	'pregnant')
<u>vekaliva</u>	'become a man'	(<u>kaliva</u>	'man')

b) lu

<u>lu?afo?ana</u>	'charm' (yams)	(<u>afo?a</u>	'magic charm' (sung))
<u>lu?afuna</u>	'hold s-t. big under arm'	(<u>afuna</u>	'put handle on knife')
<u>lu?alala</u>	'sing'	(<u>alala</u>	'songs')
<u>lu?avala?eya</u>	'carry on shoulder'	(<u>avalana</u>	'carry on shoulder')
<u>lubaiba</u>	'put in cross-wise log'	(<u>bai</u>	'crosswise stick')
<u>lubaibodana</u>	'close off with <u>bai</u> '	(<u>boda</u>	'close off')
<u>lubaikuna</u>	'pierce s-t. upright'	(<u>kuna</u>	'push stick in')
<u>lupalena</u>	'make terraces'	(<u>balebalena</u>	'lying down, horizontal')
<u>lubodana</u>	'close book'	(<u>boda</u>	'enclose, block')
<u>lufifina</u>	'draw circle'	(<u>fifi</u>	'curl round')
<u>lufuwana</u>	'hatch, break open (egg)'	(<u>fuwana</u>	'break, crush')

c) ki

<u>ki?amo?amona</u>	'mould, fashion with hands'	(<u>amana</u>	'mould'(clay))
<u>kibahina</u>	'throttle, strangle'	(<u>bahibahi</u>	'small clam')
<u>kibakabakalina</u>	'pick to pieces' (bird, of nest)	(<u>bakalina</u>	'disintegrate')
<u>kibalebalena</u>	'hold horizontally'	(<u>balebalena</u>	'lying down, horizontal')
<u>kibodana</u>	'enclose underpart of house, blot out (sun)'	(<u>boda</u>	'enclose, block')
<u>kibwadina</u>	'patch a hole'	(<u>bwadina</u>	'patch')
<u>kibwa?ena</u>	'touch something'	(<u>bwa?ena</u>	'touch')
<u>kidalina</u>	'make dam'	(<u>dalina</u>	'plaster nest')
<u>kifanina</u>	'misjudge'	(<u>fanifani</u>	'ignorant')
<u>kihawahawa</u>	'count'	(<u>hawana</u>	'count')
<u>kihobuye</u>	'turn lamp down, lower (of reputation)'	(<u>hobu</u>	'go down')

d) ai

<u>aiyega</u>	'clearing'	(<u>yegayega</u>	'get clean')
<u>aibabala</u>	'accusation of flirting'	(<u>babala</u>	'charm')
<u>aibawe</u>	'crawl'	(<u>bawe</u>	'pig')
<u>aiboda</u>	'cover drum with skin'	(<u>boda</u>	'close in, block,
<u>aibo?u</u>	'stack bundle'	(<u>bo?u</u>	'bundle, stack')
<u>aibubuna</u>	'creation, making'	(<u>bubuna</u>	'make, create')
<u>aidaba(na)</u>	'bring to a close'	(<u>dabana</u>	'bring to end')
<u>aidaka</u>	'break away, divide' (bananas)'	(<u>dakana</u>	'break away, divide(banana)')
<u>aidobo</u>	'break off'(of tree)	(<u>dobona</u>	'break off')

e) luve

<u>luvealika</u>	'kill'	(<u>alika</u>	'die')
<u>luvebowana</u>	'darm brown'	(<u>bowabowana</u>	'black')
<u>luvedamana</u>	'switch promised gift, remake s-t.'	(<u>damana</u>	'to cross (river etc.)')
<u>luvedayagina</u>	'cause blood to flow'	(<u>dayaga</u>	'blood')
		(<u>dayagana</u>	'his blood')
<u>luvedubana</u>	'sprinkle (s-t.)'	(<u>dubadubana</u>	'wet')
<u>luvefota</u>	'be dependent on s-o.'	(<u>fotana</u>	'stick to (s-t.)')
<u>luvehayahayana</u>	'(to) dry hands'	(<u>hayahayana</u>	'dry')

<u>luve'ivaguna</u>	'make new'	(<u>ivaguna</u> 'new')
<u>luvekilumina</u>	'decorate'	(<u>kilumina</u> 'decorate s-t')
<u>luvelakavina</u>	'pile up'	(<u>lakavina</u> 'climb (tree), break out on skin')

f) kive

<u>kivebwadina</u>	'kill (by rough handling)'	(_____)
<u>kivebalana</u>	'stop, prevent from going'	(<u>bala</u> 'walk along, cross over')
<u>kivebelona</u>	'be bent, bends s-t'	(<u>belo</u> 'bend, wrap')
<u>kivebe?una</u>	'drop from hand,	(<u>be?u</u> 'fall down')
<u>kivebutana</u>	'make wet by hands'	(<u>butabutana</u> 'wet')
<u>kivebwanenena</u>	'defile, make dirty'	(<u>bwanene</u> 'dirt')
<u>kivedubana</u>	'make wet'	(<u>dubadubana</u> 'wet')
<u>kivefotana</u>	'stick together (with glue)'	(<u>fotana</u> 'stick to' (of plaster))
<u>kivehelolona</u>	'drain liquid'	(<u>helolona</u> 'drain liquid')
<u>kivefaiwalana</u>	'make s-o. strong'	(<u>faiwala</u> 'hold strongly')
<u>kive?ihayana</u>	'make easy'	(<u>ihayana</u> 'easy')

g) ive - (general causative)

<u>ivebikana</u>	'calm (heart)'	(<u>bikana</u> 'become pliable')
<u>ivedigagina</u>	'sweeten food'	(<u>digadigagina</u> 'sweet (taste)')
<u>ivehifugana</u>	'make pregnant'	(<u>hifugana</u> 'abdomen')
<u>ivehobu</u>	'break power of spell (love potion)'	(<u>hobu</u> 'go down')
<u>ivekabi?ona</u>	'to make small'	(<u>kabi?ona</u> 'small')
<u>ivekoyona</u>	'spoil, make bad'	(<u>koyona</u> 'bad, wrong')
<u>ivekwe?una</u>	'to go out' (of firebrand)	(<u>kwe?una</u> 'extinguish')
<u>ivelakahina</u>	'increase' (of possessions)	(<u>lakahina</u> 'great, large')
<u>iveლაube?una</u>	'level a hilly area'	(<u>laube?u</u> 'flat land')
<u>ivemanavina</u>	'tame'	(<u>manavina</u> 'pliable')

h) Multiple use of single roots:

<u>boda</u>	'close in, block'
<u>aiboda</u>	'cover drum with skin'
<u>lubodana</u>	'close book'
<u>kibodaboda</u>	'rescue'
<u>kibodana</u>	'blot out' (sun) 'block' (ears)

<u>lauboda</u>	'wait for'	
<u>vealaboda</u>	'cook to seal blood'	(<u>ala</u> 'fence')
<u>dobona</u>	'break off'	
<u>aidobo</u>	'break off' (of tree)	
<u>ludobona</u>	'break on or by something'	
<u>kidobona</u>	'break firewood (with hands)'	

Appendix IV

Dobu Derivational Prefixes

Material culled from Dixon 1970. General meanings are those supplied by Dixon.

- a) e - Unfortunately, in the process of moving from the field to Australia, I mislaid the data for this most common of the Dobu prefixes, hence only a few examples are presented here.

<u>ebunina</u>	'to capsize'	(<u>buni</u>	'to roll')
<u>?egesi</u>	'to miss the mark'	(<u>gesi</u>	'wrongly')
<u>emanua</u>	'become an animal'	(<u>manua</u>	'an animal ?')
<u>edena</u>	'cause to escape'	(<u>dena</u>	'flee')

- b) lo

<u>loaga</u>	'debt'	(<u>aga</u>	'article got on credit')
<u>lobau</u>	'replant yams'	(<u>bau</u>	'yam mound')
<u>lobelulu</u>	'make "pshaw" sound'	(<u>belubelulu</u>	'to roar' (of bullroarer))
<u>loboda</u>	'knot for fastening fish through gills'	(<u>boda</u>	'group')
<u>lobware</u>	'eye of needle'	(<u>bware</u>	'to pierce')
<u>lobu?una</u>	'incestuous marriage'	(<u>bu?una</u>	'person of same totem')
<u>lodakadaka</u>	'be rough to the touch'	(<u>daka</u>	'rough')
		(<u>dakadaka</u>	'scratch s-t.')
<u>lodobwadobwa</u>	'speak language badly'	(<u>dobwa</u>	'cut food into pieces')
<u>loetana</u>	'be above'	(<u>etana</u>	'place above')
<u>loguguya</u>	'to exhort'	(<u>guguya</u>	'to exhort')

- c) gi - (1) by hand (2) by sundry means

<u>giapwesa</u>	'protrude from s-t.'	(<u>apwesa</u>	'put s-t. out')
<u>giata</u>	'to do four things'	(<u>ata</u>	'four')
<u>gianua</u>	'to repair house'	(<u>anua</u>	'house')
<u>gibaula</u>	'pinch (and hold)'	(<u>baula</u>	'still')
<u>gibibi</u>	'squeeze something'	(<u>bibi</u>	'squeeze s-t.')
<u>gibun</u>	'invert, translate s-t. to answer riddle'	(<u>buni</u>	'roll canoe')
<u>gibubu</u>	'to prepare'	(<u>bubu</u>	'to make')
<u>gibwage</u>	'break portion of pot'	(<u>bwage</u>	'spoil edge')
<u>gidari</u>	'sexual abuse'	(<u>dari</u>	'sexual abuse')

d) loe - (1) to cause to be (2) to become

<u>loegumwara</u>	'finish task or s-t.'	(<u>gumwara</u>	'be finished')
<u>loegogona</u>	'band together'	(<u>gogona</u>	'gather weapons for fighting')
<u>loegesi</u>	'do things wrongly'	(<u>gesi</u>	'wrongly')
<u>loemwawasa</u>	'to kill'	(<u>mwawasa</u>	'die, faint')
<u>loeowana</u>	'cause bewilderment'	(<u>owana</u>	'be bewildered')
<u>loeparu</u>	'make straight'	(<u>paruparu</u>	'straight')
<u>loesae</u>	'place food in pot'	(<u>sae</u>	'come ashore to lay eggs (of turtle)')
<u>loesana</u>	'suspend something'	(<u>sanana</u>	'be suspended')
<u>loesalutua</u>	'happen suddenly'	(<u>salutua</u>	'grow rapidly')

e) gie - (1) cause by hand or finger (2) cause by other means

<u>giebaila</u>	'to make dirty'	(<u>baila</u>	'be dirty')
<u>giebobo?ana</u>	'repair, make good'	(<u>bobo?ana</u>	'be good')
<u>gieboi</u>	'work morning till night'	(<u>boi</u>	'become dark/light')
<u>giedada</u>	'force one's head back'	(<u>dada</u>	'stare up')
<u>giedau</u>	'cause to flow'	(<u>dau</u>	'run'(water)')
<u>giededoni</u>	'cause to cry'	(<u>dedoni</u>	'to cry')
<u>giegwamumu</u>	'do s-t. difficult'	(<u>gwamumu</u>	'render s-o. helpless')
<u>gienua</u>	'to defecate'	(<u>nuu</u>	'soft')
<u>gienuana</u>	'waver in decision'	(<u>nuana</u>	'his mind')
<u>gietabe</u>	'carry s-t. suspended'	(<u>tabe</u>	's-t. to hang suspended')

f) Multiple use of single roots:

<u>buni</u>	'to roll'
<u>gibuni</u>	'to turn something over, to translate'
<u>lobunibuni</u>	'to cause to roll, to roll (v.t.)'
<u>ebunina</u>	'to capsize'
<u>ebunibuni</u>	'to roll (v.i.)'

Appendix V

Mota verb prefixes

Data on possible derivational prefixes selected from
Codrington 1885 (282-4)

va "causative"

vaesu 'to make to live, to save' (esu 'to live')

vaga "causative"

vagaqogo 'to multiply' (qogo 'many')

ge "causative" (literally 'to make, do, act')

me ge esua 'saved him' (me vaesua 'saved him')

vat ge lot 'make a pestle' (lot 'pestle')

ni we gege loloqou 'he acts like a fool'

na "causative" (literally 'to make')va "causative" (literally 'to go')¹

vailo 'to visit'

vatutu 'to encounter'

var "reciprocal"

varvus 'beat each other'

ma "passive" (Codrington means "stative" not a true passive.)

masare 'be torn' (sare 'to tear')

malate 'be broken' (late 'to break')

mawora 'to come apart' (wora 'asunder')

maluge 'folded' (luge 'to fold')

malakalaka 'to rejoice' (laka 'kick up
heels')

ta "be thought to have more the meaning of spontaneity"

tatiotio 'to stagger'

taavaava 'to miss footing'

sa

sasaroro 'to come or sink down'

¹ Presumably Codrington distinguished this use of va from the first va causative on the semantic grounds of movement.

tava (tama) "the condition has come about by itself"

tavaul 'to come untied' (ul 'to untie rope')
tavamesu 'to fall down'
tavaroro 'to sink down'
tavaraka 'to rise up
tavsare 'torn'

Appendix VI

Arosi verb prefixes

Definitions according to Fox 1978 with examples culled from dictionary.

?a prefix forming adjectives and verbs; rarely past participles

<u>?a?ahi</u>	'incline towards'	(<u>?ahi</u>	'bank up earth')
<u>?ahiro</u>	'keep coming and going'	(<u>hiro</u>	'go to and fro')

ha prefix to verbs and adjectives

<u>haroro</u>	'tight, taut (of line)'	(<u>roro</u>	'pull tight')
<u>hanguru</u>	'chatter'	(<u>nguru</u>	'hum a song or chorus')

ha?a causative prefix, forming causative verbs, adverbs and adjectives. Not all verbs can take it; and often the meaning appears to be unaltered by the prefix, but in other cases the meaning of the verb is considerably altered. In the remaining cases the meaning is causative.

<u>ha?a?a?ahi</u>	'make incline'	(<u>?a?ahi</u>	'incline towards')
<u>ha?a?adu</u>	'to rake'	(<u>?adu</u>	'rake garden')

hari reciprocal prefix...but in some cases the sense is altered...

<u>harimarumaru</u>	'rest in shade'	(<u>maru</u>	'shade')
<u>haripwari?i</u>	'spread false tales'	(<u>pwari?i</u>	'deceive')

ma (reduplication maa) conditional prefix often forming a past participle (cf. mwa and mai)

<u>maangia</u>	'be distressed'	(<u>angi</u>	'cry, sound off')
<u>maagari</u>	'to go and see'	(<u>gari</u>	'to go')
etc.			

tai prefix of condition with adjectives and verbs (cf. ta)

<u>taihiro</u>	'to stir up (water)'	(<u>hiro</u>	'go to and fro' (water))
<u>taiduruduru</u>	'to be entangled'	(<u>duru</u>	'tie a knot')

tari a prefix to adjectives and verbs

tarihisia 'be narrow, confined' (hisi 'fish trap, shutting in fish with coconut leaves')
tariho?a 'take long strides' (ho?a 'sit with legs apart')

tata a prefix of condition or continuous action

tatarahi 'to sweep' (rahi 'take/pick up from')
tatarau 'creep along branch etc' (rau 'leaf')

wai a prefix to nouns, adjectives and verbs

waiasinga 'to fish or hunt' (asinga 'to fish or hunt')
wai?atenga?i 'to drive away' (atengi 'to send')
 etc.

Appendix VII

Duke of York verb prefixes

Material culled from Brown and Danks 1882. General meanings supplied from the dictionary.

a) wa "causative particle"

<u>wabalamati</u>	'comfort, control the passion'	(<u>balamat</u>	'restful, lazy'adj.)
<u>wabaraga</u>	'look kindly upon'	(<u>baraga</u>	'friendly'adv.)
<u>wabenbeni</u>	'to lead'	(<u>benbeni</u>	'to lead')
<u>wadaraka</u>	'to lift up the face'	(<u>daraka</u>	'look up, lift up head')
<u>wadokoi</u>	'to kill'	(<u>dokoi</u>	'dead' adj.)
<u>wagagai</u>	'to hasten'	(<u>gagai</u>	'quickly'adv.)
<u>wagap</u>	'to wound'	(<u>gap</u>	'blood')
<u>wagarop</u>	'to joke, deceive'	(<u>garop</u>	'characterless, soft')
<u>wagoi</u>	'strike a drum'	(<u>goigoi</u>	'dance'
		<u>goi</u>	'strike')
<u>wagopi</u>	'to clothe'	(<u>gopi</u>	'bind, clothe'
<u>wakaka</u>	'to spread/increase'	(<u>kaka</u>	'creep, crawl'

b) ta prefix making some verbs passive

<u>tabanot</u>	'finish' adj.	(<u>banotoi</u>	'to finish')
<u>taboro</u>	'to be broken'	(<u>bori</u>	'to break')
<u>tabongi</u>	'cover with smoke'	(<u>bongi</u>	'to cover')
<u>tadaraka</u>	'openly' adv.	(<u>daraka</u>	'look up')
<u>tadoko</u>	'to die' (polite term)	(<u>dokoi</u>	'dead')
<u>tagago</u>	'crawl (snake), be swift'	(<u>gago</u>	'swift'adj.)
<u>takaba</u>	'to split'	(<u>kaba</u>	'a cluster')
<u>takado</u>	'straight, be straight' (pass. of <u>kado</u>)	(<u>kado</u>	'straight'adj.)
<u>takudul</u>	'broken'	(<u>kudul</u>	'broken?'adj.)
<u>takuop</u>	'capsized, keel up'adj.	(<u>kuopi</u>	'upside down')
etc.			

c) we (1) reciprocal particle prefixed to verbs
(2) nominaliser

<u>wedokoi</u>	'choke by twining around'	(<u>dokoi</u>	'dead')
<u>webarat</u>	'meeting place'	(<u>barat</u>	'in place of')

<u>webolo</u>	'carry stick between two'	(<u>bolobolo</u> 'cross to other side'
		<u>boloi</u> 'across anything')
<u>webukula</u>	'to crowd upon'	(<u>bukulai</u> 'crowd together')
<u>webuta</u>	'carry on the back'	(<u>buta</u> 'carry child on back')
<u>wedaun</u>	'one on top of another' adv.	(<u>dauni</u> 'be on top of s-t.')
<u>wedok</u>	'payment'	(<u>dok</u> 'repayment?')
<u>wekalik</u>	'tickle each other'	(<u>kalik</u> 'to tickle')
<u>wekoro</u>	'assemble in a place'	(<u>koro</u> 'assemble')
<u>welapang</u>	(1) 'give betel nut to visitors (2) 'exchange betel nut'	(<u>lapanga</u> 'give betel nut to visitors')

d) pam "work, do", "hold, take hold of"

<u>pam a kabangpai</u>	'whiten'	(<u>kabang</u> 'white')
<u>pam a kotoi</u>	'hold fast'	(<u>kotoi</u> 'hold fast')
<u>pam a pulatai</u>	'blinded'	(<u>pula</u> 'blind person')
<u>pam ruai</u>	'finish'	(<u>ruai</u> 'finish')
<u>pam banotoi</u>	'make complete, finish'	(<u>banotoi</u> 'finish')
<u>pam kadoi</u>	'make straight'	(<u>kadoi</u> 'stretch out')
<u>pam kadopo i</u>	'try to do'	(<u>kadopoi</u> 'try')
<u>pam kingera</u>	'catch'	(<u>kingera</u> 'be caught')
<u>pam kopoi/kopotai</u>	'leave some undone'	(<u>kopo/tai</u> 'miss s-t.')
<u>pam lukun i</u>	'bend'	(<u>lukun</u> 'bend, close')

e) pet "about to do"

<u>pet bati</u>	'enclose'	(<u>bati</u> 'espouse')
<u>pet biling</u>	'go or do slowly'	(<u>bilbiling</u> 'slow'adv)
<u>pet garanai</u>	'backbite/slander'	(<u>garanai</u> 'backbite, slander')
<u>pet gati</u>	'cause to be taken out'	(<u>gati</u> 'pull up')
<u>pet lele</u>	'bother/importune woman'	(<u>lele</u> 'good')
<u>pet lukani</u>	'have a grudge'	(<u>lukan</u> 'hold a grudge')
<u>pet paling</u>	'rich person'	(<u>paling</u> 'have property')
<u>pet papai</u>	'be able to do'	(<u>papai</u> 'able' adv.)
<u>pet pilaka</u>	'redeem'	(<u>pilakai</u> 'wrench open the hand')

f) Multiple meanings with a single root:

<u>dokoi</u>	'dead' adj.
<u>wadokoi</u>	'to kill'
<u>wedokoi</u>	'to choke by twining around'
<u>pam doko</u>	'kill, extinguish'
<u>tadoko</u>	'to die' (polite term)

Bibliography

- ARNOLD, John K. 1931. A Grammar of the Language of Edugaura. Port Moresby: Government Printer
- BALDWIN, Fr. B. c1950. 'Sketch of the Bohilai Grammar' Unpublished MSS.
- BECKER, A. and I. Gusti Ngurah OKA. 1974. 'Person in Kawi: an exploration in an elementary semantic dimension'. Oceanic Linguistics 13:229-56.
- BERLIN, B. and P. KAY. 1969. Basic Color Terms. Berkeley: University of California Press.
- BLOOMFIELD, Leonard. 1935. Language. London: Allen and Unwin. (1933 American Edition).
- BROWN, Rev. G. and B. DANKS. 1882. 'A Dictionary of the Duke of York Is. Language.' MSS placed on computer with preliminary editing by Dean Moore.
- CALLISTER, Bill and Sandra. 1979. 'Grammar Essentials of Misiman'. Unpublished MSS.
- CAPELL, A. 1943. The Linguistic Position of South-Eastern Papua. Sydney: Australian Medical Publishing Co.
- 1976. 'Austronesian Languages, New Guinea Area - General'. In New Guinea Languages and Language Study, vol 2: Austronesian Languages. Ed. S. A. Wurm. Pacific Linguistics, series C, No. 39.
- CHOMSKY, Noam. 1957. Syntactic Structures. The Hague: Mouton.
- 1965. Aspects of the Theory of Syntax. Cambridge: M.I.T. Press.
- CHOWNING, Anne. 1973. 'Milke's "New Guinea Cluster": The Evidence from Northwest New Britain'. Oceanic Linguistics, vol 12, No. 1 & 2. Papers from the First International Conference on Austronesian Linguistics 1974, pp 189-243.
- CHRETIEN, C. Douglas. 1956. 'Word Distributions in South-eastern Papua'. Language 32.1:88-108.
- CODRINGTON, R. H. 1885. The Melanesian Languages. Reprint 1974. Netherlands: Philo Press.
- DIXON, Rev. J. W. 1970. Dobu-English Dictionary. Duplicated and bound at Salamo, P.N.G.
- DIXON, R. M. W. 1971. 'A method of semantic description'. In Steinberg and Jakobovits (eds.), Semantics: An Interdisciplinary Reader in Philosophy, Linguistics and Psychology. Cambridge: the University Press.

- DIXON, R. M. W. 1976. 'Syntactic Orientation as a Semantic Property'. In James D. McCawly (ed.) Syntax and Semantics, vol 7. Notes from the Linguistic Underground. pp. 347-63.
- 1977. 'Where have all the adjectives gone?' Studies in Language, 1:1 pp.19-80.
- DUTTON, T. E. 1973. 'A Checklist of Languages and Present-day Villages of Central and South-east Mainland Papua'. Pacific Linguistics, series B, No. 24.
- DYEN, Isodore. 1965. 'A lexicostatistical Classification of the Austronesian Languages'. International Journal of Americal Linguistics, Memoir 19, 31(1).
- ELSON, Benjamin and Velma PICKETT. 1964. An Introduction to Morphology and Syntax. Santa Ana:SIL.
- EZARD, Bryan. 1971. 'Yamalele Grammar Essentials'. Unpublished MSS.
- 1977a. 'Lexicostatistical and other methods of classifying languages'. Workpapers in Papua New Guinea Languages 20:49-63.
- 1977b. 'A Basic Word list for Papua New Guinea'. Workpapers in Papua New Guinea Languages 21:45-74.
- 1977c. 'Tubetube's place among the Milne Bay Province Languages: A synchronic study'. Workpapers in Papua New Guinea Languages 21:135-153.
- 1978. 'Classificatory Prefixes of the Massim Cluster'. In S. A. Wurm and Lois Carrington (eds.) Second International Conference of Austronesian Linguistics: Proceedings. Pacific Linguistics, series C, No. 61: pp. 1159-80.
- 1980. 'Tawala Verb Classes: a pilot study'. Unpublished MSS.
- 1981. 'The Tawala Dialects: An Initial Enquiry'. Unpublished MSS.
- (In Press). 'Reduplication in Tawala: including a comparison with Motu'. To appear in Kivung.
- and Janet. 1974. 'Tawala Phonology'. Unpublished MSS
- EZARD, Janet. 1970. 'Yamalele Phonemics'. Unpublished MSS.
- FOX, Charles E. 1978. 'Arosi Dictionary'. Revised edition with English-Arosi Index prepared by Mary Croft. Pacific Linguistics, series C, No. 57.

- FELLOWS, Rev. S. B. 1894. 'Grammar of the Pannieti Dialect, British New Guinea, together with a Comprehensive Vocabulary'. Annual Report on British New Guinea pp. 78-92.
- FUNK, I. 1961. Grammar of the Greek New Testament.
- GRACE, George W. 1955. 'Subgroupings of Malayo-Polynesian: a report of tentative findings'. American Anthropologist 57-337-9.
- GUDSCHINSKY, Sarah G. 1964. 'The ABC's of Lexicostatistics (Glottochronology)'. In Dell Hymes (ed.) Language in Culture and Society. New York: Harper and Row.
- HAAS, Mary R. 1978. 'Linguistics and History'. In Anwar S. Dil (ed.) Language, Culture and History Chapter 20. Stanford: Stanford University Press.
- HALLE, Morris 1973. 'Prolegomena to a theory of Word Formation'. Linguistic Inquiry 4:1(3-16).
- HOOLEY, Bruce A. 1970. Mapos Buang - Territory of New Guinea. Ph. D. Thesis, University of Pennsylvania.
- HUCKETT, J. A. 1982. 'Iduna-English Dictionary'. Unpublished MSS.
- JACKENDOFF, R. S. 1972. Semantic Interpretation in Generative Grammar. Cambridge: M.I.T. Press.
- JENNESS, D. and Rev. A BALLANTYNE. 1928. Language, Mythology and Songs of Bwaidoga. Memoirs of the Polynesian Society, vol 8. New Plymouth, NZ: Thomas Avery & Sons.
- KING, Copland. 1901. A Grammar and Dictionary of the Wedau Language (British New Guinea). Sydney: Pepperday.
- LAUCK, Linda M. 1979. 'Patep Grammar Sketch'. Ukarumpa: Summer Institute of Linguistics computer print-out.
- LAWTON, Ralph S, 1978. 'Some Aspects of the Language of Kiriwina'. Unpublished MSS.
- LEHRER, Adrienne. 1974. Semantic Fields and Lexical Structure New Holland Linguistic Series 11.
- LITHGOW, D. 1974. Muyuw Dictionary. Ukarumpa: SIL.
- 1976. 'Austronesian languages: Milne Bay and adjacent islands Milne Bay Province'. In S. A. Wurm (ed.) New Guinea Area Languages and Language Study, vol 2: Austronesian Languages. Pacific Linguistics, series C. No. 39.

- LYNCH, John. 1973. 'Verbal Aspects of Possession in Melanesian Languages'. Oceanic Linguistics 12:69-102.
- 1976. 'Review of S.A. Wurm (ed.) Austronesian Languages (New Guinea Area Languages and Language Study, vol 2). Pacific Linguistics, series C. No. 39.' Kivung.
- LYONS, John, 1977. Semantics. London: Cambridge University Press.
- MCELHANON, K. A. 1971. 'Classifying New Guinea Languages'. Anthropos 66:120-44.
- MILKE, Wilhelm 1965. 'Comparative Notes on the Austronesian Languages of New Guinea'. Lingua 14:330-48.
- NIDA, E. 1949. Morphology. Ann Arbor: University of Michigan Press.
- PAISAWA, Elsie. Louise PAYOTTO and Joan KALE. 1976. A Short Sketch of Are (or Mukawa), Milne Bay, Papua New Guinea. UPNG Department of Language Occasional Paper No. 2.
- PAWLEY, Andrew. 1972. 'On the Internal Relationships of Eastern Oceanic Languages'. In R. C. Green and M. Kelly (eds.) Studies in Oceanic Culture History, vol 3. Pacific Anthropological Records Number 13: 1-142.
- 1973. 'Some Problems in Proto-Oceanic Grammar'. Oceanic Linguistics, vol 12:103-88.
- 1975. 'The Relationships of the Austronesian Languages of Central Papua: A Preliminary Study'. Pacific Linguistics, series C. No. 29:3-105.
- 1978. 'The New Guinea Oceanic Hypothesis'. Kivung 11:99-151.
- PERCHONOCK, Norma and Oswald WERNER. 1969. 'Navaho Systems of Classification and some Implications for Ethnoscience.' Ethnology 8.
- RAY, Sidney H. 1907. 'Linguistics'. Reports of the Cambridge Anthropological Expedition to Torres Straits, vol III. Cambridge: University Press.
- ROSS, Malcolm. 1979. 'The Austronesian Languages of Papua: Towards a Family Tree'. Duplicated Draft.
- SAPIR, Edward. 1921. Language: An Introduction to the Study of Speech. New York: Harcourt, Brace & World, Inc.
- SCHACHTER, Paul. 1978. 'Parts-of-speech Systems'. To appear in S. Anderson et al (eds.) Language Typology and Syntactic Field Work.

- SIMONS, Gary F. 1981. 'Word Taboo and Comparative Austronesian Linguistics'. Paper presented at the Third International Conference on Austronesian Linguistics.
- SPENCE, N. C. 1961. Linguistic Fields, Conceptual Systems, and the Weltbild. Transactions of the Philosophical Society.
- WIERZBICKA, Anna. n.d. 'Cups and Mugs: Lexicography and Conceptual Analysis'. Duplicated Draft.
- 1980. The Case for Surface Case. Ann Arbor: Karoma Publishers, Inc.
- WILLIAMS, H. T. 1962? 'Grammar and Dictionary of Tawala (Kehelala Dialect)'. Unpublished MSS.
- WOLFF, John U. 1982. 'Similarities between Indonesian and Tagalog and their Historical Basis'. NUSA 10.