2.10.1. THE "WEST PAPUAN PHYLUM": GENERAL, AND TIMOR AND AREAS FURTHER WEST

A. Capell

Editors' Note 1:

When the manuscript of this chapter was completed by A. Capell
in early 1974, the Alor-Timor languages were still thought to form
part of the West Papuan Phylum. Today, in early 1975, the Timor-
Alor-Pantar Stock is regarded as a sub-phylic member of the Trans-
New Guinea Phylum (see 2.5.3.3.2. and 2.5.4.2.1.). In spite of
this recent re-classification, it has been decided to leave the
present chapter in its original form and place in volume I, rather
than requesting the author to take out the discussion of the Timor-
Alor languages from it and to re-write the manuscript for it to
form two separate, independent sections, one on the Timor-Alor lan-
guages for inclusion in the sections 2.5-9. which deal with the
Trans-New Guinea Phylum languages, and one for inclusion in the
discussion of the West Papuan Phylum. Because of the nature of
Capell's contribution which constitutes a close-knit, well-rounded
chapter, this would have involved a major re-writing task without
any real gain: it is the very nature of his contribution which
highlights the problems of Papuan language classification in many
areas, and at the same time contains clear pointers intimating
that the inclusion of the Timor-Alor languages in the West Papuan
Phylum is probably in error and that its links with the Trans-New
Guinea Phylum languages are quite strong. In fact, Capell's
remarks clearly outline, in an anticipatory fashion, the now
recognized classificatory status of the various languages of the
whole area which, in early 1974, was still believed to be occupied
by the West Papuan Phylum as set up in Wurm 1971a. The now
accepted Trans-New Guinea Phylum membership of the languages of
the Bomberai Peninsula and of a southern portion of the Vogelkop
Peninsula as discussed by Voorhoeve in sections of 2.6.2. is hinted
at by Capell in 2.10.1.1.1.4. and 2.10.1.1.1.5.2., and the aberrant
nature of the Vogelkop Peninsula languages now included by Voorhoeve
in the newly established East Bird's Head (or Vogelkop) Phylum
(see 2.14.3.) is also pointed out by Capell in 2.10.1.1.1.4. and
2.10.1.1.1.2.3.

In view of this, Capell's contribution, in the form presented
here, offers most valuable insights into the nature and problems
of Papuan linguistics, and changing it to bring it in line with
the status quo of Papuan linguistic classification which is indi-
cated in it anyway in an anticipatory fashion would not have done
anything to enhance its value.

2.10.1.0. INTRODUCTION

2.10.1.0.1. *SCOPE OF STUDY*

The term 'West Papuan Phylum' (WPP) is a comparatively new one, or rather, one whose use has been developing and becoming more certain over a number of years. It is discussed by Wurm (1971a:611f.) as one of the "established language groups which do not link with the Central New Guinea Macro-phylum". There are two points of interest about it: the first is the fairly obvious one that it is not Austronesian, and the second is the fact that it extends into the islands of Indonesia, west of New Guinea itself. It includes some of the languages of the Bomberai Peninsula and most of those of the Vogelkop area, but it is also represented in Timor and Alor to the west. The languages of the northern half of Halmahera are reckoned as members of the WPP also. However, there does not seem to be any recognizable sharing of vocabulary between these languages and the members of the phylum in Timor and Alor, so that it seems desirable to subdivide it. Such a subdivision will be considered in the present chapter, into WPP_1 = Northern Halmahera etc. (NH) and WPP_2 = Alor-Timor (AT). Although speakers of these languages are numerous and the phylum in New Guinea itself is a large one, it is unfortunate that practically none of them is at all well known, so that a true analysis cannot yet be made (Cowan 1957).

The present chapter correlates the available knowledge and seeks to make additions to it in terms of analysis and comparison of these non-Austronesian (NAN) languages, and also to bring to light further probabilities about the nature of the languages within Indonesian territory as a whole. It will be shown that there is throughout eastern Indonesia a considerable body of vocabulary (even within recognized Austronesian (AN) languages) which does not fit into Proto-Austronesian (PAN) as established by Kern, Brandstetter, Dempwolff, Dyen and other workers. The chapter is therefore divided into two parts: NAN languages of eastern Indonesia and their wider relationships, and some suggestions about the linguistic conditions and pre-Austronesian Indonesia as a whole.

The direction of modern research into New Guinea languages has been the reduction of heterogeneity, the attempt to establish larger and larger linguistic groups and super-groups, so as to reduce the chaos that faced investigators at the beginning of the century. This direction is indicated most boldly by McElhanon and Voorhoeve's recent *The Trans-New Guinea Phylum* (1970), with its sub-title *Explorations in Deep-Level Genetic Relationships*. This work has been taken into account in the present chapter and an attempt has been made to test the possibility of extending the findings to areas of NAN farther west than the New Guinea

mainland.   Some consideration of the relation of the WPP to this wider
area will occupy the closing section of the chapter.

The situation at the present time, therefore, is that while it is
known that certain languages in Indonesia are non-Austronesian (NAN),
yet in most cases - with the exception of Northern Halmahera - these
languages are imperfectly known and their inter-connections are undis-
covered.   More recent work by Cowan has shown that there is a relation-
ship between the languages of NH and some of those spoken on the Vogelkop
in the north-west of New Guinea, but nothing definitive can yet be said
about them.   More recently still, Greenberg (1971:807-71) has tried to
show some still wider connections between the languages in question, and
whether his Indo-Pacific hypothesis is finally accepted or not, his work
has value in the discussion.   Recently also Capell (1972) has published
a little more information about other and additional languages in
Portuguese Timor that was not available in 1945.   This has been supplied
by Dr Ruy Cinatti, a Portuguese anthropologist who worked in Timor about
1960, and adds two other languages to the NAN.

2.10.1.0.2. *NON-AUSTRONESIAN (NAN) AMONG AUSTRONESIAN (AN) LANGUAGES*

The presence of NAN languages in NH was demonstrated by Van der Veen
in 1915, but the wider relationships of these languages remained unex-
amined.   In 1944 Capell showed that there were NAN languages also in
Portuguese Timor, but again he did not attempt to link these with the NH
or any other group of NAN languages, apart from pointing out the diver-
gence in vocabulary, along with considerable structural resemblance.
Work done on Alor by the anthropologists Cora du Bois and M.M. Nicolspeyer
showed that there was at least one and probably more NAN languages on
that island also.   As neither was a linguist, no clear demonstration was
made, and no work has been done on the text material in Abui (Alor)
provided by Nicolspeyer, apart from its partial use by Greenberg.   Du Bois
stated that there are at least eight languages on Alor, but this statement
has not led any linguist to look into them.   The linguistic situation on
Alor remains uninvestigated.[1]

For these reasons the linguist is at a loss for adequate material, as
a matter of fact not only for Alor but for all the Moluccan area of

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[1] Editors' Note 2: Quite recently, W. Stokhof and H. Steinhauer have undertaken extensive
linguistic work on both Alor and Pantar Islands, and have produced a classification of
the twelve Papuan languages encountered in the area.   Some of their results are being
published (Stokhof 1975).   See also the late note at the end of this chapter, before
the Bibliography, about the present internal classification of the Timor-Alor-Pantar
Stock.

Indonesia, and indeed for the whole area between the east end of Flores
and New Guinea. It is true that some long-standing gaps in knowledge of
the AN languages of this region are being gradually filled in, but there
are some that are still unfilled and remain so simply because no one
seems to be interested in studying them. Some of the gaps are more
serious than others, and that in eastern Indonesia (as a political region)
is one of the more serious gaps both for the student of Austronesian
languages and for those who are interested in the non-Austronesian en-
claves. Their importance lies in the fact that it is here that the
'Oceanic' linguistic type seems to have developed.

Apart from the article by Cowan (1957), only little effort seems to
have been made to study the numerous languages spoken between Flores and
New Guinea (except for Drabbe 1926a,b, 1932a,b,c, 1935), even to the
extent of deciding whether they are AN or NAN. In point of fact some are
at base NAN - possibly not only those of Alor and parts of Timor but one
or two others, especially Babar. The available information here is all
old; some goes back nearly a century, to field workers like Riedel (1886).
The analysis of Seran languages by Stresemann (1918, 1926) will prove to
be of importance in part II of this chapter (see 2.10.1.2.). This, along
with Van der Veen's thesis on the NH and the brief study of Sula and
South Halmahera by Adriani and Kruyt (1911) seem to represent most of
what is known of this region, although a good deal of material (mostly
wordlists) by a variety of less outstanding authors makes a contribution.
An analysis made at the present time has to depend very largely on this
somewhat less reliable material for the languages between Timor and New
Guinea if any account of them is to be taken at all.

2.10.1.1. PART I: THE WEST PAPUAN PHYLUM AS ACCEPTED

2.10.1.1.1. *THE NATURE OF THE WPP*

2.10.1.1.1.1. General Remarks

The West Papuan Phylum as now recognised consists of a number of
stocks (Wurm 1971a:611ff.). Geographically arranged, they include the
Alor-Timor Stock and certain languages of the mainland of New Guinea, of
which the East and South Vogelkop Stocks, the Bomberai Stock, the Moi-
Karon Family, the Kalabra Family have place along with the North Halmahera
Stock. For these Wurm gives cognation figures, except for the NH Phylum,
of which he says (p.614):

> No cognation percentage figures are available to illustrate the
> degree of interrelationship between member languages of this
> family, but in all studies and discussions of these languages
> (Van der Veen 1915, Cowan 1957 and others) they are treated as
> very closely interrelated languages of a single family,

> displaying far-reaching lexical, structural and typological
> elements. In comparison with other languages and groups within
> the phylum they are regarded as constituting a unit.

Despite this statement, however, there seems to be a greater degree
of variation in lexicon than Wurm's remarks would suggest. One of the
purposes of this paper is to give some lead in to this question, and the
statement will be expanded later. In particular, there seems to be very
little in common and a good deal of difference between the Alor-Timor
languages and the others. That is why at the very beginning a dichotomy
was made between WPP_1 and WPP_2. There seems to be only little in common
between the two, other than the fact that neither is AN. Certainly there
is very little lexical agreement between Alor-Timor languages and NH;
between NH and the New Guinea mainland there is a certain amount, although
it is not very close. A sketch of the salient structural groups (treating
them as sub-branches of one phylum) will be given first.

2.10.1.1.1.2. Northern Halmahera

No detailed description of the NH languages will be given here; but
some characterisation of them is required in order to make clear the
quite important structural differences between these and the WPP_2, the
Alor-Timor group. The salient points to be noticed are as follows:

(a) NH languages have a two-class system in the noun, which carries
over into a concord requirement in the verb. Van der Veen marks this as
a distinction between persons and non-persons; the concord involves
possessives, numerals and some verbs, in which the class of the object
is marked by the prefix ŋ-. Within the personal class there is a dis-
tinction of masculine and feminine with concord in the pronoun series.

(b) Pronoun subject and object both precede the verb: though they have
not actually been written by the Dutch linguists as orthographically part
of the verb complex, but separately from the verb base, they are never-
theless incorporated in the form of two separable prefixes into it. Noun
class is involved here.

(c) In the possession phrase, the possessor precedes the possessed and
is linked to it by the possessive pronoun as in *father his house*, Tobelo
o ama ai tau, cf. o bereki ami tau, *the old woman her house*, and o nawa
maŋa tau, *the men their house*. This is not an AN type, but it is found
in some AN languages, where it calls for explanation. It is found, for
instance, in some languages of the Moluccas commonly classed as AN - but
their true status will be discussed in Part II of the present chapter.

(d) In the noun phrase, postpositions are found in contrast to the
prepositions of the AN languages.

(e) Postpositions also serve to mark tense and aspect in the verb phrase. The only changes in the verb stem itself are due to prefixes which serve to mark transitive (immediate and remote), causatives, plurality and other features, which, if they occur at all, are usually indicated by suffixes in AN languages.

These features are shared only in part by the Alor-Timor (AT) languages; in some features they disagree with the NH group.

Along with these NAN marks on the grammatical level, the syntax of NAN languages in general contrasts with that of AN languages, and the NH group share the syntactical style common to NAN in general. The contrast in sentence pattern appears in the simple declarative sentence as

AN type: S + V + O
NAN type: S + O + V

Within the noun phrase, whether subject or object, the two types of language are in closer agreement, in that both have - or prefer - Noun + Modifier and Modifier + Verb. The occurrence of Modifier + Noun in Abui phrases quoted by du Bois needs further investigation, as Nicolspeyer's (1940) texts do not support it. It was suggested earlier that their mythological content may go with archaic and now atypical grammar, but this is not really likely. In NAN as in AN, the absence of a noun subject may give rise to sentences of the type Ø + O + V, where Ø shows a zero pre-verb subject, as in Loda (NH) bira djo tutuku, *rice they stamped*;[1] but if both subject and object are pronouns such may be the result, as in Loda no mi sano-ka, *you her ask-ed, you ask-ed her*. This result can of course occur in AT languages also, e.g. Makasai ani ai karak, *I you love*, Abui da na taki, *he me shot*.

2.10.1.1.1.3. The Alor-Timor (AT) Group

The basic information on the nature of these languages was given by Capell for Timor in his previously mentioned article (Capell 1944:315-25). Since then, further information has come to light from the easternmost language of Portuguese Timor, commonly but wrongly known as Dagodá. Its speakers prefer Fataluku - as they have no voiced plosives, the former name would become Takatá among them, and it is in any case a pejorative applied by other groups to them. The information available was supplied by Dr Ruy Cinatti and no further detail has yet been obtained. The Lovaea language as far as known rests on a 1951 publication by a Portuguese writer, Manoel Perreira who calls it Epulo, as "a dialect of the extreme east of the Province, spoken in the administrative district of Tutuala."

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[1]The word bira is a loanword from Malay beras.

The original article has not been seen by the present writer, but Cinatti supplied a manuscript copy of the vocabulary, without grammar notes of any kind. Both Fataluku and Lovaea materials have been published in part by Capell (1972:95-105). The absence of any material from which Lovaea grammar could be worked out is particularly unfortunate, as this language seems to have a number of noun classes indicated by suffixes, in a manner which no other language of WPP_2 has.

In his original paper, Capell (1944) pointed out the chief structural features in which these languages differ from the AN languages, comparative lexicon being disregarded. These features were at the same time compared with those of NH. There proved to be differences as well as agreements, both on the part of the Timor languages and as a group and amongst the individual Timor languages themselves.

At that time Alor was unknown. It has now been introduced in the form of Abui. Including Abui in the scope of Alor-Timor languages raised only the difficulty that Abui is only one language of Alor and the rest still remain unchronicled: they may be similar or they may not.[1] Some may even be AN. But grouping Abui tentatively with Makasai, Bunak,[2] Fataluku, Lovaea and Oirata, it is clear that these languages do not form a coherent group, so that it is really not satisfactory to group them as though they did, and use the name WPP. This is the reason that WPP_1 and WPP_2 have been used above. Both in structure and in lexicon they vary quite widely among themselves. Although NH languages do not exhibit a considerable degree of lexical disagreement among themselves, and no "common" or "proto" NH has yet been worked out, it is much clearer that they form a series than do the AT languages. These latter certainly agree in disagreeing with the NH in vocabulary, and otherwise also they show less in common.

The AT languages show the normal features of the NAN languages on the syntactic level, and in such points of morphology as the use of postpositions rather than prepositions, but in other regards they disagree with the NH languages:

It seems that none of them shows noun classing (or grammatical gender). However, it is particularly to be regretted that Lovaea has not been studied grammatically; all that is available yet is the one word list of Perreira. This distinctly suggests a number of noun classes, not just the two of the NH languages. Reference to the published extract (Capell 1972) shows a set of endings that are repeated on various nouns, and a

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[1]Concerning Pantar: Anceaux 1973. See the Late Note at the end of this chapter, also the Editors' Note there. Reference is also made to Stokhof 1975.

[2]This should be Buna?; but Bunak is easier orthographically.

possible concord of the possessive and adjective. This classification,
if such it is, depends on endings, unlike the NH use of free particles.
Thus it is possible to contrast the following:

    to:ke-ki *mouth*   and   to:ke kolune   *beard*

    areke-ve *son*   and   areke maekue-va   *daughter*

    une-va *moon*   and   une romi-a   *moonlight*.

The suffixes in the vocabulary that seem to imply noun-classing are -kia,
-ki, -va, -ve, -ke, -ka, -a, but the material does not allow of defining
their uses. -kia is certainly confined to some but not all body parts;
-ki to certain other body parts and to the word for *aunt*; -ke to certain
kinship terms, -ka to *father* and *mother* (-ve is used with *son*), while -va
is the commonest and is used with most 'natural history' terms as well
as *garden, wind, island, mountain, plain* and *earth*; but it is also found
with words for *sister, daughter, male* and *husband*. Some nouns that seem
to be loanwords from AN languages also carry a suffix: kafe-eva *coffee*;
ulu-kia *head* (AN root ulu). AN *kayu *tree* has given ai-ova, but the
ending is lost in numerous compounds, such as ai 'ko:keva *leaf* and ai
'omeva *stem* and others. *Tobacco* becomes tabakova, *buffalo* areboa (which
probably represents arebova by a mishearing, and derives from *karabao*).
In a few cases where Lovaea and Fataluku use the same root, the former
has a class suffix: ne:neva, Fat. nana *house*, lake:va *house*, Fat. le,
and perhaps kuruekia *knee*, Fat. culo. In the present state of knowledge
of Lovaea it is idle to speculate, but it is obviously a language that
needs investigation.

    Apart from Lovaea the AT languages do not mark noun classes, but Bunak
has a distinction of animate versus inanimate in the third person singu-
lar pronoun: himo and homo respectively, linking with verbal and posses-
sive prefixes g- and h-. Abui texts do not have a pronoun, but there are
two forms of 3rd singular prefix, d- and h- which presumably are not
interchangeable.

    Abui presents closer agreement with Bunak than with the other lan-
guages of Timor at any rate in structure. The agreement is formal, for
Bunak divides its nouns along the lines of inalienable versus alienable
as do AN languages generally. Abui agrees with Makasai and Oirata in
prefixing to all nouns, while Fataluku in certain cases uses juxtaposition.
In various parts of its morphology, Abui agrees closely with Bunak, apart
from the general agreement in sentence structure with the common pattern
of most NAN languages.

1. Abui and Bunak have similar sets of pronouns, which are displayed in
Table I. They will be discussed below (see 2.10.1.1.2.2.). It also uses
prefixed pronouns, of which it has a single set, prefixed to nouns as

possessive and to verbs as subjects and objects. These are shown in the
above-mentioned Table. In Abui all nouns take as possession markers the
same prefixes as those used with verbs to mark person. In Bunak only
'inalienables' have possessive prefixes; others require g-ie *his* between
possessor and object possessed, e.g. n-ie mar *my field*, as against n-ubul
my head; with a possessing noun Berthe gives Bau gie ama *Bau's father*.
In Bunak the part-whole relationship uses only the prefix: apa g-ubul
buffalo its-head; momen mone gie do *man old his house*. This last type
of construction plays an important part in the AN languages in certain
areas, as will be pointed out in the relevant place in this study.

TABLE I: PRONOMINAL FORMS IN BUNAK AND ABUI

		BUNAK		ABUI	
		FREE	BOUND	FREE	BOUND
Sing.	1.	nei, neto	n-	ne, nedo	n-
	2.	eto	V-, Ø-	e, edo	V-, Ø-
	3. an.	himo	g-	de, dedo	d-
	3. inan.	homo-	h-	he-, hedo	h-
Plur.	1. incl.	i		pi, pido	p-
	1. excl.	nei		ne, nedo	n-
	2.	ei		re, redo	r-
	3.	hala'i		he, hedo	d-
Dual	1. incl.	ili		?	
	1. excl.	neli		nufa	
	2.	eli		rofa	
	3.	-		dofa	

Note: In the bound forms, Bunak uses the same prefixes in all
numbers, Abui has separate sets for singular and non-singular.
There is a set of Abui forms with person prefixes to a root
-niŋ: these are inclusive: piniŋ *we altogether* etc. No dual 1.
inclusive has appeared in the texts, and usually the plural forms
seem to be used: pisa *let us both go*.

2. Bunak verb stems do not change for tense; particles are used after
the verb to mark the time or the completion of an act, as an expression
of time such as *yesterday* may be used. In Abui there are changes in the
verb ending to indicate tense: -te, -ti, marks futurity, purpose or goal,
-da marks an action that has been completed, and is itself a derivative
of di *make*, rather like the use of *did* in English to mark past time.
Abui also has a sentence-medial (SM) form, -(n)ba, as in mu-nba ama de
kodi ba-nba lake *when-he-died, the people him tied-up-and- dragg-ed-and-*

went away, i.e. *when he died, the people tied him up and dragged him away*. A variety of suffixes appears in Abui of which no clear analysis has yet been made. But frequently the stem is used without clear tense marking (as in lake *go away*, above). The Abui complications are foreign to Bunak and Makasai or Oirata. Neither do they resemble NH forms. Makasai relies on particles or time markers as does Bunak (Capell 1944: 318-9) and Oirata (De Josselin de Jong 1937:209). Fataluku is the same in this respect, where hai before the verb indicates past time and seemingly acitu after it marks futurity (Capell 1972:102-3).

In Hawu the pattern is different, but still not NAN. Further discussion of this language will be given below, as it has not been listed earlier as a NAN language. Its word order is normally V-O-S, which differs from the bulk of the NAN languages here dealt with. Its pronouns are AN, so they have not been listed above, but its verbal structure is distinctive, and has only two AN elements neither of which is used in quite the same way as in AN languages. A typical utterance might be

> peŋědu au ri   ja la ěmu
> *bring you* (erg.) *I to house*
>
> *I bring you to the house.*

In being an ergative language it agrees with the also divergent languages of Flores to the north;[1] in lack of detailed verbal marking Hawu agrees with Timor. Where marking takes place, the features are not clearly AN; ta may be a future marker but is more generally a marker of the verb as such, as in ta kako ja *I am going* - which could be future, but this is not so in toi ḍo ri ja ta-deka no *I did not know that he had come*. The position of the negative ḍo is also peculiar (as well as the word itself): literally

> toi ḍo ri   ja ta-deka no
> *know not* (erg.) *I   come he*

Intransitive sentences are constructed similarly but without the ergative ri: ta kako ja *I'm going*, and there are verbless sentences also: ije ḍo minahari *good not thus, it is no good like this*.

In the verb phrase, the number of particles usable is rather un-AN, as in ta la kerei ri ke pa Pepeka ri dou ae ne *the prince asked Pepeka again*: the first ri is *again*, the second ri is the ergative; ta marks kerei as a verb, *ask* (although it may also indicate future action), ke marks past action, la indicates action away from the speaker. This last

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[1]It can be argued that the ergative construction is AN and that ri, found in Flores as e.g. Manggarai lé is the same at root as Malay oleh, usually translated *by* or *through*, but this study is outside the present chapter. It still would not show whether such an ergative was an AN feature (linked with post-verb subject) or a borrowing from NAN substratum. See the chapter on 'Mixed Languages' ((II) 4.5.1.).

may be AN, as ma, marking action towards the speaker is - but both precede
the verb, not following it as in an AN language. Perfective is marked
by a particle ĕla (comparable perhaps with Madura ĕlla), which is fol-
lowed by pe-, causative (one of the two AN prefixes: AN pa-; the other
is ma- stative): ta ĕla pe-tao ri no *he has finished it*, lit. verb-perf.
caus-*do* erg. *he*. This involvement of causative in perfective cannot be
discussed in the present space.

Negative is expressed by + ḍo(h), as in iu au ta peḍa ḍoh? *body your*
verb *sick not*, i.e. *are you never sick?* (an example from Wijngaarden's
Dictionary). The negativiser follows the verb: kako ḍo ja miha *I am not
going alone*. The dehorative is ḅole (cf. Buton bola), but this precedes
the verb: ḅole kako *don't go!*. In Dawu, *not* is ḅoe: nia ḅoe = Hawu ije
ḍoh *good not, it is not good*; for *don't* Dawu has ḅaku.

Even with the small amount of detail possible here it is clear that
the grammatical system of Hawu-Dawu is radically NAN, however much AN
vocabulary may have been taken over. It is a clear parallel to the sit-
uation of English vis-à-vis Romance and Teutonic.

2.10.1.1.1.4. The Mainland Languages

What are here called mainland languages are those of the western
"bird's head" of New Guinea, earlier known as the Vogelkop (VK). They
are difficult to assess because the information available on the indi-
vidual languages is still very meagre. In his paper on the Papuan
Linguistic Situation (Wurm 1971a:617), the author discusses the structural
features of these languages that would link them to the WPP, though with-
out making the distinction between WPP_1 and WPP_2 that is employed here.
The point of interest is that the VK and Bomberai languages, to the
south-east of them, like those of the western islands hitherto considered,
divide into two subgroups, one of which seems to have links with the NH
languages, while the other links with the AT group. This latter was
discussed by Cowan (1965). The subdivision here rests on methods of
conjugation: the VK languages conjugate by prefixation, the Bomberai lan-
guages by suffixation. The latter, therefore, do not link with the WPP
in structure (2.10.1.1.2.3. below).

Within the former subgroup, the markers of 1st and 2nd person singular
are diagnostic. Diagram A shows these subdivisions and their geographical
relationships to each other. It is clear that agreement not only in
the use of prefixation as a method of conjugation exists between VK, NH
and AT languages, but that there are regional connections between the
prefixes in definite areas of the VK and those in NH and AT languages.
Perhaps too much stress should not be laid on the marking of 1st person

singular by n-, since this happens in other parts of New Guinea - and,
for that matter, elsewhere also, even in the Bantu languages of Africa!
However, the occurrence of t- in NH and in VK in this person is note-
worthy. Wurm also remarks that "the prefixing languages, with the ex-
ception of the Timor languages, have a two-gender system". It has been
shown above (Table I) that Bunak and Abui both have a two gender system
to the extent of possessing separate pronouns and 3rd person singular
markers for animate and inanimate subjects. These two languages, then,
fall more closely into the pattern than Wurm allows for.

DIAGRAM A: PREFIXES OF 1. AND 2. PERSON SINGULAR IN VOGELKOP
LANGUAGES AND THEIR WIDER RELATIONSHIPS
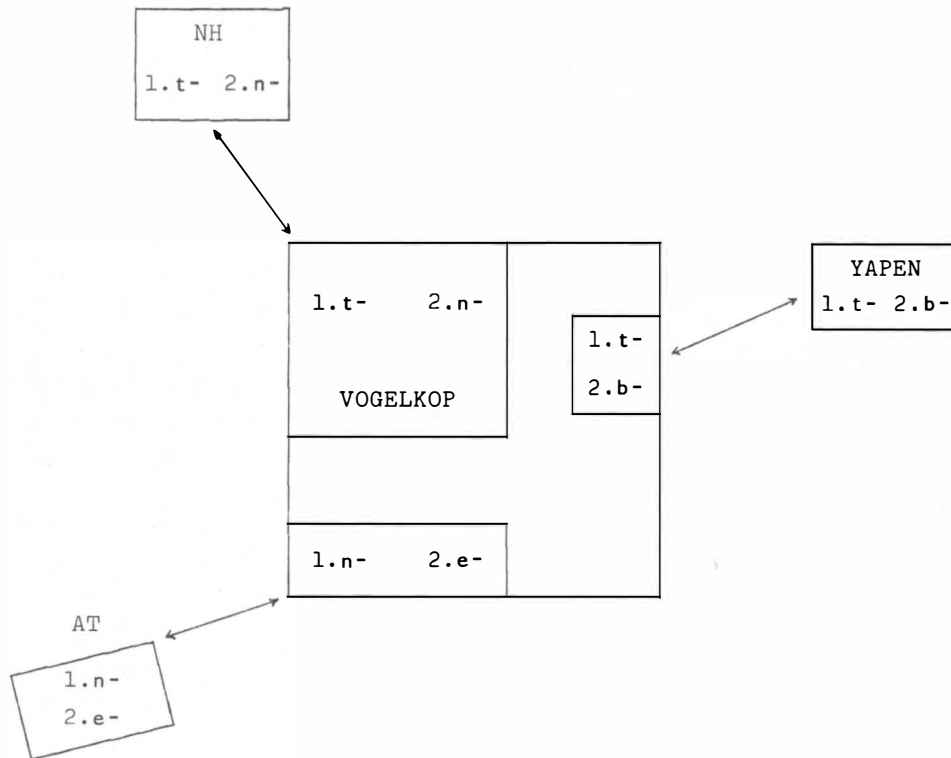
At this point, more recent work by McElhanon and Voorhoeve on a sug-
gested Trans-New Guinea Phylum (McElhanon and Voorhoeve 1970) comes in
for consideration. Their Map 1 does not include VK languages, but these
need to be compared with the overall patterning. According to a recent
statement by Wurm (personal communication), it seems that the southern

part of VK belongs to the Trans-New Guinea Phylum, but it still remains
to determine how far north the relevant area stretches. The use of the
term phylum by the two authors needs to be remembered also: in a foot-
note on p.102 they say:

> The label 'phylum' is used here to simply indicate that the
> writers recognise a group of languages which are genetically
> related at a low level. This relationship is regarded as being
> significantly higher than that implied by the term 'macro-
> phylum' as used by Wurm (1971a), and future studies may show that
> perhaps the label 'stock' is more appropriate. 'Phylum' as used
> here does not imply any particular lexicostatistical level of
> relationship since lexicostatistical relationships were not
> computed.

The relevance of this statement will come up again for mention when
lexicon is considered.

In a later study again, Wurm (1971b:163) has established a Trans-Fly
Stock, in which he posits a masculine-feminine two gender system as part
of the common structure. This agrees with the NH-VK situation, but less
so with that of AT-VK. Unfortunately, the Trans-Fly group does not
stretch far enough to the west before there comes the gap presented by
the languages of the northern half of Western New Guinea, though some
language groups to the west of the Trans-Fly Stock (e.g. those of the
Bulaka River, Marind and Nimboran Stocks) also show this feature.

An earlier work by Cowan (1953) shows the results of a provisional
study of the mainland languages of the VK groups. There is little detail
in this paper and it is difficult to make out a general picture of lan-
guage structure. Cowan in the English summary to his paper discusses
the mixture of Papuan and AN elements noticeable in all the VK languages
except a few in the east (Manikion, Mansibaber chiefly). He writes:

> Nearly all of them show a more or less distinct AN element at
> least in their vocabularies. In some cases this element is
> found even in the numerals, but this can be regarded as a deci-
> sive point in view of the fact that the same is the case in the
> undoubtedly Papuan Ekari of the Central Highlands.

He goes on, however, with a statement that is not so disturbing in view
of the now known structures of the AT languages which were not as well
known when he wrote:

> Another complication in this connection is that in all these
> VK languages the conjugation of the verb appears to be effected
> by pronominal prefixes, as is also the case in the Melanesian
> languages of New Guinea, but is found in many undoubtedly Papuan
> languages as well.

Later information shows that prefix conjugation is not a borrowing from
AN sources at all but is quite Papuan. He then goes on to mention the
link between the north-western languages of the VK and NH group, but
does not commit himself to any idea of an ultimate connection between
the two.

Leaving questions of vocabulary aside at the moment, it may be said that certain structural features in these languages are clear enough to be summarised as a basis for comparison with the WPP languages in general.

1.   A dual number is present in the pronouns. In some cases, the in-clusive-exclusive distinction is made, as far as the information goes, in the dual number only and not in the plural. *He and I* is distinguished from *you and I*, but there is no distinction between *they and I* and *you all and I*.

2.   Separate possessives exist and precede the noun, but there is no mention of suffixed possessives marking an 'inalienable' class of nouns. In Mansibaber alone the information states that the possessive follows the noun, which is very rare, but in the majority of the languages they precede it, as do the demonstratives even in Mansibaber.

3.   Tense and mood, as far as they are marked at all, are indicated by free particles placed after the verb. The real meanings of these markers are not yet known.

These features are in principle very like those which characterise the AT languages, and to a certain extent also the NH. The matter of phonemic correspondence is somewhat different, and the subgroupings set out in Diagram A come into the picture at this point.

Quite obviously the eastern VK languages are not part of the WPP com-plex so far as the shapes of the person formatives go. Those of the north-west clearly link with NH but not with AT. The distinction made earlier between WPP$_1$ and WPP$_2$ needs to be recalled at this point. The languages of the south-west do seem to agree with AT and are worth con-sidering. But more points of agreement than this one need to be found, and when closely examined this one does not seem to be really a point of agreement at all. The prefixes in the VK languages are subject markers, those in the AT languages are object markers. This difference is one of principle, and the formal agreement loses some of its value when this is remembered. The one point of complete agreement is the further formal point that both the t/n languages and the n/e languages have only the one set of prefixes, which are prefixed to all numbers of the verb, whether as subjects or as objects, and there are no separate forms for plural and/or dual. Reference can be made to Cowan (1953:21) for exam-ples in the Mogetemin dialect of Ayamaru.

The paucity of information on the structures of the mainland languages makes the interpretation difficult. Although Cowan (1953:25ff.) shows the NW → NH connection clearly enough, the remainder of his material is too defective to help. His 1965 paper is better as far as pronouns are

concerned, and these are discussed below (2.10.1.1.2.2.). It is perhaps
safe to suggest that there is a linkage along the line Abui → Bunak →
Makasai → Oirata → mainland.

At the same time it is doubtful, at the least, whether the Oirata
verb does really mark subject by prefixes if there is a noun or an ex-
pressed pronoun subject. The word divisions in the texts (De Josselin de Jong 1937)
are unreliable and the grammatical notes as well as the texts show only
that the pronoun object is marked by a prefix to the verb, as in Makasai,
Bunak and Abui, and even this might well be treated as a proclitic par-
ticle. The verb itself in the texts carries no prefix if it is subject,
especially in the third person, and the pronouns which precede it in
first and second persons may not be the short forms that could be regarded
as proclitics but may be full forms. The verb phrase can just as easily
be written with separate pronoun indicators, and when the verbs occur
sentence finally they do so without prefixes. An example from De
Josselin de Jong's texts may be given in his spelling and the suggested
revised spelling: they are taken from De Josselin de Jong 1937:106.

> DeJ.:   amara ha Apna-Apha ēasile inane?
> Capell: a mara ha Apna-Apha e: asile i na ne?
> English: *you came while our-Creator you to he said thus?*

which is parallel to:

> DeJ.:   Tatanluku: antemara nara Apna-Apha noun nakun me anina nie
> Capell: tatanluku   : ante mara nara Apna-Apha   noun nakun   me
>   *(he) answered: I   came then Our Creator instruction did*
>
>   ani na nie.
>   *me say thus*

Such a respelling brings the language into line with Makasai and pro-
duces very similar sequences to those of the Abui texts also, where
Nicolspeyer has likewise been inconsistent in her spellings. Comparison
of these languages with Bunak shows that in the latter also there are
definite prefixes expressing person (the same for all three numbers):
possessives with nouns (n-ubul *my head*) and objective with verbs (n-azal
me-see), but like them Bunak does not use subject prefixes. In Bunak,
I see him is nei g-azal *I him-see; he sees me* is himo n-azal. In Abui
similarly, na he rei *I him see* and ha ne rei *he me sees*. The spellings
in the texts hesitate between prefix and proclitic, and there are some
vowel harmony changes that are not worked out. In Bunak, also there is
an intransitive form prefixing h-: nei h-azal *I see*. This interpretation
differs from that of Berthe (1959) but it does seem to bring the language
more into harmony with the others of WPP_2 without distorting it. Further
discussion of this subject will be found in 2.10.1.1.2.2. and 2.10.1.1.2.3.

If the forms of the prefixes be considered and not their function, there is, of course, correspondence between the AT group and south-west VK. Whether the comparison is historically valid cannot be stated. There may have been a change from subject to object marking which cannot be traced now. If the forms only are kept in view, then it is right for Cowan (1965:363) to say:

> Even a casual glance at the list will be sufficient to show the striking similarity between the pronouns in the seven languages. Confining ourselves to Oirata and the south VK languages, this is particularly the case as between Oirata and Kampong Baru, as far as the 1st person singular and plural excl. and the 2nd person singular and plural are concerned. In addition there is agreement between the 1st and 3rd person singular prefix forms in these two languages.

Cowan then proceeds to apply his "phonostatistical" method (Cowan 1963) to test the statistical probability that the similar forms are really linked and not just coincidences. His decision is that chance is practically ruled out both for the pronouns and for the person markers, and this leads him to stress the factuality and the importance of Brandes' Line, which runs north from between Saru and Roti Islands, between Flores and Solor Islands, east of Celebes to the Sangir and Talaud Islands and the Philippines. Then he adds: "It appears that this line also marks the westernmost extension of present-day Papuan". Further remarks that may raise doubts about the accuracy of this last sentence will be made in Part II of this chapter, for it now seems at least doubtful.

2.10.1.1.1.5. West Papuan Phylum Lexicon

2.10.1.1.1.5.1. *Function of Vocabulary in Determining Language Relationships*

Neither structure nor vocabulary by themselves suffice for the determination of language relationships. The tendency hitherto has been to put too great a trust in wordlists, but it is now realised that no form of lexicostatistics alone can determine the relationship of one language to another in a really definitive way. Structural comparisons alone are similarly unsatisfactory; they may provide a typology, but not a genealogy, even if the phonemic shapes of the components agree with the patterns shown. The Indo-European family itself has sufficient structural variety to discourage this type of investigation, and it so happens that in this case the historical successions of various structural types can be demonstrated - but this is rarely the case.

So the present section passes on from structure to lexicon. The languages making up the WPP are to a large extent still inadequately known, and this inadequacy is on the lexical as well as the structural level. The available materials are made up as follows:

Alor: Abui vocabulary by Nicolspeyer, with some words from Du Bois.

Timor: Vocabulary of Makasai and Bunak in Capell (1944); Bunak in Berthe (1959), Fataluku and Lovaea partly included in Capell (1972) and partly unpublished; Oirata in De Josselin de Jong (1937). Discussion in various works of Cowan.

North Halmahera: Hueting (1908) and dictionaries of various individual languages published at different dates. Tobelo is here taken generally as a model since no common or proto-NH has been worked out.

New Guinea Mainland: Scattered materials, most of which have not been published, such as the official vocabularies collected through Malay by the Dutch Government in Western New Guinea, and used by Cowan as the basis of his studies. Later materials have been published by Anceaux (1961).

The fullest and best materials are those of the NH languages, but as these form a solid group with apparently little apparent outside relationship, they are not as valuable for the present work as might be desired. There is room yet for much future work in the field, in the NAN languages as well as those that are classed as AN. Of the latter, quite a number are still not well recorded. These will be discussed elsewhere in this work (see (II) 4.1.0., (II) 4.3.0., (II) 4.5.1.), but need to be taken into account here also - especially in Part II of this chapter (see 2.10.1.2.). The point about them is that they show a substratum which is apparently not AN, and this is still to be investigated. One of the best dictionaries of this type of language is Manggarai (Verheijen 1967 and 1970) and its comparative information most valuable. The Buli dictionary by Maan (1940) is also important for the present study. Sawu (or, better, Hawu - the people speak of their language as Li Hawu and their island as Rai Hawu, 'Hawu county') is in a somewhat different position and its inclusion here in NAN surroundings may excite comment and disagreement. The language has ever since Kern's day (Kern 1892) been classed as Indonesian, and regarded as forming part of the Bima-Sumba subgroup. It shares the pre-glottalised consonants ɓ, ɗ, ɗj, g with those languages - and some of these sounds occur also in Flores and as far north as Wolio: the latter is indisputably an Indonesian language. Hawu also has a large AN vocabulary, including the pronouns, and a couple of grammatical features, principally the stative prefix ma- and the causative pa- (with variations in their uses). However, it contains no other AN grammatical features at all, and while being quite NAN, its grammar does not fall into line with the AT languages, but is of an independent type. The right evaluation is therefore that Hawu is NAN, with a very heavy overlay of Indonesian AN vocabulary. It is probably in much the same position as English, which has a heavy overlay of Romance

vocabulary but a basically Germanic structure and is therefore still
included as a Germanic language. This evaluation of Hawu will be dis-
cussed in more detail, and its truth be made reasonably clear, in a later
chapter of this work (see (II) 4.5.1.). One feature of Hawu AN vocab-
ulary on which Kern laid stress is the unusual amount of metathesis, and
this will be dealt with in that section.

There is also the language of Dao or Dawu, a small island close to
the coast of Roti. Only one short specimen of this has ever been pub-
lished, and that is called 'Iets over de Taal van Dao', by J.C.G. Jonker,
as a contribution to the *Album Kern* Festschrift (Jonker 1903). This
consists only of a short story text with analysis (but no translation!).
The language proves to be a dialect of Hawu, with strong Roti influences
– and if Hawu is to be classed as mixed language then Dawu is still more
so. In fact there seem to be some influences from northwards, e.g.
Wolio area such as Buton bola *don't!* which appears in Hawu as ɓole *so as
not to...*, Dawu ɓoe. No special treatment of Dawu is included here
because of the inadequate documentation, but the language is undoubtedly
to be included with Hawu as part of the NAN area in Indonesia.

In point of fact, no comparative study in any of this field has yet
been attempted. The emphasis throughout Indonesian studies has been on
the Austronesian which is undoubtedly the basis of most of the languages.
An undercurrent of non-Austronesian, especially in Eastern Indonesia,
will be made plain in Part II of the present chapter (see 2.10.1.2.).
The one exception to this statement is the work of Joseph Greenberg
(1971), and this is concerned with evidence for his Indo-Pacific theory
(Greenberg 1971:807-71), which is discussed below, and, along with
Stresemann's work, will be considered also in Part II of this chapter
(see 2.10.1.2.).

Greenberg's first section is concerned with AT languages (1971:812-4),
and his comparative list involves 92 items. These are not all different
– in a few cases two separate roots of the same meaning are separated
out as present in different areas. The list may be taken as representing
90 items for computational purposes. It shows certain resemblances
amongst the languages of Timor, Oirata and Alor (Abui). If, however,
other languages are brought in and the same vocabulary compiled, results
can be interesting. Buru (Masarete) shows for these 90 words, only 22%
correspondence with AN roots – and it is called an AN language and its
grammar is largely AN. The rest are NAN but not in agreement with
Greenberg's AT list. Glottochronologically, 22% correspondence points
to between 3,000 and 4,000 years separation, which is not the case in
this instance. Quite a number of languages in eastern Indonesia (the

so-called Moluccan Group) show low AN counts but quite a high proportion
of AN grammatical features, and presumably the Moluccas as a whole are
basically NAN territory. AN immigration and influence has been contin-
uous, right up to modern times, but more effective in some parts than
in others. All the languages appear to carry a NAN substratum, which
will be studied later, in Part II (see 2.10.1.2.). On the other hand,
the basically NAN languages mostly show some influence from the AN, at
least in vocabulary, even though they may not be great. The Lovaea
language of eastern Timor is most interesting in this regard, for while
it shows no apparent relationship to its neighbours, it appears to have
a higher AN element than Fataluku or Makasai.

2.10.1.1.1.5.2. *Examination of Greenberg's Vocabularies*

The comparisons presented by Greenberg seem to be valid and fully
acceptable. There is no need to reproduce his vocabulary here as such,
but it is useful to do so in a modified form. The present author has
not attempted to construct any sort of linguistically valid proto-AT,
although this must be done at some stage if the group is to be studied
as a whole. All that he has done is to choose out a likely form for the
present purpose: it is entirely *ad hoc*. Table II therefore shows a set
of possible AT-protoforms with which comparison is made with an equally
ad hoc set of NH equivalents, mostly Tobelo. A true proto-NH, like proto-
AT, still waits to be done, and more is being said about NH elsewhere in
this volume. Occasionally other languages have been used when Tobelo is
clearly a minority form, for there is considerable variation among the
NH languages, but not, it would seem, as much as among the AT group.
What is important in the Table is the fact of the sharp break it shows
between the vocabularies of AT (= WPP_1) and NH (= WPP_2). Only fifteen
of the 80 words given here seem to present common roots as between the
two groups. These are the words for *bitter, cold, cry out, cut, fall,
fire, flower, a fly, to smell, stone* (b), *tree*.

TABLE II: EXTENSION OF GREENBERG'S VOCABULARY
To compare AT with NH Languages and Hawu

ENGLISH	ALOR-TIMOR	N. HALMAHERA	HAWU
1. *ask*	us(e)te	liha, sano, galoko	kerei
2. *bathe*	wela	oɦiki	ɖjiu (AN)
3. *behind*	ura(ka)	turu	(pa)keriu
4. *belly*	ato	pokoro	dəlu, kebaka
5. *bird*	asa	totaleo	dolila; manu = *hen*
6. *bite*	tia	goli	
7. *bitter*	malara	mali	(p)uɖu
8. *brother*	ka(ka) *(elder)*	hiraŋa	ʔaʔa (AN)
9. *child*	moto	ŋohaka	naiki
10. *cold*	palata, pulata	malata	mirindji
11. *come*	maʔu	sapoŋo	dəka (Malay dekat, *near?*)
12. *cover*	ʔpanuik	hiwelo	robo
13. *cry out*	(k)ole	orehe	taŋi (AN)
14. *cut*	uti	ŋuki	para
15. *day*	vatu	waŋe	loɖo (also *sun*)
16. *descend*	pai	uti	puru
17. *die*	umu	soŋeŋe	made (AN)
18. *dig*	to(h)i	paiti	
19. *dry*	tata	tooleŋe	maŋu
20. *earth (mud)*	muka	lepa	(wo)rai
21. *earth (soil)*	(a)no (AN?)	tonaka	rai
22. *eat*	nawa	olomo	ŋaʔa (AN?)
23. *excrement*	atu	(k)ihoko	poʔe
24. *eye*	ina	lako	mada (AN)
25. *face*	panu	himaŋa	taŋa mada
26. *fall*	tapa	tiwa	tue, bui
27. *fear*	ma(ha)ne	modoŋo	megigi
28. *female*	pana	hekata	rena
29. *fire*	ata	utu	a:i (AN)
30. *fish*	api	nauoko	naduu
31. *flower*	buk, biek	hohoko	wila
32. *fly* (n.)	uhur(u)	guhuru	lara
33. *foot*	idi	dohu	ḅeḅo
34. *fruit*	itu ?	sowoko	ḅue, wue (AN)
35. *garden*	ama	ledi	
36. *give*	ni(na), ina	tjatu	ɖjole, ɖjula

TABLE II (cont'd)

ENGLISH	ALOR-TIMOR	N. HALMAHERA	HAWU
37. *go*	mara	djobo	kako
38. *good*	rau	laha	iye
39. *hair*	wata	utu	ru kətu (kətu, head)
40. *hand*	tana	giama	ruai
41. *hear*	wali	isene	ḍəno, rəŋi (AN)
42. *hit*	pasi	gohara	taḅe
43. *hold*	(o)nai	hakuta	pəru
44. *hole*	kuru	guhu	roa, bo
45. *inside (cave)*	mil	haara	
46. *interior*	mutu	lowo	ḍarə
47. *kill*	uta	to(ho)ma	pemade (AN)
48. *know*	tata	nako	toi, tade
49. *leaf*	asa(h)	soka	
50. *long*	lo(k)u	kurutu	merai
51. *lose*	molu	rugi	
52. *make*	ini	aka, diai	tao, məhi, mane
53. *man (husband)*	nami	wekata	mone (AN)
54. *man (person)*	əna	njawə, nauru	dou (AN taw?)
55. *moon*	uru	meda, tono	wəru
56. *mouse*	(t)ura	karəhi	keḅuku
57. *name*	ne(ne)	romaŋa	ŋara (AN)
58. *neck*	mani(kəra)	ŋomasa	lakoko
59. *nose*	muni	ŋuruŋu	bewəŋa
60. *old (thing)*	matu(sa)	pereki	
61. *old (people)*	laʔita	timono	
62. *put*	rau	haho	
63. *rain*	aya	besaka	adji
64. *roast*	rahay(e)	hinəŋa	həŋi
65. *root*	ai (AN?)	ŋutuku	amo
66. *rope*	tara, taru	gumini	dari
67. *sibling*	nana	biraŋa	
68. *side*	weʔe	liketo	təbi (AN)
69. *sing*	leu	(njanji, Malay)	
70. *sit*	mire	gogeruku	djəḍi (AN djadi, become?)
71. *sleep*	taya	kioloko	bəḍji
72. *small*	kilai	eteki	iki (AN)

TABLE II (cont'd)

ENGLISH	ALOR-TIMOR	N. HALMAHERA	HAWU
73. *smell* (vb)	ʔamuhu	ami	tǝḍe
74. *stand*	nate	oko	titu
75. *star*	ipi	ŋaŋama	moto, wotu
76. *steal*	mani (?)	tosiki	meano (AN); loi
77. *stone* (a) rock	apa *(mountain)*	nuha	
78. *stone* (b)	hele	helewo	(wo)wadu (AN)
79. *tail*	(p)ula	bikini	(ru)iai
80. *throw*	lane ?	umo	
81. *(on) top (of)*	iya	mata, toma	dǝni
82. *tree*	ate	hate	aḍju (AN)
83. *walk*	pale	tagi	rae, pehia
84. *war*	salu ?	kudoti	patao ?
85. *water*	ira	akere	ai (AN)
86. *what?*	ina	okia	ŋa, nami
87. *when?*	tuna *(time)*	nako	pǝri (also *tomorrow*)
88. *where?*	tehi	kia(ka)	mi
89. *wish* (vb)	(k)aluke	niata	ui, (pe)wae
90. *woman*	tupuru	ŋoheka	mobǝni
91. *wrap up*	boka	hauo	uḍje *(tie up)*
92. *year*	tuŋ, toŋ	panina, muhuŋu	tou (AN)

When Fataluku, which was not available to Greenberg, is added, it usually fits in fairly well to his list. Lovaea does not, however, in the comparatively few instances in which the available materials overlap. It does, as said earlier, seem to have some AN loan element which is not present in the other AT languages. Table III shows the complete divergence of this language in comparison with Fataluku and the other AT languages. Again it is to be regretted that so little of it has yet been recorded, and quite possibly the present material – lacking all grammatical information – distorts the picture seriously. Of the 17 words in Table III the only likely agreements with common AT are the words for *root* and *water*, with *man* showing agreement with Fataluku only, and 2 (3) words in 17 may be a coincidence or the result of borrowing. On the present evidence Lovaea may be a language isolate.

TABLE III: COMPARISON OF SOME LOVAEA WORDS WITH COMMON ALOR-TIMOR

ENGLISH	LOVΛEA	FATALUKU	COMMON AT
die	maemaea	umu	umu
eat	kainaka	mace	nawa
eye	mokoe-kia	inamoco	ina
fall	nukuriera	aracane	ma(ha)ne
fish	iene-va	api	api
fly (n.)	lare-va	nailo amu	uhur
garden	kite-va	pala[1]	ama
hair	ui-ki	ca'ule'u	wata
hand	ilepi-kia	tana	tana
leaf	ai ko:ke-va	cipi	buk, biek
man	maraŋke-va	ma'aro	ana, ani
nose	vato-kia	mini	muni
root	ai ovarena	ilarina	ai
steal	mipaina	o'oca	mani (?)
water	nirei-te	ira	ira
woman	makwaeke-va	tupure	tupur(u)

A further possible comparison of Greenberg's material would be with the mainland languages, and this is approached firstly through that presented by Anceaux (1961). As far as the two lists overlap, only four possible agreements are found: AT tapa *fall*, Serui Laut, Ambai and Wandammen (the last being AN), tawa; AT buk or biek *flower*, the root bu appears in Ambai, Ansus and Kurudu on Yapen; AT ina or ni *give*: Ansus and other languages, oni and variants; AT rau *good*: Waropen, ro, roo – and this is on the east side of Geelvink Bay and is classed as AN. This list again is not impressive.

Greenberg's list is not a standard 100-word list, which seeks to examine language relationships systematically. It is the result of seeking what words in a number of languages actually do correspond. In Capell's study of the Timor languages (Capell 1944:330-7), vocabularies of 144 words in 11 Timor languages were given, to which the numerals were added. These provide a basis for a more regular 100-word list if the less suitable words are eliminated and Abui comparisons added.

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[1]This word in other AT languages means *house*. It could be PAN balay *house*. In the Lovaea words, putative noun-class endings are hyphenated from the roots.

When the Alor-Timor and North Halmahera lists are scrutinised, a
number of words are seen to be shared between AT and NH. The following
numbers are for the most part fairly definite, but a few are doubtful
though likely: Nos. (3?), 7, 10, 13, 14, 26, 29, 31, 32, 38, 39, 44, 73,
78, 82, (85?). These are a worthwhile section of the vocabulary to indi-
cate some sort of relationship between the two groups. Possibly system-
atic comparison of the two sets of languages would produce more examples.
On the other hand, the grammatical systems of AT and NH are rather apart.

Examination of the mainland New Guinea languages and the AT group also
produces suggestive comparisons. Table IV, prepared by C.L. Voorhoeve,
shows the possible relationships between 21 of the AT words (disregarding
NH) and languages in the Vogelkop area. The remarkable thing about these
words is that they tend to be Southern VK rather than Northern. In this
instance also, the first two pronouns singular are included, and this is
evidence that could be structural as well as lexical. It is much to be
regretted that no structural information concerning the VK languages is
available. There is a possible connection also between these words and
certain of the Wetar words: W. ma *come*, na *eat*, ne *give*: W. nean *name* is
derivable from AN (ŋ)aran and does not link with the AT root ne(ne), and
ma *come* could well represent PAN maɣi.

TABLE *IV*: LEXICAL CORRESPONDENCES BETWEEN THE ALOR-TIMOR GROUP
AND THE VOGELKOP AND OTHER MAINLAND LANGUAGES
(Drawn up by C.L. Voorhoeve)

ENGLISH	AT	VK
1. *belly*	ato	Kamoro: ato-are *intestines*
excreta	atu	ata *faeces*. South VK has kato *faeces*. The root *ata for *faeces* is Trans-New Guinea Phylum (TNGP)
2. *come*	ma'u	Possible cognates widespread on the main-land: ma (west VK) amo, mao, mawe, south VK; Ekagi, Moni, Dani, Awyu. Lowland Ok, Marind, Sentani all have related forms
3. *dry*	tata	Kamoro: tete, Asmat soso, sa; Asienara tatara, Tanah Merah tate, Brat tat, kat. Possibly related is another series with k: karara, kara, kakar, etc.
4. *earth ?*	muka	Awyu moka, Yaqay moqon, etc. cognates in Mairasi, Ekagi, Moni, Asmat, Ok, Nimboran
5. *eat*	nawa	Asienara: anawe, Iha nowa, etc. cognates in south VK Stock, west Bomberai Stock, Mairasi, Asmat-Kamoro Family, etc. TNGP root

TABLE IV (cont'd)

ENGLISH	AT	VK
6. *eye*	ina	Mor: ina. Possibility of connection with TNGP forms (kin, tin, si, hi, i, in, il) if one posits loss of initial stop (see also *excreta*, *foot*, where AT could have lost an initial stop)
7. *fire*	ata (also NH)	Kamoro uta, Asienara usa, Konda-Yahadian utaa, Yabi, Simori utu, Moni usa
8. *housefly*	? uhuru (also NH)	Asienara: ohoroboa, goboda (from gohoroboda?)
9. *foot*	idi	Ties in with the TNGP only if a stop (*k) would have been dropped
10. *give*	ni(na), ina	Roots ne, nia, na, nere in south VK Stock, ne, te in Brat, ne, ina in East Strickland Family.
11. *hand*	tana	Karas, Iha tan, Tanah Merah ta, Mairasi tara, Ekagi lane, hane, gane; Ok taiŋ, Trans-Fly: tondo, taeŋ
12. *leaf*	asa(h)	Asmat esena, etena; Asienara ehera (Finisterre Stock: sa, so, sese etc.)
13. *moon*	uru	Kamoro pura, Asmat pira; south VK Stock: puruno, huro, suro
14. *nose*	muni	TNGP forms: mi, iri, mini, minu; in Asmat-Kamoro, south VK Stock, Ok, East Strickland, Awyu
15. *name*	ne(ne)	Iha, Baham: nə, nie; south VK Stock: (n)anai(a)
16. *stand*	nate	Iha, Baham: nander, nandera; Konda-Yahadian: nende
17. *stone*	hele	Dani helep, kelep, East Strickland: kere, Asmat eke, ekere, Awyu iro, egiro, Ba igi, Awin ike, Moni ngele, Uhunduni gela
18. *tree*	ate	Kamoro ote, Asmat os, Ok at, as, Kiwai ota, kota
19. *woman*	? tupuru	Iha tombotombor; Asmat toor, cowoc, taot?
20. *I*	n-	South VK Stock, Asmat-Kamoro Family n-
21. *thou*	e-	South VK Stock, Asmat-Kamoro Family a-, o-.

2.10.1.1.2. *STRUCTURES OF THE WPP LANGUAGES*

This section is concerned with making clear in a brief manner the main differences between the AN languages and the NAN languages of the area with which it is concerned.

2.10.1.1.2.1. The Marks of NAN Structure

The usually accepted marks of NAN structure in New Guinea and the neighbourhood are:

1. A degree of complication in verbal systems in which there may be a few or all of the following features:

(a) distinction of person and number in the subject of the verb, usually by suffixation, but occasionally by prefixation;

(b) pronoun objects may be included in the verbal complex, again usually by suffix, but sometimes by prefixes. Prefixes tend to be commoner in western New Guinea and they are found also in Northern Halmahera (even though there they have actually been written as separate items);

(c) a varying degree of complication of moods and tenses. In the far west this is less than in eastern New Guinea, as a whole, and in NH it is less than on the mainland;

(d) incorporation of adverbial elements into the verb complex: this is more frequent in eastern New Guinea. In NH it does not occur, nor does it appear in AT as a whole;

(e) in some areas, a distinction is made in the form of sentence-medial and sentence-final forms of the verb, which, although morphologically distinguished, function chiefly on the syntactic level. This happens in this region only in Alor.

2. In the noun phrase, certain characteristics appear:

(a) gender systems are usually absent, but noun classes may appear in a few of the more easterly languages;

(b) usually very little provision is made for the distinction of number in the noun; context has to determine this;

(c) a case system signalled by postpositions tends to be present in contrast to the prepositions of the AN languages, but there is a likelihood of prepositions when a SVO order is found;

(d) pronouns may or may not distinguish sex or classes, and the presence of a dual number is less common than in AN;

(e) possession is not usually indicated by suffixed possessives and the possessive classes of AN languages are absent.

3. On the syntactic level, the following points are to be noted:

(a) the usual word order is SOV; some of the mainland languages appear to have SVO, but no detailed study has been made of languages of this type which have been reported (Cowan 1953). In NH and AT, the SOV order is normal;

(b) the complicated paragraph-sentences found in mainland New Guinea (Longacre 1972) are not present in these languages as far as NH and AT

are concerned and are less obvious in western New Guinea than in the
Eastern Highlands.

4. A few general details may be added:

(a) numeral systems in AT languages tend to be AN, borrowed from
surrounding AN languages. This is not so in NH nor as a rule on the New
Guinea mainland. These will not be considered in the present chapter;

(b) there is in all the languages borrowing of AN vocabulary, and this
seems to hold good on the mainland as well as on the islands, and in the
island region much interchange of linguistic features has occurred,
chiefly in vocabulary. Most of this is linked historically with the
predominance of some local sultanate in times past - e.g. NH through
Ternate and Tidore in the Sula-Batjan area. This can be largely disre-
garded here, provided it is not overlooked.

2.10.1.1.2.2. Structural Sketch of the Island NAN Languages

These notes are intended as expansions of the preceding section, so
far as space will permit; in 2.10.1.1.2.3. similar notes will be given
concerning the mainland languages so that comparisons may be made.

The pronouns will provide a starting point which is frequently of
importance. Table V shows the pronouns of the AT languages, linking with
Table I.

TABLE V: PRONOUNS OF THE ISLAND NAN LANGUAGES

Person	ABUI	BUNAK	MAKASAI	FATALUKO	OIRATA
Sing. 1.	na,nedo	neto	ani	ani(ro)	anri
2.	e(do)	eto	ai	e(ro)	e:ri
3.	he(do)	ɲimo,homo	gi	tava(ro)	ue
Plur. 1.incl.	pi(do)	i	fi	afi(ro)	apri
1.excl.	ne(do)	nei	ini	ini(ro)	inri
2.	re(do?)	ei	i	i(ro)	i:ri
3.	he(do)	himo,homo	ena	tava(ro)	waye

Notes: 1. In Bunak 3rd person, himo is animate, homo is inanimate, and g- is
the object and possessive prefix for both.

2. Lovaea is omitted because the pronouns so far as recorded are AN: au *I*; ou
you. They seem to link with Biak (AN) (1st person) and Japen (2nd person).

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The roots of the pronouns are monosyllabic, with the addition of a
suffix in certain cases: Alor -do is a defining marker that with a noun
acts rather like a definite article. This seems to reappear in Bunak
and Fataluku, d becoming r: the language has no voiced stops. In Oirata
-ri is the form, and in the VK languages Kampong Baru -ri is probably
comparable; Konda -gi is not formally so but its value is similar.
Analyses of these languages are still lacking.

The lack of distinction between singular and plural in the 3rd person
in Abui and Fataluku is noticeable. There is also no agreement between
the morphemes of the 3rd person in the different languages - which sug-
gests that these are basically deictics of various sorts as not infre-
quently in languages. It is the first and second person forms that may
repay comparison, and there is basic agreement among these in the lan-
guages under discussion.

The first person plural is of particular interest. The distinction
of inclusive and exclusive is made but seems to be secondary - meaning
that the exclusive could be based on the 1st singular, and the inclusive
a later development. All the languages of Table V have a first person
plural inclusive based on *pi. Strangely enough this form is found in
the NH languages also, and is their only agreement with the AT languages.
Table VI shows the NH pronoun roots, as they are most easily abstracted
from the forms in the various NH languages - the table does not claim to
exhibit a proto-NH pronoun set.

TABLE VI: NORTH HALMAHERA BASIC PRONOUNS

Person	Free form	Subject pronoun
Sing.1.	ŋo-hi	to
2.	ŋo-na,ŋa-na	no
3.	una-ŋa	wo (masc.)
	mu(na)ŋa	mo (fem.)
Plur.1.incl.		po,fo,wo,ho
1.excl.	ŋo-mi	mi
2.	ŋi-ni	ni
3.	ana(ŋa)	jo,du,na (personal,masc.fem.)
	(maena)	i, also 3rd sing. neuter

It will appear that once again there is very little in common between
AT and NH - less in this case than in the 90-word vocabulary. All that
is shared is inclusive plural 1, *pi. If Van der Veen is right, the *pi

is not an original 1st person inclusive at all, but an indefinite (French *on*, English *one*, German *man*, etc.) in an extended use. Van der Veen (1915:186) first shows that po etc. originally had no person value at all, but was for generalised reference, and he translated it into Dutch by *men* or *ge*. He regarded wo as basic (where it is hard to agree with him: po would be more likely) and considered it related to the NH 3rd singular masculine article o and the 3rd plural determinative element in o-na and j-o, as an indefinite demonstrative. Then on the following page he points out that these wo, no forms supply the only inclusive 1st person distinction in NH, and they are used "when the talk is general, and can come to serve as agent marker and may change their function so that finally wo, etc. take the place of a true first person plural."

If this line of argument is accepted, then the NH languages would have originally lacked the inclusive-exclusive distinction. It is still absent in Buru, but there the AN exclusive root kami serves for both. In Hawu, dji is inclusive, di exclusive, a rather narrow distinction that looks like being late. Cowan shows that in Konda the distinction is still not made, and many other languages might be added to the list. The general 'personal' forms became later an exclusive, just as in modern English it is possible to say *we don't do that here* or *one doesn't do that here* with the same general meaning. Further if this po, fo form is rightly identified with AT pi, plural inclusive it would have to be introduced through some NH language. This is possible, but there is no evidence for it, especially with the change of vowel. Yet the comparison seems clear enough, and no other available language - on the New Guinea mainland - shows anything like it.

Although it was suggested a little earlier that the -do suffix on pronouns was a defining marker, there is an alternative and perhaps better possibility suggested by phenomena in Oirata. De Josselin de Jong (1937:204-5) notes two sets of pronouns in this language serving as subjects: a simple prefix, and a prefix plus -te, which could well be cognate with -do. He distinguishes them as "inert" and "energetic" respectively, borrowing terms from an article by Uhlenbeck (1917) on North American languages. For *I sleep*, he gives ante taya or an tayan: the latter is a nominalisation with -n, which he regards as *I am the sleeper*; ante uda *I strike*, but an udan *I am the striker* or *I am struck, someone strikes me*. So an tayan ya:ni *my sleeping is good*, but he says that an udan could only be *I am struck*. All this suggests that the suffixes may really be ergatives. In the ergative languages of Flores and Hawu, word order is different, and the ergative le, ri precedes the postposed subject: Hawu ta toi ri ja *I know it*, where the AN aku > ja *I*. Allowing for the NAN order SOV, the explanation along these lines may be possible.

Bunak pronouns call for some special remarks. The language has a
dual, not listed above; the other languages do not. The dual is marked
by infixed -l-, and the plural by suffixed -i. So i-l-i is inclusive-
dual-plural, *we two inclusive*, and i: *we* (incl.) stands for i-i inclusive
plural. In Bunak -to is suffixed only to first and second singular pro-
nouns and these do not occur without it: whatever its value in the other
languages, any special force is lost in Bunak. There are also prefixed
objects: ne-ge *me-give*, ge-ge *you-give*, he-ge *him-give* (cf. Abui, he 3rd
person singular); and possessive root -ie *belonging to*, becomes n-ie *my*;
Ø-ie *your*; g-ie *his, her*, of Makasai gi 3rd singular. Bunak also has an
irregular hala?i *they two*, for which also g- serves as prefix: hala?i
g-ie deu *house of them two*.

Verbal systems are often diagnostic of linguistic grouping. It is
therefore useful to look at the verbs in the island NAN languages. This
cannot be done in any depth here, but what can be done will show the
complete contrast with any AN system, and may suggest also reasons for
some irregularities in a few of the AN languages of the region.

Firstly, the stem is practically invariable. A few languages have
causative and reciprocal markers but these bear no formal resemblance to
the AN morphemes corresponding in function. Time indication by means of
inflection is present (though weakly developed) in NH languages, but is
absent from the AT languages. Bunak uses prefixed person object markers,
but the other languages do not. In Makasai, gi datu ?u lolo *he story
one tell* shows the common type; if time has to be marked, an adverb pre-
cedes the verb, such as esere *yesterday*, usanana *tomorrow*, or nana?u
continuity. The negative is noto or noto nai before the verb, varying
only into noho *I will not*. Fataluku is similar: again there seems to be
no future marker; hai marks a past, as in tava hai atane *he asked*. This
past marker occurs in neighbouring AN languages: Tukudede sai, Mambai
soi before the verb. In Oirata, however, so marks intention, not a past,
as in so anut ina mire *I shall sit here*, and in the same language ro
after a verb marks completion: ate an uda ro *you struck me*.

The NH verb is more complicated and has a number of derived forms
(Capell 1944:319); tense can be marked though still in a rather vague
way: in Loda, to tagi *I go or went*, but complete past, to tagi oka; to
adje tagi *I shall go* (Capell 1944:324).

Postpositions are common in languages with SOV order: this was one of
the postulates in Greenberg's *Universals of Language* (1963:63). These
are discussed in Capell (1944:324).

2.10.1.1.2.3. Structures of the Mainland Languages

The languages referred to here are those of the Vogelkop (VK) and
Bomberai Peninsula (BP) to which reference has been made earlier. Very
little of positive content can be said about these because empirical data
is almost absent. A twenty page typescript grammar of Iha (BP) by Fr
Jules Coenen MSC with a vocabulary by the same author presents the out-
line structure of this language, but for all the others there is prac-
tically only such fragments of information as are found in Cowan (1953).
What is said here must therefore rest on these sources. Material on
Manikion was gathered by Capell in 1964, but has not been published;
this language, however, stands quite apart from the groups under consid-
eration - one of the few known VK languages that does so.

In Iha, noun class systems appear, to the extent that qualifiers of a
noun carry prefixes grouping them into certain natural classes - fruits,
houses, flat things, wooden things, boxes, inanimate things and animate
beings. This type of classification is more elaborate than the animate-
inanimate division of Bunak, and, for that matter, of numeration systems
in various Eastern Indonesian languages that are classed as AN, and there
is no phonemic correspondence in the markers. Number in nouns is marked
in Iha by reduplication: djə *bird* > djədjə *birds*. This has no parallel
in AT languages. The forms of the Iha pronouns bear very little resem-
blance to those of AT languages:

Sing. 1. on; 2. ko; 3. mi
Plur. 1.incl. in; excl. bi; 2. ki; 3. waatmo, rukno, etermo
with a 3rd plural for animals and inanimates inwaarteŋgodoŋo, which
obviously needs some further analysis.

Apart from details, it seems that Iha marks a first person by n, a
second by k and a third by m. This last recalls Bunak himo, homo, animate
and inanimate forms of 3rd singular. The form bi for exclusive plural is
of interest, in that it recalls the AT pi discussed above, but has
reversed its reference - according to the arguments from NH, it ought to
be inclusive.

The verb in Iha is morphologically simple, but it is a suffixing con-
junction, like that of Kamoro and other languages farther to the east;
so far as the AT languages mark person they do by prefix or preposed
pronouns. The genitive marker -ma in Iha recalls NH by way of contrast,
not AT.

When the languages in Cowan's *Voorlopige Resultaten* (Cowan 1953) are
studied, very little appears that can be compared with AT. Diagram A
has shown the pronoun initials and how they can be grouped, but this
grouping does not carry over well into the conjugation. Ayamaru, for

instance (Cowan 1953:21), shows an inclusive as against exclusive prefix series: n-egias *thou, you, we say*; t-egias *I say*; j-egias *they say* and similarly na-mo *thou walkest*; no-mo *you, we, walk*; ta-mo *walk*; ja-mo *they walk*.   The vowel in the second instance may belong to the verb stem. This recalls the verbal processes in Kiwai of the Western District of Papua New Guinea, but it has no parallels in AT or NH.   Cowan himself (1953:25) has drawn attention to possible alignments of Ayamaru with the NH languages, and as far as the pronouns go this seems to be right.   But his Table on 1953:25 leaves many questions unanswered owing to the uncertainty of the information offered.

These languages, then, as far as can be said at present, do not link up structurally with the island NAN languages to any extent, and in fact hardly above the level of chance agreement, except for the Ayamaru-NH alignment which may have a higher value.   The features mentioned above such as classification are all such as might occur elsewhere without historical linkage.   A verdict of undecided must therefore be returned on the present evidence.

2.10.1.2.   PART II: RE-ASSESSMENT OF AUSTRONESIAN IN THE WEST PAPUAN PHYLUM LANGUAGES

2.10.1.2.0.   *INTRODUCTION: THE WORK OF E. STRESEMANN*

There is still another aspect of Austronesian studies which has been to a large extent overlooked or just disregarded by investigators starting from the viewpoint of a common AN element in the Oceanic languages as a whole.   Words - and to a degree, constructions - that can be shown to be of AN origin are sought in a language or group of languages.   This is not really a full study of a language, for there is hardly ever a case of 100% AN content.   Indeed such has never been found and does not seem likely to be found.   The percentage AN may be large or small - what happens about the remainder?   Usually it is simply discarded.   To this extent historical linguists have been rather like chemists analysing a given substance, not to find what it is really made of, but to extract one certain element from it.   They take and use the distillate, they discard the basic fluid.   But this basic fluid may contain items of value for other purposes: should it not be used?   In the present case, once a demonstrably AN element has been found in a language, what can be done with the remainder that is presumably NAN?   The question was discussed earlier by Capell (1971) but not actually dealt with.   Greenberg (1971) made tentative steps towards it.   Is it worth while at this point in the study of WPP to seek some solution of the question in these NAN languages?

On the one hand, all the NAN languages have had contact with AN and
show at least loans from that source. On the other hand, all the lan-
guages classified as AN have considerable content that is not demonstrably
AN. They vary greatly in the AN content they show, both in vocabulary
and in structure. It is not part of the present task to subgroup these
languages, but it is well worth while trying to pick out NAN elements
within them.

The normal continuation of Indonesian studies has brought other facts
to light which may have a bearing on the question of possible NAN sub-
strata throughout the eastern or Moluccan section of the archipelago.
The languages between Timor and New Guinea have already been mentioned
as divergent from common AN forms in many regards. Now a little closer
examination must be made.

The languages of Seran form a starting point, because they were exam-
ined some fifty years ago by Stresemann, as already indicated, first in
his Paulohi Grammar of 1918 and later, under the influence of Dempwolff
in his *Lautetscheinungen in den Ambonischen Sptachen* of 1926, in which
he dealt in more specialised manner with the historical aspect of the
Seran and neighbouring languages as a group. What Stresemann did not
bring out clearly in his second work, because he was not interested in
it, is the fact that although Seran-Buru languages are definitely AN,
and definite rules can be established governing their derivation from a
PAN mother tongue, there is still a noticeable residue of vocabulary that
is not AN, and some grammatical features that do not link with AN struc-
tures as a whole. It may be objected that PAN grammar has not yet been
established, and this is true, but there are very clear indications of
its general lines, and some of the features to be mentioned here are at
variance with this growing picture. The articles by Tauern (1928-31) in
Anthropos on Seran Languages are also useful in these studies.

This, then, is the outline of the questions that are being faced in
this section of the chapter.

2.10.1.2.1. *PROTO-SERAN*

Stresemann dealt in detail with the languages of Buru, Ambon and Seran,
to a very large extent on the basis of his own fieldwork. For each of
these regions he established proto-languages which he called "sub-":
Sub-Buru, Sub-Ambon, Sub-Seran. He labelled them SB, SA and SS respec-
tively. The proto-language which he conceived as lying behind these
sub-languages he called Ur-Ambon (UA), regarding this as a direct deri-
vative of PAN. He set up for UA a set of phonemes, here reproduced as
Table VII, when re-arranged as a comparison with Dempwolff's "Ur-

Austronesisch" (here PAN). The Table as here reproduced does not rep-
resent phonemic correspondences. It has recently been suggested that /ə/
is not properly to be reckoned as part of the PAN system (Schuhmacher
1972). Even if this view should be upheld, it does not directly concern
the present discussion. It may represent a still older stage of PAN than
that contemplated by Dempwolff. The real difficulty attached to
Dempwolff's system rests on the absence of fricatives, e.g. /s/ being
treated as really /t'/ and /r/ as /ǵ/. Most subsequent students have
rewritten Dempwolff's alphabet; the original has been used in the Table
to make Stresemann's comparisons clearer. One thing, however, does stand
out: the resultant UA system is much closer to the existing systems of
the NAN languages of WPP, and this suggests that a more phonemically
elaborate PAN has been grafted on to an NAN base that even at that stage
was simpler.

TABLE VII: PROTO-AUSTRONESIAN AND PROTO-AMBON SOUND
           SYSTEMS COMPARED (after Stresemann)

PAN	PA	PAN	PA
ǵ, l, ļ	l	n, ń	n
ɣ	r	p	p
d, d', ḍ	d	b	v
t	t	mp, mb	b
t'	s	m	m
nd		k, g	k
ṇḍ		ŋ	ŋ
ńd'		h	(h)
ńǵ	d	w (v)	w
nt		y (j)	j
ńt'			

Vowels:	PAN	i	u	ə	a
	PA	i	u	(ə)	a,o,e

This part of Stresemann's work, what might be called its positive
part, has, of course, no place in a chapter on NAN linguistics of the
area. But his work does have a relevance to the present chapter, for an
examination of the vocabulary collated by Stresemann shows not only an
AN element, with which he alone was concerned, but a common NAN element
with which he was not concerned, but which recurs in the wider
setting of the NAN features of WPP. It is this common NAN element
which is germane to the present enquiry, for it carries further the
suggestions made by the present writer in an earlier work (Capell 1971:

323f.) regarding the importance of the study of what might be called comparative NAN within the AN domain - and this so far nobody seems to have taken up.

It does not require much examination of the vocabularies of many languages classed as AN to show that the Indonesian geographical region as a whole is as imperfectly AN as those farther east. Although no detailed study has yet been made, the more superficial examination resting on a 100-word list of some sort, of the lexicostatistical type, shows relatively low PAN content even in areas usually reckoned to be impeccably AN, areas in which there has never been any question raised about the existence of NAN or pre-AN languages. It is true that in these regions the grammatical construction is usually of an AN type. Actually, this is a difficult claim to make, because comparativists have so far fought shy of establishing PAN structure, as against vocabulary. However, certain grammatical features do emerge, and have done so ever since the foundation work of Brandstetter. Therefore it must at present be admitted that the grammatical judgements made here are to a certain extent impressionistic, in that they still lack rigorous proof.

The impression of 'substratum' - whatever its nature and whether it is the right word in this instance or not - was tested by the author by the use of a 100-word list to establish a preliminary analysis and percentage agreements have been set up for certain areas of Indonesia, including some to the west of Brandes' Line in order to demonstrate that the NAN vocabulary is not limited to the eastern regions.

In these examinations, some of the languages normally classed as AN have been included: in the far west, Simalur and Mentaway, in the central area Manggarai, and, as more typically 'Indonesian', Bare'e of central Celebes. With these as background eastern languages were then compared: Buli of southern Halmahera (to contrast with the NAN languages of the NH group), Numfor of northern New Guinea Vogelkop, as representative of languages in this area normally regarded and classified as AN. The examination served two purposes at once: it allowed a count to be made of the words definitely AN according to Dempwolff's lists, and also a comparison of the NAN elements, to see whether there was any sort of agreement among these.

Details on these studies cannot be included here, where it is a matter of 'current trends' in linguistic discovery. They need a fuller space in which to be developed.

So that it may not be thought that the matter of substratum is an idea peculiar to the writer, the latest statement on it by another scholar may be quoted. This is C.O. Dahl, in his *Proto-Austronesian* (1973:54), who at the conclusion of a lengthy chapter on labio-velars as possible elements of PAN, says:

> But a weightier argument comes from the phonetic development
> of the MN (=Melanesian) languages. I refer to the common merger
> of many phonemes and to the widespread change from consonantic
> to vocalic final. Such changes in Malagasy have been shown to
> have their origin in a Bantu substratum (Dahl 1954:325-62), and
> the same explanation is likely in Melanesian. Another argument
> is the clear grammatical difference between the Melanesian and
> Indonesian subgroups. It therefore seems to me that a substratum
> hypothesis is not more unlikely than to construct new proto-
> phonemes from such a scanty material.

Then he adds what cannot be stressed too much, and in the light of the
very little that is known about Eastern Indonesia linguistically:

> What is needed is a thorough examination of all the reflexes of
> the constructed PAN phonemes in these languages, and possibly
> also a comparative study of the part of the Melanesian vocabulary
> which lacks cognates in Indonesian. With such a material we
> should probably get a sober background for a revision of the
> proto-phonemes if needed.

Mutatis mutandis, the same remarks apply just as cogently to Western
Austronesian as much as to Melanesian.

Two facts appear from the present author's study of the PAN content
in the eastern Indonesian languages:

1. Most common PAN vocabulary seems to have attained its Oceanic pho-
netic shape by the time it appears in Eastern Indonesia (i.e. Seran and
eastwards). Perhaps even as far west as Celebes this is largely true.
Study is needed, but it lies outside a paper on WPP.

2. Non-AN vocabulary in Seran etc. points to a pre-AN stratum that would
have existed unless AN represents the first population. The evidence
shown here on the basis of Stresemann's work and further studies by
Capell makes it more than likely that this is not so, and with the prox-
imity of New Guinea it becomes highly unlikely that it is. Stresemann
was not interested in NAN but was examining PAN. His work contains much
of the NAN which he disregards. Table VIII presents some 90 words of his
Ur-Seran (US) and Sub-Seran, with PAN equivalents printed in Dempwolff's
spelling. These show variants from PAN except in some cases where a word
is given in brackets in one column, representing the AN derivative present
in either of the language areas, e.g. *be big*, PAN γaya, giving Ur-Ambon
(UA) raya, but US ila is not a PAN word.

Even where a word in the lists is PAN, it is often in a form which
is Proto-Oceanic rather than PAN, e.g. waga *canoe* is the form commonest
in Eastern Indonesian, and in most of Oceania: Grace in his finder-list
(1969) gives waŋkaŋ, but it is only in Fiji that waŋga appears, and even
there the /ŋg/ is not a retention of PAN -ŋk- as established by Dempwolff,
but the prenasalisation of /g/ which Fijian demands. The study of the
phonemic forms of AN words in Eastern Indonesian could be very helpful
in determining the age of these languages, but it has not been carried
out.

The present problem, however, is the NAN vocabulary within these
languages. It has already appeared that certain grammatical features
of the languages are not found in PAN languages, or in Oceanic languages
- noun suffixes of number, adjective agreement, etc. as briefly discussed
below. What then of the NAN words in Table VIII? In general, they do
not agree with the Timor-Alor or NH lists, but in some cases they extend
into parts of Timor where the languages are AN. Such a word as UA dara
earth, has relatives in Kupang kdale, Kayeli (Buru) raher, and possibly
Hawu (wo)rai; Buru iri *foot* is clearly AT idi, but the numbers of NAN
cognates among the lists it has so far been possible to examine are very
small. Most of the Seran NAN lists seem to have no cognates elsewhere,
and it looks as though allowance will have to be made for AN migrants
bringing in a measure of unity into a congeries of originally unrelated
- or apparently so - languages. The present is a survey paper only; a
book will be needed to pass even what material is available in review -
and of course this review will need to cover structure as well as lexicon.
Part of this subject will be included in another section of this work
((II) 4.5.1. on mixed languages) but even this will be only suggestive.

North and east of Seran also there is connection with the WPP both in
vocabulary and probably in structure. For example, words for *dog*:
Kilmuri kafuna, Gah kafuni, Ahtiahu awan, Lobo kawuna in the island
region, connect with Waigiu dofana, Ansus wona and Kowai awuna on the VK
area. The word yai for *father* is found in Liambata (Seran), Watubela
and then in Kowiai and Ansus. Further examination will no doubt increase
the list of such shared words, parts of WPP but many of them in areas now
classed as Austronesian.

TABLE VIII: NON-AUSTRONESIAN VOCABULARY IN THE SERAN
AND AMBOYAN LANGUAGES

ENGLISH	PAN	UR-AMBON	UR-SERAN
above	antat'	dətə	lətə
angry	baŋit'		kolake
arrange	dandan		tita
ashes	abu, ḍabuk		lobonə
attack	təmpuh		sali
bad	d'ahat	gavaya	
bamboo	bə(t)uŋ, buluh	tedin, tabalə	
banana	pu(n)ti	(puḏi)	telewa
basket	bakul	epo	
bathe	aŋḍu	sugu	voi

TABLE VIII (cont'd)

ENGLISH	PAN	UR-AMBON	UR-SERAN
beach	t'avaŋ	lalat	
beans	ka(ɲ)k'aŋ	kavuə	vatila
belch	təɣab	tora	
below	babah	ləvu	
betel	d'ambaj,pinaŋ	gamu	
(be) big	ɣaja,laba	(raya)	ila
breast	t'ut'u	pila	
brother (ygr)	a(ɲ)g'i	wali	wali
cape (land)	hud'uŋ	tətunə	
carry (bring)	baba		ligu
carry (on head)	t'uhun		(solo)
chalk	(k)apuɣ	(apur)	losa
chisel	pahat	(ʋatete?)	
chop	d'ald'al	tətə	
chop off	k'alk'al	lake	
contents	it'i	tau-ni	
crooked	biŋkuk		səkole
cut off	kəɣət	tətə	tivi
dirty	l̥abu		tati
draw water	a(ń)t'u	tiba	
earthquake	liṇḍuɣ		isu
edge	təpi		lale
empty	puhaŋ	lene	
fat	mińak	vələʔ	
fear	(ma)takut	(mataku)	d̲ila
finger	dal̥id'i	gugu-	
fingernail	(t')ilu	tadigi	
fly (vb)	l̥əmbaj	d̲ivu	
front	hadəp	mina	
ginger	lija	sevi	
girl	dajaŋ	ma-ruka	
give	bəɣaj	ruke	
gnat	lamuk	səŋət	
go	panav,lakav	lawa	
gong	əguŋ	buku	
grass	dukut	vuta	
hang	gantuŋ,l̥ajl̥aj	pain	ləlu
high	tiŋgi		lətə

TABLE VIII (cont'd)

ENGLISH	PAN	UR-AMBON	UR-SERAN
(be) hot	ləgʹav	lea(w) =ʂun	
hungry	lʊpaɣ	sere	
I	aku	(aku)	aya,yanam
intestines	tinahi	vatuka	
knife	pitʹav	kətanə	peitə
know	tahu		tewa
laugh	tava	mali	
left (side)	kiva,viɣi	bali	
(be) long	(p)ańdʹaŋ	nadu	
mat	(l)amak	labu,ʙailə	
mountain	gunuŋ	urat	tənita
neck	lihiɣ	ənu-	
nipa palm	nibuŋ	bərən	
plain (n.)	pa(n)daŋ		latalə
poison thorn	kʹəɣəd		sələtə
prick (vb)	dʹuluk	suda	tava
pull	taḷik		lipi
ready, done	tʹi(ŋ)kəp	səpu	bəla
resin	damaɣ		aysi
rubbish	tʹaḷəp	sira	
send	ki(ḷ)im	katu	
sew	dʹahit		voli
shoulder blade	balikat	sari	
shoulder	kiḷik,kikil	gege-	
show	tuńdʹuk		tilu
shut (eye)	pədʹam	tadegu	
sick	(ma)tʹakit	ma-pələ	
sieve	tʹigʹi (vb)	sa-isat (n.)	
sing	hila,ńańi	kabata	
sink	bənəm,ka(ḷ)əm	molo	
slime	lukʹak		tona
smoke	hatʹap,atʹu	vənə	
snake	ulaɣ	tobolo-	
sour	atʹəm		linu
speak	ukʹap	padepa	
spear	tumbak	toba,galepi	
spittle	ludah	aber	
spoon	tʹəṇduk	sidu	

TABLE VIII (cont'd)

ENGLISH	PAN	UR-AMBON	UR-SERAN
sprinkle	diɣut'	sora	
stand	ḍiɣi	kədə	kələ
swear	t'umpah	soba	
sweep	t'apu	sara	
tabu	pali	tamoli	
tie, bind	d'alin		vole
urinate	miɣmiɣ	tiri	
voice	tənəɣ	liə	
vomit	u(n)tah	muta	
wait	hantaj,tuŋgu	(tugu =*watch*)	lali
wall	diŋdiŋ	rəsət	
wave (n.)	humbak (adj.)	dovu (n.)	
weave	tənun,lag'a	kədə,sedu	
wound (vb)	luŋka	abata(y)	
year	tahun	ŋarə?	
you (sing.)	kav	ale	

2.10.1.2.2. PROTO-SERAN STRUCTURE

Along with the special nature of the PS lexicon, Stresemann shows
that a certain grammatical type occurs in the languages of the same area
— in fact, it stretches rather farther than he was able to take into
account. This grammatical structure affects almost all the speech
categories. Reference to his work needs to be made for a full discussion;
only an outline is possible here (Stresemann 1926:139-81):

In the noun phrase the most characteristic feature of these Eastern
Indonesian languages is the appearance of noun classes marked by ending.
There are no articles, but the noun is marked by endings, which change
for the plural; the adjective is similarly marked and there is usually
a concord of number between noun and adjective. The actual endings vary
(Stresemann 1926:165ff.): in Amahei, Nusalaut, Saparua the marker is -lo
which, says Stresemann, is "added to every noun" in these languages, and
acts as an enclitic, moving the stress forward. In Liambata and Kobi
the ending is -im or -am; if the noun carries a possessive suffix, this
ending follows the (AN!) suffix: Liambata *ulu-ni > ul-n-im *his head*;

Kobi *vavu(y) > hah-am *pig*. In Manusela and Hoti the suffix is -a:
Manusela ian-a *fish* < *ikan. Here, of course, a different explanation
is possible, for iana is a form found in parts of western Oceania. In
these cases it has been taken to show supporting of a final consonant by
an added harmonic vowel (Ray 1926:46-8, 49-50; Capell 1971:303). In
fact this does not seem to be the case, because stem final vowels are
similarly supported in Manusela: isu-a *earthquake* for PS isu.

Plurals in almost all Amboyna languages end in -du (Buru -ro, Nuaulu
-u). This applies to stems bearing possessive suffixes also: Saparua,
vulu-ni-lu *its feathers*. Number is thus marked inflectionally: Paulohi
coconut nuel-e, plural nuel-a < UA niwər, PAN nijuγ.

Plural formations for adjectives are limited to what Stresemann calls
the "sub-Ambon" languages, e.g. Paulohi *crooked* keru-ti, plural keru-ti-ru
with two suffixes; Amahei *full* ponu-i-ro, plural ponu-i-o.

The background of these formations is not PAN, nor, for that matter,
is it AT or NH. It would seem to be a local, pre-AN formation, which
occurs in Seran-Amboyan, Babar but apparently not in the islands closer
to New Guinea. In Goram, however, there are traces of regular suffixing
of possessives to noun, as in ilu-mu *your head*.

While most of the pronouns in these Seran languages are AN, they are
frequently in very abraded forms, and in some cases not all the pronouns
are AN. Examples can be seen in Haaksma (1933:156-66) and have been
mentioned above. The 2nd and 3rd person singular are the chief NAN rem-
nants: in Amboyna Asilulu ale *you* and ali *he*. The same forms occur in
parts of Seran, but in e.g. Wemale, ahu *you*, and eme *he*, are again dif-
ferent. In southern Halmahera and New Guinea languages the PAN pronouns
recur albeit with much phonetic modification.

The possessive inflection has departed from PAN - or preserved an NAN
patterning - in these languages. Nouns fall into two classes, prefixing
and suffixing. Prefixes are used with inalienable or 'part' nouns,
suffixes with all others (those that in Oceanic languages are not suf-
fixing). *Bird's nest* in UA type languages becomes manuʔ ni-ruma *bird
its-nest*, not *manuʔ ruma-ni. Stresemann (1926) gives a whole chapter
(129-47) to this phenomenon which evidently impressed him, coming from
the PAN patterns. In Buru and some other areas, suffixation is absent;
a cardinal pronoun is followed by a free possessive and then the noun,
which if it was in PAN suffixing, retains the -n of the original -ña 3rd
singular in all persons: Buru: jako nau huma *(I) my house*; rine nake huma
(he) his house; sira nunuk huma *their house*, plural sira nunuk humaro
their houses. Here there is clearly a combination of an NAN system with
a PAN. It is interesting to recall that this structure is found in parts

of eastern New Guinea, in NAN languages, and also in some of the South-
eastern Papuan AN (or OC) languages (Capell 1943:231-2).

Person marking in verbs has also been changed from the normal PAN
methods in the languages of Buru, Seran and Amboyna and some of the Flores
languages (e.g. Sikka). Stresemann gives a good deal of attention to
these "fused" forms (1926:118-25) which are characteristic of Seran,
Amboyna. The system is basically AN, but sound changes have occurred
which leave it very different. There is no great differentiation of
markers for tense in these languages, but it is worth noting that in
Saparua and Nusalaut a future particle na appears, which plays a consid-
erable part in certain Oceanic languages, e.g. Kuanua of the Rabaul area,
New Britain, and Fijian (Haaksma 1933:160).

In the NAN languages, as has been shown, the tendency is to mark per-
son, if at all, by prefixes. In a few cases on the New Guinea mainland
person is marked by suffixes, e.g. in Iha. In certain languages of
western Timor and Flores, suffixal marking with AN elements is found,
e.g. in Kupang, au lako-ŋ *I go*, and these suffixes can be transferred to
a syntactically linked morpheme, e.g. W. Timor ka *not* in in ka-n mui fa
sanat *he did not do evil*; ko ka-m fe *you did not give*. The similar
principle has been used in a more elaborate fashion in Flores languages -
see the chapter on Austronesian and Papuan Mixed Languages ((II) 4.5.1.).

2.10.1.3. CONCLUSIONS AND DEDUCTIONS

The purpose of this chapter was to show that the non-Austronesian West
Papuan Phylum, already shown to exist, extended beyond the limits of New
Guinea into Eastern Indonesia. This it has done, and the NAN languages
of that area have been divided into an Alor Group and a Timor Group. In
Timor, the Lovaea language of the extreme eastern end of the island seems
to stand out as an isolate, although only perhaps because information on
it is still inadequate.

The chapter, however, has done something more than this. It has served
to show that many features of language within the Indonesian region are
very difficult to assign to PAN. Vocabulary and structure both show un-
assimilable elements. This is more marked the farther east one looks.
The language of Hawu (or Sawu) has certainly a majority of AN vocabulary,
but its grammar is radically NAN. The facts behind this statement are
set out in another chapter in this volume, that on Austronesian and Papuan
Mixed Languages ((II) 4.5.1.). In that chapter it will be suggested that
throughout geographical Indonesia there is a substratum of NAN language,
which has left its traces in the modern languages. Vocabulary that can-
not be accepted in PAN (at least as far as Dempwolff's work is concerned)

is found in large numbers of languages. This is particularly noticeable
in the Seran-Amboyna area, but is present also in the small islands east
of Timor (Babar, Liang, Sermata, etc.) quite apart from the known Makasai
colony on Oirata. The writer feels that similar investigation is needed
in the west also, especially in the islands west of Sumatra - Enggano,
etc. Much of the work of Dutch scholars whereby these languages have
been fitted into the PAN framework is really misdirected.

The languages of Flores, dealt with in the chapter on Austronesian and
Papuan Mixed Languages ((II) 4.5.1.), are a case in point. Vocabulary
borrowing has been heavy, but there is much that is NAN, and much of the
structure is quite foreign to PAN patterns. In the case of Sawu in
particular, the language has been classed by everybody since Kern's work,
as belonging to the Bima-Sumba subgroup, when in point of fact it is no
more Austronesian than English is Romance. There is a whole pre-AN
linguistic world swamped beneath the later AN flood, only parts of which
it may be possible to recover now. The previous pages have shown in a
number of cases that the necessary information on which to base definite
conclusions is just not available, and still needs to be sought. Perhaps
the next stage of research in this part of the now AN territories is the
re-examination of neglected languages.

In their brief treatment of southern Halmahera languages, Adriani and
Kruyt (1911, Vol.III:307f.) are in trouble about a frequent final -o in
Buli, which in this group of languages seem to be a suffix petrified on
a number of words, many of them PAN, e.g. golo *tail* (< ikuɣ); pero *lip*
(< bibiɣ), others NAN, e.g. hnjao *belly*, papleo *tongue*, kakamo *armband*.
In his later grammar Maan (1951) is not really clearer about it; he says
that "probably the o is not to be taken as a 3rd person pronoun but rather
as an article". In point of fact such words seem to carry vestiges of
the Seran noun-ending discussed above, no longer active as such. In
this case, the South Halmahera languages were once part of the pre-AN
Seran-Amboyna field. Like those languages, Buli has two noun classes,
as in Seran: sma:t ni-wil-o *man his-lip*-noun, or, without noun ending,
ai ni tipa *tree its-sprout* - and in true AN one would expect both
*wil(i)ni and *tipa-ni with the suffix -ni < -ña.

The earlier limits of the WPP and the languages embraced in its area,
may not be possible of discovery, but much more could yet be found about
its present content.

Late Note: The picture of the Alor-Timor languages has become more com-
plicated through a reference made in Anceaux (1973) to some earlier work
done by an unnamed Dutch official in 1914, who gave some 300 words in
three dialects of Alor, all different from Alor, and one showing distinct

Austronesian influence, agreeing generally in its form with the Seran
language group discussed by Stresemann (1926), and by a few notes on
Pantar published by Watuseke in 1973. The distribution of this new mat-
erial is roughly as follows: in the source pointed out by Anceaux are
included Alorese which is not Abui, though related to it, "spoken in the
coastal stretch of the Alor district" - and this is the dialect with
considerable Austronesian content in vocabulary though apparently not in
morphology - Kui in the districts of Kui, Mataru and Batu-lolong, and
Kolana, in the districts of Puremam and Kolana. A short list has been
sent recently to Capell by Myron Bromley (who has worked for years among
the Dani of the Baliem Valley, New Guinea) which he received from a
teacher employed by the Indonesian Government but of Abui origin, coming,
however, from Mataru district. His language as a whole is much nearer
Nicolspeyer's Abui than the earlier Kui. All of this indicates both the
needs for and the direction of future work in the Alor area. No attempt
has been made to include these vocabularies in the present work. It does
not seem that they would alter the final picture presented.

Editors' Note 3:

   As has already been pointed out in the Editors' Note to 2.10.1.0.2.,
   W. Stokhof and H. Steinhauer have recently assessed the language
   situation in the Alor-Pantar area (Stokhof 1975) and established
   the existence of twelve Papuan languages there which together con-
   stitute a stock-level family within the sub-phylum-level Timor-Alor-
   Pantar Stock of the Trans-New Guinea Phylum. The present classi-
   fication of the stock is therefore as follows (for the location of
   the stock see Map II in 1.3.4. in this volume):

Timor-Alor-Pantar Stock	175,000?
1) Bunak family-level Isolate (in central Timor)	80,000?
2) Makasai family-level Isolate (in north-eastern Timor)	10,000?
3) Oirata family-level Isolate (on Kisar Island, off the north-eastern point of Timor)	3,000?
4) Fataluku (Dagodá) family-level Isolate (in the extreme north-eastern part of Timor)	5,000?
5) Lovaea family-level Isolate (in north-eastern Timor)	1,000?
?6) Kairui family-level Isolate (in north-eastern Timor, west of Makasai)	1,000?
7) Alor-Pantar Family	75,000?
Lamma (on Pantar)	10,000?
Tewa (on Pantar)	5,000?
Nedebang (on Pantar)	1,000?
Blagar (on Pantar)	11,000?
Kabola (on Alor)	7,000?
Kelon (on Alor)	5,000?
Kafoa (on Alor)	1,000?
Kui (Kiraman) (on Alor)	4,000?
Abui (on Alor)	12,000?
Woisika (on Alor)	8,000?
Kolana (on Alor)	8,000?
Tanglapui (on Alor)	3,000?

Explanatory notes: 1) The figures of speakers of the individual languages of the Alor-Pantar Family and the other figures given are only very approximate and highly tentative estimates.

2) Capell (see 2.10.1.1.1.3. and 2.10.1.1.1.5.) points out the relatively isolated nature of Lovaea within the Timor-Alor languages. However, the available material seems to suggest that its inclusion into the Timor-Alor-Pantar Stock as a family-level isolate may be justified and that this would be preferable to its possible alternative classification as a stock-level (sub-phylum-level) isolate within the Trans-New Guinea Phylum.

BIBLIOGRAPHY

ADRIANI, N. and A.C. KRUYT
    1911   *De Bare'e Sprekende Toradjas*, 3 vols. VKNA 44,45,46.

ANCEAUX, J.C.
    1961   *The Linguistic Situation on the Islands of Yapen, Kurudu,*
            Nau and Misonun, New Guinea. The Hague. Martinus Nijhoff.

    1973   Postscript to F.S. Watuseke, 'Gegevens over de taal van
            Pantar'. *BijdrTLV* 129.345-6.

BERTHE, L.
    1959   'Sur quelques distiques Buna'(Timor Central)'. *BijdrTLV* 115.
            336-71.

    1963   'Morpho-syntaxe du Bunaq (Timor Central)'. *Homme* 3/1.106-16.

    1972   *Bei Gua: Itinéraire des Ancêtres, Mythes des Bunaq du Central*
            Timor, Central National de la Recherche Scientifique. Paris.

CAPELL, A.
    1943   *The Linguistic Position of South-Eastern Papua.* Sydney.
            Australian Medical Publishing Co.

    1944   'Peoples and Languages of Timor'. *Oceania* 14/3.191-218;
            4.311-37; 15/1.19-48.

    1971   'Austronesian Languages of Australian New Guinea'. Sebeok,
            ed. 1971. 240-340.

1972   'Portuguese Timor: Two more non-Austronesian Languages'.
        OLM 15.95-104.

COWAN, H.K.J.
1953   *Voorlopige Resultaten van een ambtelijk Taalonderzoek in
        Nieuw-Guinea. Koninklijk Instituut voor Taal-, Land- en
        Volkenkunde.* The Hague. Martinus Nijhoff.

1957   'A Large Papuan language phylum in West New Guinea'.
        Oceania 28.159-66.

1963   'Le Buna' de Timor, une language 'Ouest-Papoue''. *BijdrTLV*
        119.387-400.

1965   'The Oirata Language'. *Lingua* 14.360-70.

DAHL, O.C.
1954   'Le substrat bantou en malgache'. *NTS* 17.325-62.

DRABBE, P.
1926a   *Spraakkunst der Fordaatsche taal.* VBG 67/1.

1926b   *Spraakkunst der Jamdeensche taal.* VBG 67/2.

1932a   *Woordenboek der Fordaatsche taal.* VBG 71/2.

1932b   *Woordenboek der Jamdeensche taal.* VBG 71/3.

1932c   *Beknopte spraakkunst en korte woordenlijst der Slaroeësche
        taal.* VBG 71/4.

1935   'Aanvulling van de spraakkunst der Jamdeensche taal'. *TBG*
        75.625-33.

DU BOIS, CORA
1944   *The People of Alor.* Minneapolis. New enlarged edition,
        1960.

GRACE, G.W.
1969   'A Proto-Oceanic Finder List'. Revised ed. *Working Papers
        in Linguistics* 1969/2. 39-84. Department of Linguistics,
        University of Hawaii.

GREENBERG, J.H.

1971 'The Indo-Pacific Hypothesis'. Sebeok, ed. 1971. 807-71.

GREENBERG, J.H., ed.

1963 *Universals of Language*. Cambridge, Mass. M.I.T. Press.

HAAKSMA, R.

1933 *Inleiding tot de Studie der vervoegde vormen in de Indonesische talen*. Leiden. Brill.

HUETING, A.

1908 'Iets over de 'Ternataansch-Halmahèrasche' taalgroep'. *BijdrTLV* 60.370-411.

JONKER, J.C.G.

1903 'Iets over de taal van Dao'. *Album Kern*. Leiden. Brill. 85-9.

JOSSELIN DE JONG, J.P.B. de

1937 *Oirata, a Timorese Settlement on Kisar*. VKNA new series 39.

KERN, H.

1892 *Sawuneesche Bijdragen: Grammatische Inleiding*. *BijdrTLV* 5/Vii = Deel 41. Reprinted in *Verspreide Geschriften*, Vol.6. 181-95, but without vocabulary.

LONGACRE, R.

1972 *Hierarchy and Universality of Discussion Constituents in New Guinea Languages*. Washington, D.C. Georgetown University Press. 2 vols.

MAAN, G.

1940 *Boelisch-Nederlandsche Woordenlijst*. *VKI* Deel 74, Derde Stuk. Bandoeng. Nix.

1951 *Proeve van een Bulische Spraakkunst*. *VKI* Deel 10. The Hague. Martinus Nijhoff.

McELHANON, K.A. and C.L. VOORHOEVE

1970 *The Trans-New Guinea Phylum: Explorations in Deep-level Genetic Relationships*. PL, B.16.

NICOLSPEYER, M.M.

1940 *De sociale structuur van een Aloreesche bevolkingsgroep*. Dissertation, University of Leiden. Rijswijk.

RAY, S.H.

1926   *The Melanesian Island Languages.* Cambridge University Press.

RIEDEL, J.G.F.
1886   *De Sluik- en Korsehaarige Rassen tusschen Celebes en Papoea.*
         Den Haag.

SCHUHMACHER, W.W.
1972   *Cybernetic aspects of language.* Leiden. Mouton and Co.

SEBEOK, T.
1971   *Current Trends in Linguistics,* Vol.8: *Linguistics in Oceania.*
         The Hague. Mouton and Co.

STOKHOF, W.A.L.
1975   *Preliminary Notes on the Alor and Pantar Languages* (*East
         Indonesia*). PL, B.43.

STRESEMANN, E.
1918   *Die Paulohi-Sprache. Ein Beitrag zur Kenntnis der
         Amboinischen Sprachengruppe.* The Hague.

1926   *Die Lauterscheinungen in den amboinischen Sprachen.* ZES.
         Beiheft 10.

TAUERN, O.D.
1928-   'Beitrag zur Kenntnis der Sprachen und Dialekte von Seran'.
1931   *Anthropos* 23.1000-20; 24.953-81; 25.567-78; 26.109-39.

UHLENBECK, C.C.
1917   *Het passieve karakter van het verbum transitivum of van het
         verbum actionis in talen van Noord-Amerika. Verslagen en
         Mededeelingen der Koninklijke Akademie van Wetenschappen,
         Afdeeling Letterkunde,* 5e Reeks, Deel II. Amsterdam.

VAN DER VEEN, H.
1915   *De Noord-Halmahera'se Taalgroep tegenover de Austronesischen
         Talen.* Leiden.

VERHEIJEN, J.A.J.
1967   *Kamus Manggarai, I: Manggarai-Indonesia.* The Hague. Martinus
         Nijhoff.

1970   *Kamus Manggarai, II: Indonesia-Manggarai.*   The Hague.
        Martinus Nijhoff.

WATUSEKE, F.S.
   1973   'Gegevens over de taal van Pantar'. *BijdrTLV* 129.345-6.

WIJNGAARDEN, J.K.
   1895   *Sawuneesche Woordenlijst.* Uitgegeven door het Koninklijk
           Instituut voor Taal-, Land- en Volkenkunde van Nederlandsch
           Indië.

WURM, S.A.
   1971a   'The Papuan Linguistic Situation'. Sebeok, ed. 1971. 541-
           657.

   1971b   'Notes on the Linguistic Situation in the Trans-Fly Area'.
           PL, A.28.115-72.