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Author
Foley, William

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Comparative Syntax in Austronesian

By

William Auguste Foley

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DISSERTATION

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Approved:

.....Charles J. Fillmore., Chairman.....
.....Jesse O. Sawyer.....
.....Larry M. Hyman.....

Committee in Charge

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Abbreviations

1	first person	E	Experiencer
2	second person	erg	ergative
3	third person	excl	exclusive
I	Position I	fut	future
Ip	pronominal marker for	G	Goal
	Position I	gen	genitive
II	Position II	IF	Instrument Focus
IIp	pronominal marker for	imperf	imperfective
	Position II	IN	Instrument
A	Actor	incl	inclusive
act	active	IPF	Instrument Pre-focus
AF	Actor Focus	L	Locative
APF	Actor Pre-focus	LF	Locative Focus
art	article	lig	ligature
B	Benefactive	NEG	negative
BF	Benefactive Focus	nom	nominative
CI	clause introducer	noml	nominalization
circ	circumstantial	obj	object
clas	classifier	obj mk	object marker
def	definite	obl	oblique
dl	dual	P	Patient

PAN	Proto-Austronesian	pres	present
part	participle	prog	progressive
pass	passive	S	Source
pc	paucal	sg	singular
PEO	Proto-Eastern Oceanic	stat	stative
perf	perfective	subj	subject
PF	Patient Focus	subj mk	subject marker
pl	plural	subord	subordinator
PO	Proto-Oceanic	T	Time
poss	possessive	TP	Topic
PPF	Patient Pre-focus	TR	transitive
PPN	Proto-Polynesian		

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Chapter I

Introduction

1.0 Basic Goals

In this study we will undertake a comparative study of the syntax of the noun phrase and the clause in the Austronesian languages. Our first goal will be to formulate general principles which account for the varied types of structures we encounter. Because these languages are all genetically related, we will also be able to trace certain historical developments which produced these structures. This will be the second goal of this study.

We will distinguish between universal and language specific features in formulating our general principles. Certain syntactic features which are widespread in the Austronesian family may be candidates for universals, but they may also be simply features of the proto-language which have been preserved in the daughter languages. If, however, a non-random variation is attested across the languages, as with the distribution of the ligatures discussed in Chapter II, then a principle which explains this pattern in a straightforward fashion is a strong candidate

for a language universal. This is the case of the Bonded-
ness Hierarchy of Chapter II, which accounts for the non-
random distribution of the ligature particles in the noun
phrases of many Austronesian languages. Thus, a strong
piece of evidence for a proposed language universal is
that the universal exhibit an independent, but non-random
variation across the languages in question.

When dealing with genetically related languages, the
independence of the variation across languages is crucially
important. This simply means that the variation is not
traceable back to an earlier source from which all the
modern languages derive. If this is possible, we may be
dealing with a family or sub-group specific feature, not a
language universal. If, however, the pattern of variation
can be shown to be innovated independently in at least one
language, but preferably several, then we are dealing with
a possible language universal.

A good indicator of inheritance based variation as
against universal based variation is consistent, but arbi-
trary gaps in the pattern across languages. If the varia-
tion is really based on a universal principle, then any
gaps should also be subject to a statement of universals.
If the gaps do not seem to be subject to such a statement,
then we are likely dealing with a pattern of variation due
to inheritance from a language ancestral to the languages
being investigated. The classes of verbs in Tongan and

Fijian are a good example of an inheritance based variation. Both languages divide their verbs into classes along the lines of action versus process verbs (Chafe 1970). Such a dichotomy is widespread in the languages of the world. However, in both languages there are some verbs, the class membership of which is arbitrary, and these verbs do not follow the semantic criteria for their class. But the arbitrariness of class membership for these verbs is consistent across the two languages; the verbs agree in class in both languages. These arbitrary, but consistent gaps in the pattern indicate that the two systems are related through inheritance and are not independently innovated on the basis of a language universal.

In this study we will be looking at the Austronesian languages primarily for what their comparative syntax can tell us about principles of syntax in general. We will deal with their comparative syntax in two parts: the syntax of the noun phrase and the syntax of the clause. On the basis of the variation of structure in both the noun phrase and the clause, we will advance proposals for a universal theory of both these levels of language.

In Chapter II we will take up the structure of the noun phrase. We will propose a universal theory of noun phrase structure, dividing them into two types: Adjunct + Noun and Noun + Noun. This division will be justified on the basis of numerous differences in syntactic behavior between

the two types. Within each type various principles will be proposed to account for their syntactic properties.

In Chapter III, IV and V, we will undertake a comparative study of the syntax of the clause in the Austronesian languages. In section 3.1, a universal theory of clause structure will be presented. All analysis and discussion in Chapters III, IV and V will be conducted within this theory. Its fundamental principle is the recognition of a dual aspect of clause structure. One aspect of clause structure is comprised of semantic elements, such as the basic case roles of the nouns (Fillmore 1968). The other aspect deals with contextual notions, such as definiteness or anaphoricity. Clause level grammar is seen as consisting primarily as the interplay of these two. This theory was finally arrived at by our attempts to account for the facts of clause level grammar of the Austronesian languages in as straightforward a manner as possible. This theory of clause structure represents the final outcome of that attempt. In Chapters III and IV it will be applied to languages of the Philippine and Oceanic area respectively. In Chapter III an analysis of Tagalog will be presented. We will propose a quite novel way to view the grammar of a Philippine language. In Chapter IV we will set forth an analysis of Fijian within this theory. It is a language of a much different type than Tagalog and exhibits some remarkable properties.

In addition to proposing principles to account for the structures we encounter, we will also propose plausible historical sources for them. In section 2.2, we will propose an historical origin for the ligature phenomenon, the most striking characteristic of the comparative syntax of the noun phrase in the Austronesian languages. In Chapter V we will present a reconstruction for the clause structure of Proto-Austronesian. By quite plausible historical changes, we will then derive the clause structures of the modern Philippine and Oceanic languages.

This is the scope of this study. It is hoped that it will make a contribution not only to the comparative grammar of the Austronesian languages, but also to the ever growing body of language universals.

1.1 The Austronesian Languages

The Austronesian languages are a genetically related group of languages which occupies in territory almost the entire area of the Pacific Ocean. The only exception to this is the large island of New Guinea and a few geographically close smaller islands, on which languages not belonging to the Austronesian family are spoken. There are, however, Austronesian languages spoken in the coastal regions of New Guinea. The Austronesian area also spreads onto the Asian mainland in southeast Asia. Malaya and parts of South Vietnam and Cambodia are occupied by speakers of

Austronesian languages. Finally, Malagasy, spoken on the island of Madagascar off the southeast coast of Africa, is an Austronesian language.

The Austronesian speaking area can be broken into several areas which closely reflect structural isoglosses among the languages of the family. The first such grouping may be called the Northern. This area includes Formosa, the Philippines, northern Borneo and Sulawesi, and Madagascar. These languages are characterized by a unique system of clause level grammar known as the focus system, which will be discussed in detail in Chapter III. These languages are also characterized by complex verbal morphology of the derivational sort and a verb initial word order in the clause.

The next group may be called the Central. This area includes most of the large islands of Indonesia, such as Sumatra, Java, Bali, and most of Borneo and Sulawesi, as well as the languages of the Asian mainland, such as Malay. These languages are characterized by a simpler morphology than those of the Northern group. These languages often have an optional, or in some cases obligatory, word order of SVO. The Northern and Central languages share many features, and the border between the two types is obscure. In northern Borneo there are several languages which represent intermediate stages between the two types (Clayre 1970).

The Eastern grouping covers all the islands of eastern Indonesia to New Guinea. These languages are characterized by little morphology and the use of subject and object concord markers with the verb. The final group is generally referred to as Oceanic.

The Oceanic group basically covers the geographical areas of Micronesia, Melanesia and Polynesia. These languages are quite similar in basic type to those of the Eastern group. They also exhibit little morphology and subject and object concord with the verb.

These groupings are based on geography and overall typology and are certainly not to be construed as linguistic sub-groups within the Austronesian family. As yet, there has been little careful delineation of sub-groups within Austronesian. The only sub-group which can reasonably be said to have been established is the Oceanic. This is, rigorously defined (Grace 1955), those languages east of 140 degrees East, except Chamorro. Oceanic subsumes the languages of Melanesia, Polynesia and Micronesia, except Chamorro and Palauan. Oceanic may be linguistically defined as a sub-group by several innovations from Proto-Austronesian (PAN): PAN *p, *b merged to Proto-Oceanic (PO) *p; all final PAN consonants are lost in PO; PAN *e become PO *o; and, finally, the voice contrast in the prenasalized stops of the bilabial and velar positions was lost (Pawley 1972). These innovations among others define the Oceanic sub-group.

The languages of the Oceanic sub-group are often referred to as Eastern Austronesian, while those of Indonesia, the Philippines, Formosa and the Asian mainland are called Western Austronesian. There is, as yet, no large scale sub-grouping of the Western Austronesian languagea. Dyen's (1965a) lexicostatistical study is only an approximation and certainly does not adequately define linguistic sub-groups. Within Western Austronesian the geographical groupings outlined above will have to do for our purposes. Because the Philippine and Formosan languages represent those Western Austronesian languages most divergent in structure from the Oceanic languages, we have chosen them in our study of clause structure to represent Western Austronesian.

The comparative phonology of the Austronesian languages has proceeded fast apace of their comparative grammar. Dempwolff (1934-8) and later contributions by Dyen have placed comparative Austronesian phonology on a solid footing. Dahl (1951) and Wolff (1974) have done some work in comparative morphology, but this study represents the first undertaking in the comparative syntax of the Austronesian languages. Pawley (1972, 1974) has reconstructed some aspects of Proto-Oceanic grammar, and these will be discussed in the proper place.

1.2 Universal Grammar

Because we are going to advance claims about language universals in this study, a definition of universal grammar is in order. Chomsky (1968:52) states, "the principles of universal grammar provide a highly restrictive schema to which any human language most conform." This represents the orthodox position of transformational grammar on the concept of universal grammar. Language universals are conceived as constraints on the possible form and substance of human languages. Within this view we may profitably distinguish properties which these constraints require for all languages from properties which these constraints exclude from any language. The properties which are required for all languages may be represented as overt properties of the grammars of all languages. Trivial examples are such properties as pronominal systems, question formation, imperatives and deictics. All these are required in the grammar of any language. Furthermore, they may be discovered by the study of any one language. The properties which are excluded from all languages cannot, of course, be represented as overt properties of a grammar of a language. Examples of such properties are Ross (1967) constraints. They represent possibilities which no language utilizes.

There is a large and growing number of proposals for language universals which do not fit into either category. These are constraints which are discoverable only through

the pattern of cross language variation, and, as such,
represent neither overt properties nor excluded properties
of the grammars of all languages. Because these constraints
are discoverable only cross linguistically, they may not be
overtly present in the grammar of any language. This posi-
tion has recently been endorsed by Keenan (1975a). Within
these cross linguistic universals we may distinguish two
types: strict constraints and dependency conditions.

Strict constraints are those language universals which
are operational in constraining the possible form of all
grammars, but are not necessarily present in any of them,
and may only be discoverable through cross-language varia-
tion. Necessary overt properties and excluded properties
of grammars as discussed above may be viewed as sub-cases
of the more general type of strict constraints. Necessary
overt properties and excluded properties are simply cases
of zero variation across language. Perhaps the best publi-
cized of strict constraints established on the basis of
cross-linguistic variation is Keenan and Comrie's (to appear)
Accessibility Hierarchy. In their study they investigated
the cases of nouns which could be relativized across
languages and arrived at the following hierarchy:

<div style="text-align: center">

subject   (1)

direct object

indirect object

object of a preposition

</div>

possessive

comparative

The hierarchy is to be interpreted as: if any category X
can be relativized in language L, then categories above X
on the hierarchy can be relativized. Thus, if a language
allows indirect objects to be relativized, then it will
also allow direct objects and subjects to be relativized.
Note that the hierarchy itself is not an overt or an ex-
cluded property of the grammars of all languages, and the
Accessibility Hierarchy could not be established on the
basis of one language. The bottom point on the hierarchy
at which a given language allows Relativization is a purely
language specific choice. But once this choice is made,
the universal constraints of the Accessibility Hierarchy
dictate which nominal cases will be relativizable. The
cross linguistic variation among languages determines the
shape of the hierarchy, and it, in turn, imposes a constraint
on Relativization in all languages. The Bondedness Hierarchy
to be presented in Chapter II is another example of a varia-
tion based strict constraint.

Dependency conditions are those language universals
which express the fact that one typological feature of a
language is dependent on another. Dependency conditions
are those language universals of the form: if A, then B.
Dependency conditions are only operational in constraining
the forms of the grammars of those languages which have

feature A. Examples of dependency conditions are if a language has ergative case marking, then it will not have SVO word order, or if a language has a dual number, then it has a plural number. Note that the converse of a dependency condition is not necessarily true. If a language does not have SVO word order, then it does not necessarily follow that it will have ergative case marking. If a language has a plural number, it is not necessary for it to have a dual number.

This, then, is the theory of universal grammar which we shall be operating with in this study. Universal grammar is that body of principles which constrain the possible form of human languages in non-trivial ways. They may be overt properties of all grammars or constraints and dependency conditions discoverable only through cross linguistic variation. In all cases they are constraints on the forms that human languages can take.

Because we will be dealing with comparative syntax in this study, most of our universals will be of the variation based sort. A striking case of variation based universals is our theory of the universal grammar of the noun phrase of Chapter II, to which we will now proceed.

Chapter II

The Noun Phrase

2.0 Introduction

One of the striking features of many Austronesian
languages is the use of special particles linking modifiers
to their head nouns in a complex noun phrase. Certain
types of noun phrases consistently use these linkers in
many languages, while other constructions never appear to
employ them. The distribution is not random, but seems
to follow certain universal principles which are the focus
of this chapter. It is necessary to recognize in a theory
of universal grammar two general types of complex noun
phrases: Adjunct + Noun (A + N) and Noun + Noun (N + N).
The basis for the distinction will become apparent below.
These two types are sufficient for the discussion in this
chapter. More types may be necessary in universal grammar,
but are not required for the data discussed here.

2.1.0 Adjunct + Noun and Palaun grammar

An Adjunct may be defined for our purposes as any non-
nominal modifier of a head noun within a noun phrase. In
languages which have the linking particles noted above,
it is the Adjunct + Noun constructions in which their use

is widespread. In fact, on the purely formal distributional facts of presence versus absence of a linking particle, the dichotomy of Adjunct + Noun constructions versus Noun + Noun constructions may be established. This formal definition and the more functional categorical definition advanced above reinforce each other and give added weight to the arguments to be advanced in this chapter.

As mentioned above, in the Adjunct + Noun constructions the use of linking particles is common in many Austronesian languages, especially those of the Philippines. In many of these languages the linking particle or ligature is widely used in verbal complement constructions, but these are not the concern of this chapter. The phonological shapes of these particles often vary from language to language, but their functions are similar. Note these examples in Palauan, in which the ligature is _el_ ('_l_ after vowels or diphthongs):

Article + Noun:

a ?ad   (a) (1)

art man

"a/the man"

a kliokl   (b)

art hole

"a/the hole"

Deictic + Noun:

      tirikey 'l ʔekebil   (a) (2)

       those   lig girl

      "those girls"

      ngikey 'l ʔad   (b)

       that   lig man

      "that man"

Interrogative + Noun:

      taʔa 'l ʔad   (a) (3)

      what lig man

      "what man?"

      tela   'l klebesey   (b)

    how many lig   day

      "how many days?"

Quantifier + Noun:

      a ta 'l klalo   (a) (4)

    art one lig thing

      "a thing"

      betok el ʔad   (b)

    many lig man

      "many men"

      eym el   sils   (c)

    five lig   day

      "five days"

Adjective + Noun:

        a kekerey 'l   ?ad   (a) (5)

        art small   lig man

        "a/the small man"

        a odelekelek el   bil-ek   (b)

        art   black   lig clothes-1 sg poss

        "my black clothes"

Participle + Noun:

        a seluwb   el   ?o?ur   (a) (6)

        art learned   lig arithmetic

        "the arithmetic learned"

        a ?elat   el   ngikel   (b)

        art smoked   lig fish

        "smoked fish"

        a   lelukl   el babier   (c)

        art to be read lig book

        "a/the book to be read"

Relative Clause + Noun:

        a mley ?el?ang el   ?ad   (a) (7)

        art came   today lig man

        "the man who came today"

        a bla   le-bes-kak   el   babier (b)

        art been pass 3 sg-given-1 sg obj lig   book

        "the book given me"

In Palauan adjuncts precede their head noun. All adjuncts but the article require a ligature between them and the head noun of the noun phrase. In complex noun phrases with several adjuncts in addition to the article, several occurrences of the ligature will be required. Thus, (8) below:

> ngikey 'l meowd el mekiys el ?ad
>
> this lig late lig awake lig man (8)
>
> "this man who gets up late"

(8) contains two adjuncts ngikey "this" and meowd el mekiys "late to get up" bound to the head noun ?ad, and which requires the ligature el. As noted above el is also used in verbal complement constructions, and its occurrence in meowd el mekiys is an example of this usage.

2.1.1 The Bondedness Hierarchy

In 2.1.0, we saw how Adjunct + Noun constructions behave in Palauan and investigated the distribution of el, the subordinator in many such constructions. In Palauan, el is used with deictics, interrogatives, quantifiers, adjectives, participles and relative clauses, but not with the article. Many other Austronesian languages have ligatures like el in Palauan, but their distribution is not always parallel to it. If we look at Adjunct + Noun constructions in other languages we find that a hierarchy predicts the distribution of ligatures. This hierarchy is:

```
         ┃ Articles + Noun
         ┃
         ┃ Deictics + Noun
         ┃
         ┃ Interrogatives + Noun
weaker   ┃
         ┃ Quantifiers/Indefinites + Noun
bondedness┃
         ┃ Adjectives + Noun
         ┃
         ┃ Participles + Noun
         ▼
           Relative Clauses + Noun
```
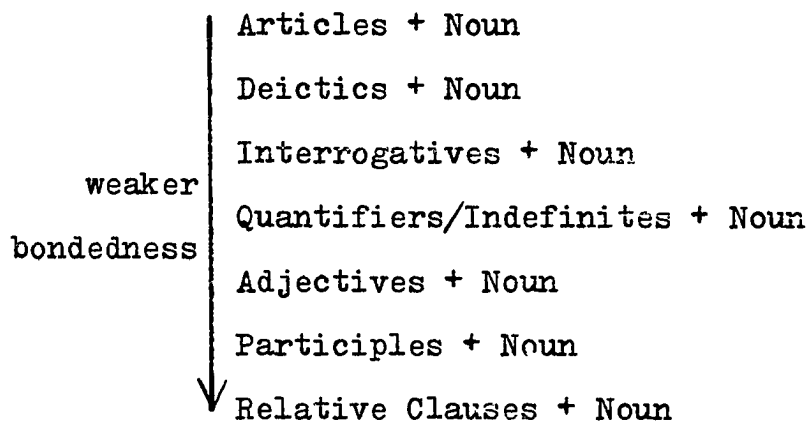
It is not required that every language have each of these as separate grammatical categories, but they will have most of them as semantically differentiable entities. In our data we will be treating the categories separately on the basis of their semantic distinctness. Those formal grammatical categories that a language does have on the hierarchy will be arranged accordingly. Thus, in Toba Batak (Van der Tuuk 1971) adjectives are simply a morphologically marked class of stative verbs. Adjective + Noun constructions are a sub-class of Relative Clause + Noun constructions. The hierarchy represents a potential maximum expansion of possibly distinct Adjunct + Noun constructions, at least as far as the data show.

This hierarchy predicts the distribution of the ligatures in the following ways: whenever a category is full, i.e. all Adjunct + Noun constructions within a single category on the hierarchy require an obligatory ligature, all categories below it also require a ligature. Thus, in Palauan Deictic + Noun constructions such as <u>ngikey 'l ?ad</u>

"this man" require a ligature, and, as we have seen, all
categories below it require a ligature. It is necessary for
a category to be completely full for use of the ligature to
be obligatory in lower categories. If a ligature is op-
tional in a category or obligatory with some adjuncts in
the category but not others, its use in lower categories
may or may not be obligatory. This is primarily because
the boundaries of the categories themselves are not rigid,
and are, in fact, rather vague. The categories more or less
merge into each other. A common type of grammatical change
is for an adjunct morpheme to jump categories, such as the
English definite article _the_ from the Old English demon-
strative system. A similar development is now occurring
in modern Malay/Bahasa Indonesia with _itu_ "that." The cate-
gories may perhaps best be viewed as analogous to states,
the boundaries of which can vary a bit from language to
language. Each category subsumes smaller categories also
arranged hierarchically within that category. One language
may have a borderline construction in one category, while
another language may include it in another. This is
especially true of the quantifier/indefinite category. A
language may choose to use a ligature with certain quanti-
fiers, but not with indefinites, formally treating quanti-
fiers in this regard like adjectives, but indefinites like
interrogatives. Furthermore, quantifiers and some indef-
inites may be part of the Noun + Noun system; this will be

investigated in more depth when the individual languages are taken up.

What should concern us here is the explanation behind this hierarchy; what is the grammatical primitive which determines the arrangement of the hierarchy? We propose that what is involved here is the notion of strength of a syntactic bond. It is claimed that this hierarchy represents universal tendencies in the strength of bonds between adjuncts and their head nouns. The bond between an article and its head noun is much stronger than that between a relative clause and its head noun. Thus, as soon as a category has an overt marker of subordination, all weaker bound categories also require an overt marker. To some extent the strength of the bond varies inversely with the degree of full sentential properties of the subordinated element, such as tense or aspectual inflection of the adjunct. Thus, relative clauses are more weakly bound than participles, which in turn are more weakly bound than adjectives. Participles may be looked upon as specially tightly bound relative clauses. Within this theory we have a partial explanation for the noun phrase Accessibility Hierarchy (Keenan and Comrie to appear). Keenan and Comrie noted that in many Western Austronesian languages, such as Palauan, the head and subject of a relative clause must be coreferential. Relativization is by deletion of the subject of the relative clause. By this deletion these adjunct

structures in these languages are often less sentential
than the corresponding English structure and much more
participial. Palauan phrase (7) (b),

<div style="margin-left: 2em;">

a	bla	le-bes-kak	el	babier	(b) (7)
art	been pass	3 sg-give-1 sg obj	lig	book	

"the book given to me"

</div>

which contains a relative clause adjunct, has two possible
English translations:

<div style="margin-left: 2em;">

the book given to me   (a) (9)

the book which was given to me   (b)

</div>

In English we have a choice of a more or less sentential
adjunct and, consequently, a more or less weakly bound ad-
junct. The adjunct in (9) (b) is obviously more sentential
than that of (9) (a), and is, therefore, more weakly bound.
This is corroborated by the fact that while (10) (a):

<div style="margin-left: 2em;">

the book over there near John which was   (a) (10)
         given to me

</div>

is fine, (10) (b) is ungrammatical:

<div style="margin-left: 2em;">

*the book over there near John given to   (b)
         me

</div>

(10) (b) is precluded because the bond between the head
noun and adjunct in (9) (a) is too strong for the intervening

adjunct <u>over</u> <u>there</u> <u>near</u> <u>John</u>. If the intervening adjunct does occur, a more weakly bound and more sentential structure must be used.

It has also been pointed out (Keenan 1972) that in many subject-object-verb word order languages, the general relative clause formation strategies produce participial or participle-like constructions. Quechua and Turkish are examples of languages of this type. Note the following examples from Turkish (Underhill 1972):

<div style="text-align:center">

mekteb-e   gid-en   oğlan   (11)

school-dative go-part   boy

"the boy who goes to school"

oğlan-ın   git-tiğ-i   mekteb   (12)

boy-gen   go-art-3 sg   school

"the school the boy goes to"

</div>

Note in example (12) that the subject of the adjunct modifier is in an oblique case, the genitive, and the verb has none of the inflection for tense it would have in an independent sentence. The verb is made into a participle with -<u>en</u>, when the subject is what is relativized, and -<u>diğ</u>, when it is not. Turkish, like Palauan, has restricted relative clause formation strategies which seek to bind more tightly the adjunct and its head noun that is the corresponding full English relative clause. Both languages seek to maximize the bondedness strength between adjunct

relative clauses and head noun.

What do these two languages share that they both use such restricted Relativization strategies? The Austronesian languages with the subjects-only Relativization strategy are generally verb initial or were verb initial not long ago in their history, while many languages with participial relative clauses are verb final.

In both these language types the simple sentence would consist of one or a string of adjoining noun phrases either preceded or followed by the main verb. It would appear desirable in such languages to bind adjuncts as strongly as possible to their head nouns so as to indicate as clearly as possible which noun the adjunct is bound to. In verb second languages the verb separates the two major noun phrases of the sentence, and we would expect to find greater freedom in Relativization strategies and at least the option of more weakly bound adjunct constructions. And this is exactly what we find in a verb second language like English or Trukese (Dyen 1965).

Thus, this notion of syntactic bondedness seems to explain not only the hierarchy pointed out above, but also certain restrictions in the Relativization strategies in the world's languages. This hierarchy has been terms by us the Bondedness Hierarchy.

We are now prepared to discuss in depth and by individual language the evidence for the proposed Bondedness

Hierarchy, and its corollary, the hypothesized notion of strength of syntactic bonding. As mentioned above, the distribution of the ligature in the various languages obeys the Hierarchy. The following table illustrates the distribution for each adjunct category type with each major language to be discussed:

Table 1

Distribution of the Ligature in Austronesian Languages

	Tag.	Pal.	Ilo.	T.B.	Tol.	Wol.	Mlg.
Articles	X						
Deictics	X	X					
Interrogatives	X	X	X				
Quantifiers	X	X	X	X			
Adjectives	X	X	X	X	X		
Participles		X					
Relative Clauses	X	X	X	X	X	X	

Abbreviations: Tag. = Tagalog, Pal. = Palauan, Ilo. = Ilokano, T.B. = Toba Batak, Tol. = Tolai, Wol. = Wolio, and Mlg. = Malagasy.

Only Palauan and Wolio have participles as a separate form class; this accounts for the lacunae in the table. We will now go into the facts in each language in depth so as to give support for the claims made above.

2.1.2 Tagalog

Tagalog and other central Philippine languages are the only ones in which the ligature is used with articles. In Tagalog its phonological shape is conditioned: -ng after vowels, the glottal stop and /n/, and -na elsewhere.

Tagalog, like some Philippine languages, does not possess definite or indefinite articles. These languages do, however, have a system of prepositional case marking particles, and these particles have similar distributional features as articles in other languages (the common Topic (TP) marker in Tagalog is cognate to the nominal article in other languages such as Palauan). The position on the Bondedness Hierarchy of these case marking particles in Tagalog is the same as articles.

In the central Philippine languages some of these particles end in a nasal, which I analyze as the ligature, while others of these particles do not. The shapes of these particles in Tagalog, Cebuano (Bunye and Yap 1971) and Bikol (Mintz 1971) are as follows:

	TP common	TP proper	non-TP[1] common	non-TP[1] proper	oblique common	oblique proper	(13)
Tagalog	a-ng	si	na-ng	ni	sa	kay	
Cebuano	a-ng	si	sa	ni	sa	ka-ng	
Bikol	a-n	si	ni-n	ni	sa	ki	

Note that all three languages agree in using the ligature with the common Topic marker, and both Tagalog and Bikol use it with the common non-Topic marker. All three languages also agree in not using the ligature with the proper Topic and non-Topic markers. Only human nouns may be proper. This difference may be ascribed to a greater semantic saliency between a proper noun and its case marker than between a common noun and its case marker, that is, because of the limited and clearly defined membership of the class of proper nouns, the bond between a proper case marker and its nouns is more transparent (and perhaps tighter), and the presence of an overt binding ligature is less likely.

In modern Tagalog the case markers with the ligature never appear without it, so that its use with them appears fossilized. Speakers are not aware of the equivalence between the -ng in ang and the -ng in the ligature -ng ~ na. However, this historical source for the -ng in and is well motivated, especially in view of the fact that the a in ang is cognate with the Palauan article a, as will be argued in section 2.2. Palauan and Tagalog differ in that within the Adjunct + Noun system in Tagalog uses the ligature with a, but Palauan does not. Compare the following Tagalog examples with the Palauan data in (1) (a) and (b):

a-ng   bata   (a) (14)
TP-common-lig child

"the child"

a-ng   bulaklak   (b)

TP-common-lig flower

"the flower"

Tagalog agrees with Palauan in constructions below the articles/case markers in the Bondedness Hierarchy in always employing an overt mark of subordination. Tagalog has no category of participles distinct from relative clauses. Examples of other constructions on the Hierarchy follow:

Deictic + Noun:

kulay   n-iyon   (a) (15)

color   lig-that

"that color"

ito-ng   bata   (b)

this-lig child

"this child"

Interrogative + Noun:

ano-ng   puno   (a) (16)

what-lig tree

"what tree?"

sa   aling   parti   (b)

oblo which-lig party

"to which party?"

Quantifier + Noun:

apat	na	piso		(a) (17)
four	lig	peso		

"four pesos"

marami-ng	bata		(b)
many-lig	child		

"many children"

sila-ng	lahat		(c)
they-lig	all		

"all of them"

Adjective + Noun:

mataba-ng	marunong	tao	(a) (18)
fat-lig	wise-lig	man	

"fat wise man"

mahaba-ng	mesa-ng	mababa	(b)
long-lig	table-lig	low	

"long low table"

In Philippine languages, Relativization follows a Topics-
only strategy. With regard to Relativization, Topics in
Philippine languages behave similarly to subjects in other
Austronesian languages, such as Palauan and Malagasy. See
3.2.1 for a discussion of how the notion of Topic in Philip-
pine languages differs from the concept of subject as
generally defined. For the purpose of this chapter we will

treat the two as identical. Examples of relative clause adjuncts are:

Relative Clause + Noun: (a) (19)

a-ng   babae-ng   nag-babasa   na-ng diyaryo

TP-lig woman-lig AF^2 imperf-read P-lig newspaper

"the woman reading a newspaper"

a-ng   pagkaing   ni-luto   mo (b)

TP-lig food-lig PF^2 perf-cook 2 sg

"the food you cooked"

a-ng aklat na   b-in-ili   na-ng bata (c)

TP-lig book   lig PF^2 perf-buy A-lig child

"the book the child bought"

2.1.3 Ilokano

Ilokano is a Philippine language spoken in coastal northern Luzon and is not closely related to Tagalog (Thomas and Healey 1962). The form of the ligature in Ilokano is a - nga . The conditioning factor for the alteration is not at all clear, but it does seem that nga is associated with words ending or beginning in vowels, especially /a/, while a occurs elsewhere.

Ilokano differs from Tagalog in not using a ligature with articles/case markers and from both Tagalog and Palauan in not using one obligatorily with deictics. The deictic system of Ilokano is more complex than that of

Tagalog and consists of five basic categories. In the singular each category has two forms: a complete and an abbreviated one. Thus, the complete form is _dayta_ _aso_ "that dog," but the incomplete form is _ta_ _aso_. There is no difference in meaning between the two, but the abbreviated forms are generally preferred over the complete in speech. The complete forms may be used as adjectives or pronouns, but the abbreviated forms may only be used as adjectives, that is, they may only be used as adjuncts.

The deictic adjuncts generally precede their heads immediately without any ligature. Sometimes the ligature may be used with them, especially with the complete forms _daytoy_ "this near me," _daydiay_ "that far from both you and me" and _daytay_" that spoken of previously, but in the recent past" (Vanoverbergh 1955). The use of the ligature with these deictics is characteristic of more formal or "elegant" speech. Under no circumstances may an abbreviated form of a deictic ever take a ligature. Also, no ligature is ever used with a complete form if an adjunct lower on the Bondedness Hierarchy, such as an interrogative or adjective, is within the noun phrase (see examples (23) (a) and (b) below). Ilokano examples illustrating constructions with articles and deictics follow:

Article + Noun:

ti   aso   (a) (20)

art-common dog

"the dog"

ti   balay   ni   Antonio   (b)

art-common house art-proper Antonio

"the house of Antonio"

Deictic + Noun: complete forms

daytoy   (a)   balay   (a) (21)

this near me   lig   house

"this house"

dayta   (nga) aso   (b)

this near you lig   dog

"that dog"

abbreviated forms

toy   pusa   (a) (22)

this near me   cat

"this cat"

ta   ina-m   (b)

that near you   mother-2 sg poss

"that mother of yours"

complex phrases

dagitoy   napintas   a   billit   (a) (23)

these near me beautiful lig   bird

"these beautiful birds"

dagidiay   napigsa   a   kabayo   (b)

those yonder strong   lig   horse

"those strong horses"

Note that in (23) (a) and (b) the ligature is used with the adjective adjunct to the head noun, but not with the deictic. This contrasts with the situation in Tagalog and Palauan, in which there would be two occurrences of the ligature in such complex noun phrases. Contrast, for example, sentence (8) above.

With all constructions below deictics on the Bondedness Hierarchy, a ligature is obligatory. Examples of these Adjunct + Noun constructions in Ilokano are (Vanoverbergh 1955):

Interrogative + Noun:

| ania | nga | aso | (a) (24) |
| what | lig | dog | |

"what dog?"

| sadino | a | tanem | (b) |
| in what | lig | grave | |

"in what grave?"

Quantifier + Noun:

| bassit | a | balay | (a) (25) |
| few | lig | house | |

"few houses"

| amin | nga | aso | (b) |
| all | lig | dog | |

"all dogs"

lima   nga   aldaw   (c)

five   lig   day

"five days"

Adjective + Noun:

ti   nalimbag   a   tao   (a) (26)

art   kind   lig man

"the kind man"

ti   malamiis   a   danum   (b)

art   cold   lig   water

"the cold water"

ti   dakkel nga   aso   (c)

art   big   lig   dog

"the big dog"

Like Tagalog, Ilokano also has a very restricted relative clause formation strategy in that only Topics may be relativized upon. It, too, has a large number of focus possibilities for verb inflection (see 3.2.0) so that all noun phrases regardless of basic semantic role may be accessible to Relativization. Examples of Relative Clause + Noun constructions in Ilokano are (Vanoverbergh 1955):

ti   lalaki   a   nang-asawa   (a) (27)

art   man   lig   AF perf-marry

"the man who married"

ti sao a b-in-alikas-ko (b)

art word lig PF perf-pronounce-1 sg

"the word that I pronounced"

ti kuarta nga in-gatang-mo (c)

art money lig IF perf-buy-2 sg

"the money with which you bought"

2.1.4 Toba Batak

Toba is the best described of the quite numerous and diverse dialects of the Batak language, spoken in north Sumatra. The ligature in Toba Batak is na in all environments.

Toba Batak does not use the ligature with articles, deictics or interrogatives in Adjunct + Noun constructions. There is only a definite article in Toba Batak, and it is i. Examples of its use are radja i "the prince" and baoa i "the man." Examples of constructions with deictics or interrogatives follow (Van der Tuuk 1971):

Deictic + Noun:

radja on (a) (28)

prince this

"this prince"

pidong an (b)

bird that

"that bird"

Interrogative + Noun:

　　　dija　　baoa　　　　　　　　　　　　　(a) (29)

　　　which　man

　　　"which man?"

　　　anang　huta　　　　　　　　　　　　　(b)

　　　whose　village

　　　"whose village?"

Complications arise in constructions involving quanti-
fiers of numerals. All numerals and some quantifiers belong
to the Noun + Noun system, mentioned earlier, and discussed
in section 2.3.3. The Toba Batak numerals and those quanti-
fiers which behave like numerals are treated in depth in
section 2.3.3, and arguments are presented there for their
inclusion in the Noun + Noun system. Numerals can be used
as adjuncts and the ligature does occur in such constructions,
as in rijar-hu na onom on reals-my lig six this "these
six reals of mine." But this usage is clearly uncommon and
may be a Malayism in literary Batak. Here we will only
look at those quantifiers which belong to the Adjunct + Noun
system in Batak. There are surprisingly few of such quanti-
fiers. All quantifiers functioning as adjuncts employ the
ligature na. An example of such constructions is (Van der
Tuuk 1971):

Quantifier + Noun:

    huta   na   leban   (30)

    village lig another

    "another village"

Adjectives and relative clauses in Batak also require
the ligature <u>na</u>. Batak parallels the other languages thus
far in that only relativizating subjects are possible with
the basic strategy (Keenan and Comrie to appear). Oblique
cases may be relativized by a different Relativization
strategy which leaves a pronominal copy. This is not allow-
able in the other languages.

Examples of these constructions are:

Adjective + Noun:

    bijang na balga   (a) (31)

     dog   lig big

    "a big dog"

    sijan dalan na   pulik   (b)

    along path lig different

    "along a different path"

    baoa   na   mora   i   (c)

    man   lig   rich the

    "the rich man"

Relative Clause + Noun:

    baoa   na   mang-arang buku   i   (a) (32)

    man   lig act-write   book the

    "the man who wrote the book"

```
dakdanak   na   mang-allang   kue   i        (b)

child   lig   act-eat      cake   the

"the child who are the cake"


kue   na   ni-allang   ni   dakdanak   i   (c)

cake lig   pass-eat   A    child   the

"the cake that was eaten by the child"


boru-boru   na      hu-djalah-i        (d)

woman      lig   pass 1 sg-look for-3 sg

"the woman I looked for"
```

2.1.5 Tolai

Tolai is a Melanesian language spoken in New Britain,
a large island off the northwestern coast of New Guinea.
It is also known as Tuna, Gunatuna or Kuanua. Although it
is an Austronesian language, it is structurally quite
different from the Western Austronesian languages discussed
so far.

A ligature is not used in Tolai with articles, deictics,
interrogatives or quantifiers in the Adjunct + Noun con-
structions. The article in Tolai is a utterance initially
and ra elsewhere. Like the article a in Palauan it serves
simply to mark a noun and does not distinguish definite/
indefinite. Examples illustrating Adjunct + Noun construc-
tions without a ligature follow (Franklin et al. 1974):

Article + Noun:

a   pal   (a) (33)

art house

"a/the house"

i   maige   ra   boroi   (b)

he wants   art pig

"He wants a/the pig."

Deictic + Noun:

nam   ra   buk   (a) (34)

that art   book

"that book"

go   ra   davai   (b)

this art   tree

"this tree"

Interrogative + Noun:

a   mani   aivia   (a) (35)

art money   how much

"how much money?"

a   beo   ava   (b)

art bird   what

"what bird?"

Quantifier + Noun:

tara   bul   (a) (36)

another   child

"another child"

a   ura   beo   (b)

art two   bird

"two birds"

a   peal   boroi   (c)

art many   pig

"many pigs"

There are two classes of adjectives in Tolai. The
first is a very small class which follows the head noun
and takes no ligature. These adjectives are some colors
and words like tabu "sacred" and melem "clever." The
second class, which is the general class of adjectives,
contains all other adjectives including some colors, and
these occur before the head noun and use the ligature na.
Examples of adjectives of Class 1 are (37) (a)-(b), while
(38) (a)-(c) illustrate Class 2 adjectives (Franklin et
al. 1974):

a   pal   tabu   (a) (37)

art house sacred

"a/the sacred house"

a   lama   kulau   (b)

art coconut green

"a/the green coconut"

```
          a     gege   na    davai              (a) (38)
          art crooked lig stick
          "a/the crooked stick"


          a   korong   na    galang              (b)
          art black    lig   rat
          "a/the black rat"


          a   mamat    na    vat                 (c)
          art heavy    lig   stone
          "a/the heavy stone"
```

Adjectives which occur before their heads with the ligature __na__, such as (38) (a)-(c), may also occur post-posed but with a different ligature __i__. In this form these Adjective + Noun constructions are indistinguishable from Relative Clause + Noun constructions, because __i__ serves as the ligature for relative clauses, and they also occur postnominally. An example of such an adjective construction is:

```
          ta    ra    valian  i   mariringien           (39)
          loc   art   beach   lig beautiful
          "along a/the beautiful beach"
```

while an example of a relative clause would be:

```
          ra vavina  i   kakave ra   rat                (40)
          art woman  lig carry art basket
          "a/the woman who carries a/the basket"
```

Whether we choose to regard (41) as an Adjective + Noun construction or as a Relative Clause + Noun construction in no way affects the claims of the Bondedness Hierarchy. i is the ligature of the weakly bound, more sentential constructions, while na is the ligature for more tightly bound, less sentential constructions. i occurs with the always postnominal relative clauses and the postposed adjectives, while na occurs with the prenominal adjectives. Furthermore, most other categories above adjectives on the Bondedness Hierarchy, such as articles, deictics and quantifiers occur prenominally. Interrogatives appear to be exceptional in this regard. Thus, the Bondedness Hierarchy clearly predicts the structure of Tolai noun phrases with two principles: (1) more tightly bound categories occur prenominally, less tightly, postnominally; (2) more tightly bound categories use na if they use any ligature at all, less tightly use i. These two principles overlap in the Adjective + Noun constructions, and it is here that we observe the variation between prenominal adjectives with na and postnominal adjectives with i. This is exactly as would be predicted by the two principles above. Note that a disproof of the claims of the Bondedness Hierarchy would obtain if na was used with prenominal quantifiers, i with prenominal adjectives, na with postnominal adjectives and i with postnominal relative clauses. In this schema the distribution of the ligatures is

discontinuous in the Hierarchy, and the claim behind the Bondedness Hierarchy that there is a direct correlation between the presence of a ligature and the bondedness strength of the construction in which it is used vis-a-vis other adjunct constructions would be falsified. But clearly this situation does not arise in this language, and Tolai is a fine example of the predictive power of the Bondedness Hierarchy.

2.1.6 Wolio

Wolio is a language of southeast Sulawesi and adjacent small islands. The only material for its study is Anceaux (1952). Brief though this is, it provides a lucid exposition of Wolio grammar.

Wolio does not employ a ligature with articles, deictics, interrogatives, quantifiers or adjectives. Cardinal numerals always take a classifier when used as adjuncts to a noun. Examples of these constructions follow (Anceaux 1952):

Article + Noun:

o	kariaa			(a) (41)
art	feast			

"a/the feast"

o	daoa	i	Baubau	(b)
art	market	loc	Baubau	

"a/the market in Baubau"

Deictic + Noun:

        sagala   giu   (a) (44)

all kinds thing

"all kinds of things"

baribari loka   humai   (b)

  all   banana   that

"all those bananas"

      ana-na   lima   mia   (c)

child-3 sg poss five classifier

"his _five_ children"

If the numeral is not emphasized, it and its classifier occur before the head:

      rua   aqu   banua   (d)

two   classifier house

"two houses"

Adjective + Noun:

       o mia mate   (a) (45)

art man dead

"a/the dead man"

      bia   maputi   (b)

cloth   white

"white cloth"

Wolio is one of the few Austronesian languages which, like Palauan, has an adjunct category of participles versus relative clauses. We have seen that in Palauan, Tagalog and Ilokano, all relative clauses are participle-like because only subject or topics in Philippine languages can be relativized and the coreferential embedded subjects or Topics are then deleted, leaving a largely desententialized structure. In Palauan, Participle + Noun constructions differ from Relative Clause + Noun constructions in that participles are morphologically defined parts of speech, and participial constructions represent a far more restricted semantic domain than do relative clauses. Palauan participles are always passive (more exactly, stative) and may only be past or future. Palauan relative clauses, on the other hand, have all the tense, voice and aspect possibilities of any free sentence.

The parameters which differentiate Wolio participles from relative clauses are quite different from those of Palauan and provide important evidence for the Bondedness Hierarchy. In Wolio participles occur in both active and passive forms. The general rule for determining the use of participial adjuncts rather than relative clause co - structions is that active participles are used for rela iv-izing subjects, and passive participles are used for rel-ativizing objects, while relative clauses are used when relativizing oblique cases. Thus, participial construc-

tions are used when relativizing the more accessible posi-
tions on the Accessibility Hierarchy, and relative clauses
are used when relativizing the less accessible positions.
Participles can be distinguished from verbs in relative
clauses in that participles have special participial pre-
fixes which finite verbs do not have, while finite verbs
take prefixes for concord with their subjects and parti-
ciples do not. Furthermoie, constructions with participles
as adjuncts never use a ligature, while those with rela-
tive clauses do.

Examples of constructions with participles and relative
clauses follow (Anceaux 1952):

Participle + Noun:

umane   mo-kawi   (a) (46)

man   act part-marry

"bridegroom"

kambakamba   i-tobe-na   i dala (b)

 flowers   pass part-pick-3 sg L path

"flowers picked along the path"

rampe   i-tau-na   mawa   (c)

flotsam pass part-carry-3 sg flood

"flotsam carried down by the flood"

Relative Clause + Noun:

wakutuu na   a-umba-mo   (a) (47)

    time   lig 3 sg-come-definite

"the time he did come"

heqgane na   be-a-umba-mo   (b)

    time   lig intention-3 sg-come-definite

"the time he will come"

Thus, Wolio provides some very strong evidence for
the Bondedness Hierarchy. When relativizing the univer-
sally most available positions, subject and object, a more
tightly bound participial construction with no ligature
is used. On the other hand, when relativizing less uni-
versally available positions, a less tightly bound, more
sentential finite relative clause with the ligature na is
used. That a language may in fact have such dual strate-
gies follows from the Bondedness Hierarchy. As noted above,
Toba Batak also has two strategies for Relativization, one
for subject and object, and the other for oblique cases.
Relativizing the less transparent positions is probably
cognitively more difficult to process, and consequently,
a more fully sentential adjunct, containing more redundant
information, would be advantageous. More fully sentential
adjuncts are more weakly bound and, consequently, we find
the use of na in Wolio with these constructions.

That relativizing the less acessible positions requires

more redundant information is well supported by the facts
of Fijian. In relativizing subjects or objects, the em-
bedded noun phrase coreferent with the head is simply
deleted, but with other positions on the Accessibility
· Hierarchy, an adverbial marker is left. Thus, compare
(48) (a) and (b) with (49) (a) and (b):

        na gone   e   ā   lako   e   nanoa   (a) (48)
        art child lig past go   T yesterday
        "the child who went yesterday"

        na koro   e ratou ā   rai-ca e nanoa (b)
        art village lig they past see-TS T yesterday
        "the village they saw yesterday"

        na koro   e tiko   kina   ko   Semesa (a)(49)
        art village lig be-at there art-proper Semesa
        "the village Semesa was at"

        na gone   e   ā   lako   kaya ki Suva
        art child lig past go   with it to Suva
                na   tamata   (b)
                art   man
        "the child the man went to Suva with"

In (49) (a) and (b) kina and kaya mark the less accessible
oblique positions that have been relativized.

2.1.7 Malagasy

Malagasy represents the final stage of our discussion
of the various points along the Bondedness Hierarchy that a
language can occupy by the criterion of presence versus
absence of a ligature. Malagasy has no occurrences of a
ligature other than a generally optional invariable rela-
tive clause marker izay. All other Adjunct + Noun con-
structions have no ligature. Examples of these construc-
tions without ligatures are (Malzac 1950):

Article + Noun:

ny   lehilahy   (a) (50)

art   man

"the man"

ny   vy   sy   ny   hazo   (b)

art iron and art wood

"the iron and the wood"

Deictic + Noun:

ity   antsipika   (a) (51)

this   knife

"this knife"

ireo lehilahy ireo   (b)

these   man   these

"these men"

Interrogative + Noun:

satroka   inona   (52)

hat   which of a set

"which hat?"

Quantifier + Noun:

ny mpianatra rehetra   (a) (53)

art   student   all

"all students"

tsy omby firyfiry   (b)

NEG cow   many

"not many cows"

omby roapolo   (c)

cow   twenty

"twenty cows"

Adjective + Noun:

rano madio   (a) (54)

water pure

"pure water"

ny satroka fotsy   (b)

art   hat   white

"the white hat"

With relative clauses an invariable relative marker
izay is often used. However, it may just as often be

omitted (Malzac 1950). Malagasy follows the same relativization strategy as other Western Austronesian languages in that only subjects are accessible to Relativization. It Therefore has a complex system of verbal voices, an active, passive and circumstantial, to allow Relativization to apply to noun phrases of different semantic roles. Examples of Malagasy relative clauses are (Keenan 1972):

ny vehivahy izay ni-vidy ny vary ho an'ny ankizy (a)(55)
art woman lig act-buy art rice for art children
"the woman who bought the rice for the children"

ny vary izay novidin' ny vehivahy ho an'ny ankizy (b)
art rice lig pass-buy art woman for art children
"the rice that was bought by the woman for the children"

ny ankizy izay nividian an'ny vehivahy ny vary (c)
art children lig circ-buy art woman art rice
"the children for whom the woman bought the rice"

As an example of a relative clause adjunct occurring without the _izay_ (Dyen 1971):

Io ny fantsika ha-nanto-nao ny akanjo-nao (56)
this art nail fut circ-hang-2sg art clothes-2 sg
"This is the nail for you to hang your clothes on."

Malagasy, like Tagalog and Ilokano, is a verb initial language, and like them has a very restricted Relativization strategy. As mentioned in 2.1.1, there appears to be

a dependency condition between verb initial or verb final
languages and restricted Relativization strategies so as
to maximize the bonding strength of the embedded relative
clause. All evidence thus far supports this. There does
not, however, seem to be a dependency condition between
these typological characteristics of a language and the
point on the Hierarchy where it will overtly signal adjunct
subordination with a ligature. There is, of course, no a
priori reason to believe that there would be such a correla-
tion, and the strikingly different behavior of Tagalog and
Malagasy in this regard shows such a claim to be false.

2.2 Diachrony

In this section we will outline a probable source for
the development of this curious phenomenon of the ligature
in Austronesian languages. This could be tried in two ways.
The first would be a strictly comparative method. By this
we would simply assemble the data from all the Austronesian
languages exhibiting this phenomenon and attempt to find
features shared by all languages behaving in a similar way
in the Bondedness Hierarchy. Such features might condition
the behavior of the languages in question in the Bondedness
Hierarchy and be the origin of the use of the ligatures.
This, of course, would be an extremely laborious and time
consuming method to follow, and if the extent on the Bonded-
ness Hierarchy to which a language employs ligatures is due

to chance, as is certainly conceivable, then this procedure will obviously result in a no clearer view of the origin of the use of ligatures as before its undertaking.

The other possible method would be to find a language in an inceptive stage of the development of the use of a ligature. Whereas the first method is characterized by its laboriousness and its possibility of producing no dividends, the only requirement for this second method is a little luck and insight. And we are lucky enough to have in Austronesian a transparent case of Inceptive Ligature Development!

The language in question is Fijian, but to understand the Fijian data it is necessary first to look at the sentence structure in the Eastern Oceanic group of Austronesian languages in general and Nguna, a language of the central New Hebrides which is closely related to Fijian (Pawley 1972) in particular. In Proto-Eastern Oceanic the basic structure of a simple sentence was (Pawley 1972):

subject NP - subject marker - verb + (transitive suffix) - object marker - object NP

If there was no subject or object noun phrase, the subject and object markers would stand alone, but they were always present. Nguna clearly preserves this system today (Schütz 1969):

Airplane   e   too   pa-ki   togoa?   (57)

airplane sub mk prog go-to Tongoa

"Does the airplane go to Tongoa regularly?"

Pila-na   e   saru   e   suugoro   (58)

mother-3 sg poss sub mk wash obj mk clothes

"His mother is washing clothes."

E   too   munu-gi   a   (59)

sub mk prog drink-TR obj mk

"He drinks it regularly."

In Nguna, and probably Proto-Eastern Oceanic, the subject and object markers can be most elegantly analyzed as the third person pronouns. These pronouns are bound and there are rules of subject and object concord which account for (57) and (59). This analysis is clearly motivated because the first and second person pronouns occur in the same environments (Schütz 1969):

A   poo   punu-si   a.   (60)

1 sg perf see-TR him

"I've already seen him."

E   poo   punu-si   gita   (61)

3 sg perf see-TR 1 pl incl

"He's already seen us (incl)."

Relative clauses in Nguna are postnominal and there is

no ligature. When relativizing subjects or objects the noun
is deleted, but the pronominal concord particle remains; in
relativizing oblique cases, an adverbial element similar to
those of Fijian (see 2.1.6) marks the deleted noun phrase.
Thus, we have the following examples of relative clause con-
structions in Nguna (Schütz 1969):

E   peani   na-pau-na   e   ma-sai.   (62)
3 sg have art-head-3 sg poss 3 sg stat-break
"It has a broken head."

na-pua waina e   too pae   asa   (63)
art-path that 3 sg prog come from there
"the path from which he is coming"

Fijian has made several important grammatical innova-
tions in the course of its separate development from its
period of unity with Nguna, and these set it off markedly
from the Eastern Oceanic structure of which Nguna is a
typical representative. As outlined above, Nguna and most
other Eastern Oceanic languages have a basic word order of
subject-verb-object. In the course of its development,
Fijian innovated a basic word order of verb-object-subject.
However, while the full subject shifted, the pronominal
concord marker did not, and, in fact, in the innovated
order serves to introduce the sentence. Compare the typical
Fijian sentences below with Nguna sentences (57) - (59)

(CI indicates clause introducer):

E ā   gunu-va na yagona na tūraga   (64)

CI past drink-TR art kava   art chief

"The chief drank the kava."

E dua na   no-na   waqa na tūraga   (65)

CI one art clas-3 sg poss canoe art chief

"The chief has a canoe."

E ratou ā   gunu na tūraga.   (66)

CI 3 pc past drink art chief

"The few chiefs drank."

With first person exclusive and second person dubjects, how-
ever, the Proto-Eastern Oceanic order is retained in Fijian,
there being in these cases no full subject noun phrase to
postpose. Consequently, in these sentences there is no
sentential introducer _e:

Au ā rai-ca iratou na gone.   (67)

1 sg past see-TR 3 pc art child

"I saw the few children."

Ko ā rogo-ca na   no-na   vosa?   (68)

2 sg past hear-TR art clas-3 sg poss speech

"Did you hear his speech?"

Fijian relative clauses are similar to those of Nguna

in that when relativizing subjects or objects the noun phrases
are deleted, while in the less accessible positions an ad-
verbial trace remains. However, while in Nguna the pronom-
inal concord marker remains for the deleted subject, in
Fijian the _e_ serves merely to introduce the embedded sentence.
Thus, we have:

na   koro   e   ā   rai-ca   e   nanoa   (69)

art village CI past see-TR   T   yesterday

"the village he saw yesterday"

na   waqa   e   ā   lako   kina ki Suva   (70)

art canoe CI past   go   in it to Suva

"the canoe he sailed to Suva in"

The word order in the embedded sentence is also verb-object-
subject as in the matrix sentence, and the _e_ sentence marker
remains:

na   koro   e   ā   rai-ca   e   nanoa   ko Rovate (71)

art village CI past see-TR   T   yesterday art Rovate

"the village Rovate saw yesterday"

The facts of Fijian are best explained by claiming that the
shift from subject-subject concord marker-verb-object con-
cord marker-object to subject concord marker-verb-object
concord marker-object-subject in both main and embedded
sentences resulted in stranding the concord marker in left

field and ultimately caused a re-analysis of _e, the third person concord marker and independent third singular pronoun. It was re-analyzed as a particle introducing both main and embedded sentences. The new third singular pronoun was ∅. Thus, in (69), the third singular pronoun ∅ is the subject of the embedded sentence, and _e serves to mark the embedding. Due to its historical origin the _e is not yet used in relative clause constructions with first inclusive and second person subjects in which there may be no particle introducing the clause:

na   tamata   au   na   kau-ta   vua   (72)

art   man   1 sg will take-TR to there

"the man I will take it to"

Sentences like (72) might lead one to question whether the proposal of the re-analysis of _e is correct, in view of the fact that _e and _au occur in exactly the same environments in (65) and (67) and (70) and (72). These observations might lead us to suppose the _e is still a pronominal element. There are, however, five arguments which support the proposal of re-analysis.

The first argument concerns the first person inclusive pronouns and the third non-singular pronouns. When used as the subjects of main sentences or relative clauses they are always preceded by _e:

E   da   na   sega   ni   kune-a   rawa.   (73)

CI 1 pl incl will   NEG   subord find-TR able

"We will not be able to find it."

na   koro   e ratou   ā   rai-ca   (74)

art village CI   3 pc   past see-TR

"the village they few saw"

If _e_ is still to be regarded as a third singular pronoun its usage in (73) and (74) is difficult to explain.

The second argument concerns the particle s̄ā. Like _e_, s̄ā can also be used to introduce main sentences. The meaning of s̄ā is not at all clear, but it appears to involve perfective aspect. While _e_ and s̄ā can both occur in a main sentence, s̄ā can occur alone in the same sentence initial position normally occupied by _e_. If there is no other subject element present, these sentences with s̄ā are construed third singular pronominal subjects. Compare (75) and (76):

S̄ā   ā   gunu.   (75)

perf CI past drink

"He did drink."

E   ā   gunu.   (76)

CI past drink

"He drank."

That both (77) and (78) are construed to involve third singu-

lar pronominal subjects supports the claim that _e is not the marker for third singular subjects, but rather ∅ is. _e and sā are sentential particles, _e being neutral and sā, perfective aspect.

The third argument involves relative clauses. Not only do _e and sā introduce main clauses, but they, along with a third particle ka, may introduce relative clauses. Any one of these may be used to introduce a relative clause, even when a noun phrase for a third singular subject is present:

na   kā   sā caka-va ko Rovate   (77)

art thing CI do-TR   art Rovate

"the thing Rovate did"

na   koro   ni vuli ka tiko kina ko Sēmesa   (78)

art village of study CI stay there art Semesa

"the school Semesa was at"

The parallel behavior of _e, sā and ka in introducing relative clauses strongly supports an analysis which treats these uniformly as relative clause introducers rather than one which treats _e as a third singular pronoun or concord marker for a third singular noun, but sā and ka as clause introducers. The syntactic behavior of all three with relative clauses is parallel and they should all be analyzed similarly. (77) and (78) also argue against any analysis for _e as an obligatory concord marker for third singular subjects. Both

(77) and (78) have relative clauses with third singular sub-
jects, but are introduced by sā and ka respectively.

While I claim the basic form for the third singular pro-
noun is ∅, there is a pronominal form ko koya, which may be
used for the third singular. This pronoun can only be used
for human subjects and is always optional. Whereas all the
other subjective pronouns occur before the verb ko koya
comes at the end of the clause after an object, if present,
in the manner of a full subject noun phrase. Thus:

E vinaka ko   koya.   (79)
CI good   3 sg human
"He/she is good."

Sā gunu-va na yagona ko   koya.   (80)
CI drink-TR art kava   3 sg human
"He/she drank the kava."

Note that in (80) ko koya is present, but the sentence is
introduced by sā. Clearly, an analysis of e as a pronoun is
not motivated here.

The final argument concerns the structure of complement
sentences. Fijian has a number of particles which introduce
complements, the choice of which is determined by the
semantic and pragmatic conditions of the utterance. This
discussion will only concern ni, but it applies as well to
other complementizers. ni is a particle used to introduce

fully sentential complements, as that does in English. It
occurs commonly with verbs such as sega "not" and bera "not
yet." After ni, e may not be used. Thus, we have (81) but
not (82):

Sā bera   ni   lako ko Pita.   (81)
CI not yet subord go   art Peter
"Peter has not yet gone."

*Sā bera ni   e lako ko Pita.   (82)

The reason (82) is ungrammatical is because the particle ni
has certain grammatical and semantic properties incompatible
with e, the neutral sentence marker. Furthermore, excluding
the behavior of sā, only one sentence marker per clause is
allowable in Fijian. The ungrammaticality of (82) is com-
pletely inexplicable with an analysis of e as a third singular
pronoun or concord marker, especially in view of the presence
of the third singular subject phrase ko Pita, which presum-
ably should trigger concord.

These five arguments clearly support the contention
that the use of e in Fijian is as a sentence marker, for
both main and embedded sentences, and not as a pronominal
element. The shift of word order in Fijian from subject-e-
verb-object to e-verb-object-subject resulted in a re-analysis
of the third singular pronominal marker to a sentence marker.
Because the word order shift occurred in both main and sub-

ordinated sentences, _e came to function as simply a sentence marker of both main and embedded clauses.

It is this usage of _e to mark relative clauses, the most weakly bound Adjunct + Noun construction in the Bondedness Hierarchy, that provides the clue for the origin of the ligature phenomenon in Austronesian languages. The use of _e in Fijian relative clauses represents an embryonic ligature phenomenon. The use of the ligature is first innovated in the most weakly bound construction, relative clauses, and then spreads through the Hierarchy into the more tightly bound constructions. This development is triggered by a re-analysis of a pronominal concord marker/third singular pronoun when an innovation of the grammar obscures the conditioning factor for concord by shifting the position of or otherwise altering the noun triggering concord, the subject noun phrase. The shifting of the subject noun phrase creates an opaque environment (to extrapolate the use of a term in Kiparsky 1971) for the pronominal element to be recoverable by concord. This would occur in both main and embedded sentences where the concord marker was found. Opaque environments are well known for causing re-analysis. If the earlier Relativization marker was simply the pronominal marker, as in present-day Nguna, re-analysis will result in its being simply a relative marker with no trace of its earlier pronominal status. At this stage of a simple subordinator with relative clauses, it can then spread through the Hierarchy

and mark the subordination of other Adjunct + Noun construc-
tions.

Strong supporting evidence for this hypothesis would
come from pronominal traces in the ligature systems of the
languages investigated. It is not our purpose here to enter
a long treatise on pronouns in PAN and the daughter languages,
but to make this point, let us first concentrate on Palauan.
There are two sets of subjective pronouns in Palauan, one
for the realis mood and one for the irrealis mood. The
third singular subjective pronoun for the realis mood in
ng-, for the irrealis mood, l-. The form l- looks suspicious-
ly like the Palauan ligature el, and because Palauan /l/
derives from PAN *ñ (Palauan wel "sea turtle" < PAN *peñu),
we can trace them both in earlier forms in *ñ. Thus, we
have Palauan pronominal forms for subject in ng- and *ñ.
Through the diachronic developments in Palauan phonology of
final vowel loss and unstressed vowel reduction, Palauan el
is cognate to the ligature na found in Tagalog, Toba Batak,
Tolai and Wolio. In all these languages, PAN *n and *ñ have
merged to /n/. However, the earlier form of the ligature is
witnessed by Malay nya, which functions both as a third
singular possessive pronoun and as a connective between
clauses. Furthermore, in Toba Batak, Tolai and Wolio the
third singular possessive pronoun is na, homophonous with the
ligature particle. In Palauan the basic form of the third
singular possessive pronoun is stressed -el < PAN *eña. This

is always stressed. The ligature, on the other hand, never takes stress. While the ligature and the third singular possessive pronoun differ in modern Palauan, both descend from PAN *ña. All modern ligatures descended from PAN *ña have pronominal elements.

What about the other variant of the ligature in Tagalog, -ng? There is fossilized evidence in Palauan of an earlier use of a ligature ng. In the diachronic phonology of Palauan, one of the most striking developments is the addition of an initial ng to all words beinning in a vowel in Proto-Austronesian (Foley 1974). Thus, we have Palauan ngak "I" < PAN *aku and Palauan ngaw < PAN *apuy. In view of the highly marked status of the velar nasal in initial position, this development seems peculiar. Of all consonants why add it? Why not glottal stop or /h/ or whatever?. It is difficult to conceive of this development as purely phonological.

However, a development in the history of English provides a clue here. The English words adder and apron derive from earlier forms nadder and napron, in which the initial /n/ is misconstrued and re-analyzed as part of the indefinite article: an adder < a nadder. Compare the Old French source for apron: napperon "napkin."

The addition of initial ng in Palauan arises by a similar development. Only nominals would generally occur vowel initial because verbs are inflected with prefixes. The noun would be preceded by the article. The Palauan article is a.

If there was a form of the ligature ng and its use was spread throughout the Hierarchy to the article, the form of the article in construction would be *ang. Before vowel initial words, the ng could then be re-analyzed as part of the root: *a-ng apuy > *a ngapuy > a ngaw "fire" by regular developments. This could then be phonologized and spread to other vowel initial stems in the language such as pronouns. This allows a natural explanation of a peculiar innovation in Palauan and provides cogent evidence for a productive use of a ligature from -ng at an earlier stage of Palauan. Its productive use was lost, and el < *ña took over ligature functions.

This evidence also provides an explanation for the only seemingly anomolous ligature form, the Ilokano a ~ nga. We have essentially four particles to connect: a, nga, *na and *ng. From all the evidence, it is clear that *a was the form of a nominal article (compare Palauan and Tolai); its ligature use in Ilokano is secondary and will be explained below. In languages with conditioned variants, Tagalog and Ilokano, -ng and nga occur after words ending in vowels or glottals. The similarity between *ña and nga is apparent. It is relevant here that none of the modern languages which have a contrast between /n/ and /ñ/, such as Malay, Javanese or Chamorro, allow /ñ/ to occur in word final position. If the contrast existed in Proto-Austronesian, presumably the same constraint held. Now, *-ng is the ligature word finally and

*ña elsewhere. *ña can be divided into *ñ and *a, the article.
Clearly, the basic proto-form of the ligature is *ñ. *-ng
existed as a conditioned variant precisely because *ñ could
not occur in word final position. When the previous word
ended in a non-glottal consonant the ligature could not be
cliticized, and the article *a became jointed to it to form
the free ligature form *ña. In many languages, such as Toba
Batak, Tolai, Wolio and Palauan, the bound form was lost
(although relics exist in Palauan and other languages), and
the form cognate with *ña became the ligature. The origin
of *ña from the ligature *ñ and the article *a explains why
in most languages with the ligature, such as Palauan, the
article cannot be used after it.

With this exposition of the origins of the ligature the
situation in Ilokano is much clearer. The *ñ form of the
ligature after non-glottal consonants was lost, with the re-
sult that the a took over the ligature function. However,
the clitic *-ng conditioned variant of the ligature after
vowels and glottals remained, but became joined to the a to
produce nga. Thus, the Ilokano ligature nga - a is suc-
cinctly accounted for.

We would now like to make a few remarks on the dissolu-
tion of the ligature system. Whereas new ligatures are
added in the most weakly bound constructions and spread up
through the Hierarchy, ligatures are lost in the reverse
direction, first in the most tightly bound constructions and

then through progressively less tightly bound constructions.
The significance of the subordinating ligature is lost in
the most tightly bound constructions precisely because they
are so tightly bound, and there is, consequently, less need
for an overt mark of subordination. Because of the very
tightness of the bond in constructions at the upper end of
the Hierarchy, the significance of the ligature is washed
out of it. It may get fossilized in certain phonological
environments, as with Palauan vowel initial stems, and
gradually its distribution gets more and more restricted un-
til its productive use is lost. At the higher end of the
Hierarchy it is more likely to become bound phonologically
and lose its independent status as a ligature. Thus, in
Tagalog there is a set of attributive deictics, nito, niyan
and noon, the initial n of which is from na: niyan < na +
iyan. It is only in the deictics that this phonological
bonding of the na occurs. In the lower categories na is
always a separate particle. However, it is clear that the
significance of the n as the ligature is already being lost.
Forms such as na ito, na iyan and na iyon may be used in
the same environments and are preferred by some speakers.
Forms like na ito are always used for contrastive stress.

In this section we have investigated the diachrony of
the ligature phenomenon. We have seen that ligatures arise
from pronominal elements, the significance of which is lost
when the concord rule which determines their use is obscured

by an innovation which affects the position or status of the noun phrase triggering concord. The case we investigated involved a shift in word order from subject-verb-object to verb-object-subject.

2.3.0 The Noun + Noun System

The purpose of this section will be to motivate the distinction in universal grammar claimed above between Adjunct + Noun and Noun + Noun systems and to explore some of the basic properties of Noun + Noun systems in several Austronesian languages. The behavior of constructions in Noun + Noun systems in various languages does not seem to be as subject to an elegant statement of basic principles as does the Adjunct + Noun system (or, at least, these principles are not apparent), so we will attempt here only a summary sketch of basic Noun + Noun constructions in a few languages. It should be pointed out that our definition of Noun + Noun constructions excludes Noun + Noun compounds, the behavior of which is idiosyncratic. Two features which distinguish compounds from Noun + Noun phrases are their peculiar phonological properties and semantic opacity. In many languages, such as English and Palauan, compounds have stress patterns unique to themselves. Furthermore, compounds differ from Noun + Noun phrases in that their meaning often is a metaphorical extension of the sum of the meanings of their constituent elements. Thus, the meaning of Palauan <u>bungangaw</u>

"red" is a metaphorical extension of the meanings of _bung_
"flower" and _ngaw_ "fire." Such extensions are not charac-
teristic of true Noun + Noun phrases.

2.3.1 Palauan

Noun + Noun constructions are generally those involving
nominalizations, gerunds and possessive phrases. In many
languages these are referred to as genitive constructions.
In this section we will show what the properties of these
constructions are in Palauan and how they form a natural
class as opposed to Adjunct + Noun constructions.

In Palauan possessives are marked by a series of suffixes
to the possessed noun. The syllables containing these
suffixes always take stress. Thus, we have a _beding-ék_
art body-1 sg poss "my body" and _o?í-l_ foot-3 sg poss "his
foot." There is a class of mostly borrowed words which can-
not take a suffix, but rather are followed by the objective
oblique case marker _er_ and the free form of the cardinal
pronouns: _a bilis er ngak_ art dog obj/obl I "my dog" and
a babier er ngiy art book obj/obl he "his book."

When the full nominal possessor is expressed, it is
preceded by the article and occurs immediately after the
possessed noun with its suffix. Thus:

<div align="center">

a   o?í-l   a babi   (a) (83)

art foot-3 sg poss art pig

"the pig's foot"

</div>

a   bilí-l   a se?al   (b)

art clothes-3 sg poss art man

"the man's clothes"

With the unsuffixable nouns the possessor simply occurs
after er: a bilis er a Juan art dog obj/obl art John
"John's dog."

The construction involved here is clearly different
from the Palauan Adjunct + Noun system. The modifier, the
possessor, occurs after the head noun rather than before as
do the adjuncts in Palauan. Both forms involved in posses-
sive constructions have the article a, whereas the head noun
may never take the article which precedes the entire Adjunct
+ Noun phrase. Finally, the possessive constructions have
no ligature. The -l suffix containing it always takes stress.
The ligature never takes stress.

Nominalizations also follow the same system in Palauan.
Deverbal nominals are inherently passive in Palauan. De-
verbal nominals are marked with the suffix -el "future" or
the infix -l- "past" or both in a few unpredictable cases.
The nominal form also has a possessive suffix. The object
of the nominalization occurs following the nominal, and then
comes the Actor, marked with the oblique preposition er.
Thus, we have the examples:

a   ?e-l-ede?ede?á-l   a   meduw (a)(84)

art past noml-talk: <u>?ede?a</u>-3 sg poss art breadfruit

"the tale of the breadfruit"

a   u-l-tut-el-él   a   tekoy   (b)

art past noml-aim: <u>tawt</u>-fut nom-3 sg poss art word

"the meaning of the word"

As with some possessives, <u>er</u> may be used instead of the
suffix -<u>l</u>:

a   t-el-mall   er   a   ?orior er

art past noml-destroy: temall obj art Koror obl

    a   Merikal   (85)

    art America

"the destruction cf Koror by the Americans"

Thus, the features which distinguish possessive construc-
tions, such as the possessive suffixes, the preposition <u>er</u>
and the absence of the ligature, are also diagnostic of nom-
inalization constructions. Clearly, these constitute a
system in themselves in Palauan grammar, separate from the
Adjunct + Noun constructions. Possessives and nominali-
zations make up the Noun + Noun system in Palauan grammar.

2.3.2 Tagalog

    In Tagalog full possessor noun phrases and agents and
objects in gerund and nominalization constructions are

marked by the non-Topic Actor and Patient case marker ng (pronounced /naŋ/ and not to be confused with the clitic ligature from -ng pronounced /ŋ/) for common nouns and ni for proper nouns. These particles have the same uses when marking noun phrases functioning as arguments to a verb in a main or embedded clause. The surface syntactic features of possessives and nominalizations distinguish them from all constructions of the Adjunct + Noun system, in which the ligature -ng ~ na is obligatory in Tagalog. Examples of Noun + Noun constructions in Tagalog are:

libro	ng	bata		(a)	(86)
book	A/P	child			
"the child's book"					

bahay	na	puti	ni	Juan	(b)
house	lig	white	A/P	John	
"John's white house"					

pag-sigaw		ni	Ben	sa	inay	(c)
gerund-scream		A/P	Ben	L	mother	
"Ben's screaming at his mother"					

(86) (b) is an example of a combination Adjunct + Noun and Noun + Noun construction. Note the presence of both the ligature na and the proper non-Topic Actor/Patient case marker ni. The evidence clearly supports the proposal of separate Adjunct + Noun and Noun + Noun systems in Tagalog.

2.3.3 Quantifiers in Toba Batak

In 1.4 we discussed quantifier and numeral constructions in Toba Batak. It was proposed that the vast majority of Quantifier + Noun constructions did not belong to the Adjunct + Noun system, as they did in the other languages investigated, but rather to the Noun + Noun system. It will be the purpose of this section to justify this claim.

In Toba Batak numerals and many other quantifiers occur immediately after the head noun. As examples of Batak numeral constructions, we have manuk duwa fowl two "two fowls" and horbo duwa buffalo two "two buffalos."

The use of numerals with nouns exactly parallels the appositional construction of two nouns: oppu doli grandparent male "grandfather," manuk sabungan fowl male "cock" and gadja tunggal elephant male "bull elephant." Note that there is no ligature in these constructions; however, if the elements such as doli or tunggal were functioning as adjuncts, the ligature na would be obligatory. Numeral + Noun constructions and appositional Noun + Noun constructions are parallel in that no ligature is used and constitute a subset of the Noun + Noun system in Batak.

The possessive and nominalization constructions of the Noun + Noun system in Batak are distinguished from the numerals and appositions by their use of the particle ni. ni marks the possessor and the Actor or Patient in nominalizations. It also marks the Actor in sentences with a certain

type of passive. Thus, like Tagalog ng, it is clearly a case
marker. Thus:

sumangot ni	d-amang		(a) (87)

spirit A/P 1 sg poss-father

"spirit of my father"

ogung ni da-oppung (b)

gong A/P 1 sg poss-grandparent

"my grandfather's gong"

tuhor ni sira on (c)

buying A/P salt this

"the buying of this salt"

ni-uwak ni goppul (d)

pass-steal A/P bear

"things stolen by the bear"

The implications of this bifurcation of the Noun + Noun
system in Batak into numerals and appositions versus pos-
sessives and nominalizations will be explored in 2.3.5.

2.3.4 Tongan

In the languages investigated in this section so far,
Palauan, Tagalog and Toba Batak, there was no syntactic
distinction between the various semantic relations the
nominal elements in Noun + Noun constructions could bear
to each other. Tongan, like other Oceanic languages,

syntactically distinguishes different semantic relations
that obtain between these nominal elements.

Two types of possession are recognized in Tongan:
agentive and objective. The agentive possession relation
is marked by 'a ~ 'e, while the objective possession rela-
tion is marked by 'o ~ ho. To appreciate the difference
involved compare the following contrastive phrases (Church-
ward 1953):

```
ko    e    taki      'a    e    tu'i          (a) (88)
topic def guidance agt poss def king
"the guidance of (given by) the king"


ko    e    taki      'o    e    fonua         (b)
topic def guidance obj poss def country
"the guidance of (given to) the country"


ko    e    pa'anga    'a    Sione            (a) (89)
topic def  money   agt poss John
"John's money"


k o   e    fale     'o    Sione             (b)
topic def house obj poss  John
"John's house"
```

Churchward (1953) summarizes the distinction in usage be-
tween agentive ('a) and objective possession ('o) by stating
that 'a implies that the possessor is active, influential,

or formative toward the thing possessed, whereas 'o implies
that the thing possessed is active, influential, or forma-
tive toward the possessor. Other writers have termed 'a
"dominant" possession and 'o "subordinate" possession. We
term 'a agentive po... ssion because the possessor is effi-
cacious toward the possessed, while 'o is objective posses-
sion because either the possessor is subject to the possessed
object or neutral toward it. The former is associated with
the semantic role of Actor and the latter with Patient, Goal,
Locative etc. (see 3.1). While all these may be distinguished
semantically, the syntactic opposition in Tongan is that of
agentive versus objective. The various semantic distinc-
tions possible are collapsed into this binary syntactic
distinction in Tongan. Thus, in (88) (a), the king is the
agent providing the guidance, and 'a is used, while in (88)
(b) the country is the recipient of the guidance, and 'o
is used. In (89) (a) money is viewed as what is earned and
used by John, and 'a is used, while in (89) (b) the house
is simply John's place of dwelling, and 'o is used.

Due to their individual semantic content most nouns
in Tongan take either 'a or 'o, but there are some which
allow both with a clear and enlightening difference in
meaning. Thus, we have 'e-ne lao agent poss-3 sg law "the
law he sets down" versus ho-no lao object poss-3 sg law
"the law by which he is governed," 'e-ku pale agent poss-
1 sg prize "the prize awarded by me" versus ho-ku pale

object poss-1 sg prize "the prize awarded to me" and 'e-ku
sote agent poss-1 sg shirt "the shirt which I made" versus
ho-ku sote object poss-1 sg shirt "the shirt which I wore"
(Churchward 1953). These examples all show the clear
semantic contrast in possessive constructions with agentive
relations between the nouns and those with objective rela-
tions.

As we might expect from the survey of Noun + Noun con-
structions in other languages, deverbal nominalizations in
Tongan behave in a similar way. Agents are marked by 'a
and related particles and objects by 'o and related part-
icles. Thus, the nominalization of

                na'a   ku   ui   kinautolu.   (a) (90)
                past 1 sg call   3 pl
                "I called them."

is

                'e-ku   ui   kinautolu   (b)
                agent-1 sg poss call   3 pl
                "my calling them".

and a nominalization of

                'oku   ou   taki   ia.   (a) (91)
                pres 1 sg guide 3 sg
                "I guide him."

is

<div style="text-align:center">

'e-ku   taki   ia   (b)

agent-1 sg poss guidance 3 sg

"my guidance of him"

</div>

An example of an objective nominalization related to (91) (a) is (91) (c):

<div style="text-align:center">

ho-no   taki   (c)

object-3 sg poss guide

"his being guided"

</div>

The nominalization of (92) (a)

<div style="text-align:center">

Na'e hua-'i 'a e wai   (a) (92)

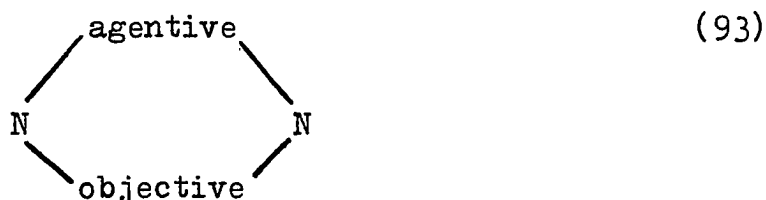past pour-perf obj def water

"Somebody poured out the water."

</div>

is

<div style="text-align:center">

ho-no   hua-'i   (b)

object-3 sg poss pour-perf

"its being poured out"

</div>

The Tongan possessives and nominalizations behave alike syntactically in distinguishing agents and objects. A system like this is common to all Polynesian languages.

2.3.5 The Noun + Noun System in Universal Grammar

It is Tongan and Toba Batak which provide the requisite evidence to propose a universal theory of Noun + Noun constructions. Noun + Noun constructions are an overt property of all grammars. The nominal elements in such constructions are directly bound to one another, and this bonding consists of various possible semantic relations. From the Tongan evidence it would appear that the minimum number of syntactic distinctions which must be recognized from among the possible semantic relations is two: agentive versus objective. However, as Fillmore (1968) has demonstrated, the various semantic roles that a noun can assume in a clause are considerably greater in number than this. The roles of nouns in a clause are discussed in 3.1. Whether more need to be distinguished as possible relational primitives in a universal typology of Noun + Noun constructions would depend on finding a language which would distinguish them syntactically in possessive constructions. Such a language has not yet appeared, but if it did we would simply revise our typology. There are obvious semantic differences between different possessive constructions. The classic example of <u>Myron's statue</u> exhibits this: the statue made by Myron, the statue of Myron, and the statue owned by Myron. Even more semantic differences in possessive constructions may be recognized. Note, for example, the ablative meaning in <u>John's present</u>: the present from John,

but these may only be recognized as possibilities in the representation of Noun + Noun constructions in universal grammar if any language syntactically distinguishes them. Tongan certainly has these various semantic possibilities too, but the syntactic system of Noun + Noun constructions is binary. Its system may be schematized as:

$$\begin{array}{ccc} & \text{agentive} & \\ \nearrow & & \searrow \\ N & & N \\ \searrow & & \nearrow \\ & \text{objective} & \end{array} \qquad (93)$$

Tagalog and Palauan do not distinguish the different semantic relations within the Noun + Noun system, but do distinguish the system as a whole from the Adjunct + Noun system. The crucial difference between the two systems is that within the Adjunct + Noun system, the grammatical category of the adjunct itself defines the relations between the elements of the noun phrase. And it is, of course, this relation defined by the adjunct that underlies the Bonded- ness Hierarchy. However, in the Noun + Noun system the relations between the elements in the phrase is itself a given primitive and is not always determinable from the elements themselves. The Tongan minimal pairs in 2.3.4 bear ample witness to this. The semantic relations between the Noun + Noun construction are a constraint on the representa- tion of these constructions in the grammars of all languages

and provide a universal definition for them as separate from Adjunct + Noun constructions.

This notion is of fundamental importance in understanding apparent exceptional languages with regard to the dichotomy of the Adjunct + Noun and Noun + Noun systems claimed above and also the seemingly strange case of Toba Batak. In languages like Chinese and Trukese (Dyen 1965b), there is evidence of a relation between relative clauses and possessive constructions. In Trukese the construct suffix -n is used in constructions of the Noun + Noun system and may be used with relative clauses. This would appear to contradict the claims of a separate Adjunct + Noun system, containing relative clauses, and Noun + Noun system. However, looking at these languages more closely, we discover that both languages have classifier systems in adjunct constructions. This is the conditioning factor. Classifiers when used with adjuncts define additional semantic relations to the head (at the minimum, membership in a class) other than the purely grammatical relation of the adjunct. These semantic relations are of a somewhat different type than the case roles in possessive constructions, but multiple possibilities apply to classifiers with adjuncts as well as to nouns in Noun + Noun constructions. The fact that the head noun does not necessarily determine any one classifier has been convincingly demonstrated for Burmese by A. L. Becker (personal communication). Classi-

fiers therefore allow multiple semantic relations to be possible in at least some categories in the Adjunct + Noun system, most commonly numerals, but in Chinese deictics and interrogatives as well. It is this multiplicity of possible relations which are diagnostic of the Noun + Noun system. This use of classifiers then may trigger a collapsing of the two systems, the extent of which may vary from language to language. In Chinese and Trukese it is only the most weakly bound adjuncts, relative clauses, which merge with the Noun + Noun system.

In Toba Batak we have seen that numerals, appositions, possessives and nominalizations all belong to the Noun + Noun system, but that they constitute two sub-systems. Possessives and nominalizations are marked with the case marking particle ni, but numerals and appositions are not. The use of ni in possessive and nominalization constructions in Batak is no accident. While Batak does not distinguish multiple semantic relations in Noun + Noun constructions, the use of ni is to mark that they exist, but are neutralized. Batak is exactly like Palauan and Tagalog in this regard. In Batak the universal schema Noun + relations + Noun is realized as Noun + ni + Noun.

As for the other sub-system, it is important to note that Batak does not possess a system of numeral classification, and, consequently, the potential for indicating multiple semantic relations with numerals is not realized.

However, it is a fact that classifiers are more commonly used with numerals than any other part of speech. If classifiers are used with only one adjunct category in the Adjunct + Noun system, it is with numerals. Malay and Wolio testify to this fact. There appears to be a strong potential for numerals and other quantifiers to bear multiple semantic relations to their head nouns which often finds its realization in a classifier system. Even if the potential is not realized grammatically, this places the category of numerals (and by generalization some other quantifiers) in the Adjunct + Noun system in a tenuous position. If more tightly bound categories are marked as adjuncts by a ligature, they will follow suit. But to begin the surface marking of adjunct subordination with a ligature at the level of numerals may be disfavored in large part by their special status. This is the situation that would have occurred in Toba Batak, and it avoids this by shifting Numeral + Noun constructions into the Noun + Noun system. The Noun + Noun system is simply expanded to include numerals, which have the potential for bearing multiple relations.

Palauan, on the other hand, takes a different route. It puts appositional constructions into the Adjunct + Noun system. It may seem contradictory to have constructions with two nouns in apposition in the Adjunct + Noun system rather than the Noun + Noun system, but it is necessary to remember the basic parameters which define the two systems. The basic defining characteristic of the Noun + Noun system

is the array of possible relations that may hold between the constituent elements and are not determinable from them, whereas the constituent elements themselves define the relation in the Adjunct + Noun system. There are no complication to this rule in Palauan. Numerals and other quantifiers are clearly adjuncts (see 2.1.0) and there is really no numeral classifying system in Palauan of any extent. There is no choice of possible relations between two nouns in apposition. Rather the construction itself defines the relation. In Palauan this is sufficient for them to be in the Adjunct + Noun system. In other languages the obvious nominal character of the elements involved is responsible for the presence of apposition constructions in the Noun + Noun system, but not in Palauan. The language appears to regard the defining parameters as overriding this superficial fact. Examples of appositional constructions in Palauan are:

kemiw   'l ?ad   (a) (94)
you (pl) lig man
"you people"

a   ?erm-ék   el babi   (b)
art animal-l sg poss lig pig
"my animal, the pig"

The presence of the ligature el in (98) (a) and (b) points them out as being Adjunct + Noun constructions.

2.4 Summary

In this chapter we have investigated the internal structure of noun phrases in several Austronesian languages. On the basis of these data we have made several claims about the structure of noun phrases in universal grammar. We have divided noun phrases in universal grammar into two types, Adjunct + Noun constructions and Noun + Noun constructions, on the basis of syntactic behavior. Adjunct + Noun constructions are distinguished by the ligature phenomenon, the behavior of which is determined by the Bondedness Hierarchy. The arrangement of the Bondedness Hierarchy is in turn determined by the various adjuncts entering into Adjunct + Noun constructions. The Noun + Noun system is primarily set off by the wide range of semantic relations the elements within a Noun + Noun construction can bear. The extent and manner to which these relations between the nominal elements in a Noun + Noun system are syntactically realized varies from language.

Notes to Chapter II

[1]Non-Topic in this context refers only to Actors (A) or Patients (P) which are not Topics. For definitions of these concepts in Philippine languages, see Chapter III. All other non-Topic noun phrases are subsumed under oblique.

[2]AF and PF are abbreviations for Actor Focus and Patient Focus respectively. Actor Focus refers to the inflection of a verb in a clause in which the semantic role of Actor is the Topic, while Patient Focus refers to the inflection of a verb in a clause in which the role of Patient is Topic. Locative Focus (LF) indicates the roles of Goal, Source or Locative as Topic. Similarly, BF and IF are abbreviations for Benefactive Focus and Instrument Focus. For definitions of these semantic roles, see section 3.1. The notion of focus is discussed in detail in 3.2.0.

Chapter III

Clause Structure: the Philippine Type

3.0   Introduction

In this chapter and the next we will undertake a comparative study of the clause level grammar in Austronesian languages. As with our study of noun phrase grammar in Chapter II, this pursuit will have a dual goal: to systematize the grammatical patterns that the comparative data reveal and to formulate principles which account for them. Among these principles it is especially important to sort out those which are candidates for language universals from those which are language specific. We will be generally interested in these chapters in the evidence that the comparative data provide for certain universals of clause structure. It will be shown that any adequate theory of clause structure must recognize two basic aspects. One aspect of clause structure is comprised of semantic elements, such as the basic case roles of the nouns (Fillmore 1968). The other aspect of clause structure deals with contextual notions, such as definiteness or anaphoricity. The basis for this distinction will become apparent in the discussion in this and the following chapters.

In this chapter we will take up the comparative study of clause level grammar in selected Philippine languages. Philippine type languages are found not only in the Philippines, but also in Formosa and northern Borneo and Sulawesi. Whether they constitute a linguistic sub-group within Austronesian is not known. In this chapter we will attempt to arrive at a typology of the clause structure of the Philippine type languages. These languages are characterized by a unique system of clause level grammar, known as the focus system, unattested elsewhere in the world. It will be the main thrust of this chapter to investigate in depth the workings of this sytem in order to arrive at a proper formulation of what in fact it entails. But before plunging into this problem, it is necessary to provide a capsule summary of the theory of clause level grammar which will be used in these chapters.

3.1 Toward a Theory of Clause Level Grammar

Following the tagmemic theory (Longacre 1968), it is assumed that language can be analyzed in terms of a series of separate hierarchical levels: discourse, paragraph, sentence, clause, phrase, word, morpheme, phoneme, and phone. The grammar of each level can refer back to features of higher levels.

At the level of clausal grammar the clause can be divided into two aspects: the modality aspect and the propo-

sitional aspect (Fillmore 1968). The modality aspect consists of tense and aspect notions as well as some adverbials such as _certainly_, _possibly_, etc. The propositional aspect consists of the meaning of the predicate and its noun phrase arguments. It corresponds to what Langacker (1975) refers to as "the objective content" of the clause. The clause can be defined for English as that linguistic unit which contains minimally a predicate and its noun phrase subject.

But there is far more structure to the clause than just this simple dichotomy. It is assumed throughout this study that the basic purpose for speaking is communication and that when we utter a clause, we choose to code linguistically an event or state so that our hearer may also become cognizant of the event or state. This link to the real world of events and states and their participants must be accounted for in any adequate theory of clause level grammar. Furthermore, certain features of clause level grammar are a direct function of the fact that we speak in temporal sequence, and for purposes of discourse cohesion, certain strategies often affecting word order, that is the temporal sequencing, are employed within the clause. Both these aspects of clause level grammar must be accounted for in any adequate theory.

The most thorough attempt to account for the former

aspect of clause structure published to date is Fillmore's
(1968) case grammar. The theory we will outline here is
to a great extent a development of inspirations from Fill-
more's work. Within recent months greater attention has
been paid to the functional aspects of grammar (Lakoff and
Thompson 1975, Givón 1975, Chafe 1972, 1974). Fillmore
too has recently come to deal with the dual aspect of clause
level grammar (Fillmore 1975). Outside the transformational
paradigm, the tagmemicists have for almost a decade been
investigating the dual aspect of grammar (Pike 1967, Becker
1967, Longacre 1968, Platt 1971). The theory we will now
propose derives from the work of all these people, but it
is hoped that it is an original synthesis.

The _sine_ _qua_ _non_ for the utterance of a clause is, of
course, something to linguistically encode, whether real
or imagined. Therefore we start with the event or state
and its real world participants. The speaker perceives
this event or state either in the mind or with the five
senses. Let us for the purposes of exposition assume that
the speaker has an event he wishes to encode. The first
step in the process of encoding is the choice of the modal-
ity and propositional aspects of the _action_ of the event.
The speaker chooses from his lexicon the verb root which he
most closely identifies with the real world action he wishes
to encode. This constitutes the propositional aspect of
the predicate. Simultaneously the temporal, aspectual and

modal aspects of the predicate are selected. This constitutes the modality aspect of the predicate.

The semantics of the predicate is then responsible for setting up the <u>clause</u> <u>frame</u>. The clause frame consists of the semantic roles that the noun phrase arguments in the clause bear in relation to the predicate. These semantic roles are essentially the cases set out in Fillmore (1968) and Platt (1971). In universal definition they are:

Actor (A): the typically animate entity to whom the action is attributed

Experiencer (E): the typically animate experiencer of a mental state of psychological event

Instrument (IN): the inanimate force or object accessory involved in performing the action of the verb

Patient (P): the entity affected by the action or state identified by the verb

Goal (G): the entity toward which the action is directed

Source (S): the point of origin or non-Actor cause of the action or state

Locative (L): the entity which identifies the location of the state or action identified by the verb

Benefactive (B): the typically animate benefactor of the action or state identified by the verb

Whether more roles are needed is still an open question

(Fillmore 1975), but these are what are necessary for the discussion here. These eight represent the semantic roles associated with the propositional aspect of the clause. A ninth, Time (T), the temporal orientation of the state or action identified by the verb, belongs to the modality aspect of the clause. Within the propositional aspect the semantics of the verb sets up the clause frame which consists of the basic roles associated with that verb. The verb __beat__ has three basic roles: an Actor, the person doing the beating; a Patient, the person or thing being beaten; and an Instrument, the implement used to beat with. These three may be referred to as the __nuclear roles__ of __beat__. The action of beating cannot be conceived without all three being involved. Of course, other roles are conceivable in the clause expansion, such as a Benefactive and a Locative, as in (3):

John beat Bill on the street for me with a stick.   (3)

where __on the street__ is a Locative noun phrase and __for me__, a Benefactive noun phrase. But neither of these roles is necessary in the conception of the act of beating, whereas an Actor, Patient and Instrument are. We will refer to roles such as Benefactive and Locative with respect to __beat__ as __peripheral roles__ of the verb in question. Benefactive and Locative are not always peripheral roles. The verb __buy__ has five nuclear roles: Actor, Patient, Benefactive, Source,

and Instrument, all of which are inseparable from the conception of buying; while the verb <u>walk</u> has three nuclear roles: Actor, Goal, and Locative.

The next step in the production of a clause is to match up the semantic roles of the verb's clause frame with the participant roles of the event as perceived by the speaker, which are the roles of the nouns in the clause independent of any language specific constraints. Many language specific features influence this match up. In some languages durative intransitive action verbs may be viewed as states, and the Actors associated with them, universally speaking, will be coded as Patients, that is, entities affected by the state identified by the verb. This is a possible explanation of the structure of some ergative languages. Furthermore, features of the modality system, such as possibility or unintentionality, may condition the match up of participant roles to clause frame roles. In Tagalog, Actors are defined as being necessarily efficacious and deliberate in the action. If in the modality system a feature of accidental action is present, the structure of the Tagalog clause cannot contain an Actor. In fact, in such cases a special form of stative verb is used. Such clauses, while they entail a participant role of Actor in a universal sense, do not contain a semantic role of Actor because the semantic roles are constrained by language specific definitions. After the clause structure is filtered through all these

language specific constraints, the matching of participant roles to clause frame roles is completed. This level of structural representation for the clause we will call the role structure.

It is at this point that discourse, contextual and extralinguistic semantic factors about what human cultures and, as a consequence, human languages hold dear, all affect clause structure. It is at this level that notions such as subject and direct object are useful. They are useful for the description of clauses in many languages, but not all. Schachter (1976) has shown the difficulty in transferring the concept of subject as in English directly into the Philippine languages. Subject and object in English and in many languages are simply those positions of high pragmatic salience in the clause, whether this is due to previous discourse, extralinguistic context and other semantic factors. This position has recently been argued quite convincingly by Fillmore (1975).

We claim that rather than subjects or objects being syntactic categories or relations, in English they are in fact nothing but linear positions in the temporal sequencing of the words in the clause which are accorded special significance in the language. The implicational hierarchy for the coding of subjects (Keenan 1976):

position ◄── case marking on NP ◄──verb agreement

is not accidental. The most easily acquired property of sub-

jects is in fact position. The higher end of this hierarchy relates more to the semantic role of Actor than to the surface notion of subject. Languages such as Achinese (Lawler 1975) and Palauan (see 5.1), in which a non-Actor occupies subject position, but the Actor still triggers subject concord, bear ample witness to this fact.

We propose to account for the surface positions of subject and direct object by claiming that these are the positions in the clause in construction with the predicate. The predicate is taken as the head of the clause construction. Those noun phrases which are in construction with the predicate occupy Positions I and II, subject and direct object position respectively. The other noun phrases in the clause are simply adjuncts and are not in construction with the predicate. Only nuclear roles may occupy Positions I and II and be in construction with the predicate. Noun phrases which are in Positions I and II may be said to be in perspective (Fillmore 1975). Noun phrases in perspective have high pragmatic prominence in the clause.

It is important to remember that I and II are positions in English, not categories or relations. Only the roles of the clause are clause level relations. They are relations to the predicate. The system of the pragmatically salient positions of a clause, I and II, we will refer to as the referential structure of the clause. The various grammatical notions which determine which noun phrases occupy these

positions we will call the <u>referential</u> <u>aspect</u> of language.

We may profitably distinguish among nouns in terms of their degree of referentiality, that is, the transparency with which they denote their referents in the linguistic or extralinguistic context. The referential aspect of any noun is to a great extent a function of its assigned referentiality and this also determines its behavior in the clause. Nouns of higher referentiality have greater access to the pragmatically salient positions I and II. Proper nouns and first and second person pronouns are highly referential in that they usually unambiguously denote their referents. Third person pronouns are somewhat less referential, but still highly so. Definite and specific common nouns are still less referential, and indefinite nouns are the least. Generic nouns are interesting in that they may appear at either end of the referentiality hierarchy. Because they refer to the whole class of objects they denote, their referent is always transparent. Therefore they may be seen to be highly referential. But because they are indefinite and non-specific, they may occur at the bottom of the hierarchy. For an extensive illustration of the application of this hierarchy in a specific language, see the discussion of Position II in the Fijian transitive clause in 4.2.3.

The final stage in the production of a clause is the mapping of the role structure onto the referential structure. This process is called by us <u>systemization</u>, and there are

both language specific and language universal strategies employed. In addition to certain types of which which have higher referentiality and greater access to Positions I and II, certain roles are more pragmatically salient. In an unmarked clause type, an active clause in English, the role of Actor occupies referential Position I. If the speaker chooses to place any other role in I, a special clause type called passive is used. A few verbs such as open allow Instruments in active sentences to occupy Position I if the Actor is not overt, as in (4):

The key opened the door.   (4)

Which nouns occupy I and II depends on a combination of both their basic role and degree of referentiality or pragmatic salience. When systemization is completed, we have the spoken form of the clause.

In order to illustrate more fully the workings of this model of grammar and to present some of the factors in addition to referential degree which determine the systemization of roles to Positions I and II, we will look at more closely some data from English and from Shona, a Bantu language of Zimbabwe. The analysis of English is essentially the same as that presented in Fillmore (1975).

Let us first take some sentences with the verb hit, which has the three nuclear roles of Actor, Patient, and Instrument. Compare sentences (5) (a) and (b):

John hit the wall with the cane.   (a) (5)

John hit the cane against the wall.   (b)

Both these sentences contain an Actor, Patient, and Instrument. As these are active transitive sentences the Actor should occupy Position I, and the Actor <u>John</u> does so in both (5) (a) and (b). However, as regards Position II, either the Patient or the Instrument may occupy it. The event coded by the sentences or the role structure of the sentences is identical, but the perspectives (Fillmore 1975) on it are different. The scene highlighted by (5) (a) is that of Actor and Patient, while in (5) (b) the Actor and Instrument are highlighted. Position II is that of secondary prominence, and the options taken in occupying it account for the differences in perspective.

(5) (a) and (b) are equal paraphrases because both <u>cane</u> and <u>wall</u> have equal salience potential and equal referentiality. If, however, we make the Patient human, we find a rather different situation:

John hit Sam with the cane.   (a) (6)

?John hit the cane against Sam.   (b)

(6) (a) seems to be the normal way of coding this event. This is because <u>Sam</u> is human and has greater salience. Its greater salience is due in large part to its status as a proper noun, which gives it a high degree of referentiality.

Consequently, it has more accessibility to Position II than cane. (6) (b) is somewhat awkward, and Sam seems to function more as a Locative, the entity where the hitting is being done, rather than as a Patient. Thus, one of the strategies of systemization for English and many other languages such as Shona and Palauan is for Position II to be occupied by Patients if they are proper and human.

Another notion which determines access to Position II is that of totality versus partitiveness. Compare the sentences below:

I smeared paint on the canvas.	(a)	(7)
I smeared the canvas with paint.	(b)	
I loaded hay on the truck.	(a)	(8)
I loaded the truck with hay.	(b)	

In both of the (b) sentences we get the implication that the noun phrases occupying Position II have been totally affected. In (7) (b) the canvas has been totally covered with paint, while in (8) (b) the truck has been filled with hay. We do not find these readings necessary for the corresponding (a) sentences.

All of these cases thus far have dealt with Position II. What about Position I? The constraints on accessibility to Position I appear to be much stronger. As noted above, the unmarked choice for Position I in active transitive clauses is the Actor. But suppose that the event to be coded is

perceived as Actorless. In that case, with verbs like <u>hit</u> the Instrument can occupy Position I in an active transitive clause, as in (9):

The cane hit the wall. (9)

The event coded in this fashion is perceived as having no direct Actor involved.

If the Actor is still present in the clause its accessibility to Position I is so great that the entire clause must be re-framed for any other role to occupy I. This results in a passive clause with the Actor in a <u>by</u> phrase, and a different role occupies I. Passives corresponding to (5) (a) and (b) are (10) (a) and (b):

The wall was hit with the cane by John. (a) (10)
The cane was hit against the wall by John. (b)

In all four sentences, (5) (a) and (b) and (10) (a) and (b), the role structure is the same, but the referential structure is different for each. Each codes the same event within a different perspective. The factors determining the use of one or the other would be context, either linguistic or extralinguistic.

This completes our quick discussion of English clause structures. We will now turn to Shona. All Shona data are from Hawkinson and Hyman (1974). Shona is an SVO language with complex verbal morphology, including concord

for Position I. If a Benefactive or human Goal is present in the clause, a special suffix -er/-ir is added to the verb, and the Benefactive or human Goal follows:

    mùrúmé   á-kà-nyór-ér-á   mwàná tsàmbà.   (11)

    man   3 sg-past-write-B/G child letter

    "The man wrote a letter to/for the child."

The Benefactive has greater salience in occupying Position II (immediately after the verb) than the Goal, because when both are present, the Benefactive occupies II, and the Goal comes after the Patient and is preceded by the preposition ku "to." In Fillmore's (1975) terms, the Goal is "out of perspective" in sentences like (12):

    mùrúmĕ   á-kà-nyór-ér-á mwàná tsàmbà kù mùkâdzí. (12)

    man   3 sg-past-write-B child letter to woman

    "The man wrote a letter for the child to the woman."

While mwàná and tsàmbà can occur in either order in (11) and (12), if both the Benefactive and the Patient are human, the Benefactive must occupy II, as in (13):

    mùrúmé   á-kà-chék-ér-á mùkâdzí mwàná   (13)

    man   3 sg-past-cut-B   woman child

    "The man cut the child for the woman."

(13) cannot mean "the man cut the woman for the child." Position II must be occupied by the Benefactive in these

cases when the Patient and the Benefactive are of equal salience. From these data it would seem that with verbs taking Actor, Patient and Benefactive roles, the Benefactive has higher accessibility to Position II than the Patient, if both are human. Furthermore, when (13) is passivized only the Benefactive is accessible to Position I:

mùkâdzí   á-kà-chék-ér-ẁ-á   mwàná né mùrúmé   (14)

woman 3 sg-past-cut-B-pass child by man

"For the woman was cut the child by the man."

Again, the Benefactive is favored over the Patient for accessibility to a gramatically salient position when both are human. It is quite clear that in the process of systemization Shona has strategies which furnish the Benefactive with higher pragmatic salience than the Patient. This probably correlates, as noted by Hawkinson and Hyman (1974), with the fact that Benefactives are typically animate, and most commonly, human. Shona, like many other Bantu languages, affords a great deal of prominence in its grammar to the notion of animacy (see Hawkinson and Hyman 1974:148-50).

This completes our sketch of the clause level grammar to be used in this study. It will be elaborated as we proceed in our analysis of the Austronesian languages. To these we now turn.

3.2.0   Tagalog Clause Structure

3.2.0.0   Introduction

As discussed in 3.1, the basic unit of clause struc-
ture is the predicate. The semantic sub-categorization of
the verb determines the basic roles associated with it.
Therefore, clause types can be said to be a function of verb
types, and clauses can be classified on the basis of verb
classes in the language. The fundamental dichotomy of verb
types in Tagalog is between stative and active, and clause
types parallel this.

All Tagalog clauses except those with meterological or
acts of God predicates like ulan "rain" consist minimally of
a predicate and what is called in Tagalog grammar an ang
phrase or Topic (TP). ang marks the noun phrase with the
highest pragmatic salience in the clause, the noun phrase in
perspective. ang phrases are always definite. The main
criterion for a nominal in perspective in Tagalog is defin-
iteness. Ncun phrase arguments in Tagalog clauses are also
marked for semantic role by prepositions. These prepositions
partially constitute the coding of the role system. The
preposition ng, pronounced [naŋ], is used to mark Actor,
Patient and Instrument while sa marks Goal, Source, Locative
and Benefactive.

While Tagalog is a verb first language, the noun argu-
ments following the verb may occur in any order, if they are

full noun phrases. Consequently, the use of position to code high pragmatic salience is not applicable. Rather the segmental morpheme _ang_ performs the referential function in Tagalog that Position I does for English.

Tagalog verbs divide into two classes: stative verbs and active verbs. Therefore, Tagalog has stative clauses and active clauses. Tagalog stative clauses consist minimally of a stative verb or adjective predicate and an _ang_ phrase with the role of Patient. Stative verbs and many adjectives in Tagalog are marked morphologically with the prefix _ma-_. Stative verbs are distinguished from adjectives in that they take inflection for aspect, while adjectives do not. _ma-_ appears as _na-_ for the perfect and imperfect aspect, but _ma-_ for the future. The future and imperfect are both marked with reduplication. Sentences (15) (a) through (c) illustrate stative clauses in Tagalog:

Ma-taba   ang bata .   (a) (15)
stat-fat   TP   child
"the child is fat."

Ma-tu-tulog   ang aso sa kama   (b)
stat-fut-sleep TP dog L bed
"The dog will sleep on the bed."

Na-sira   ang bapor.   (c)
stat perf-ruin TP boat
"The boat was ruined."

The grammar of active clauses is a great deal more complicated than that of stative clauses. It is in the active clauses that the full range of the focus system comes into play. The focus system of a Philippine language is basically that system of verbal inflection by which the basic semantic role of the noun phrase marked by _ang_ is identified. The prepositions usually marking case roles are not used with _ang_, and only verbal inflection identifies the semantic role. Clauses with the same lexical items, but differing focus, code the same event but with differing perspectives. This summary is the standard analysis of the Philippine focus system, and, as we will argue later, there are several reasons to suspect that it is not complete. First, it is necessary to give an in-depth analysis of the workings of the focus system in Tagalog in order to make the later discussion more intelligible. Many Philippine languages have four focus types, but Tagalog can best be analyzed as having five. They are: Actor Focus (AF), Patient Focus (PF), Locative Focus (LF), Benefactive Focus (BF), and Instrument Focus (IF). We will proceed with a discussion of these focus types one by one.

3.2.0.1 Actor Focus

Actor Focus (AF) clauses are basically those in which the roles of Actor or Experiencer are chosen to receive the highest pragmatic salience in the clause and are marked by

ang. There are several verbal affixes which identify AF, but we only will be concerned here with -um- and mag-. The example sentences in this and the following sections will be in the perfective aspect. mag- appears as nag- in the perfective, while -um- remains -um-. Thus, the perfective of kain "eat" is kumain, while that of luto "cook" is nagluto. The difference in usage between -um- and mag- is basically semantic, although it is to some extent lexically determined. This semantic dichotomy in AF affixes will be discussed in greater depth in Chapter IV when we discuss Fijian verbal sub-categorization. Actor Focus clauses are those clauses in which the Actor/Experiencer is marked with ang, and the verb is marked with -um- or mag-. They may contain the Patient role (transitive clause) or may not (intransitive clause). The following examples are AF clauses:

```
B-um-ili      ng kotse ang lalake.        (a) (16)
AF perf-buy  P   car    TP    man
"The man bought a car."


Um-akyat     ang bata.                     (b)
AF perf-cry  TP  child
"The child cried."


P-um-asok     sa bahay  ang lalake.        (c)
AF perf-enter G  house   TP    man
"The man entered the house."
```

Nag-ihaw   ng manok ang lalake.   (d)

AF perf-broil P chicken TP   man

"The man broiled chicken."

Nag-sara   ng pinto ang lalake.   (e)

AF perf-close P door TP   man

"The man closed a door."

In all of these examples the role of Actor has been realized referentially as the _ang_ phrase. Other roles are present in most of these sentences, but they cannot be marked with _ang_. Only one _ang_ phrase per clause is allowed. The Actor has been chosen as the _ang_ phrase in these clauses, and this is coded on the verb by one of the AF verbal affixes _-um-_ or _mag-_.

3.2.0.2 Patient Focus

Patient Focus (PF) clauses are those in which the role of Patient is chosen to be the _ang_ phrase. Again, there are several verbal affixes to mark PF, but in this section we will only discuss one. This is the infix _-in-_, which in the perfective aspect occurs infixed immediately after the first consonant of the verb root and before the first vowel, exactly as does the AF infix _-um-_.

Patient Focus must be used if the Patient is definite. If the Patient role is referentially determined as definite by linguistic or extralinguistic context, then obligatorily

the role of Patient must be matched to the referential slot of the <u>ang</u> phrase, the pragmatically most salient noun phrase in the clause. This is an overriding systemization rule in Tagalog grammar. Examples of PF clauses are:

B-in-ili   ng lalake ang kotse.   (a) (17)
PF perf-buy A   man   TP   car
"The man bought the car."

B-in-asag   ng bata   ang laruan ng tungkod. (b)
PF perf-break A child TP   toy   IN   cane
"The child broke the toy with the cane."

T-in-aga   ng lalake ang   gulay.   (c)
PF perf-chop A   man   TP vegetables
"The man chopped the vegetables."

In all of these sentences the Patient must be the <u>ang</u> phrase because it is definite. The infix -<u>in</u>- codes the fact that Patient role is the <u>ang</u> phrase.

3.2.0.3 Locative Focus

Locative Focus (LF) clauses are those in which the roles of Locative, Source or Goal are chosen to be the <u>ang</u> phrase. There are far fewer affixes involved in marking this focus, and the basic one is -<u>an</u>. This is suffixed directly to the verb root. The perfective aspect is indi-

cated by the infix -in-. Thus, LF verbs carry two affixes, one for focus and one for aspect.

The semantic roles of Goal, Source and Locative are all realized as the basic surface role of locative in Tagalog. Goal includes the notion of dative. The three basic semantic roles are disambiguated either by the inherent semantics of the verb or by context. All three roles when not in focus are marked with the particle sa. When in focus they are marked with ang, and the verb coded with -an. Examples of LF clauses follow:

Ang phrase as Source:

    B-in-ilh-an   ng lalake   ng isda   ang bata.   (a) (18)
    perf-buy-LF   A   man   P fish   TP child
    "The man bought some fish from the child."

    K-in-un-an   ng lalake   ng pera   ang bata.   (b)
    perf-get-LF A   man   P money   TP child
    "The man got some money from the child."

Ang phrase as Goal:

    B-in-igy-an   ng lalake   ng libro   ang bata.   (a) (19)
    perf-give-LF A   man   P book   TP child
    "The man gave a book to the child."

    D-in-alh-an   ng lalake   ng isda   ang bata.   (b)
    perf-bring-LF A   man   P fish   TP child
    "The man brought some fish to the child."

P-in-untah-an   ng lalake ang bukid.   (c)

perf-go-LF   A   man   TP   farm

"The man went to the farm."

Ang phrase as Locative:

T-in-amn-an   ng lalake ng damo ang lupa.   (a) (20)

perf-plant-LF A   man   P grass TP ground

"The man planted grass in the ground."

T-in-irh-an   ng lalake ang bukid.   (b)

perf-live-LF A   man   TP   farm

"The man lived on the farm."

In all these sample sentences a basically location oriented role Source, Goal or Locative, is realized as the _ang_ phrase, and the verb is coded as LF. In terms of Tagalog syntax all three semantic roles are conflated into one overt role of location. This is a language specific rule of systemization in Tagalog.

3.2.0.4 Benefactive Focus

Benefactive Focus (BF) clauses are those in which the role of Benefactive is realized as the _ang_ phrase. This focus is marked by the prefix _i-_, prefixed to the verb root. As with the suffix _an-_, the perfective aspect is marked with the infix -_an_-. It should be noted that in Tagalog Bene-

factive and the notion of dative are clearly separate.
Dative is included in the role of Goal, which is a part of
the LF complex. Examples of BF clauses are:

I-b-in-ili ng lalake ng isda ang bata.   (a) (21)

BF-perf-buy A   man   P fish TP child

"The man bought some fish for the child."

I-p-in-utol ng lalake ng isda ang bata.   (b)

BF-perf-cut A   man   P fish TP child

"The man cut some fish for the child."

I-k-in-uha ng lalake ng isda ang bata.   (c)

BF-perf-get A   man   P fish TP child

"The man got some fish for the child."

In these sentences the Benefactive bata "child" is marked
with ang , and the verbs are all coded with i-, for BF.

3.2.0.5 Instrument Focus

Instrument Focus (IF) clauses are those in which an
Instrument role is marked with ang. The verb in IF clauses
is coded with i- to mark IF, and the infix -in- to mark
perfective aspect. The inflection for IF clauses is the
same as in BF clauses at least for verbs which use i- for
both. What disambiguates the two focusses is that the
Benefactive role is usually animate, most commonly, human,
while the Instrument role is an inanimate object. To make

this clear, contrast the BF clauses (21) (a) and (b) above
with the IF clauses (22) (a) and (b):

> I-b-in-ili ng lalake ng isda ang pera.   (a) (22)
>
> IF-perf-buy A   man   P fish TP money
>
> "The man bought some fish with the money."

> I-p-in-utol ng lalake ng isda ang kutsilyo.   (b)
>
> IF-perf-cut A   man   P fish TP   knife
>
> "The man cut some fish with the knife."

In the Benefactive clauses (21) (a) and (b) the _ang_ phrase
is _bata_,"child," a human Benefactive, while in (22) (a) and
(b) the _ang_ phrases are _pera_ "money" and _kutsilyo_ "knife,"
both inanimate Instruments. The semantic features of the
noun phrases marked by _ang_ will therefore disambiguate the
role in cases of affix homophony of BF and IF verbs. Further-
more, while IF clauses are grammatical in Tagalog, they are
actually quite rare (Naylor 1973). The most common way to
state (22) (a) would be with an AF clause, as in (23):

> B-um-ili   ng isda ng pera   ang lalake.   (23)
>
> AF perf-buy P fish IN money   TP   man
>
> "The man bought some fish with the money."

While _pera_ "money" is still definite in (23), as an Instru-
ment it has very weak accessibility to the perspective mark-
ing with _ang_, especially in the presence of an overt definite
Actor in the same clause. Tagalog speakers generally prefer

(23) to (22) (a). This is not unlike the situation in English where (24) (a) is acceptable, while (b) and (c) are not:

<div style="text-align: center;">

The man opened the door with the key. (a) (24)

*The key opened the door by the man.   (b)

*The key was opened the door by the man (c)

</div>

3.2.1 Role and Reference in Tagalog Grammar

In a most insightful paper, Paul Schachter (1976) has surveyed Keenan's (1976) proposed properties of subjects with respect to Tagalog and discovered that the proposed universals for subject properties were split in Tagalog between the roles of Actor or Experiencer and the referential noun phrase marked by ang, which we shall henceforth always refer to as Topic (TP). Certain referential properties of subjects, such as definiteness, are attributed to Topic in Tagalog. Also, as pointed out in Chapter II, Relativization in Tagalog can only operate with respect to Topic. The head of the relative clause and the Topic of the relative clause must be co-referential. Relativization is by deletion of the Topic. The (a) sentences in (25) and (26) are grammatical, but the (b) sentences are not:

ang laruang   b-in-asag   ng bata   (a) (25)

TP toy-lig PF perf-break A child

"the toy which the child broke"

*ang laruang   b-um-asag   ang bata   (b)

TP   toy-lig AF perf-break TP child

ang bata-ng   b-in-igy-an ng lalake ng isda   (a) (26)

TP child-lig perf-give-LF A   man   P fish

"the child that the man gave the fish to"

*ang bata-ng   nag-bigay   ng isda ang bata   (b)

TP   child-lig AF perf-give P fish TP child

From these examples it is clear that relativizability is
one of the subject properties that the Topic possesses.
According to Keenan (1976) subjects are the noun phrases
which are most universally accessible to Relativization.

Other properties of subjects suggested by Keenan (1976),
such as controlling Reflexivization and undergoing deletion
by Equi-Noun Phrase Deletion, belong to the Actor noun
phrase, regardless of its being Topic or not. In (27) a
non-topic Actor is triggering Reflexivization:

H-in-iwa   ng lalake ang kaniya-ng sarili.   (27)

PF perf-cut A   man   TP   his-lig   self

"The man cut himself."

While in (28) a non-topic Actor undergoes Equi:

Gusto ko   sila-ng   hampas-in.   (28)

want 1 sg 3 pl TP-lig strike-PF

"I want to strike them."

<u>Ko</u>, the non-topic Actor/Patient form of the pronoun "I," is the Experiencer in (28). In transformational terms, it controls the deletion of the Actor "I" in the lower clause. For purposes of syntactic operations in Tagalog the basic roles of Actor and Experiencer are not distinguished, but fall into a single relation of Actor. The lower clause is in PF, but its Topic, <u>sila</u>, the topic form of the pronoun for "they," has been raised into the main clause. What is to be noted here is that the non-topic Actor has been deleted by Equi, not the Topic.

This split of subject properties between Topic and Actor/Experiencer parallels the notion of referential versus role structure of the clause. Relativization is an operation that deals with the referential structure of the clause. It involves the predication of some information about a referent, the head noun phrase, which is already given. Within the embedded clause the referential system of the language would choose as Topic that noun phrase which is given and definite, that is, the noun phrase co-referent with the head. If more than one noun phrase within the embedded clause is definite, the one chosen as Topic would be that most salient, again the nominal co-referent with the head. Relativization is clearly a referentially oriented strategy, and this explains its restriction to Topic in Tagalog.

As for Reflexivization, it is also clear why this should be a role related operation. Therefore, its close tie to the role of Actor is no surprise. Deletion of Actors/ Experiencers by Equi-Noun Phrase Deletion is more complicated. The action in the complement clause is always attributed to a nominal role in the matrix clause (Schachter 1976:47). Consequently, that nominal which would be interpreted in this same way, if present, that is, the Actor/Experiencer, may be deleted. While the restriction to Actor/Experiencer is due to the role structure of the clause, the fact of the deletion itself is due to the referential system. The referent of the deleted Actor/Experiencer is determined in the context of the role structure of the higher clause.

This dichotomy of role versus referential aspects of clause structure is fundamental to a proper understanding of Tagalog grammar. What distinguishes a language like Tagalog from a language like English is that in English the noun phrases marked for referential prominence are indicated by position, and in the process of these noun phrases vy- ing for position, the basic role structure of the clause is often obscured. Tagalog, on the other hand, has free word order among full noun phrase arguments. Consequently, position is not relevant to the marking of referential peaks in the clause. A segmental morpheme ang is greatly restricted. It may only mark definite noun phrases. Posi- tions I and II have no such restriction in English. In

spite of the impressive focus system the referential system in Tagalog seems poorly developed in comparison to English. In a basic clause only one noun phrase may be marked for pragmatic prominence. What we do find in Tagalog is a transparent and consistent marking of the role structure of the clause. This is a basic function of the focus system— to keep the role structure of the clause intact after the referential system has selected one noun phrase to be Topic.

To equate the focus system on a one-to-one basis with the English Passive is simply short sighted. Tagalog is a role dominated language, while English is a reference dominated language. This typology of domination may be established on the basis of the preponderance the language gives in overtly coding one aspect of clause structure over the other. All clauses in all languages consist of both aspects of clause structure. Both are needed to communicate. Furthermore, many languages are dominationally neutral, with neither the role nor the referential structure being elaborated at the expense of the other. But, in a reference dominated language like English the positions for pragmatic prominence are dominant in the structure of the clause. Generally, two positions of pragmatic prominence, Positions I and II, will be distinguished in a reference dominated language. But the primary defining characteristic of a reference dominated language is that the overt coding of the role structure of the clause is suspended in favor of

the referential structure. This is not found in a domina-
tionally neutral or role dominated language. In a refer-
ence dominated language the roles of the noun phrases occu-
pying the pragmatically prominent positions are not overtly
marked. In English the referential positions of I and II
are fundamental to the structure of the clause, and the
roles of the nouns occupying these are not transparent.
Thus, the nominal occupying Position II in (29):

$$\text{I gave John a book.} \tag{29}$$

is a Goal, while in (30):

$$\text{I walked the whole course today.} \tag{30}$$

it is a Locative, and in (31):

$$\text{I cooked the roast.} \tag{31}$$

it is a Patient.

Similar facts obtain with the Passive option in a refer-
ence dominated language. The function of Passive is to get
a non-Actor into Position I, the position of highest promi-
nence. As such, Passive has both a role and a referential
component. However, in a reference dominated language,
Passive is a referential operation. There is no overt coding
of the roles of the nouns in I. The English Passive is
primarily a referential operation. It places noun phrases
of various roles in the referential peak position of the

clause. In keeping with its status as a reference dominated language, English has no overt marking for the role structure of the noun in I:

Bill was given a book by John. (32)

A book was given to Bill by John. (33)

The nominal in I in (32) is a Goal, while in (33) it is a Patient. In English the passive morphology simply indicates that a noun phrase other than the unmarked choice occupies I, and no more attention is paid to the role aspect of that nominal. This follows from the status of English as a reference dominated language.

In a role dominated language like Tagalog the overt marking of the role structure of the clause is dominant. Also, the referential system will be poorly developed. There may be only one noun phrase of pragmatic prominence allowed per clause, as in Tagalog, in contrast to neutral or reference dominated languages, in which there are at least two. Or, to take a more extreme case, there may be no basic position or form for pragmatic prominence in the clause. The structures of some ergative languages such as Tongan are typical of these. In Tongan (see 4.3), all nouns are overtly marked for role and there is free word order among full noun phrases. The only overt marking of the referentiality of the nouns in the clause is with the definite and indefinite articles. These articles merely

signalled the assigned referentiality of the nouns due to
context and do not constitute a separable component of
referential structure of the clause, as do Positions I and
II in English. Tongan can be seen to be even more heavily
role dominated than Tagalog, because in Tagalog there is at
least one basic element of clause structure, the Topic, which
codes the referential structure.

Tagalog is a role dominated language by virtue of its
weak development of the referential system in basic clause
structure. The focus system of Tagalog and the Passive
option in a dominationally neutral language are similar in
that the role of the pragmatically prominent noun phrase
is always transparent. In a neutral language there is a
basic unmarked choice, the Actor, for Position I or highest
pragmatic prominence. However, in Tagalog, there is no
basic focus form. There is no evidence in Tagalog to indi-
cate that AF is any more basic than PF or LF. In keeping
with the status of Tagalog as a role dominated language,
all roles are eligible for highest pragmatic prominence,
and none are more eligible than others (perhaps excluding
Patient). In neutral languages and even more so in refer-
ence dominated languages, there are complex systematic
restrictions on the roles which can receive pragmatic prom-
inence.

In Tagalog, the role and referential systems are kept
clearly distinct and transparent. In this view, Tagalog is

less heavily role dominated than Tongan. In Tagalog, a complex system of verbal morphology, keeps the role structure of the clause intact. The focus system of Tagalog is not directly comparable to the Passive of English, because English, as a reference dominated language, subordinates the coding of the role structure of the clause to the reference structure.

It is an interesting fact about Tagalog that probably follows from its status as role dominated language that it possesses a purely role oriented operation similar to Passive. This was alluded to in 3.1. Keenan (1975b) has defined Passive as the demotion of the subject from Position I, while Postal and Perlmutter (unpublished notes) have proposed that it is direct object to Position I. While neither subject nor direct object are viable concepts in Tagalog grammar, these proposals, if adapted, do have some relevance. It seems we can with some benefit distinguish role oriented Passives from reference oriented Passives. The focus mechanism, which allows any nominal to be the referential peak of the clause is partially a role, partially a referential operation, as noted above. This may be seen as the Tagalog analog of Passive in Postal and Perlmutter's definition of direct object to Position I in the sense that roles other than the Actor achieve pragmatic salience. If we adapt Keenan's definition to demotion of Actor, we have a basically role oriented Passive-like operation, and Tagalog

exemplifies this also.

In Tagalog Actors are defined as necessarily effica-
cious and deliberate in the action. If the action is
involuntary or accidental, the semantic role of Actor cannot
function overtly as an Actor, and a special PF stative form
of the verb is used. The Patient appears as Topic. Thus,
the Actor has been demoted from its role as Actor and ap-
pears simply as an Adjunct to the verb because stative
verbs occur in stative clauses, which by definition do not
allow Actors. Examples of this construction are:

Na-basag   ng lalake ang laruan.   (a) (34)
stat perf-break   man   TP   toy
"The man accidentally broke the toy."

Na-hiwa   ng lalake ang kamay.   (b)
stat perf-cut   man   TP   hand
"The man accidentally cut his hand."

In (34) (a) and (b) the Actor <u>lalake</u> "man" appears simply
as an Adjunct to the special stative verbal forms. "The
man" is obviously not an Actor syntactically because these
are not active clauses. As might be expected in a language
with a bias toward the role structure of the clause, Taga-
log has a role oriented Passive-like construction opposed
to the focus system, which has both role and referential
aspects.

3.2.2 Another Look at Patient Focus

In 3.2.0.2 it was shown that the infix -in- marks PF, the clause type in which the role of Patient is Topic. However, this was an oversimplified view of the situation. While -in- does in fact mark PF for a great many verbs, PF for many other verbs is marked by i-, the basic BF and IF affix, and by -an, the basic LF affix.

We will first give a few more examples of PF verbs with -in-:

K-in-ain	ng lalake ang isda.	(a) (35)
PF perf-eat A	man TP fish	
"The man ate the fish."		

P-in-utol	ng lalake ang isda.	(b)
PF perf-cut A	man TP fish	
"The man cut the fish."		

Both these verbs take -um- for AF, and this is a common correlation for verbs with -in- for PF (Schachter and Otanes 1972:292).

A large number of verbs use the basic BF/IF focus affix i- for PF. If i- is used for PF, it is not used for BF or IF. Other, derived affixes occur in these focusses. If a verb has i- for PF, it normally has mag- for AF (Schachter and Otanes 1972:256). Examples of PF verbs with i- follow:

I-b-in-igay ng lalake ang libro sa bata.   (a) (36)

PF-perf-give A   man   TP book G child

"The man gave the book to the child."

I-ni-luwa   ng lalake ang   gamot.   (b)

PF-perf-spit A   man   TP medicine

"The man spit out the medicine."

I-t-in-apon   ng lalake ang isda.   (c)

PF-perf-throw A   man   TP fish

"The man threw out the fish."

On fact to be noted about these Pf i- verbs is that they all take three or more nuclear roles. Although all three nuclear roles may not be overt in the clause, they are implied by the semantics of the verb. Note the "out" in the English translations of (36) (b) and (c). Tapon "throw" and luwa "spit" both imply nuclear roles of Actor, Patient and Goal.

There are also some verbs which use the basic LF affix -an for PF. In such cases a derived affix is used for LF (normally pag-...-an). Again, most verbs which use -an for PF take mag- for AF. Examples of PF -an verbs are:

B-in-uks-an ng lalake ang pinto.   (a) (37)

perf-open-PF A   man   TP door

"The man opened the door."

S-in-akt-an ng lalake ang bata.　　　　　　(b)

perf-hurt-PF A   man   TP child

"The man hurt the child."

T-in-akp-an   ng lalake ang damit.　　　　　(c)

perf-cover-PF A   man   TP clothes

"The man covered the clothes."

The fact that the basic LF affix -an and the BF/IF affix i- can be used to mark PF would seem to create a problem for the analysis presented above because there is no longer a one-to-one correspondence between basic role type and the focus affix used to code that role as Topic. The affix -an will sometimes mark LF and sometimes PF, and the function of the focus system proposed above, namely to recover the basic role of the Topic would appear to break down in these cases. Even though with any one verb root a given focus affix will only indicate a simple focus type (if i- marks PF, then ipag- will mark BF, and ipaN-, IF), the correlation between focus type and the simple focus affixes would now appear to be random. It is not at all random, as the next few sections will demonstrate, but the situation becomes much clearer if we approach it from a comparative viewpoint. To this task we now turn.

3.3 Bilaan

Bilaan is a language of southern Mindanao and belongs

to a different sub-group of Philippine languages than does
Tagalog (Thomas and Healey 1962). While Bilaan does possess
a focus system, it is of a radically different type than
that of Tagalog. Except for Source, Goal and Locative,
which are marked with di, no nominal arguments in the Bilaan
clause are marked for role. Furthermore, there is no ob-
ligatory Topic marker in Bilaan. As a consequence, word
order in the Bilaan clause is rigid. Bilaan is normally
verb initial, and the Topic or referential peak of the clause
is final, if a full noun phrase. Pronouns are enclitic to
the verb. Bilaan quite frequently has a word order in which
the Topic is initial in the clause, immediately preceding
the verb. This is probably due to the lack of role or refer-
ential markers in the clause. In contrast to Tagalog, in
Bilaan it is position rather than segmental marking which
marks a referential peak.

In addition to these peculiar features for a Philip-
pine language, the Bilaan focus system is remarkably diver-
gent. All active verbs in the language are classified
according to a notion known as Prefocus. The Prefocus of a
verb represents that focus orientation of a verb which takes
no focus marking affix. In these focusses the bare verb
root is used. If a focus type other than the Prefocus of
the verb root is used, then the verb is marked with an affix
for focus type. Bilaan possesses three types of Prefocus:
Instrument Prefocus (IPF), Patient Prefocus (PPF) and Actor

Prefocus (APF). All data on Bilaan are from Abrams (1961) and Rhea (1971).

Instrument Prefocus verbs are those with at least two, but normally three or more, nuclear roles, one of which is an Instrument. The two other roles are normally Actor and Patient. Verbs belonging to this class are: _dak_ "pound," _tbél_ "sew," _fwes_ "open," _bgang_ "break," and _kef_ "climb (with)." In addition to Instrument Focus (IF), IPF bases may occur in AF clauses with the affix _m-_ ~ _-m-_, PF clauses with the affix _n-_ ~ _-n-_ and LF clauses also with the affix _n-_ ~ _-n-_. From the data available there seem to be no BF clause types in Bilaan. Examples of IPF bases in various focusses follow (the Topic is in capitals in all the Bilaan examples):

IPF: klang "cut"   kef "climb."

AF: K-am-lang AGU   kayo.   (a) (38)
     AF-cut   1 sg-TP tree
     "I cut a tree."

PF: K-an-lang-gu   KAYO.   (b)
     PF-cut-1 sg   tree-TP
     "I cut the tree."

LF: n-kef-gu   KAYO   EN.   (c)
     LF-climb-1 sg tree-TP that
     "I climbed that tree."

IF: Klang-gu kayu FALAKOL. (d)

cut-1 sg tree hatchet

"I cut a tree with the hatchet."

Note that in (38) (d), the IF clause, the bare verb root of the IPF base is used.

Patient Prefocus verbs are those transitive verbs with a minimum of two nuclear roles, non of which may be an Instrument. With PPF verbs one of the nuclear roles is necessarily Patient. Some verbs belonging to this class are: blé "give," dlu "chase," dek "command," and linge "hear." In addition to PF, PPF bases may occur in LF clauses with the affix n- ~ -n- and in AF clauses with the affix m- ~ -m-. Examples of PPF bases in various focus types are:

PPF: bat "throw" dsu "sacrifice"

AF: m-bat AGU bula. (a) (39)

AF-throw 1 sg-TP ball

"I threw a ball."

LF: D-an-su-gu KAYO EN. (b)

LF-sacrifice-1 sg tree-TP that

"I sacrificed at that tree."

PF: Bat-gu BULA. (c)

throw-1 sg ball-TP

"I threw the ball."

In (39) (c), the PF clause, the bare root of the verb marks the PF clause type for PPF bases.

Actor Prefocus (APF) bases are all intransitive. They normally have one nuclear role, although in a few cases, such as intransitive motion verbs, they have two: Actor and Goal. The single nuclear role is generally Actor or Experiencer, although with inchoative verbs, the Patient will be the nuclear role. Besides Actor Focus, APF bases also occur in LF clauses, in which they are marked with the affix n̲- ~ -n̲-. Verbs belonging to this class are: sub̲e "go upstream," f̲tud̲ "rest," d̲yo "bathe oneself," and bn̲en "sneeze." An example of an APF base in its various focusses follows:

APF: fusuk "enter"

LF: F-n-usuk-gu   GUMNE   EN.   (a) (40)
        LF-enter-1 sg house-TP that
        "I entered the house."

AF: Fusuk   AGU   di gumne.   (b)
        enter 1 sg-TP G house
        "I entered the house."

Note in (40) (b) the bare verb root is used for the AF clause for APF bases.

The focus system for Bilaan can be summarized in the following table:

Table 3: Bilaan Verb Inflection

FOCUS TYPE

P		AF	PF	IF	LF
R					
E	APF	#			-n-
F					
O	PPF	-m-	#		-n-
C					
U	IPF	-m-	-n-	#	-n-
S					

The gaps in the table are possibilities that the language does not permit, primarily because of the parameters it uses to define Prefocus. An APF base cannot be marked for IF because if the semantics of the verb entailed a nuclear role of Instrument, the base would in fact belong to the IPF class. Outside of the LF possibilities, which do not appear to be part of the basic system because any Prefocus type can occur with it, only nuclear roles of a verb can occur as Topic. The verbs are divided into Prefocus classes on the basis of their nuclear roles. The nuclear roles other than that of the Prefocus can be made Topic with the focus affixes.

The essential point to be gleaned from this study of Bilaan clause structure is that the semantics of the verb is primarily responsible for determing its Topic potential among the roles associated with it. Except for LF constructions, only nuclear roles may be Topic, and the nuclear roles of a verb are, of course, intimately related to its

semantics. We will return to this point.

3.4 Inibaloi

In this section we will discuss some data from Inibaloi, a language of the Northern Philippine sub-group (Thomas and Healey 1962). It belongs to a different sub-group than both Tagalog and Bilaan. Inibaloi is a rather typical Philippine language and structurally is much more like Tagalog than Bilaan. All Inibaloi data are from Ballard (1974).

The Inibaloi data quite clearly point out that the so-called focus affixes do not simply signal the role of the Topic, but that they themselves have independent semantic value. This is clearly brought out in minimal pair sentences. Minimal pair sentences are those sentences which contain identical lexical items, and in which the Topic is in an identical role, but which have a different focus affix. To illustrate this, compare sentences (41) (a) and (b):

<div style="margin-left: 2em;">

Bedatbat-<u>en</u> to 'y pingkan,   (a) (41)

    line up   he TP plates

"He will line up the plates."

I-balatbat to 'y pingkan.   (b)

    line up   he TP plates

"He will line up the plates."

</div>

While (41) (a) and (b) are both translated as "he will line up the plates," each sentence codes the event from a different perspective. The Topic is a Patient in each sentence, but the perspective of the sentence is coded by the differing focus affixes. Sentence (41) (a) with the affix -en codes the event from the perspective of the result gained by the performance of the action, that is, the plates will be put away. The -en affix codes a Patient oriented action in which the Patient is truly affected by the action. Sentence (41) (b) with i- codes the event from the perspective of the physical positioning of the plates, either with respect to the shelf or to each other. i- marks a positioning of one thing to another. The Patient itself is not truly affected, but rather its position is affected. As noted above for Tagalog, i- PF verbs have at least three nuclear roles.

To illustrate further, let us compare the minimal pair sentences:

Bedesbes-en to 'y shidan ni baka.   (a) (42)

    repair   he TP breach of cow

"He will repair the breach the cow went through."

Bedesbes-an to 'y shidan ni baka.   (b)

    repair   he TP breach of cow

"He will repair the breach the cow went through."

In (42) (a) we again have the perspective of the result
gained. The Topic is a Patient affected by the action; it
is what will be affected by the action "repair." (42) (b)
implies the use of an Instrument which will be used upon
shindan "breach" as Goal or Locative. The perspective of
(42) (b) is upon the Topic as Goal of the action. "Repair"
in (42) (b) implies three nuclear roles, while in (42) (a)
it implies only two. But a correct analysis of (42) (b)
is not that -an marks a Goal made Topic, but rather that
the affix marks the entire perspective of the sentence as
an Instrument operating on a Goal, an implication not pres-
ent in (42) (a).

What do we make of this situation? We could, of course,
claim that (42) (a) is a PF clause, while (42) (b) is a LF
clause in which the role of Goal is Topic. This fails with
the contrast in (41) (a) and (b) because pingkan "plates"
is clearly in the role of Patient in both sentences. Rather
it seems that the inherent semantics of the differing focus
affixes in each sentence is responsible for the differences
in perspective. We will discuss these briefly for Inibaloi.

The affix -en commonly indicates a Patient oriented
action in which the actual essence or structure of the
Patient is affected. It is normally associated with two
nuclear roles: Actor and Patient. Of the three basic
affixes it has the most divergent semantic field associated
with it, and this affix could best be taken as the neutral

non-AF affix. There are a large number of verbs in which
the Topic of a clause with -en appears to function as a
Goal. Examples of verbs affixed with -en are:

bangon "awaken"   bengon-en "wake someone"

bi-nik "tear"   bi-nik-en "tear something"

tebek   "puncture"   tetbek-en "puncture something"

tengel "control"   tengel-en "control something"

The affix i- basically indicates the positioning of
one thing to another. It is associated with three nuclear
roles, most commonly Actor, Patient and Goal or Actor,
Patient and Instrument. The Patient in a clause marked
with i- is affected only positionally. Examples of i- PF
verbs are:

teb-ok "motion into water" i-teb-ok "put something

                                      into water"

beneg "back"   i-beneg "put something behind"

iral   "lean"   i-iral "lean something against"

tikbo "empty"   i-tikbo "dump something out"

dekeb "door"   i-dekeb "shut a door"

The affix -an generally indicates action on a thing
which is at the same time the location of another action.
As in Tagalog, -an is basically location oriented. There
are, however, a large number of verbs with -an for PF which
could take -en. This may result from a confusion of the
semantic roles of Goal and Patient, which are often diffi-
cult to separate. In English, is the noun bread in (43):

<div align="center">

John cut the bread with a knife.   (43)

</div>

a Goal or a Patient? The state of the bread is being affected by the action of cutting, but at the same time it is the Goal of the action of cutting with a knife. It meets criteria for both roles. In most Philippine languages, bread is seen as a Patient, because in a clause like (43) in which bread is Topic, the verb would be marked with the equivalent of -en.

Given the semantic closeness between the roles of Patient and Goal, it is easy to see why there is an overlap of the semantic fields of the verb classes with -en and -an. There are many near homonyms, one with -en and the other with -an: ejab-an and tawal-en both mean "summon, call."

Some verbs with -an in which the semantic notion of location is clear are:

eshom "add"	eshom-an "add to something"
asin "salt"	esin-an "salt something"
bato "stone"	bato-an "pave something with stones"
ani "harvest rice"	eni-an "harvest a field"
sosot "intestines"	sosot-an "remove intestines from something"

What determines the combining potential of an affix with a specific verb base is the principle of semantic

compatibility. When the meaning of a verb base is such that addition of the meaning of the affix is semantically possible, then theoretically an affixed verb form can be derived. The verb <u>tongaw</u> "sit" implies position and allows formation with <u>i-</u> as <u>i-tongaw</u> "sit down with something." This notion of semantic compatibility immediately brings to mind the Bilaan situation, in which the semantics of the verb determines the Prefocus and ultimately the focus potential of the verb base.

3.5 Tagalog Revisited

With this background in Bilaan and Inibaloi, we are now ready to propose a solution to the problem outlined in 3.2.2.2 of the overlapping of the basic BF/IF and LF focus affixes in PF clauses. The facts of Inibaloi are not isolated to that language, and similar examples can be advanced for Tagalog. Note (43) (a) and (b):

<u>In</u>-abot ng lalake ang libro.   (a) (43)

   get   A   man   TP   book

"The man got the book."

<u>I</u>-ni-abot ng lalake ang libro.   (b)

   pass   A   man   TP   book

"The man passed the book."

These sentences are identical except for the focus affixa-

tion on the verb. The basic meaning of _abot_ is fairly abstract. It means "moving of a Patient by an Actor." In both these sentences the Topic is a Patient. (43) (b) differs from (43) (a) in that it implies a third role, a Goal. The existence of a Goal is precluded in (43) (a). The infix -_in_- implies two nuclear roles, while _i_- implies three. The semantics of _i_- in this case is exactly the same as in Inibaloi, the positioning of one thing relative to another. Consequently, the role of Goal is implied in (43) (b), the clause with _i_-, although both clauses are in Patient Focus.

Another example of minimal pair sentences is in (44):

B-_in_-asa ng lalake ang libro.   (a) (44)

    read   A   man   TP   book

"The man read the book."

B-in-asah-_an_ ng lalake ang libro.   (b)

    read   A   man   TP   book

"The man read the book."

(44) (a) and (b) differ in that (44) (a) implies that the entire book was read, while (44) (b) implies only part of it was read. The Topic in (44) (a) is clearly a Patient, while that of (44) (b) has features of both Patient and Locative. Note the English translation of (44) (b): "the man read _from_ the book." The location oriented affix -_an_ codes the dual Patient/Locative aspect of the Topic in the

event described in (44) (b).

It would appear then that the presence of a semantic component in the focus affixes themselves is not limited to Inibaloi. In Tagalog too they do considerably more than code in a straightforward manner the semantic role of the nominal functioning as Topic. Rather they have their own independent meaning and contribute to the meaning of the clause as a whole. This is a widespread feature of Tagalog verbs. Schachter and Otanes (1972:293-4) noted this fact:

"there are, however, many bases that co-occur with two or more major affixes (that is, -in-, i- and -an WAF) to form verbs of identical focus."

We would like to argue here for a position which claims that it is the semantic value of the focus affixes, -in-, i- and -an which is basic and that their role coding properties follow from their semantics. This is a significant departure from the standard view of the Philippine focus system presented in 3.2.0 above, but the facts of Inibaloi and Tagalog indicate that analysis to be insufficient. A re-analysis along semantic lines may prove more enlightening. While there are exceptions to a semantically based analysis also, it does capture more regularities.

We will start with the infix -in- because it is the most straightforward. -in- is commonly associated with the nuclear roles of Actor and Patient, although an Instrument

may be present with some verbs. The overriding semantic
consideration for the use of -in- is that the Patient is
strongly affected, often to the point of altering its struc-
ture or essence. The Actor affects a change in the basic
status of the Patient. With this definition it is immed-
iately clear why -in- is a PF affix and only a PF affix.
Some basic PF verbs with -in- are (quoted in their infini-
tive forms with the suffixed -in : huli-in "catch," tahi-in
"sew," bali-in "snap," taga-in "chop," gupit-in "clip,"
durug-in "crush" and baguh-in "change."

The affix -an is also fairly straightforward. It
essentially has two semantic fields associated with it. One
is location, and this accounts for its use as a LF affix.
The other field, which may be seen as an abstraction from
the first, is that only the surface or appearance of the
Patient is affected. The change in the status of the Patient
may be only temporary. The Patient is not radically af-
fected, as it is with -in-. The second definition accounts
for a great many PF verbs with -an like: buks-an "open,"
sarah-an "close," walis-an "sweep" and takp-an "cover."
With the last two verbs the notion of location is at least
as prominent as Patient, and the use of -an with these verbs
is not surprising. Gupit "clip (hair)" can take either
-in- or -an, depending on whether one views the hair as
the affected Patient or Goal/Locative of the action of
cutting.

The affix i- is certainly the most complex of the three. It also has the most abstract meaning. It essentially indicates a nominal which is an intermediary in the transfer of the main action of the clause between two other noun phrases in the clause. Therefore, verbs with i- always have three nuclear roles as a minimum. This definition immediately accounts for its use as an IF affix because an Instrument is intermediary in the transfer of action between the Actor and the Patient/Goal. It cannot, however, account for its use as a BF suffix, and perhaps it should not. Tagalog is anomalous in this regard. Most Philippine languages use -an for BF (McKaughan 1971), which makes sense from the standpoint of the semantic field for -an.

The affix i- in PF clauses is used with verbs with the nuclear roles Actor, Patient and Goal/Locative. The Patient in such clauses functions as an intermediary in the transfer of action from Actor to Goal/Locative. The classic case of such a verb is give. And, indeed, the Tagalog verb bigay "give" is i-bigay in PF. Other verbs with i- for PF are: i-duong "anchor," i-alak "offer," i-pulok "throw," i-tali "tie," i-sandal "lean against," i-libing "bury," i-bitin "hang" and i-bunton "pile up."

3.6 Toward a Typology of Philippine Clause Structure

This re-analysis with inherent semantics in the focus affixes themselves would seem to present a problem for some

of our earlier claims. If the focus affixes do not code role structure after all, then what about our claim that Tagalog is a role dominated language? What keeps the role structure clear in the various types of clauses?

It is not that our earlier claims were wrong, just a little oversimplified. What obscures the picture is that the focus system is multi-systemic. The role coding properties of the focus system fall out primarily as a function of the layering of two aspects of clause structure, as we will argue below.

Philippine languages in general are verb initial languages, and as pointed out by Chafe (1970), verbs are most commonly new information. In most languages of the world the clause initial position is occupied by a noun phrase which is old information. This position for old information functions as a linking device between clauses for the purposes of textual cohesion. The starting point for the clause is a nominal whose referent is already established, and then a comment is made on it, supplying new information. This fact probably accounts for the statistical rarity of verb initial languages as opposed to SVO or SOV languages.

The use of the focus affixes in a Philippine language is to function as a discourse cohesion device. The affixes are intimately linked to the Topic of the clause, which, as definite, is always old information. The Topic occurs after the verb in the clause, and, in fact, its unmarked

position is clause final, although free scrambling of full noun phrases is permitted. Therefore, the focus affixes code a certain aspect of the old information, the Topic, in the clause initial position, which is occupied by new information, the predicate. The focus affixes set up broad semantic domains for the clause as a whole which signal the semantic area in which the Topic will function. They signal a semantic starting point for the clause. Because the Topic is old information, it is already identified in the discourse context, either linguistically or extralinguistically, and the semantic domain of the focus affix looks back to the previous clause or context, in which the referent of the Topic has been identified, as well as ahead to the Topic in the clause being uttered. The focus affixes function as discourse cohesion devices.

How does this account for the role coding aspects of the focus system? The role of the Topic is uniquely determined by a match up between the semantic domain of the focus affix and the nuclear roles of the verb. The intersection of the semantic domain of the affix and the nuclear roles in the clause will determine the role of the Topic.

The workings of this system may seem a bit obscure, and perhaps an illustration will improve the picture. Let us take as an example sentence (43) (b):

I-ni-abot ng lalake ang libro.　　(b) (43)

　pass　A　man　TP　book

"The man passed the book."

In (43) (b) the affix i- indicates that the semantic domain
is that of an intermediary in the transfer of action be-
tween two other nominals. The clause frame for the verb
abot is Actor, Patient and Goal. The only possible inter-
section of these two will identify the role of the Topic as
Patient, the noun which is transferred from the Actor to
the Goal. If we contrast (43) (a):

In-abot ng lalake ang libro.　　(a) (43)

　get　A　man　TP　book

"The man got the book."

The -in- affix implies the semantic domain of a Patient, the
status of which is affected. It precludes the existence
of a Goal in the clause, because there is no transfer of
action between two nominals other than the Patient implied
with -in-. But the clause frame for abot is Actor, Patient
and Goal. Consequently, the Actor must function as both
Actor and Goal in (43) (a), and abot has the meaning "get,"
rather than "pass." Note that the nuclear roles for abot
in (43) (a) are exactly the same as in (43) (b), but in
order for the use of -in- to be grammatical, the Actor and
Goal must be the same nominal, because the semantics of -in-

does not allow an overt Goal. The intersection of the semantic domain in -in-, affected Patient, and the nuclear roles of the clause, Actor, Patient and Goal, uniquely determine the Patient as Topic.

This is the manner in which the focus system truly functions in a Philippine language. It is a discourse sensitive system which codes a component of old information in the clause initial position, which in these languages is occupied by new information, the predicate. Its role coding properties for the Topic are the result of its interaction with the global structure of the clause, the nuclear roles. Bilaan is an enlightening case in point. The rich variations for focus marking in the clause in most Philippine languages have been much restricted by the notion of Prefocus, which is itself a function of the nuclear roles of the clause set up by the verb. But Bilaan is also a Philippine language in which the Topic occurs very frequently in clause initial position before the verb, with no seeming difference in emphasis. This is undoubtedly due to the restricted system of overt focus marking. Its potential for indicating old information in clause initial position has been greatly reduced by the innovations in the focus system.

How does this re-analysis affect our claim in 3.2.1 that Tagalog is a role dominated language? This is undoubtedly still true. The language carefully marks role on non-

Topic noun phrases, and the focus affixes indicate a seman-
tic domain of roles for the Topic. The only difference
between our earlier view and the present revision is that
the relationship between the role of the Topic and a par-
ticular focus affix is no longer a direct one-to-one cor-
respondence. Rather the role of the Topic is determined
indirectly by the semantic domain of the focus affix and
the basic role structure of the clause, its nuclear roles.

3.7 Summary

In this chapter we have investigated the basic clause
structure of the Philippine languages. We have seen that
the standard treatment of the focus system of these lan-
guages in which the focus affixes signal the basic role of
the noun phrase which is Topic is not complete and fails
to account for a large part of the data. We have suggested
an alternative analysis in which the focus affixes signal
the basic semantic domain for the clause, to which the
Topic is closely related. The role of the Topic is then
determined indirectly by reference to the role structure of
the clause as set up by the semantics of the verb base.

We have also suggested that Philippine languages are
basically role dominated languages as opposed to English,
which is reference dominated. This is indicated by the
careful marking of the role structure of the clause and the

dual aspect of role/reference structure in the focus system. We are now ready to turn to the clause structure of the Oceanic type languages.
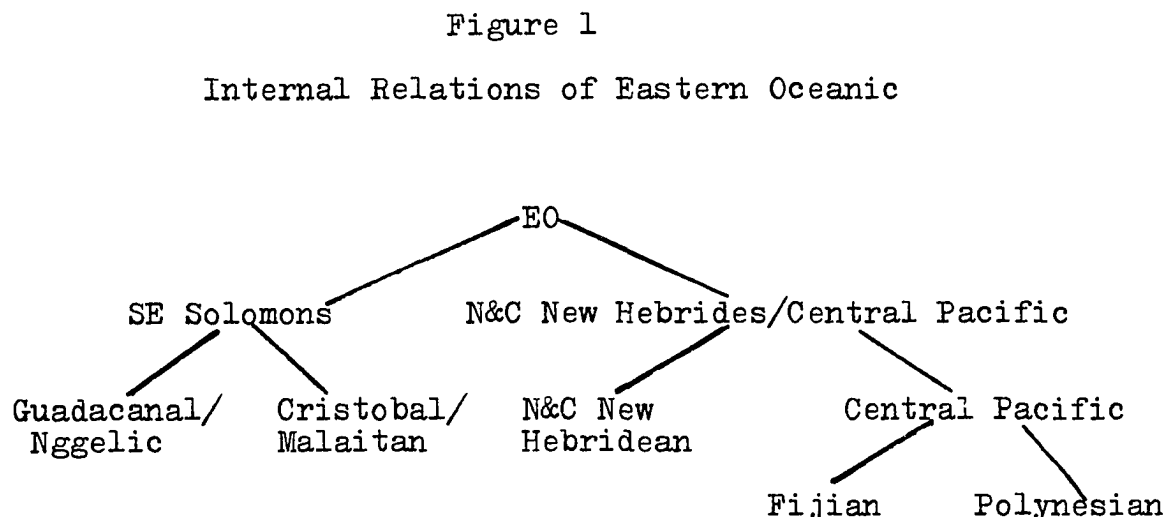
Chapter IV

Clause Structure: the Oceanic Type

4.0 Introduction

In Chapter IV we will undertake a comparative study of the clause structure of the Eastern Austronesian or Oceanic languages. The Oceanic sub-group of Austronesian may be defined (Grace 1955) as those languages east of 140 degrees East except Chamorro. Thus, Oceanic subsumes the Austronesian languages of the geographical regions of Polynesia, Melanisa and Micronesia, excluding Palauan and Chamorro. Oceanic may be linguistically defined as a sub-group by several features innovated from Proto-Austronesian (see 1.2), the most notable of which is PAN *p, *b > PO *p. While a few scholars may still doubt the validity of this Oceanic sub-group, it is now generally accepted.

Within Oceanic itself the groupings have not been much worked out. Grace (1955) proposed 19 coordinate groupings within Oceanic, but this is only an approximation based on lexicostatistics. The internal relations of one of these 19 groups have recently been determined by Pawley (1972). This grouping has been termed Eastern Oceanic (EO) and includes the languages of the southeast Solomon Islands, the north and central New Hebrides, Fiji and Polynesia.

Its internal relations are schematized in Figure 1 (Pawley 1972):

Figure 1

Internal Relations of Eastern Oceanic

```
                              EO
              SE Solomons          N&C New Hebrides/Central Pacific

   Guadacanal/   Cristobal/   N&C New              Central Pacific
   Nggelic       Malaitan     Hebridean
                                              Fijian       Polynesian
```

It is an unfortunate, but inescapable, fact that few good descriptions exist for languages outside the Eastern Oceanic group. Consequently, our discussion of Oceanic clause structure must deal primarily with Eastern Oceanic languages. Also, due to the work of Pawley (1972) some reconstruction of PEO grammar has been accomplished. Starting from this basis facilitates our comparative work. It does appear likely that the simple clause structure of Proto-Oceanic and Proto-Eastern Oceanic were similar (Pawley 1974). Data from Tolai, an Oceanic language of the New Ireland group, will be quoted in appropriate places to support this claim.

In this chapter we will first briefly characterize the basic clause structure in Proto-Eastern Oceanic with comparative data from several daughter languages. In 4.2

we will undertake an extensive study of Fijian basic clause
types. Pawley (1975) has recently argued for the great
conservatism of Fijian with respect to Proto-Eastern Oceanic
structure. In 4.3 it will be shown that natural grammatical
developments from Fijian clause types resulted in the erga-
tive case marking in Tongan clauses and in Proto-Polynesian.
Throughout this chapter the model of clause level grammar
presented in 3.1 will be used.

4.1 Clause Structure in Eastern Oceanic

Some basic reconstruction of Proto-Eastern Oceanic was
attempted in Pawley (1972). While not completely rigid,
the word order of Proto-Eastern Oceanic was SVO, in our
terms I V II, just as in English. A formula for the pos-
sible expansion of a basic clause in PEO is:

I   VP   (II)   (PP)   (TP)   (1)

where PP represents any number of prepositional phrases,
and TP represents an optional temporal phrase. In all EO
languages a VP can be distinguished. This VP is not equiv-
alent to the notion of the generative grammarians, but merely
abbreviates the concatenation of Verb and Verbal particles.
Pawley (1972) gives the following expansion of the VP:

Aspect/
Conjunction   SM Aspect <u>Verb</u> OM Direction Manner (2)

SM and OM refer to subject marker and object marker respectively. They are obligatory pronominal concord markers for full noun phrases occupying Positions I and II. We will symbolize them as Ip, pronominal marker for Position I, and IIp, pronominal marker for Position II. Generally, when there are no full noun phrases in I or II, then Ip or IIp take on these positions.

These formulae represent a near maximal expansion of clause elements, and naturally, not all clauses will be of this type. The noun phrase arguments in the clause will be a function of the verbal semantics. The clause frame of nuclear roles is a function of the meaning of the verb.

All EO languages have a distinction between stative and active verbs. As with the Philippine languages, stative verbs are often marked with the stative derivational prefix *ma-. Active verbs are further divided into intransitive verbs, which have no noun phrase in Position II, and transitive verbs, which do have a noun phrase in II. The minimum structure for clauses with stative or intransitive verbs contains one noun phrase, while that for transitive verbs requires two.

The structure of any clause with a stative verb as predicate requires one nominal element which occupies Position I and has the role of Patient. Other nuclear roles may be present if the semantics of the verb requires it. All EO languages exhibit this clause type. Data to illus-

trate claims in this section will be drawn from three EO

languages: Kwara'ae (KWR) (Deck 1934), spoken on Mala,

Solomon Islands; Mota (MTA) (Codrington 1885), spoken on

Sugarloaf Island, Banks' Islands; and Nguna (NGU) (Schütz

1969), of Nguna Island, Central New Hebrides. In addition,

examples from Tolai (TOL) (Franklin et al. 1974), which is

outside of the EO group, will be sometimes used.

Examples of stative clauses with a Patient in Position

I follow:

NGU: Na-p̃au-na   e   ma-sai.   (a) (3)
         art-head-3 sg poss Ip:3 sg stat-break
         "Its head was broken."

MTA: O tanun   ni   we tatas.   (b)
      art man Ip:3 sg pres bad
      "The man is bad."

TOL: A tutana   i   ngala.   (c)
      art man Ip:3 sg big
      "The man is big."

TOL: A tutana   dia   ngala.   (d)
      art man   Ip:3 pl big
      "The men are big."

All of these sentences require a Ip concord marker to the

noun phrase in I with the role of Patient. Note, as in (c)

and (d), that the concord marker denotes the number of the noun phrase in I. Number is rarely overtly marked on nouns in Oceanic languages.

Active verbs occur in both transitive and intransitive clauses. Intransitive clauses have no noun phrase in Position II. In intransitive sentences the role of the noun in Position I must be either Actor or Experiencer. Other nuclear roles may be present in the clause as required by the verb. Examples of intransitive clauses are:

KWR: Nau   ku   leleka i   ro'oki.   (a) (4)
     1 sg Ip:1 sg   go   T yesterday
     "I went yesterday."

NGU: Na-wota   e   munu.   (b)
      art-chief Ip:3 sg drink
      "The chief drank."

TOL: A pap   i   momo.   (c)
      art dog Ip:3 sg drink
      "The dog is drinking."

The Kwara'ae sentence (4) (a) contains an emphatic pronoun occupying Position I and a Ip concord marker <u>ku</u> for it before the verb. This is a common feature of Oceanic languages. Note that all the nouns in Position I in (4) are Actors.

Transitive verbs contain both an Actor/Experiencer in Position I and a noun phrase in Position II. Suffixes to

the verb overtly mark the clause as transitive. After these suffixes comes the pronominal concord marker IIp for the noun in Position II. In some languages it may also be suffixed to the verb. The sentences in (5) illustrate this clause type:

KWR: Nau   ku   li-si-a   lima-na. (a) (5)

    1 sg Ip:1 sg look-TR-IIp:3 sg hand-3 sg poss

    "I looked at his hand."

NGU: Pila-na   e   munu-gi   a   noai. (b)

    mother-3 sg poss Ip:3 sg drink-TR IIp:3 sg water

    "His mother drank the water."

The transitive suffixes are -si in (5) (a) and -gi in (5) (b).

There are two basic transitive suffixes in Oceanic languages. They may be represented as *-Ci and *-Caki respectively. The *C in the affixes represents a consonant, the form of which is morphologically conditioned for each verb. In the course of the phonological development of the Oceanic languages, the final consonant of the Proto-Austronesian base was lost. When, however, a suffix followed the consonant, it was preserved. Later, it was re-analyzed as part of the suffix, and the forms of the suffixes became *-Ci and *-Caki.

The suffixes *-Ci and *-Caki contrast semantically.

Examples from Kwara'ae point this out (PO *k became KWR glottal stop, written as '):

li-<u>si</u>-a "look at it"   lia-<u>nga'i</u>-nia "look to him" (6)

oli-<u>si</u>-a "answer him"   oli-<u>ta'i</u>-nia "return it"

mu-<u>si</u>-a "break it"   mu-<u>ra'i</u>-nia "tear it"

tala-<u>'i</u>-a "lead him"   fa'a-tala-<u>ma'i</u>-nia "instruct

                                                          him"

In the last example <u>fa'a-</u> is the causative prefix. The semantics of these suffixes will be discussed in depth in 4.2 with regard to Fijian. We should mention here that comparative evidence (Pawley 1974) indicates the origin of *-<u>Ci</u> as the locative preposition *(<u>q</u>)<u>i</u> "to, in, at" and the origin of *-<u>Caki</u> as the instrumental preposition *(<u>q</u>)<u>aki</u> "with, for." They have cognates as prepositions as well as suffixes in many Indonesian languages, including Malay, Javanese, Buginese and Toba Batak. See Pawley (1974) for discussion.

If we review the examples in this section, we note that the usual Ip marker for the third singular is <u>i</u> or <u>e</u>. <u>e</u> comes from <u>i</u> and is an innovation of Proto-North and Central New Hebridean/Central Pacific. Also, in all the examples the marker for IIp for third singular nouns is <u>a</u>. With these observations we can reconstruct the basic clause structure for third singular nouns in Positions I and II as:

            I   *i   Verb-(TR)   (*a)   (II)   (7)

This is essentially the same as the reconstruction for basic clause structure for PEO in Clark (1974), but is equally applicable to Proto-Oceanic. It would be well to remember this formula because it will have important implications for our reconstruction of Proto-Austronesian clause structure in Chapter V.

This completes our summary of PEO clause structure as a background for our extensive discussion of Fijian. Fijian is generally very conservative with respect to the structure outlined here, but has made a few innovations, which will be brought out below.

4.2 Fijian Clause Structure

The Fijian grammar which we are going to discuss in this section is that of Standard Fijian. While based primarily on the Bauan dialect, it does possess features of other dialects. There are many native speakers of Standard Fijian, and it is the dialect commonly heard on the radio and in the streets of Suva, the capital.

Fijian differs from other Oceanic languages in one immediately apparent feature. It is not an SVO language. The basic order of Fijian is VOS, in our terms V II I, although as we will see below, there are some reasons for believing that this is not altogether an accurate typology. The word order shift resulted in a re-analysis of the Ip concord marker for third singular noun phrases as a clausal

introducer (CI) for both main and embedded clauses, as
demonstrated in Chapter II.

The other major innovation of Fijian from Proto-
Eastern Oceanic is that the _a_, the IIp marker for third
singular nouns, has driven out the _i_ in the transitive
suffixes *-Ci and *-Caki so that with third singular nouns
in Position II they appear as -Ca and -Caka respectively.
Some dialects of Fijian still possess the _i_ in these
suffixes (Pawley and Sayaba 1971).

4.2.1 Verb Sub-categorization

Fijian has a basic sub-categorization of its verbs
into two types, as pointed out by Arms (1974). The dichot-
omy is along the lines of action versus process verbs
suggested in Chafe (1970). This distinction is most clearly
seen in intransitive sentences. Compare the sentences in
(8) with those of (9):

E   ra   ā   tagi na gone.   (a) (8)
CI Ip:3 pl past   cry art child
"The children cried."

E   ā   curu na tūraga.   (b)
CI past enter art chief
"The chief entered."

E ā qōlou na gone.   (c)

CI past scream art child

"The child screamed."

E rau   ā soko na tūraga.   (d)

CI Ip:3 dl past sail art chief

"The two chiefs sailed."

E ā   sogo na kātuba.   (a) (9)

CI past close art   door

"The door closed/was closed."

E ā   ubi na yaqona.   (b)

CI past cover art   kava

"The kava was covered."

E ā   musu na bilo.   (c)

CI past break art   cup

"The cup broke/was broken."

E ā   boko na cina.   (d)

CI past go out art lamp

"The lamp went out/was out."

Note that all verbs in (8) and (9) are intransitive. In all sentences in (8) the nominal in I is in the role of Actor or Experiencer, while in (9) they are in the role of Patient. Following Arms (1974) we will refer to verbs of the type in (8) as Actor oriented (A-verbs) and those in

(9) as Patient oriented verbs (P-verbs).

This distinction in verb class is a fundamental one in Fijian grammar and cannot be put down to ambiguity in the clause or a common sense interpretation of the role of the single nominal. Sentence (10):

E ā qaqi na tūraga. (10)

CI past crush art chief

"The chief was crushed."

can only have this meaning because qaqi "crush" is a P-verb. "The chief crushed (something)" is an impossible reading for (10). Furthermore, sentence (11):

E ra ā rū na tūraga. (11)

CI Ip:3 pl past curse art chief

"The chiefs cursed."

can only have that meaning because rū "curse" is an A-verb. The reading "the chiefs were cursed" is impossible for (11).

This distinction in verb classes is basically along the lines of action versus process verbs (Chafe 1970). A-verbs are action verbs and commonly occur intransitively. When they are overtly transitive, the nominal in Position II is generally in the role of Goal or Locative, and can never be a Patient. Examples of A-verbs are (Arms 1974):

roro "approach lutu "fall" (12)

toro	"move"	drō	"flee"
taro	"ask"	sali	"flow"
vodo	"board, embark on"	vuka	"fky towards"
kaila	"boast, shout"	lako	"go"
cegu	"breathe"	siro	"go down"
kaci	"call"	kudru	"growl"
kaba	"climb"	rika	"jump down"
tagi	"cry"	lade	"jump over"
rū	"curse"	caqe	"kick"
nunu	"dive"	dredre	"laugh"
curu	"enter"	davo	"lie on"
cala	"err"	qito	"play with"
reki	"rejoice"	cewa	"sit on"
lesu	"return"	dabe	"sit on"
cici	"sun"	tiko	"sit on"
soko	"sail"	qalo	"swim"

A few A-verbs, such as moce "sleep," rai "see," seem semantically to be process verbs, but because the nominal in Position I with these verbs in intransitive clauses is an Experiencer, they belong to the A-verb class. For a few A-verbs, their membership in this class seems completely arbitrary: vuli "study, learn," tete "spread," and regu "kiss."

P-verbs are basically process verbs. As transitive verbs they correspond to the action-process verbs of

English (Chafe 1970), but in Fijian the notion of action-process is derivative, the semantic character of process being basic to P-verbs. As predicates of intransitive clauses, they take Patients in Position I. As transitive verbs they take an Actor in Position I and a Patient in Position II. Examples of P-verbs are (Arms 1974):

vavi	"bake"		cibi	"coil"	(13)
love	"bend"		ubi	"cover"	
musu	"break"		qaqi	"crush"	
tavu	"broil"		sele	"cut"	
bulu	"bury"		cika	"damage"	
kau	"carry"		keli	"dig"	
tobo	"catch"		caka	"do, make"	
mudu	"cease, end"		maca	"empty"	
tā	"chop"		oti	"finish, end"	
koti	"clip, shear"		rawa	"get"	
sogo	"close		cā	"hate"	
vuni	"hide"		voro	"smash"	
biu	"leave behind"		kola	"split"	
luva	"loosen"		lose	"squeeze"	
dola	"open"		kele	"stop, anchor"	
boro	"paint"		moku	"strike, hit"	
lamu	"pierce"		dresu	"tear"	
tei	"plant"		vuki	"turn over"	
sova	"pour"		sere	"untie"	

Again, the class of a few verbs appears to be arbitrary: rogo "hear," tara "touch" and tabu "forbid." Why rai "see" is an A-verb, and rogo "hear" and tara "touch" are P-verbs, is inexplicable, but grammatical classes are rarely perfectly regular.

Intransitive clauses with P-verbs are ambiguous between stative and process meanings. Note the following sentences:

E ā   sogo na kātuba.   (a) (14)

CI past close art door

"The door closed/was closed."

E ā   musu na bilo.   (b)

CI past break art cup

"The cup broke/was broken."

Both of the sentences in (14) can have a stative reading "was closed" or "was broken" or a process reading "closed" or "broken." It seems best to regard the process reading as basic, because many P-verbs undergo affixation to mark an obligatory stative reading. These are the so-called spontaneous forms (see Arms 1974:72-7). Also, from the standpoint of simplicity it seems better to regard the process meaning as basic because when P-verbs are transitivized, they are always action-process verbs, although action-stative verbs are ruled out as being semantically impossible.

This basic sub-categorization of Fijian verbs is likely quite widespread in Austronesian. It may have quite possibly been a feature of Proto-Austronesian. As mentioned in 3.2.0.1, Tagalog verbs are sub-categorized in a similar manner, although the pattern is not quite so transparent. In Tagalog the notion of aspect is superimposed on the basic semantic division. Fijian P-verbs correspond to Tagalog verbs with mag- for Actor Focus, while Fijian A-verbs correspond to those with -um-. Compare the following Tagalog verbs with -um- with the Fijian A-verbs in (12):

l-um-apit	"approach"	b-um-aba	"go down"	(15)
s-um-akay	"board, ride"	um-ungol	"grumble"	
h-um-inga	"breathe"	t-um-alon	"jump down"	
t-um-awag	"call"	l-um-akso	"jump over"	
um-akyat	"climb"	s-um-ipa	"kick"	
um-iyak	"cry"	t-um-awa	"laugh"	
s-um-isid	"dive"	h-um-iga	"lie on"	
p-um-asok	"enter"	b-um-alik	"return"	
p-um-atak	"fall"	t-um-akbo	"run"	
t-um-akas	"flee"	l-um-ayag	"sail"	
um-agos	"flow"	um-upo	"sit on"	
l-um-ipad	"fly towards"	l-um-angoy	"swim"	
p-um-unta	"go"			

Of course, the correlation is not perfect. There are some verbs of like meaning which are A-verbs in Fijian, but do

not take -um- in Tagalog. But the comparison of the lists
of (12) and (15) is quite impressive. What is fundamental
to verbs with -um- is that they are intransitive. As with
A-verbs in Fijian, the Tagalog -um- verbs in (15) do not
occur with Patients, but rather Goals or Locatives. This
correlation is not perfect, however, because there are many
-um- verbs in Tagalog which do occur with Patients, such
as" t-um-aga "chop," g-um-upit "clip," p-um-utol "cut,"
s-um-ira "damage," p-um-atay "extinguish, kill" and b-um-utas
"pierce." These Tagalog -um- verbs correspond to P-verbs
in Fijian. The reason they are marked with -um- is due
to the second criterion for its use: punctual aspect. The
actions of these verbs are inherently punctual. In Fijian,
the basis for the classification of verbs is simply action
versus process. In Tagalog, transitive durational verbs
are opposed to action and punctual process verbs, whether
transitive or intransitive. The former are marked with mag-
and the latter with -um-. Some transitive durational pro-
cess verbs in Tagalog which correspond to Fijian P-verbs in
(13) are:

mag-hurno	"bake"	mag-bunton	"pile up"	(16)
mag-ihaw	"broil"	mag-tago	"hide"	
mag-libing	"bury"	mag-iwan	"leave behind"	
mag-dala	"carry"	mag-pa-lawag	"loosen"	
mag-tigil	"finish"	mag-bukas	"open"	
mag-bago	"change"	mag-pinta	"paint"	

mag-sara "close"   mag-tanim "plant"

mag-takip "cover"   mag-buhos "pour"

mag-durog "crush"   mag-pa-ikot "turn over"

mag-hukay "dig"   mag-pulupot "wind, blow"

mag-tapos "finish"

The verbs in (16) are always transitive and represent durational processes. They are action-process verbs, as opposed to the Fijian P-verbs, which are basically process verbs. When many of these verbs occur as process verbs, that is, intransitively, they are marked with the intransitive affix -um-: t-um-igil "cease," b-um-ago "change," s-um-ara "close," l-um-awag "loosen," b-um-ukas "open" and um-ikot "turn over."

It is obvious, then, that the Tagalog and Fijian systems of verb sub-categorization are related, although the pattern is more transparent in Fijian. Fijian A-verbs, which are action verbs, correspond to intransitive verbs and transitive punctual process verbs in Tagalog, while Fijian P-verbs, which are process verbs, correspond to transitive durational action-process verbs in Tagalog. The interrelatedness of these two systems is clear. The differences are due to language specific categorizations which slightly skew the pattern. All intransitive verbs in Tagalog, regardless of being action or process, are marked with -um-. But the basic opposition is found in both languages: action versus process. In Tagalog, mag- basically marks process, but it

is restricted to transitive and durative actions. The two
systems may be schematized as:

Fijian		intransitive	transitive	(17)
	action	A-verbs	A-verbs	
	process	P-verbs	P-verbs	
Tagalog		intransitive	transitive	(18)
	action	-um-	-um-	
	process	-um-	mag-	

The definition of transitive for these tables is that the
Fijian verb is suffixed with a transitive suffix and the
Tagalog verb allows a PF clause type. The criteria for mag-
delimits its use to only transitive process verbs, but the
two systems are clearly related. We have ignored the
aspectual distinction between -um- and mag- for the purposes
of the table.

Because Tagalog and Fijian are distantly related lan-
guages and definitely belong to different sub-groups in
Austronesian (Dempwolff 1934-8), it would seem that a system
of verbal sub-categorization similar to these existed in
Proto-Austronesian, although convergent development cannot
be ruled out, given that a semantic split in the verb system
between action and process verbs is wholly natural and quite
widespread in the languages of the world. This semantic
classification of verbs is also primarily responsible for
the genesis of an ergative type clause structure in Proto-

Polynesian, which we will demonstrate in 4.3.

4.2.2 Fijian Transitive Clauses

Transitive clauses in Fijian are those in which the verb is marked with a transitive suffix. All transitive clauses have this overt structure, but the role structure of the clause depends crucially on whether the predicate is an A- or P-verb.

With transitive A-verbs the nominal in Position I is an Actor or Experiencer, exactly as in intransitive clauses. The primary defining characteristic of transitive A-verbs is that the role of the noun phrase in Position II cannot be Patient. The usual roles for II with A-verbs are Goal or Locative, when the A-verb is affixed with the suffix -Ci. As noted above, with third singular nominals the suffix appears as -Ca, the marker for the third singular noun in II having driven out the i. Examples of transitive clauses containing A-verbs with the suffix -Ci are:

<div style="text-align:center">

E ra ā roro-v-a na

CI Ip:3 pl past approach-TR-IIp:3 sg art

    vale na tūraga.   (19)

    house art chief

"The chiefs approached the house."

</div>

```
E  ā       lade-v-a      na kato na  gone. (b)

CI past jump-TR-IIp:3 sg art box art child

"The child jumped onto the box."
```

```
E  ā  taro-gi  ira     na tūraga.         (c)

CI past ask-TR IIp:3 pl art   chief

"The chief asked them."
```

```
E  ā       siro-m-a              na  uciwai.  (d)

CI past go along-TR-IIp:3 sg art   river

"He went along the river."
```

In (19) (a) through (c), the role of the noun in Position
II is Goal. In (19) (d), it is Locative. This is typical
of transitive clauses with A-verbs. In (c), the basic form
of the suffix appears because the following IIp marker is
third person plural. Therefore, the i of the suffix is
overtly present.

With the second transitive suffix -Caki, the basic
roles of the nominal in II are Instrument/Comitative, Source
and Benefactive. For the purpose of Fijian grammar, we
may define Comitative, the role of accompaniment, as that
sub-role of Instrument when it is not efficacious to the
action, but merely accessory. Comitative will rarely be a
nuclear role of a verb, while Instrument often is. Instru-
ment and Comitative are also in complimentary distribution
in Fijian. Instrument is used in Position II with P-verbs
in the few cases where they allow any other role but Patient

there, and Comitative with A-verbs. Examples of the use of
-Caki with transitive A-verbs are:

II as Source:

E ā tagi-cak-a na kisokiso na gone. (a) (20)

CI past cry-TR-IIp:3 sg art cramp art child

"The child cried from the cramp."

E ā reki-tak-a na itukutuku na tūraga (b)

CI past rejoice-TR-IIp:3 sg art news art chief

"The chief rejoiced at the news."

E ā kudru-tak-a na itukutuku na tūraga. (c)

CI past grumble-TR-IIp:3 sg art news art chief

"The chief grumbled at the news."

II as Comitative:

E ā kaba-tak-a na kato na gone.

CI past climb-TR-IIp:3 sg art box art child (a) (21)

"The child climbed with the box in hand."

E rau ā nunu-vaki ira na gone

CI Ip:3 dl past dive-TR IIp:3 pl art child

na tūraga. (b)

art chief

"The two chiefs dove with the children."

E ā dro-tak-a na ilavo. (c)

CI past flee-TR-IIp:3 sg art money

"He fled with the money."

II as Benefactive:

```
E  ā       soro-vaki      ira     na  gone
CI past make offering-TR IIp:3 pl art child
```
       `na  tūraga.`   (a)(22)

       `art chief.`

"The chief made an offering for the child."

```
E  ā lotu-taki ira     na  gone.                (b)
CI past pray-TR IIp:3 pl art child
```
"He prayed for the children."

```
E  ā       vala-tak-a      na gone na tūraga.   (c)
CI past fight-TR-IIp:3 sg art child art  chief.
```
"The chief fought for the child."

With transitive P-verbs marked with -Ci, the nominal
in Position II is almost always a Patient, although with at
least one verb, keli "dig," it is a Locative. All P-verbs
become action-process verbs (Chafe 1970) when transitivized,
and this is the only way they become action-process.
Examples of sentences with P-verbs transitivized with -Ci
are:

```
E  ra  ā     bulu-t-a      na kato na  gone. (a)(23)
CI Ip:3 pl past bury-TR-IIp:3 sg art box art child
```
"The children buried the box."

```
E  ā kau-ti  ira     na gone na tūraga.   (b)
CI past carry-TR IIp:3 pl art child art  chief
```
"The chief carried the children."

E ā   sogo-t-a   na kātuba na gone. (c)

CI past close-TR-IIp:3 sg art door art child

"The child closed the door."

E ā moku-ti   ira   na gone na tūraga. (d)

CI past beat-TR IIp:3 pl art child art chief

"The chief beat the children."

In all these examples the nominal occupying Position II has the role of Patient. This is general for P-verbs affixed with -Ci.

Few P-verbs occur with the suffix -Caki. Their entire orientation seems to be toward the Patient, which, as we saw above, is marked by -Ci in transitive clauses. In the few P-verbs that -Caki occurs with, it denotes the role of Instrument for the noun in II. Some examples are:

E ā   tā-tak-a   na isele na tūraga. (a) (24)

CI past chop-TR-IIp:3 sg art knife art chief

"The chief chopped with the knife."

E ā   cori-tak-a   na dali na gone.   (b)

CI past tie-TR-IIp:3 sg art rope art child

"The child tied with the rope."

-Caki with P-verbs is extremely rare in my data corpus, only occurring with three verbs, including the two above. A reasonable explanation for this is that because P-verbs are

Patient oriented, Patients and only Patients have access to Position II. The sentences in (24) would only be used when no obvious Patient is implied, a situation which is not likely to arise very often. This condition does not exist with transitive clauses with A-verbs, because the roles they are oriented towards, Actor and Experiencer, always occupy Position I. This leaves Position II open for various roles: Goal, Source, Locative, etc.

Having discussed the features of nominals in Position II in transitive clauses, we may now ask what are the options for Position I? The normal choice, of course, is for the Actor or Experiencer to occur there. Fijian does, however, possess a passive-like construction, but unlike English, it is not intransitive. Also unlike English, no Actor/Experiencer may be expressed in a passive construction. If an Actor or Experiencer is present in a clause, it and only it may occupy Position I, and the clause will be active.

The Fijian passive clause type is still marked overtly for transitivity, but there is no nominal in Position II, and no IIp marker. The following are examples of passive clauses:

E ā sogo-vi na kātuba. (a) (25)
CI past close-TR art door
"The door was closed."

```
E    ra    ā    kau-tü    na    gone.
CI Ip:3 pl past carry-TR art child                (b)
"The children were carried."
```

```
E    ā    musu-ki    na    bilo.                  (c)
CI past break-TR art    cup
```

Note that all three sentences are marked with the transitive suffix, even though they are passive. It is clear that the noun phrases are in Position I, because there is no IIp marker suffixed to the verb. Furthermore, the fact that in (25) (b) gone "child" is indexed by the Ip concord marker ra before the verb makes it quite clear that gone is in Position I.

All three of these sentences contain action-process verbs which imply an Actor. This is what distinguishes them from their intransitive counterparts in (26):

```
E    ā    sogo    na    kātuba.              (a) (26)
CI past close art    door
"The door closed/was closed."
```

E   ra   ā   kau   na   gone.   (b)

CI Ip:3 pl past carry art child

"The children were carried."

E   ā   musu   na   bilo.   (c)

CI past break art   cup

"The cup broke/was broken."

Because the sentences in (26) have a stative or process meaning, no Actor/Experiencer is implied in them. In the passive clauses in (25) while no Actor is overt, it is implied by the transitive clause marking. The sentences in (26) contain stative or process verbs which are basically durational, while the verbs in (25), the passive sentences, are punctual. What is passive about the clauses in (25) is exactly the same as what is passive in many other languages. For purposes of the referential aspect of the clause, a transitive clause which implies at least the roles of Actor and Patient or Goal, has a role other than Actor in I. The only distinguishing fact about the Fijian passive construction is that it does not allow the Actor to be overtly present in the clause, although it is always implied. This is not particularly remarkable and has been observed for other languages (Keenan 1975b).

The claim that Actors are implied by the passive construction, even though not overt, is well supported by the fact that A-verbs or Actor-oriented verbs also occur in

passive constructions:

E	ā	taro-gi na	gone.	(a) (27)
CI	past	ask-TR art	child	

"The child was asked."

E	ā	curu-mi	na vale.	(b)
CI	past	enter-TR	art house	

"The house was entered."

E	ā	kudru-taki	na itukutuku.	(c)
CI	past	grumble-TR	art news	

"The news was grumbled over."

The examples in (27) all imply an Actor and in this respect exactly parallel those in (25). All are examples of passive clauses and only differ in the grammatical class of the predicate. What has confused the issue of Passive in Fijian for the past century is the existence of intransitive clauses like those in (26) with a passive translation. But we have shown in this section that they are not passives at all, but rather intransitive clauses with Patient oriented verbs.

4.2.3 Role and Reference in Fijian Grammar

In 4.2.2 we defined transitive clauses as those with an overt transitive suffix on the verb. They were defined in this way because there are some clause structures in

Fijian in which a nominal occupies Position II, but there is usually no transitive suffix, and there is never a IIp marker. Contrast the following (a) sentences with the true transitives in (b):

E   ra   sogo kātuba.   (a) (28)
CI Ip:3 pl close door
"They close doors."

E   ra   sogo-t-a   na kātuba.   (b)
CI Ip:3 pl close-TR-IIp:3 sg art door
"They close the door."

E gunu   wai   na gone.   (a) (29)
CI drink water art child
"The child drinks water."

E   gunu-v-a   na   wai   na gone.   (b)
CI drink-TR-IIp:3 sg art water art child
"The child drinks the water."

E qoli lawa   na tūraga.   (a) (30)
CI fish net   art chief
"The chief fishes with nets."

E   qoli-tak-a   na lawa na tūraga.   (b)
CI fish-TR-IIp:3 sg art   net art chief
"The chief fishes with the net."

Note that the (b) sentences in (28) through (3) are typical
transitive clauses. The verb is affixed with a transitive
suffix, the clause contains a IIp marker, and the noun
phrase in Position II is marked with the article <u>na</u>. All
three of these features are lacking in the (a) examples.
The verb is in the intransitive form, there is no IIp marker
in the clause, and the nominal in Position II is not pre-
ceded by <u>na</u>. But there is a noun in Position II in these
(a) sentences. These structural differences in the Fijian
clause correspond to a difference in meaning. The nominals
in the (a) clauses are generic, while those in the (b)
examples are specific (Arms 1974). The noun phrases in Posi-
tion II in the (a) sentences refer generally to the class
of objects they designate, while those in the (b) examples
refer to a specific referent in the linguistic or extra-
linguistic context of the speech act.

Definite and specific are closely related concepts.
Definite noun phrases are a sub-case of specific noun phrases
for which the speaker assumes the referent is already known
to and presently identifiable to the hearer. The speaker
makes no such assumption for specific nouns. Thus, in (30):

I'm looking for a snake. (30)

the speaker may have a particular snake in mind, and in this
case <u>snake</u> would be specific, although the particular snake
may not be known to the hearer. In (31):

the speaker assumes the hearer is cognizant of the referent

of snake. Definite and specific are clearly related in

that a particular referent is denoted for the noun phrase

in question. They are opposed to generics, in which the

entire class of the objects designated by the noun is

denoted. The referentiality of definite and specific nouns

is quite high.

The difference in meaning between generic and specific

for nouns in Position II is one of the entire structural

contrast between the (a) and (b) sentences. It is not simply

the presence versus absence of the article na. na is not

a definite or specific article, but rather the simple nominal

article for common noun phrases. This is clearly indicated

where it is used indefinitely and non-specifically, as in:

e sega na wai CI NEG art water "there's no water," or

e so na wai CI some art water "there's some water." wai

"water" in both these sentences is obviously being used

generically, but the article na is still present. Construc-

tions like *e sega wai and *e so wai are ungrammatical.

The differences in the (a) and (b) examples seem to

entail object incorporation in the (a) clauses. In the

languages of the world which exhibit object incorporation,

it seems to be limited to generic noun phrases (Mardirussian

1975). The (a) sentences correspond to English intransi-

tive sentences like "they are road-building" or "the child is glue-sniffing."

This option, then, allows Position II in an overtly transitive sentence in Fijian to be occupied only by specific noun phrases, the referents of which are already predetermined at least to the speaker and usually also to the hearer. Thus, the options for Position II in Fijian are sensitive to the degree of referentiality of the nouns in the clause. Furthermore, as we discussed in 4.2.2, the roles of these noun phrases are indicated by the transitive suffixes on the verb. These facts suggest a similarity to the Philippine typology of Chapter III.

As we pointed out in 4.1, the word order of the clause in Proto-Oceanic and Proto-Eastern Oceanic is I V II, as in English. English and the Oceanic languages exhibit a feature which may be characteristic of I V II languages: a greater accessibility of semantic roles to Position II than to Position I in the active transitive clause. This feature was noted for English in 3.1. But English also has an option that most Oceanic languages do not possess. It has an essentially freely applying Passive. Most Oceanic languages have no passive clause type at all, and, in Fijian and the other Oceanic languages, when an Actor is present in the clause, it must occupy Position I, a restriction the passive construction allows English to get around.

The counterweight Fijian has to this restriction is
the elaboration and coding of options for Position II. The
referential features of the nominal in II are signalled by
whether it is incorporated into the verb or not. If the
noun is generic and highly referential in a universal, un-
restricted sence, because it denoted the entire class of
objects, it is incorporated directly into the verb stem
and has no IIp marker.

Proper nouns and pronouns are only slightly less refer-
ential than generic nouns. Their real world referents are
quite apparent. Proper nouns occur with the transitive
suffixes to code their role, but not with the IIp marker.
This is unnecessary because of their highly referential
nature. Pronouns, too, especially those of the first and
second person, are highly referential in the same way.
Their discourse referents are clear. In Fijian, the refer-
ents of the third person pronouns are restricted to animates
only. This restriction limits the possible referents of
third person pronouns in any discourse. Because of their
highly referential nature, pronouns occur incorporated into
the verb phrase and take no IIp marker other than themselves.
They, too, are tightly bound to the predicate. Examples of
proper nouns and pronouns in II are:

E ā rai-ci Viti na gone.   (a) (33)
CI past see-TR Fiji art child
"The child saw Fiji."

E ā taro-gi Samu na tūraga. (b)

CI past ask-TR Samu art chief

"The chief asked Samu."

E ā rai-ci au oqori na gone. (a)(34)

CI past see-TR IIp:1 sg near you art child

"The child saw me near you."

E ā taro-gi ira na tūraga. (b)

CI past ask-TR IIp:3 pl art chief

"The chief asked them."

In (33) the proper article ko is not used with Viti and Samu because as proper nouns they have been incorporated. (34) (a) indicates that the pronouns are also incorporated because oqori "near you" is a post-verbal particle within the verb phrase. A common noun in Position II would follow the verb phrase.

Finally, we come to the lowest point of the Fijian referentiality scale for Position II: the specific common noun phrases. This construction has been extensively illustrated in previous examples. Common nouns are not incorporated within the verb phrase, but rather occur outside of it in Position II with the common article na. Within the verb phrase a IIp marker is obligatory. The function of the Ip and the IIp markers in Fijian is exactly to indicate the real world or discourse referents of the nouns in I and

II. They are indices to indicate the referential proper-
ties of these nouns which bear no marking on themselves for
referential properties. The Ip and IIp markers perform a
purely referential function and are like articles in other
languages.

The basic rule governing the behavior of nouns in Posi-
tion II in Fijian is that the more highly referential the
noun phrase vying for II, the less overt marking for tran-
sitivity the clause will bear. The hierarchy of referen-
tiality, generics, proper nouns, pronouns and specific com-
mon nouns, is the exact reverse of the extent of marking of
the clause for transitivity when each of these types of noun
phrases occupies II. Clauses with generics have no overt
marking for transitivity, in fact, are structurally intran-
sitive, while clauses with common nouns in II are fully
coded for transitivity.

Thus, we find in Fijian a highly developed referential
system developed around Position II. By contrast, Position
I is poorly developed. Only the Actor/Experiencer may
occupy it, when present, regardless of its referentiality,
although Actors/Experiencers will generally be animate or
human and, therefore, highly salient pragmatically. But
there are no options with regard to I. While in traditional
terms, Fijian is a VOS language, in our terms of defining
Positions in terms of referential salience, there seem to be
good reasons for describing it as a V I II language, because

from our analysis above, it is obvious that the referential
peak of the clause occurs immediately after the verb. The
traditional typology of subject and object, which fails to
account for the role and referential properties implied with
these two terms, succeeds only in obscuring the true typo-
logy of the Fijian transitive clause. For the sake of the
reader's sanity, we will continue to refer to the object
position as Position II, even though in Fijian it is prob-
ably Position I, in view of its higher referential salience,
which is what determines the ranking of Positions.

The question that immediately comes to mind is what
could be responsible for this elaboration of Position II.
The first reason is the obvious one we have noted several
times. In general, the Oceanic languages lack a true passive
construction. It is impossible to get a role other than
Actor into I in a transitive clause. This significantly
restricts the options for indicating referential prominence
in the clause. Therefore, the languages have elaborated the
options and coding for Position II. While Fijian does
possess a passive construction, as discussed in 4.2.2, it
cannot be used with an overt Actor/Experiencer. This serious-
ly limits its usefulness for communicative purposes. Further-
more, the passive construction is an innovation in Fijian,
while the elaboration of II is part of its Oceanic heritage,
and it is more central to our comparative interest. The
only construction widespread in Oceanic languages which is

comparable to the English passive is an active transitive sentence with a third person pronoun in Position I and a full noun phrase in II. This would be translated by an English passive. Note the following example from Mota (Codrington 1885):

Neira we   tau-r o imwa.   (35)

3 pl pres build-TR art house

"They built the house, " or

"The house is built."

Constructions like (35) have the referential aspects of a passive, because of the heavy elaboraton of the referential structure for II, but formally they are still active transitive sentences with an Actor/Experiencer in I, and they are not equivalent to the English passive construction, except in translation.

The second reason for the dominance of Position II is purely internal to Fijian. It is simply that Fijian is a verb initial language. Verbs are generally new information, but the clause initial position in most languages is normally occupied by old information. Furthermore, in Fijian, Position I, the usual position for old information, is clause final. This is obviously not the best situation for a language to be in, given that Position I, the position for old information and the referential peak of the clause, pro-

vides textual cohesion by linking with the previous clause
of the discourse or the extralinguistic context. The old
information is the linkage upon which the rest of the clause
is commentary. Consequently, its best position is clause
initial, and its worst is clause final.

This is the extra problem Fijian must deal with that
the other Oceanic languages avoid by being I V II languages.
The passive construction is no help here because it moves
nouns into Position I. Position II is the first nominal
position in the clause, and in Fijian, we have seen it is
very sensitive to referential notions. It has taken over
the characteristic linking function of Position I.

Fijian and the Philippine languages face similar
dilemmas in being verb initial. The solution for the Philip-
pine languages is their complex focus system. Fijian has
solved the problem by the referential prominence of Posi-
tion II and the transitive suffixes. Similarly to the
role coding properties of the Topic for the focus affixes
in the Philippine languages, the transitive suffixes code
the role of the noun phrase in Position II, but, again,
only indirectly. Unlike the focus affixes, it is difficult
to give consistent semantics to the transitive suffixes.
As noted in 4.1, -Ci comes from the locative preposition
*(q)i and -Caki from *(q)aki "with," but these meanings do
not appear to be very relevant to the synchronic analysis.
In Fijian -Ci seems to code that the more immediate or

directly _affected_ nuclear role occupies Position II, while -Caki codes that the accessory or _effective_ nuclear role occupies Position II. As with the Philippine languages, the notion of nuclear roles is crucial to a proper understanding of the coding mechanism.

P-verbs only allow a Patient to occupy Position II. This is coded with the suffix -Ci, the _affected_ suffix. -Caki is rarely used with P-verbs because of this restriction.

A-verbs permit a much broader array of roles to occupy Position II. Because the Actor occupies Position I, this leaves II open for various roles. Because A-verbs are generally action verbs, the basic roles with the affected suffix -Ci are Goal or Locative. With roro-vi "approach," taro-gi "ask," curu-mi "enter" and lako-vi "go," the noun phrases in Position II will all be Goals, because these verbs denote "motion to," and the Goal is the nuclear role directly involved. With vodo-ki "board, ride on," kaba-ti "climb," siro-ri "go along," cewa-ri "sit on" and dabe-ci "sit on," the noun in Position II will be Locative, because these verbs denote position or "movement on/along."

With the accessory or effective suffix -Caki several roles are allowed to occupy II with A-verbs. They are Source, Instrument/Comitative and Benefactive. Examples of each were given in 4.2.2. Again, the semantics of the verb determines its nuclear roles, and, ultimately, which of the

possible roles for the nominal in II will be coded by -Caki. With verbs like tagi-caki "cry over," lolo-vaki "fast for" and kudru-taki "growl over," the role of Source is coded by -Caki. These verbs indicate action prompted by outside influence. This outside influence is the Source. Verbs like vala-taki "fight for," soro-vaki "make offering for" and lotu-taki "pray for" are coded for a Benefactive role in II by -Caki. These verbs all imply actions done for the benefit of someone who is the Benefactive. With the large majority of A-verbs, -Caki indicates the role of Instrument/ Comitative in Position II. Examples are very common, and with some of these verbs peripheral roles are permitted in Position II. Some examples are: siwa-taki "fish with," kaba-taki "climb with," nunu-vaki "dive with," drō-taki "flee with," vuka-taki "fly with" and cabe-taki "go with." All these verbs may imply action with an accessory, either as a tool or as accompaniment.

The use of both transitive suffixes with A-verbs to code the role of the nominals in Position II is no longer fully productive, but it is still a very common feature of the language, especially with verbs which indicate cultural-ly basic actions.

From our discussion of Fijian it would appear that both the role and the reference systems of the language are well developed. It would be inaccurate to designate it either as role dominated or reference dominated. It is

a dominationally neutral language. The language has evolved basic structures which permit both systems to function transparently in expressing ideas.

4.3 Tongan: the Genesis of an Ergative Type

In the course of the study of Polynesian languages over the past century, there has been a continuing debate over the basic verbal system of the proto-language. In recent years this debate has sharpened over the issue of whether Proto-Polynesian was an ergative language or an accusative language. Hohepa (1969) has argued that PPN was an accusative language like Maori and that the ergative structure of Tongan and Samoan arose from an ever increasing use of the passive construction. Clark (1974), on the other hand, has claimed that the ergative pattern of Tongan and Samoan was basic to PPN and that the accusative structure of Maori and other Polynesian languages was a secondary development.

In this section we will attempt to offer a very plausible, albeit indirect, case for the structure of Proto-Polynesian as an ergative language by demonstrating that the ergative structure of Tongan very likely arose from an earlier grammatical system like that of modern Fijian. In this view Tongan is regarded as the most conservative Polynesian language grammatically, a position which agrees very closely with the phonological evidence (Biggs 1971).

Tongan has basically two classes of verbs, and these
are distinguished by the type of clause structure they occur
with. One type of verb occurs generally in accusative con-
structions. We will refer to them as A-verbs. The other
class of verbs occur in ergative constructions. We will
call these E-verbs.

E-verbs can occur in both intransitive and transitive
clauses. Tongan is a verb initial language with basically
free word order of the following noun phrases. Consequently,
as in Tagalog, the notion of position is not relevant in
Tongan. All noun phrases are case marked. 'e marks the
ergative case or Actor/Experiencer in a transitive class,
while 'a marks the nominative case, the Patient in a tran-
sitive clause and Actor or Patient (basic role is irrele-
vant) in an intransitive clause. Some examples of clauses
with E-verbs are (Hohepa 1969, Lynch 1972):

Na'e taipe   'a   e   tangata.   (a) (36)
past type   nom def   man
"The man is typing."

Na'e taipe   'e he tangata 'a e   topi.   (b)
past type   erg def   man   nom def letter
"The man is typing the letter."

Na'e tanu 'a   e   ika.   (c)
past bury nom def fish
"The fish was buried."

Na'e tanu-'i 'e he tangata 'a e ika.   (b)

past bury-TR erg def man nom def fish

"The man buried the fish."

'i still retains much of its transitive import in Tongan. Although seemingly intransitive, (38) (a) is truly a transitive clause. It implies an Actor, although it is not overtly present. In this it contrast with (37) (a), in which no Actor is implied. In addition to being a transitivizer, 'i also carries with it the notion of perfective aspect (Milner 1974). It is on this point that (37) (b) and (38) (b) contrast. (37) (b) is unmarked for aspect, although it would normally be interpreted as imperfective. (38) (b) can only have the meaning of perfective aspect. This contrast is clearly brought out in (39) (a) and (b):

Na'e langa 'a e tangata.   (a) (39)

past build nom def man

"The man was building."

Na'e langa-'i 'a e fale 'e he tangata.   (b)

past build-TR nom def house erg def man

"The man built the house."

(39) (b) contrasts with (a) in that it is transitive and must have a perfective arrect interpretation. Both of these notions are provided by the suffix -'i.

A-verbs can also function with intransitive and tran-

sitive clauses. Again, all cases are overtly marked. Because A-verbs occur in accusative clauses, the case marking with them is as an accusative language. The nominative case is marked with 'a and the accusative case with 'i or ki. Note the following clauses with A-verbs:

Na'e kai 'a e tangata.   (a) (40)
past eat nom def   man

"The man ate."

Na'e kai 'a e tangata 'i he ika.   (b)
past eat nom def   man   acc def fish

"The man ate the fish."

Na'e lea . 'a e tangata.   (a) (41)
past speak nom def   man

"The man spoke."

Na'e lea 'a e tangata ki he fefine.   (b)
past speak nom def   man   acc def woman

"The man spoke to the woman."

In the intransitive (a) sentences, the single noun phrase argument is marked with 'a, the nominative marker. In the transitive (b) clauses, the Actor is marked with the 'a nominative marker, and the Patient/Goal with 'i or ki, the accusative markers. The accusative structures with A-verbs sharply contrast with the ergative pattern of E-verbs. The

nominative marker 'a functions in both clause types, but
with seemingly different uses in transitive clauses.

However, A-verbs can in fact occur in clauses with an
ergative type case marking. In such clauses the A-verb
must be marked with the transitive suffix -'i. Examples
of these are (Lynch 1972, Tchekhoff 1973):

Na'e kai-'i 'a e ika 'e he tangata. (a) (42)

past eat-TR nom def fish erg def man

"The man ate the fish."

Na'e lea-'i 'a e fefine 'e he tangata. (b)

past speak-TR nom def woman erg def man

"The man scolded the woman."

The structural differences between the transitive (b) clauses
in (40) and (41) and (42) (a) and (b) are that (40) (b) and
(41) (b) are case marked according to an accusative pattern,
while (42) (a) and (b) are marked in an ergative pattern.
Also, the verbs in (42) are inflected with the transitive
suffix -'i, while those of (40) (b) and (41) (b) are not.
These structural differences correspond to an important
difference in meaning. As Clark (1974) points out, (40) (b)
means "the man ate some of the fish," while (42) (a) means
"the man ate all of the fish." As our translations indicate,
(41) (b) means "the man spoke to the woman," while (42) (b)
means "the man scolded the woman," but the verb base lea

"speak" is the same in both cases.

These in capsule summary are the basic facts of Tongan clause structure: a split according to verb classes between an ergative and accusative noun phrase marking patterns in the clause, with an overlap on the ergative side. We would like to have an explanation for this bizarre system. The semantic contrast between (40) (b) and (41) (a) and between (41) (b) and (42) (b) provide an insight into the solution. In (40) (b) "fish" has a partitive interpretation. As we saw in Tagalog in 3.5, partitive meanings are associated with location oriented roles, especially Source and Locative. In (42) (a) "fish" is totally eaten; it is a totally affected Patient. (40) (b) and (42) (a) contrast at least in part in the role of "fish," Source/Location versus Patient. In (41) (b) "woman" is a Goal, the person to whom one is speaking, but in (42) (b), it seems to be treated as a Patient, the noun phrase truly affected by the action. Thus, the contrast between ergative and accusative in Tongan is closely related to the role structure of the clause. Ergative clauses are associated with <u>Patients</u>.

This immediately suggests the Fijian system of verb classes, and, in fact, the Tongan system is a direct development from it. In Fijian, we have the following system:

Intransitives: (43)

    A-verb   NP: Actor/Experiencer

    P-verb   NP: Patient

Transitives:

    A-verb-Ci   NP: Goal/Locative   NP: Actor/Experiencer

    P-verb-Ci   NP: Patient   NP: Actor/Experiencer

In Fijian, because there are no case markers for the nouns in Positions I and II, the distinction between A-verbs and P-verbs is covert. Only the semantic interpretation of the sentence allows us to distinguish the classes. The only real innovation in Tongan is that the language has made the distinction an overt structural one. Tongan E-verbs correspond to Fijian P-verbs, and Tongan A-verbs to Fijian A-verbs. Tongan E-verbs are generally action-process verbs, as seen in (44), which can be compared with the list of Fijian P-verbs in (13).

ta'o	"bake"	'osi	"finish"
piko	"bend"	ma'u	"get"
foa	"break"	fufū	"hide"
tutu	"burn"	tuku	"leave behind"
tanu	"bury"	kōkō	"loosen"
fua	"carry"	ava	"open"
ngata	"cease, end"	vali	"paint"
tā	"chop"	tō	"plant"
kosi	"clip"	hua	"pour"

puni "close"	ta'ofi "prevent"	
'ufi'ufi "cover"	fōfoa "smash"	
ta'omi "crush"	fahi "split"	
hele "cut"	tatau "squeeze"	
maumau "damage"	tuki "strike"	
keli "dig"	hae "tear"	
fai "do, make"	vete "untie"	

Tongan A-verbs are action verbs and are often intransitive, as are the Fijian A-verbs. Compare the following Tongan A-verbs with the Fijian list in (12):

'unu "approach"	talatuki "curse"	(44)
fehu'i "ask"	uku "dive"	
u'u "bite"	hū "enter"	
heka "board, ride"	hala "err"	
pole "boast"	tō "fall"	
mānava "breathe"	tafe "flow"	
ui "call"	puna "fly"	
kaka "climb"	'alu "go"	
tangi "cry"	hifo "go down"	
ngulu "growl"	lele "run"	
hopo "jump"	folau "sail"	
kata "laugh"	sio "see"	
tokoto "lie on"	kī "squeal"	
lotu "pray"	ako "study, learn"	
foki "return"	kakau "swim"	

Using a list of about 120 basic verbs of similar gloss in
Fijian and Tongan, we did a statistical analysis of the
correlations between the classes of verbs in the two lan-
guages:

Tongan E-verb/Fijian P-verb:	81%
Tongan A-verb/Fijian P-verb:	19%
Total:	100%
Tongan A-verb/Fijian A-verb:	95%
Tongan E-verb/Fijian A-verb:	5%
Total:	100%

The statistical correlations between the verb classes in
the languages are far too high to be due to chance. It is
either that the classes are historically related, as we have
suggested, or that the classes represent universal verb
classes which all languages have in one form or another.
Both of these are in fact correct. The distinction in verb
classes does reflect the universal one of action versus
process/action-process verbs. But, there are some verbs in
both languages, the class of which seems arbitrary. However,
the arbitrariness is consistent cross-linguistically.
Fijian _vuli_ and Tongan _ako_ "study, learn" are A-verbs in
both languages, although they are action-process verbs and
should normally belong to the P-verb or E-verb class. Thus,
we can only conclude a historical relation between the two

classes, which do, however, reflect universal semantic categories of verbs.

The evolution from the Fijian system of the Tongan system is quite straightforward. The 'a nominative marker was historically the common article (see 5.2) and is ultimately related to Fijian na. As an article, it was used with the single noun phrase in intransitive sentences. Intransitive sentences like those of Fijian would appear in Tongan as the system below:

Intransitives: (46)

      A-verb   'a   NP: A/E

      E-verb   'a   NP: P

With intransitives, then, the role of the noun phrase would still be covert and dependent on the verb class, as it is in modern Tongan. The nominative marker 'a marks the single noun phrase argument of the verb, regardless of its being an A-verb or an E-verb.

A-verbs, however, were allowed another option for intransitive clauses in addition to that of (46). Because they are often position or motion verbs, they could be constructed with locative phrases. Marked with various prepositions, intransitive clauses with overt Goals or Locatives could be formed. The prepositions used were 'i, a general locative preposition meaning "at, on, in, into, till"

(Churchward 1953:109-11). Thus, _'i_ marks Locative, and _ki_,
Goal. _Ki_ is also found in Fijian to indicate Goal. These
innovations permitted the following possibility for an
intransitive clause with an A-verb:

A-verb   'a NP: A/E   'i NP: L / ki   NP: G   (47)

Clauses like (47) were formally intransitive. There is no
overt transitive suffix on the verb. But in the course of
the development of the language, the _'i_ or _ki_ came to be
taken as accusative case markers, and, thereby, an accusative
case marking pattern became associated with A-verbs.

There was only one major innovation in the transitive
clause system, and this occurred with both E-verbs and A-
verbs. The roles of Actor and Experiencer were overtly
marked with the preposition _'e_. _'e_ appears as _e_ in Fijian,
in which it functions as a general locative particle. It
must have come to be used as a marker for Actor/Experiencer
in transitive clauses via its use as a marker for Source.
In many languages, some uses of Actor and Source are closely
related. Note the following paraphrases: "John gave me
the book" versus "I got the book from John." John is
semantically a Source in both cases because he is the point
of origin for the transfer of the action, but he is also
an Actor in the former example.

Why an overt marker for the Actor/Experiencer was

innovated is not clear. It may have been that the word order for nominal elements was no longer fixed, as it is is Fijian, and an overt marker for the Actor role was needed to disambiguate the role structure of the clause. In the same vein, it may have been that too much ambiguity arose from the purely covert classes of A-verbs and E-verbs, and an overt structural distinction was required. In any case, the use of 'e to mark the Actor/Experiencer in transitive clauses was innovated and resulted in the following:

```
A-verb-'i      'a    NP: G/L    'e    NP: A/E
P-verb-'i      'a    NP: P      'e    NP: A
```

There was only one final innovation. The use of -Ci in transitive clauses with E-verbs became associated with perfective aspect. There is no definitive explanation for this, but it is well known that ergative case marking patterns and perfective aspect are closely associated in many languages, as in Punjabi and Georgian (Comrie 1973). An adequate explanation for this has never been proposed, but we have a very tentative one to offer here. As the Tongan data indicate, ergative case marking is oriented toward Patients, the entity which is affected by the action of the verb. They will only be completely affected by the action when it is completed, that is, in the perfective aspect. When the action is ongoing, as in the imperfective aspect,

Patients will be being affected, but they will not be truly or completely affected until the action is completed. This may explain the correlation between perfectivity and ergativity. Consequently, when -Ci became associated with perfective aspect with ergative verbs, transitive clauses with E-verbs could appear without it to mark the distinction between perfective and imperfective aspect. With this innovation we derive the modern Tongan clause patterns:

Intransitive: (49)

    A-verb 'a NP: A/E ('i NP: L / ki NP: G)

    E-verb 'a NP: P

Transitive:

    A-verb-'i 'a NP: G/L 'e NP: A/E

    E-verb-('i)'a NP: P   'e NP: A

We have with this historical explanation accounted for the unusual split ergative system of Tongan from the basic system of Fijian by natural grammatical changes, well documented for many languages throughout the world. The system in (49) is essentially the same as that reconstructed for Proto-Polynesian by Clark (1974). Our careful historical look would seem to support strongly that reconstruction. The clause patterns of the other Polynesian languages are secondary developments from (49). For an explanation of

those developments see Clark (1974).

Tongan is another language like Tagalog which is role dominated. It has completely free word order among noun phrase arguments, and each role is coded with a prepositional marker. Little wonder, then, that of all the Austronesian languages we will investigate in this study, Tongan has the most developed system of nominal articles, much like that of western European languages. It has a definite article, he after 'e, 'i or ki, and e elsewhere, and an indefinite article ha. As with English, the articles are extensively used, and one of them occurs with almost every noun phrase. This extensive use of articles is obviously necessary in view of the free word order of noun phrase arguments. They provide the essential surface coding of referentiality of the nouns in the clause, because Tongan basic clause structures give prominence to the role structure.

4.4 Summary

In this chapter we have discussed the basic typology of the clause structure in the Oceanic languages. After a comparative sketch of Eastern Oceanic in 4.1, we presented a detailed description of Fijian in 4.2. Fijian was shown to be a language with both the role and referential aspects of clause structure equally developed. It, furthermore, seems

to be unusual in that Position II is probably more prominent pragmatically than Position I. Finally, in 4.3 we demonstrated how the split ergative system of Tongan likely arose from a grammatical structure like that of Fijian.

With Chapters III and IV, we have completed typological sketches of the two fundamentally different types of Austronesian languages. Such a background was necessary for our final task: the reconstruction of the clause structure of Proto-Austronesian.

Chapter V

Palauan and Proto-Austronesian Clause Structure

5.0 Introduction

In this chapter we are going to present our reconstruction of Proto-Austronesian clause structures. In 5.2 it will be argued that Proto-Austronesian was more similar to an Oceanic language than to a Philippine one. From our reconstruction of Proto-Austronesian, we will provide a likely evolution for the Philippine clause typology in 5.3. Before approaching these problems, however, certain of our claims about Proto-Austronesian must be justified, especially regarding the unusual features. They will be motivated by a consideration of some facts about Palauan, which we will direct our attention to first.

5.1 The Palauan Passive

Palauan verbs are divided into stative and active. We will not be concerned here with the stative verbs. The following table summarizes the active verb inflection in Palauan:

Table 4

Palauan Active Verb Inflection

intransitive: -m- ~ m-

middle: m-

transitive:

     imperfective: meN-

     perfective: -m- + suffixed IIp

                             marker

Palauan exhibits the same active verb inflection pattern as Tagalog: intransitive and punctual or perfective forms (with -m-) opposed to transitive durative forms (with meN-).

We will only be concerned with transitive clauses. The basic word order is SVO or I V II. In transitive imperfective clauses the verb is prefixed with meN-. The N of the prefix and the initial consonant of the stem undergo certain morphophonemic changes (see Foley 1975). Labial and velar or glottal initial dentals become /l/. Stems with initial /r/ remain the same. Other changes can complicate the derivation (Foley 1975). Patients in imperfective transitive clauses are marked with er, as are the spatial roles of Goal, Source and Locative. Examples of imperfective transitive clauses are:

A ngalek a   menga   er   a ngikel.   (a) (1)

              /meN-+ka/

art child art imperf-eat P art fish

"The child is eating the fish."

A ngalek a   meleseb   er   a blay.   (b)

              /meN-+sesob/

art child art imperf-burn P art house

"The child is burning the house."

A ngalek a   omoes   er a ?ad er a diong. (c)

              /meN-+boes/

art child art imperf-shoot P art man L art river

"The child is shooting the man at the river."

In all of the clauses in (1) the verb is marked with the tran-
sitive imperfective prefix meN-, and the Patient is marked
with er. Although it is overtly marked for role, the Patient
is still in Position II in the sentences in (1). Position
II immediately follows the verb and is occupied by Patients.
The ordering of the post-verbal noun phrases in (1) (c)
cannot be reversed. Patient must occupy II. The ordering
of the noun phrases other than Patient after the verb is
free. The nominal in Position I is always an Actor or Ex-
periencer in active transitive sentences.

    Transitive sentences in the perfective aspect are marked
with the infix -m-, which also undergoes several morpho-

phonemic changes (Foley 1975), most notably, becoming [w] and blending with the following vowel. In perfective transitive clauses, the noun phrase in Position II is marked with a IIp concord marker. The IIp concord markers for Palauan are:

Table 5

Palaun IIp Markers

1 sg:	-ak, -kak
2 sg:	-w, -aw, -kaw
3 sg:	-iy, -r
1 pl incl:	-id, -kid
1 pl excl:	-emam, -kemam
2 pl:	-emiw, -kemiw
3 pl human:	-rir, -terir
3 pl non-human:	$\emptyset$

The choice of which allomorph of a particular IIp marker a given verb will use seems to be lexically determined. In perfective transitive clauses the noun in Position II directly follows the IIp marker, and no er is present. Examples of perfective transitive clauses parallel to those in (1) are:

A ngalek a   koliy   a ngikel.   (a) (2)

/k-m-al-iy/

art child art perf-eat-IIp:3 sg art   fish

"The child ate the fish."

A   ngalek   a   sosebiy   a   blay.   (b)

           /s-m-esob-iy/

art   child art perf-burn-IIp: 3 sg art house

"The child burned the house."

A   ngalek   a   mosterir   a   re

        /b-m-oes-terir/

art   child art perf-shoot-IIp:3 pl human art pl

      ?ader   a   diong.   (c)

      man L art river

"The child shot the men at the river."

A   ngalek   a   mosak.   (d)

        /b-m-oes-ak/

art   child art perf-shoot-IIp:1 sg

"The child shot me."

In all of the examples in (2), the perfective form of a
transitive verb is affixed with -m-. Each verb is also suf-
fixed with a IIp marker which agrees with the nominal, if
any, in Position II. The noun in Position II appears im-
mediately after the IIp marker. While there is no Ip marker
for Position I, Palauan in perfective transitive clauses
closely resembles the Oceanic languages in structure. The
structure of transitive clauses in Palauan is very unusual
in that while there is concord for the nominal in Position
II, there is none for that in I.

Palauan differs from Oceanic languages in another crucial respect. It has a freely applying Passive option. In fact, any nominal in a transitive clause, no matter what its semantic role, can occupy Position I. A noun phrase in I via the Passive option leaves a pronominal copy where it would have stood in an active transitive clause. The verb in a passive clause takes on a special passive morphology. This morphology consists of the lack of /m/ in the various verbal affixes plus a special set of pronominal forms. These pronominal forms are presented in Tabe 6:

Table 6

Palauan Passive Pronouns

1 sg: ku-, k-, ko-   1 pl incl: de-, do-

1 pl excl: ki-, kimo-

2 sg and pl: ʔo-, ʔomo-

3 sg and pl: le-, lo-

Note that there is no distinction for number with the second and third person pronouns in these passive forms. The most important fact about the uses of these pronouns, which are obligatory when any role other than Actor/Experiencer occupies Position I, is that they code not the nominal in Position I, but the Actor/Experiencer! Note the following examples of passive clauses in imperfective aspect:

A   ngikel a   longa   er ngiy a   ngalek. (a)(3)

/lo-N-ka/

art   fish art pass 3 sg-imperf-eat P 3 sg art   child

"The fish is being eaten by the child."

A   re ?ad a   lomoes   er tir

/lo-N-boes/

art pl man art pass 3 sg-imperf-shoot P   3 pl

a   ngalek.   (b)

art   child

"The men are being shot by the child."

A   blay a   kuleseb   er ngiy.   (c)

/ku-N-sesob/

art house art pass 1 sg-imperf-burn F   3 sg

"The house is being burned by me."

In each example the passive pronoun codes the Actor/Experien-
cer rather than the noun phrase in Position I. This is most
clearly demonstrated by (3) (c), in which the noun phrase
in I, a blay "the house," is third singular, which is the
Actor of the clause. In (3) (a) and (b) lo- is third singu-
larg and agrees with ngalek "the child," which is the Actor
in each sentence. In each example a pronominal copy which
agrees in person and number with the noun in Position I, is
in Position II, where the noun phrase would be in an active

transitive clause. In (3) (b) <u>tir</u>, the third plural pronoun, is in Position II, but is coreferent with <u>a</u> <u>re</u> <u>?ad</u> "the men" in Position I! <u>Tir</u> is the pronominal copy of <u>a</u> <u>re</u> <u>?ad</u> left behind in Position II by the Passive. The Actor/Experiencer in a passive clause does not take <u>er</u>, the oblique marker, and occurs after Position II or in clause final position.

Perfective passive clauses are basically similar, except that the IIp markers occur instead of pronominal copies following <u>er</u>:

```
A    blay   a        le-sesb-iy              a ngalek. (a)(4)
art house art pass 3 sg-burn-IIp:3 sg art child
"The house was burned by the child."
```

```
A    re    ?ad  a           le-bos-terir
art   pl   man art pass 3 sg-shoot-IIp:3 pl human

          a ngalek er    a  diong.                        (b)
          art child  L   art river
"The men were shot by the child at the river."
```

```
A ngalek  a           k-bos-iy.                           (c)
art child art pass 1 sg-shoot-IIp:3 sg
"The child was shot by me."
```

In all these examples, while the Patient of the verb is in Position I, it still triggers concord as if in Position II.

This is true even though there is no noun phrase in Position II. Furthermore, the passive pronouns code not the noun in I, but the Actor/Experiencer. In (4) (c), the IIp marker for third singular -iy is coreferent with a ngalek "the child" in Position I, while k- is the passive pronoun for first singular, the Actor of the clause. In (4) (b), a re ?ad "the men" is in Position I, but triggers concord as if in Position II, as indicated by the IIp marker -terir for third plural human. The Actor ngalek "child" agrees in person and number with the passive pronoun prefix on the verb, le-.

What could be the explanation for this complex cross referencing system of verbal concord? It is involved with the interlocking systems of role and reference in Palauan. Palauan is strictly a I V II language. Only one noun phrase may appear before the verb. That is the most pragmatically prominent noun phrase, which occupies Position I. The unmarked choice for I is the Actor/Experiencer. If any other role occupies Position I, then the verb is marked with a pronominal prefix which agrees with the Actor/Experiencer. This is to keep the role structure of the clause clear—to unambiguously mark the noun functioning as Actor/Experiencer. The clause is also marked to code the role of the noun which now appears in Position I. In a perfective clause, if the noun is a Patient or Goal, the only roles which can occupy

Position II, a IIp suffix on the verb codes its role. This
is less ambiguous than it might seem because only a few
verbs, such as __bes__ "give," allow Goals to occupy II. The
vast majority only allow Patients there. The roles of Patient
with an imperfective verb, Goal, Source and Locative, when
they occur in Position I, are indexed by a coreferential
pronoun preceded by __er__, the marker for these roles, in their
__normal__ position after the verb in the clause. Source, Goal,
Locative and even Time can freely occur in Position I:

```
A   diong   a            le-bos-terir
art river art pass 3 sg-shoot-IIp:3 pl human
            a  re ?ad  er  ngiy   a  ngalek.        (a) (5)
            art pl man  L  3 sg art  child
"The child shot the men at the river."
```

```
A kerrekar a        le-sebek    er ngiy  a belo?el. (b)
art   tree  art pass 3 sg-fly   S  3 sg art pigeon
"The pigeon flew out of the tree."
```

```
A   klukuk    a       k-bo            k-bos-terir
art tomorrow art pass 1 sg-go pass 1 sg-shoot-IIp:3 pl
                a  re ?ad  er  ngiy.                  (c)
            human art pl man   T   3 sg
"Tomorrow I will shoot the man."
```

In the examples in (5), the roles of Locative, Source and

Time, for the noun phrases in I, are coded by the pronouns following _er_, the prepositional marker for these roles.

It might be objected at this point that we are simply discussing Topicalization, and not Passive at all. However, Topicalization, as generally conceived, can only occur in main clauses, while the passive construction under consideration can, in fact, must in some cases, occur in embedded clauses. Palauan has a restriction in relative clause formation that the head of the clause and the noun phrase in Position I must be coreferential. Relativization is by deletion of the noun phrase in I in the embedded clause. This restriction and strategy is similar to that of many other Austronesian languages, as discussed in Chapter II. In Tagalog, the head and the Topic of the relative clause must be coreferential, and Relativization is by deletion of the Topic. As noted in Chapter III, this restriction follows from the fact that Relativization is a referentially oriented operation, which involves a predication about a referent, the head noun phrase, already given. Within the embedded clause, the referential system would make prominent that noun phrase coreferential with the head because the entire thrust of the clause is to give information about the noun phrase. Therefore, the restriction in Palauan that the head of the relative clause and the noun phrase in Position I in the embedded clause be coreferential is not surprising.

All languages for communicative purposes need to be
able to relativize more than just Actors. Because in Palau-
an only Actors can occur in Position I in basic active
transitive clauses, the Passive option is employed to permit
other roles to be relativized:

a re ?ad el le-bos-terir

art pl man lig pass 3 sg-shoot-IIp:3 pl human

        a ngalek er a diong   (a) (6)

        art child L art river

"the men that the child shot at the river"

a diong el le-bos-terir

art river lig pass 3 sg-shoot-IIp:3 pl human

        a re ?ad er ngiy a ngalek   (b)

        art pl man L 3 sg art child

"the river the child shot the men at"

a blay 'l le-sesb-iy a ngalek   (c)

art house lig pass 3 sg-burn-IIp:3 sg art child

"The house the child burned"

*a blay 'l sosebiy a ngalek   (d)

        /s-m-esob-iy/

art house lig perf-burn-IIp:3 sg art child

In (6) (a) through (c), the embedded clauses are in the
passive forms so that the heads of the clauses and the nouns

in Position I are coreferential. Relativization is by deletion of the noun in I. (6) (d) is unacceptable because the embedded clause is not a passive construction so that the Patient blay "house" would be in Position I. The verb sosebiy "burned" is an active form. (6) (d) does not contain a proper form of the embedded clause for Relativization to produce a grammatical result.

Palauan is a language much like Fijian, in which Position is basic to the referential structure of the clause. In Palauan, only one noun phrase may occur before the verb, and that nominal occupies Position I. Position I is the fundamental referential point in the Palauan clause. Position II is far less significant, and in this feature Palauan differs from Fijian and the other Oceanic languages. While the unmarked choice for Position I in Palauan is the Actor, any role may occur there. This is possible in Palauan, but not in the Oceanic languages, because, unlike them, it possesses a Passive option which allows any role to occupy I. The roles of the nouns in I are kept clear by the complex pronominal coding system on the verb and in the clause. The fact that the passive pronouns agree with the Actor/ Experiencer rather than the noun in I is part of this role coding function of the pronouns. Because the Oceanic languages have no Passive, they have elaborated the possibilities for Position II, and the roles there are indicated by the

transitive suffixes. Because Palauan has such a freely
applying Passive, only Patients are generally found in II,
and there is no need for transitive suffixes. In fact, they
are entirely absent in Palauan, even though the language
closely resembles the Oceanic languages in many features..

5.2 Proto-Austronesian Clause Structure

In this section we will present a case for the clause
structure of Proto-Austronesian as being much like that of
an Oceanic language, but with a Passive option like Palauan.
In Chapter IV we presented a formula for the basic clause
structure in Proto-Oceanic. We repeat it here:

$$\text{I} \quad \text{Ip} \quad \text{Verb-(TR)} \quad \text{(IIp)} \quad \text{(II)} \qquad\qquad (7)$$

For third person singular nouns in I and II, it would appear
as:

$$\text{I} \quad *\text{i} \quad \text{Verb-(TR)} \quad (*\text{a}) \quad \text{(II)} \qquad\qquad (8)$$

Capell (1974) did an extensive study of the clause structure
of many of the Western Austronesian languages. Excluding
the Philippine type languages and those of the Malaya, Java,
southern Borneo area, he found the following formula ac-
counted for the basic clause structure of the Western Austro-
nesian languages (Capell 1974:11):

$$\text{I} \quad \text{Ip} \quad \text{Verb-(TR)} \quad \text{IIp} \quad \text{II} \qquad\qquad (9)$$

This formula is exactly the same as that for the Oceanic
languages and would appear to account for the clause struc-
ture of the vast majority of the Austronesian languages,
all those except for the languages of Formosa, the Philip-
pines and the large western islands of Indonesia. With this
large and discontinuous distribution (it is exhibited by
the languages on the several small islands west of Sumatra),
(9) would be a very good candidate for the clause structure
of Proto-Austronesian.

Furthermore, when we start searching in Western Austro-
nesian for the form of Ip for third person singular nouns,
we find that the form most commonly encountered is $\underline{i}$. The
following sample sentences from widely separated Western
Austronesian languages amply bear this fact out:

Nias (island west of Sumatra) (Brandstetter 1916:201):

$$\text{I} \quad \text{mane Buruti-bexu} \qquad \qquad (10)$$

Ip:3 sg speak Buruti-ghost

"The ghost Buruti spoke."

Mentaway (island west of Sumatra) (Brandstetter 1916:199):

$$\text{Ukui} \quad \text{i} \quad \text{puputärä bakä ka uma.} \qquad (11)$$

father Ip:3 sg   twine   yarn L home

"The father twines yarn at home."

Buginese (southwest Sulawesi) (Becker, personal commu-
nication):

Tau   ero   jokka-i   (12)

man that walk-Ip:3 sg

"That man is walking."

Paulohi (Amboina) (Capell 1974:26):

Iri   i-suo.   (13)

3 sg Ip:3 sg-sit

"He is sitting."

These are just some languages with i as the Ip marker for
third singular noun phrases. The structural arrangement of
the clause varies a great deal from language to language
(note Buginese where the Ip marker is suffixed), but the form
of the Ip marker is constant. Capell (1974:17) notes the
following languages with i as Ip: Achinese, Gayo, Batak
(all of Sumatra); Simular, Sichule, Nias, Mentaway (all
islands west of Sumatra); Ambon (Amboina); Seran, south
Halmahera, Kei-Tanimbar-Aru (all island groups in far eastern
Indonesia near New Guinea).

There is another form for the Ip marker which is quite
widespread in Indonesia and is also found in some Oceanic
languages. This form contains an a and usually appears as
a or na. Some examples of languages with this form are:

Wolio (southeast Sulawesi) (Anceaux 1952):

O mama   a-liqka   i dala.   (14)

art man Ip:3 sg-go L path

"The man is going along the path."

Rottinese (Roti) (Brandstetter 1916:204):

Na-kaneni   touk   a   (15)

Ip:3 sg-seek man   the

"He seeks the man."

Areas which Capell (1974:17) mentions as having the _a_ based
form of the Ip marker are: Java, parts of Borneo and Sula-
wesi, and Bima, Roti, Timor and Solor, all of extreme eastern
Indonesia. Furthermore, there are a few languages in which
the third singular pronoun is made up of both elements, that
is, appears as _ia_. This is the form of the third singular
pronoun in Dayak, Malay/Indonesian and Old Javanese. Given
the complex distribution of the _i_ and _a_ elements, it is
judicious to reconstruct both as Ip markers for third singu-
lar nouns in I in Proto-Austronesian clauses. Thus, we
reconstruct (16):

I   *i/*a   Verb-(TR)   (*a)   (II)   (16)

The reconstruction of (16) gets immediate support by Brand-
stetter's (1916) reconstruction of *i and *a as articles.

PAN had two noun articles. *i was used for humans and proper nouns, and *a for common nouns. Examples in several languages are: Buginese i Diyo "Madame Diyo," Old Javanese i bapa "the father," Malagasy i Butu "Butu (name of a person)," Kamberese (near New Guinea) i ama "the father" (Brandstetter 1916:101). Examples with *a are: Rottinese nau a "the grass," Makassarese (Sulawesi) jarang a "the horse," Gayo (Sumatra) anak bujang a "the youth" (Brandstetter 1916:102), and Palauan a klalo "the thing." Note also that Tagalog has si and ni for proper nouns, but ang and nang for common nouns.

The close link to the article system suggests that the choice between *i and *a for the Ip marker was conditioned by the type of nominal in I. Note that *a can occur as a marker for both Ip and IIp. Taking this into account and its use as an article for common nouns, we suggest that it was associated with the role of Patient in both I and II. We will see below that this claim has excellent support. The *i, on the other hand, was associated with the roles of Actor or Experiencer in Position I. Its use as an article for proper nouns and humans seems to fit well with this. The semantic class of the verb, as discussed in Chapter IV, would determine the choice between *i and *a as Ip for third singular. Stative verbs would have *a because the role of the noun in I would be Patient. Active verbs would take *i

because the role would be Actor/Experiencer.

As in many Oceanic languages, it would appear that a wide spectrum of roles was available to Position II. The transitive suffixes *-(q)i "locative" and *-(q)aki - *-(q)aken "with, for" are well attested throughout Indonesia and Oceania (Pawley 1974), although not found in the languages of the Philippine type. In PAN, no transitive suffix was used to indicate the role of Patient in II, *-(q)i was used for Goal, Locative and Source?, and *-(q)aki - *-(q)aken for Benefactive and Instrument.

These suffixes, however, were only used in active clauses. Like Palauan, PAN had a freely applying Passive. Also like Palauan, the Actor/Experiencer continued to trigger concord for Ip, even though another role occupied I. As in very many Western Austronesian languages, the Actor/Experiencer was joined to the verb with the possessive relation marker in a Noun + Noun construction (see Chapter II). The form of the possessive relation marker in PAN was *ñ. This *ñ occurs in the basic form of the third singular possessive suffix. *-ña, which is made up of the possessive relator plus the third singular pronoun. This *ñ is obviously ultimately related to the ligature *ñ, discussed in Chapter II. Applying these changes, then, to (16) gives us the passive clause structure in PAN:

I   *i   Verb + *ñ + A/E   (17)

The transitive suffixes do not appear in passive clauses be-
cause the verb has been detransitivized by the application
of Passive. Both (16) and (17) apply only to third singu-
lar Actors or Experiencers and Patients, but the patterns
for other persons and numbers would be parallel. Further-
more, the third singular forms are basic to the later
developments in the Philippine languages.

The developments from this reconstruction of PAN to the
languages of the Oceanic type are quite straightforward.
The Passive option is lost, leaving only (16) as the clause
structure. With this loss the language came to rely heavily
on the possibilities for Position II, because there was no
longer any way to get a referentially or pragmatically prom-
inent noun phrase into Position I. It is probable that the
elaboration of II and the loss of the Passive proceeded
side by side, with the Passive ultimately being given up
entirely. It may have been that in Proto-Austronesian the
options for Position II were not so varied as in the Oceanic
languages. The transitive suffixes clearly derive from
earlier free prepositions (Pawley 1974): *(q)i location
and *(q)aki ~ *(q)aken "with, for." They may have been
free prepositions in PAN, and when a noun phrase other than
a Patient occupied II, it _and_ its case marker occurred there.
The prepositional case markers could then have become bound
as suffixes to the verb. They would then be the modern

transitive suffixes which indicate the role of the noun in
II. All this would proceed apace with the loss of the
Passive. But this is pure speculation. While it seems a
plausible scenario, we have no evidence to confirm or re-
fute it.

5.3 The Evolution of the Philippine Type

For Proto-Austronesian we reconstructed the following
clause structures:

$$I \quad *i/*a \quad Verb-(TR) \quad (*a) \quad (II) \qquad (16)$$

$$I \quad *i \quad Verb + *\tilde{n} + A/E \qquad (17)$$

One addition to these formulae is needed. All the languages
of the Philippine type exhibit an alternation between m and
n which is associated with aspect or tense. This can be
documented from many languages: Tagalog matutulog "will
sleep," natulog "did sleep;" Inibaloi (Ballard 1974) man-
eshol "will sleep," nan-eshol "did sleep;" and Sangirese
(islands between the Philippines and Sulawesi) (Maryott
1963) maiang "is sitting," naiang "did sit." The n seems
generally to indicate perfective aspect, and the m is op-
posed to it. The exact semantics of m is impossible to
pinpoint. It may simply have indicated neutral aspect or
may in fact have been an imperfective marker. In any case,
adding this alternation to (16) and (17), we get the

```
I    *m/*n    *i/*a    Verb-(TR)    (*a)    (II)    (18)

I    *m/*n    *i/*a    Verb + *ñ + A/E              (19)
```

The formulae in (18) and (19) may ver likely have been clause structures in Proto-Austronesian because the stative prefix ma-, which is related to *m, as we will demonstrate below, is found throughout the Austronesian area, even in Fijian and Tongan. In any case, whatever their PAN status, (18) and (19) represent the starting points for the development of the Philippine type languages.

The first innovation in the development of the languages of the Philippine type was a basic word order change. As pointed out in Chapter III, Philippine languages are essentially verb initial. Furthermore, the unmarked position for Topic is clause final. This was the first, and ultimately decisive, innovation in Philippine type languages. (18) and (19) became:

```
*m/*n    *i/*a    Verb-(TR)    (*a)    (II)    I    (20)

*m/*n    *i       Verb + *ñ + A/E       I           (21)
```

This change has been documented as occurring in Fijian in Chapters II and IV. Thus, while unusual, it is by no means implausible.

Here it is wise to begin to discuss the innovations in the active and passive clauses separately because they each go their own ways. We will start with the active clause.

The next stage is the loss of the transitive suffixes and the IIp marker. The possibility that the transitive suffixes were a later innovation in the Oceanic languages and some Indonesian languages was discussed above. With this innovation we get (22) for the simple structure of the active clause:

*m/*n   *i/*a   Verb   II   I   (22)

(22) is the basic structure which underlies active clauses for all modern Philippine languages. At this stage large scale re-analysis of function sets in. In Chapter II we demonstrated in Fijian how the re-structuring of _e_, the Ip marker for third singular, to a clause introducer occurred as a result of the shift of word order from I V II to V II I. A similar development happened in the evolution

of the Philippine languages. The conditioning factor for the alternation between *i and *a was obscured as a result of the word order shift. *a, which had coded a role of Patient in I merged with the aspect markers *m and *n to form the stative prefix ma- ~ na-. This is eminently plausible in view of the fact that only stative verbs would have the role of Patient in I in a non-passive clause. This explains the origins of ma in many Philippine languages. The *i was lost in many languages, but survived in the form of a prefix mi- in a few languages, such as Malagasy and Yami, spoken on an island between Formosa and the Philippines. Note the following examples from Yami (Asai 1936):

atep	"roof"	mi-atep	"having a roof"	(23)
tatala	"boat"	mi-tatala	"having a boat"	
vatek	"pattern"	mi-vatek	"having a pattern"	
kusung	"spouse"	mi-kusung	"be married"	
anak	"child"	mi-anak	"having a child"	

Note that mi- in Yami changes nouns into verbs of possession. Possession is closely associated with the role of Actor in many languages. This accounts for the use of this prefix in Yami because the i of the prefix mi- < *m + *i is the earlier Ip marker for Actor/Experiencer.

Applying these innovations to (22) we get:

stative clause: *ma-/*na-   Verb   I   (24)

active clause: *m/*n   Verb   II   I   (25)

a few languages (cf. Yami): *mi-verb   I   (26)

(24) is already the form of a stative clause in most Philippine languages. Note the following examples in Tagalog:

Ma-tu-tulog   ang bata.   (a)(27)

stat-fut-sleep TP   child

"The child will sleep."

Na-tulog   ang bata.   (b)

stat perf-sleep TP   child

"The child slept."

(25) is the basic structure from which the Actor Focus clauses of the various Philippine languages evolved. Here we will concentrate on the evolution of Tagalog. The alternation of *m and *n for aspect is a prominent feature of several AF affixes in Tagalog. The affix mag- occurs in future or neutral aspect forms, while nag- is associated with perfective forms. Note the following examples in Tagalog:

Mag-da-dala   ng tungkod ang bata.   (a)(28)

AF-fut-carry P   cane   TP child

"The child will carry a cane."

Nag-dala   ng tungkod ang bata.   (b)

AF perf-carry P   cane   TP   child

"The child carried a cane."

The basic form of the prefix is *ag-, and the m and n alternation is simply the aspectual one of the proto-language, which has become joined to it. The basic form is witnessed by Ilokano (Lopez 1928):

Ag-bado   dagiti ubbing.

AF neutral-dress TP-pl children   (a)(29)

"The children are getting dressed."

Nag-bado   dagiti ubbing.   (b)

AF perf-dress TP-pl children

"The children got dressed."

The basic form is ag-; the n adds perfective aspect. Whatever the ultimate source of the ag- prefix, it is clear that the alternation between m and n associated with its aspectual distinctions in Tagalog is related to the *m/*n aspect markers in the earlier stages of the language.

What about the source of the -um- AF affix? It is not entirely clear, but it probably arose from a metathesis of the *m neutral aspect marker. After the loss of the Ip markers in the active clause, the *m/*n aspectual elements occurred directly before the verb, as in (25). An alterna-

tion between its form as an infix and a prefix is widely attested. Because the *m would only occur directly before the verb in active clauses, its re-interpretation as an AF marker seems plausible enough. The form *m for this AF marker is probably the basic one, as its distribution is wider: Atayal (Formosa) (Egerod 1965) m-qilang, AF of qilang "not feel like," s-m-uling, AF of suling "burn," and Bilaan (southern Philippines) (Abrams 1961) m-bat, AF of bat "throw," k-am-lang, AF of klang "cut." Palauan also exhibits the m form, see 5.1. Thus, we can reconstruct an alternation between a prefix allomorph and an infix allomorph of *m, and this accounts for its various realizations in Philippine languages. This, then, gives us the basic AF clause structures in languages of the Philippine type:

$$V-m-erb \qquad II \qquad I \qquad\qquad (30)$$

$$m/n \quad prefix-Verb \qquad II \qquad I \qquad\qquad (31)$$

The form of the prefixes in (31) will vary from language to language. Tagalog and Ilokano both have a prefix ag- among others. Some languages which have innovated no new prefixes may only have (30) as the AF clause form. Atayal (Egerod 1965) may be an example of this, but the data are too insufficient to be sure. The stative clause structure (24) and the AF clause structures (30) and (31) summarize the descendents in the modern Philippine type languages of the

active clause structure (20) of Proto-Austronesian.

We are now ready to turn to the evolution of the non-AF clause structures in Philippine type languages. They arose from the passive clause structure of PAN, repeated below:

I   *m/*n   *i   Verb + *ñ + A/E   (19)

which following the word order innovation in the Philippine languages appeared as:

*m/*n   *i   Verb +   *ñ   +   A/E   I   (32)

None of the languages of the Philippine type distinguish PAN *n̲ from *ñ̲, if, indeed, the distinction existed in PAN, so we can replace (32) for our purposes with (33):

*m/*n   *i   Verb +   *n   +   A/E   I   (33)

We will only be concerned with the origin of PF clauses with -in- and the LF clauses with -an. The origin of i- remains a mystery. We will start with PF clauses with -in-.

The Tagalog PF affix -in- is not basically an infix. Its basic form is a suffix. This is clearly demonstrated with a paradigm for a verb inflected with -in-:

	"read"	"get"	(34)
perfective:	b-in-asa	in-abot	
imperfective:	b-in-abasa	in-aabot	

future:	babasah-in	aabut-in
infinitive:	basah-in	abut-in
imperative:	basah-in	abut-in

Note that the infix allomorph occurs only in the perfective and imperfective forms. This distribution of the infix -in- occurs also with i- and -an affixed verbs:

	"cut"	"open"	(35)
perfective:	i-p-in-utol	b-in-uks-an	
imperfective:	i-p-in-uputol	b-in-ubuks-an	
future:	i-puputol	bubuks-an	
infinitive:	i-putol	buks-an	
imperative:	i-putol	buks-an	

In (35) verbs affixed with i- and -an have an infix -in- in the perfective and imperfective aspect forms. The infix -in- is not really a PF affix at all. It is really a perfective aspect marker. Its use with the imperfective in Tagalog is due to the fact that that aspect is a combination of the markings for perfective (-in-) plus the markings for the future (reduplication): b-in-ubuks-an < -in- "perfective" + bubuks-an, the future of buks-an, LF of bukas "open." This rule for the formation of the imperfective applies to all focus affixes in Tagalog. With regard to -in-, what has happened in Tagalog and all Philippine languages is that the PF suffix -in has been zeroed out in forms with the

phonetically similar perfective infix -in-, an innovation
that is not altogether surprising. Furthermore, the phono-
logical shape of the PF affix was not *-in, but *-en, be-
cause PAN *e (phonetically schwa) normally became Tagalog
/i/, as in PAN *beRkes "bundle" to Tagalog bigkis "bundle,"
PAN *deket "adhere" to Tagalog dikit "adhere" and PAN
*keteg "pulse" to Tagalog kitig "pulse."

These facts make the evolution of the Tagalog PF
clauses with -in much clearer. Let us take the case of a
PF clause in perfective aspect. We would start in PAN or
a very early offshoot with:

$$*n \quad *i \quad Verb \ + \ *n \ + \ A/E \quad I \qquad (36)$$

An *e was inserted between the final consonant of the verb
root and *n connective to form a suffix. This gives (37):

$$*n \quad *i \quad Verb \ + \ *en \ + \ A/E \quad I \qquad (37)$$

Again, due to the opaque environment for concord, the status
of *i as a Ip marker was obscured. The entire preverbal
complex was taken as a prefix for perfective aspect, as in
(38):

$$*ni\text{-}Verb\text{-}*en \quad A/E \quad I \qquad (38)$$

The *-en is then zeroed out:

$$*ni\text{-}Verb \qquad A/E \quad I \qquad (39)$$

There are many languages in the Philippines and Borneo
(Clayre 1970) which exhibit a prefix ni- corresponding in
function to Tagalog -in-. While the basic form in Tagalog
is an infix, verbs beginning in /y/ or /l/ permit free
variation between an infix -in- and a prefix ni-: l-in-uto
or ni-luto "cook" and y-in-aya or ni-yaya "invite." In
Tagalog, as with the prefix m-, it metathesized with most
verb roots to become an infix:

$$V\text{-in-verb} \quad A/E \quad I \qquad\qquad (40)$$

(40) is the basic structure for a perfective Pf clause in
modern Tagalog. We have derived it from the PAN passive
structure (32) by a series of plausible historical changes,
all of which are motivated by comparative evidence. For
non-perfective clauses, the *m/*n complex and the *i were
completely lost.

We now turn to LF clauses with -an. As noted in Chap-
ter III, clauses of the type in (40) are only used in Tagalog
when a Patient is Topic. It also seems reasonable that the
PAN passive clause structure in (32) was only used when a
Patient occupied Position I, and Position II was empty.
What about the case when a Locative, Goal or Source occupied
I in a passive clause, but a Patient occupied II. In such
cases, a IIp marker would code the Patient in II, exactly as
in modern Palauan. There would be no transitive suffixes

because such clauses were formally intransitive. The
passive clause structure for non-Patients in Position I
was:

*m/*n   *i   Verb + *a + *n + A/E   II   I (41)

The *a IIp marker would still be present because a Patient
was in Position II, and the enclitic Actor/Experiencer
would follow it. A perfective passive clause with a non-
Patient in I would be:

*n   *i   Verb + *a + *n + A/E   II   I   (42)

The *a and *n were re-analyzed as a suffix, and the *n and
*i again as a prefix which underwent metathesis to an infix:

V-in-erb-an   A/E   II   I   (43)

(43) is the basic structure in modern Tagalog for a LF clause.

All these historical developments seem quite plausible,
but someone may interject: How do you account for the fact
that these affixes which had pronominal origins came to code
the role of the pragmatically prominent noun phrase, the
Topic? This is really quite simple to answer. The -in
only developed in clauses in which a Patient occupied I.
Consequently, its Patient coding function is no surprise.
With -an, the *a was a IIp marker for a Patient in II. It
originally coded the role of the Topic as Source, Goal or

Locative only indirectly by marking that it could <u>not</u> be Patient, because it coded Patient in II. It is only a short step from this to coding the roles of Source, Goal and Locative directly. The marking of m̲ for AF seems to be due largely to default. There was a strict dichotomy of structure in PAN between active and passive clauses. The m̲ affix occurred only in the active clause and, in the absence of any pronominal concord marker to point out any other role as pragmatically prominent, it came to code Actor Focus.

This, them, is the origin of the complex Philippine focus system. A few basic structural changes occurred in the clause and resulted in re-analysis on a massive scale fo the basic referential and role coding mechanisms. The evolution of the focus system was due to the subtle and complex interplay of the role and referential aspects of language. It is the earlier status of the elements of the focus affixes as pronouns which were responsible for pointing out certain nouns as pragmatically prominent. In the process of re-structuring, they lost their identity as pronouns, but not as referential coding mechanisms. It was only when the system was fully evolved that they came to code the role structure of the clause also, by coding the role of the Topic, which earlier had been the pragmatically or referentially prominent noun phrase in I.

As word order became free, position was no longer relevant to the Philippine structure, and all features of role and reference structure became segmentally marked. The PAN article *a in its Tagalog incarnation ang became specialized to mark the Topic when a common noun. Other markers came to denote the roles of the basic nominals in the clause. The role of the Topic, of course, was coded by the focus affixes, via the stages outlined here.

5.4 Summary

In this chapter we have proposed that Proto-Austronesian was essentially like an Oceanic language, but possessed a Passive essentially like that of modern Palauan. The clause structure of the Philippine type languages was derived from our PAN reconstruction by plausible and well motivated innovations. A few basic structural changes followed by large scale re-structuring through the complex interplay of the role and reference systems of language account for the seemingly wide divergence of structure between the Philippine type languages and the Oceanic type languages.

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