

THE FUNCTIONS AND MEANINGS OF THE ERIMA DEICTIC ARTICLES

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1. INTRODUCTION

1.1 Location

The Erima language is spoken in an area along the coast south of the town of Madang in the Madang Province of Papua New Guinea. The language area starts approximately ten miles south of Madang town and comprises four villages located between the Gogol and Yawor Rivers. The four villages are in an area approximately four miles long and four miles wide. Speakers number approximately 500. Three villages, Garima (also called Mariga), Dogia, and Balama are a part of the Ambenob Council of the Madang District, while the fourth village, Erima, is a part of the Astrolabe Bay Council of the Madang District. See Figures 1-2.

1.2 Classification of the language

Erima is a non-Austronesian language classified by Z'graggen (1975:3) as a Trans-New Guinea language of the Madang-Adelbert Range Sub-Phylum, belonging to the Madang Superstock. The Madang Superstock is composed of two stocks: the Rai Coast Stock and the Mabusio. Erima belongs to the former. The Rai Coast Stock consists of six families, Erima being a member of the Nuru family. Within the family, Erima's closest neighbour both geographically and linguistically is the Uya language. The cognate percentage between the two has not yet been determined although informal observation suggests it is high. The name Erima is given to the language following Z'graggen. The people, however, have traditionally called their language Ogia. All adult Erima and most children are bilingual in Tok Pisin, the main trade language of Papua New Guinea.

1.3 Fieldwork

Data for this paper were gathered during some twenty-six months in the field between 1977 and 1981 under the auspices of the Papua New Guinea branch of the Summer Institute of Linguistics, which is under contract with the Papua New Guinea Department of Education. Approximately fifty pages of text were

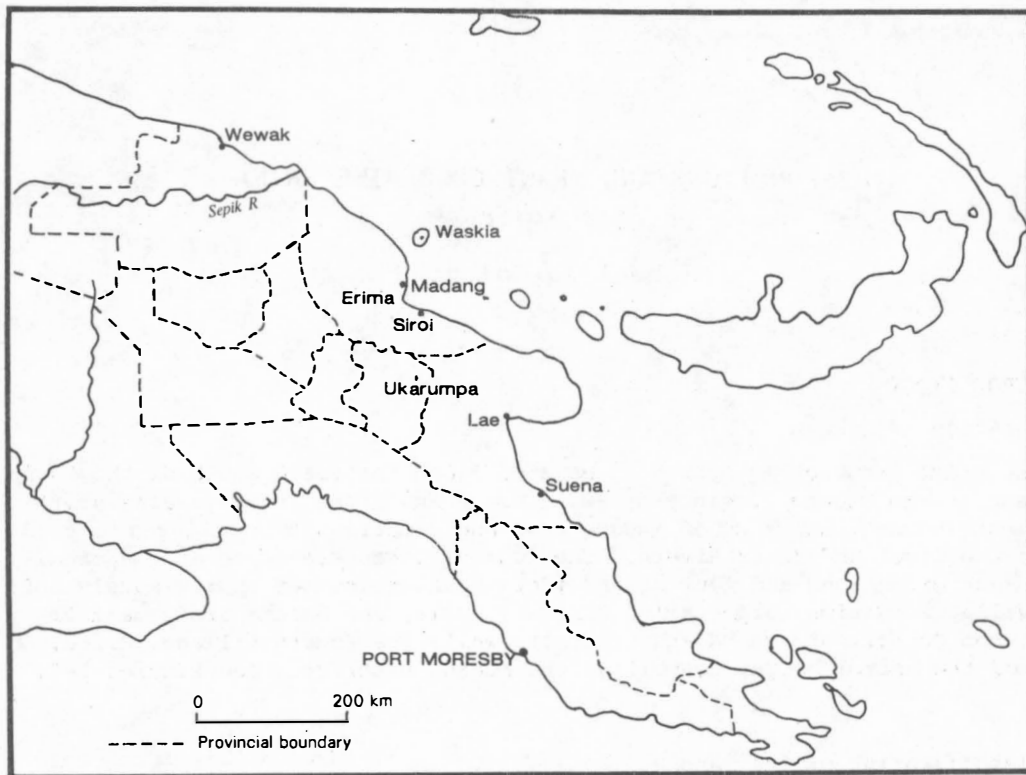


Figure 1. Papua New Guinea

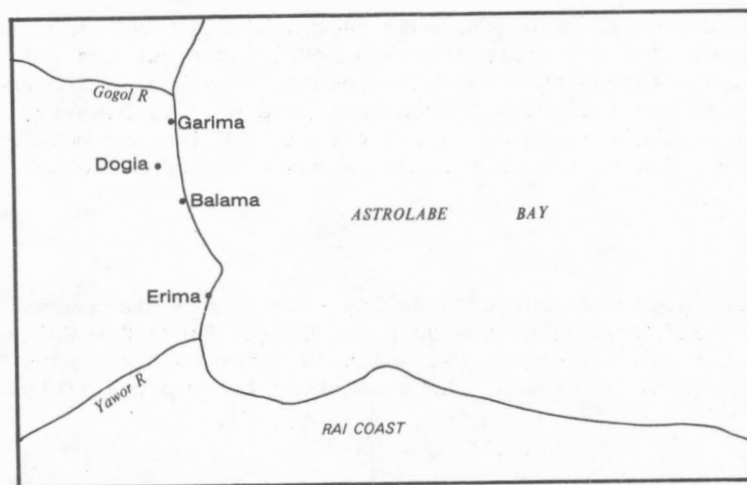


Figure 2. Erima-speaking villages

used for the study as well as numerous elicited utterances. This study is mainly based on the Erima dialect of the Erima language. Main language assistants were Sioba and Abaro Ura of Erima village and Kelebai Iriwai of Dogia village.

1.4 Aim of the study

This study grew out of the need to come to grips with the functions and meanings of the Erima deictic articles. As initial study of the language was undertaken, the three deictic articles *be*, *wa*, and *wo* were found to occur in a bewildering variety of contexts. They were seen to function as locatives, demonstrative pronouns, relativisers, topic markers, conditional markers, and as conjunctions in various inter-clausal logical relationships as will be seen in section 2. A statistical concordance produced by the computer department of the Papua New Guinea Branch of the Summer Institute of Linguistics revealed that apart from the third person pronouns, the deictic articles appear more frequently in text than any other free morphemes.

The aim of the study, therefore, is to attempt to discover the functions and meanings of the Erima deictic articles, and to provide an explanation of the reason for such apparently widespread uses and functions. The achievement of this goal necessitates examining other topics such as definitivisation, relativisation, and topicalisation. I intend to show that the apparent vast variety of functions and meanings of the Erima deictic articles is best explained from a topic-comment perspective, with the realisation that what is in fact involved is the topicalisation of definite NPs.

The study is divided into three main parts. Sections 2 and 3 define the nature of the problem by the examination of the Erima data and the analyses done on related languages. The second part, sections 4 and 5, concern the explanation of the true function of the deictic articles. Section 4 looks at the insights of two linguists working on languages of Papua New Guinea, while section 5 is my own explanation. In section 6, the discourse functions of the deictic articles are discussed. And finally, in section 7 an attempt is made to classify Erima according to the typology proposed by Li and Thompson (1976), namely topic-prominent versus subject-prominent languages.

2. THE DATA

In this section I present the etic data regarding deictic articles in Erima. The purpose of the section is to provide the reader with a feel for the various contexts in which the deictic articles appear, and the possible glosses in each context.

2.1 The deictic articles as locative

For the casual observer of speakers of Erima, one of the most obvious functions of the three deictic articles is seen to be that of locating objects in the physical environment. (1) below is an example of a deictic article uttered as an independent utterance in the context, for example, of someone handing an object to another person:

- (1) be. *Here*.

Or, an inquiry as to where an individual is sitting might have the response of either (2) or (3):

- (2) wa la
 there at
 (Over) there.
- (3) wo la
 there at
 (Over) there.

The difference in meaning between the three deictic articles involves the distance of the object referred to from the speaker. An object located near the speaker is referred to by use of *be*, one a mid-distance from the speaker by *wa*, and an object which is far from the speaker is referred to by use of *wo*. Therefore, *wa* is glossed as *there* (a mid-distance) and *wo* as *there* (a far-distance).

Grammatically, the deictic articles as locative occur as complete utterances, or as fillers of the axis slot of locative axis-relator phrases as was seen in (2) and (3).

2.2 The deictic articles as demonstrative pronouns

As demonstrative pronouns, the deictic articles have the meanings of *this*, *that* (mid-distance), and *that* (far-distance) as in (4)-(6):

- (4) fai be-fa Madang man-o-na
 man this-emp Madang go-fut-3sS
 This man will go to Madang.
- (5) fai wa-fa ala goita?
 man that-emp where go-3sS.ip
 Where did that man (mid-distance) go?
- (6) fai wo-fa wa la yaf-o-na.
 man that-emp there at sit-fut-3sS
 That man (far-distance) will sit there (mid-distance).

The deictic articles in their function as locatives do not occur with the emphatic clitic *-fa*, but in their function as demonstrative pronouns they optionally take *-fa* as seen in a comparison of (5) and (7):

- (7) fai wa ala goi-ta?
 man that where go-3sS.ip
 Where did that man go?

Although I have glossed *-fa* as 'emphatic', I do not yet know its true function and meaning.

Another possibility of a gloss for the deictic articles in the last few examples is that of 'the' since Erima does not have a definite article. Erima speakers with a knowledge of English will sometimes translate the deictic articles as 'the', or when asked to translate into Erima the English sentence *Where did the man go?* will give (7).

The above examples of the deictic articles functioning as demonstrative pronouns are all cases of their filling the determiner slot of noun phrases.

The deictic articles may also occur as clause level constituents when they fill the subject or object slots of clauses as in (8) and (9):

- (8) wa-fa yame mata la inyi-Ø-na.
 that-emp my house at be-pr-3sS
 That (thing) is at my house. It is at my house.
- (9) ji wa-fa ur-ei uwa
 I that-emp see-nom not
 I did not see that.

Notice that in both of the above examples, it would be more natural to translate wa as *it*. Indeed, there is no third person pronoun in Erima that corresponds to the English 'it' except for the deictic article.

At this point it will perhaps be helpful to summarise the two functions to the deictic articles seen thus far, and compare them to English, as well as give an explanation of why be, wa, and wo are being termed deictic articles. Much of the material at this point is the fruit of examining the Erima deixis system in light of Lyons' (1977) discussion of deixis, space, and time. (cf. Lyons 1975). His insights into the semantics of deixis are very relevant to Erima and have been most helpful.

As is commonly stated in general linguistic works, the terms deictic and deixis derive from the Greek word *deiktikos* meaning *pointing*. Lyons (1977:637) states that

... by deixis is meant the location and identification of persons, objects, events, processes and activities being talked about, or referred to, in relation to the spatiotemporal context created and sustained by the act of utterance and the participation in it, typically, of a single speaker and at least one addressee.

According to Lyons, current linguistics discusses under the heading 'deixis' the functions of personal and demonstrative pronouns, the definite article, and some other features of language such as tense. The term 'demonstrative' also has the meaning of pointing. Lyons (1977:636) identifies our English term 'demonstrative' as deriving from the Latin word *demonstrativus* which was the term used by Latin grammarians to translate the Greek grammarian term *deiktikos*. Thus we see the common derivation of the current English terms deixis, deictic, and demonstrative.

The next point made by Lyons (1977:636) will be quoted in full as it sheds light on the Erima deictics:

It is worth noting that we now call demonstrative pronouns were referred to as deictic articles in the earlier Greek tradition and that the Greek word 'arthron', from whose Latin translation, 'articulus', the technical term article derives, was no more than the ordinary word for a link or joint. It was only in the later tradition that the Greek equivalent of 'pronoun' was used; and this fact is of some significance. The point is that in early Greek, no sharp distinction can be drawn, in terms of their forms or syntactic and semantic function, between demonstrative pronouns, the definite article, and the relative pronoun: the term 'article' was at first applied to them all, and it was chosen presumably, because they were regarded as connectives of various kinds.

From Lyons' observations it may be seen that in early Greek linguistics the demonstrative pronouns, the definite article, and the relative pronoun were all seen together as forms with a pointing (*deiktikos*) and linking (*arthron*) function.¹ This, in fact, fits Erima quite well. Should *wa* be described on the one hand as a locative, and on the other as a demonstrative pronoun? Should it be considered a definite article as well as a third person pronoun (i.e., *it*)? *Wa* also functions in a sense, as it will be seen, as a relative pronoun as well. Early Greek grammarians had the insight that all of these grammatical categories are related and that the forms in the Greek could be viewed as deictic articles, or *pointing links*. That is, forms which point by giving the location or identification of 'persons, objects, events, processes and activities' and then link them into the grammatical and textual context in which they occur. The Erima *be*, *wa*, and *wo*, therefore, will be termed *deictic articles*, with the term deictic article being defined as designating a lexeme with the function of 'pointing out' a person, object, event, or idea talked about by locating it in space or time or 'identifying' it, and then relating it or linking it to its grammatical and textual context.

This concept of deictic articles is not simply a convenient cover term to describe part of Erima grammar. In fact, Lyons argues that what we are concerned with is an underlying semantic structure, a sort of semantic universal concerning person-deixis. He notes (1977:646) that in both Germanic and Romance languages the definite article and the third person pronouns historically derived from the demonstrative pronoun.² In fact, in English we can see the same sort of connection. What are the similarities and differences between *here*, *this*, and *the* in English? The point of similarity is that all are marked for definiteness. *Here* and *this* are additionally marked for proximity. Lyons states that *this book* means 'the book (which is) here' or 'the book (which is) near the speaker'. The English definite article, however, is marked only for definiteness, not for proximity. Figure 3 shows a feature matrix for the Erima surface forms which encode the semantic features covered by the corresponding English surface forms. The English feature chart is not meant to be exhaustive, but to show some of the features incorporated in the English person-deixis system. Lyons (1977:647), after a section of argumentation concludes that

... looked at from a diachronic point of view, then, the definite article in English is a demonstrative pronoun marked for gender and number, and the third-person personal pronouns are demonstrative pronouns, distinguished with respect to gender and number, but, like the definite article unmarked for proximity.

Lyons (1968:278) points out that the notion of proximity and person are not usually connected in the analysis of demonstrative pronouns. That is, the semantic component of proximity should be defined in terms of person. Person is normally viewed as having three semantic categories, namely first, second, and third person. This, in English, is defined as 'near the speaker' and could be thought of as a first person demonstrative pronoun. In the case of *that*, in English, the categories of second and third person are neutralised. Lyons refers to Latin and Turkish as examples of languages with a three-person distinction in the demonstrative pronouns. The Latin *hic* and the Turkish *bu* correspond to the English *this* and are first person demonstrative pronouns. That is, they may be defined as 'proximate to the speaker'. The Latin *iste* and the Turkish *su* correspond to *that* but are second person (i.e., 'proximate to the hearer'). The third person demonstrative pronouns are *ille* for Latin, and *o* for Turkish and mean *remote from the speaker and the hearer*.

Figure 3: Feature matrix for part of the English person-deixis system showing those features monitored

Grammatical Class	Form	Semantic features monitored			
		Proximity	Definiteness	Number	Gender
Demonstrative adjectives	here there	marked marked	marked marked	unmarked unmarked	unmarked unmarked
Demonstrative	this that these those	marked marked marked marked	marked marked marked marked	marked marked marked marked	unmarked unmarked unmarked unmarked
Definite article	the	unmarked	marked	unmarked	unmarked
Third person personal pronouns	he she it they	unmarked unmarked unmarked unmarked	marked marked marked marked	marked marked marked marked	marked marked marked unmarked

Figure 4: Feature matrix for part of the person-deixis system for Erima

Grammatical Class	Form	Semantic features monitored			
		Proximity	Definiteness	Number	Gender
Deictic articles	be wa wo	marked marked marked	marked marked marked	unmarked unmarked unmarked	unmarked unmarked unmarked
Third person personal pronouns	no nere	unmarked unmarked	marked marked	marked marked	unmarked unmarked

Form	Meanings
be	<i>here, this, these, the</i>
wa	<i>there, that, those, the, it</i>
wo	<i>there, that, those, the, it</i>
no	<i>he, she</i>
nere	<i>they</i>

This same sort of system has already been noted for Erima. *Be* could be viewed as the first person deictic article, *wa* the second, and *wo* the third.

In summary, we have seen that in many Indo-European languages (i.e., Germanic and Romance languages) demonstratives are basic and that the definite article and the third person pronouns historically derived from the demonstratives.

2.3 Overview of Erima clause and sentence structure

It may have already been noticed by the reader that Erima is a SOV language. Generally, tagmemes such as location, time, instrument, etc., occur following the subject tagmeme and always before the predicate. (cf. Colburn 1979 for a description of Erima grammar from morpheme to clause levels.) Erima is typical of many non-Austronesian languages of Papua New Guinea in that it may be classified as a *clause chaining* language. (For a detailed description of such languages see Longacre 1972, and for a description of clause chaining in another New Guinea language see Anderson 1976:13-14.)

In Erima, and other clause chaining languages, prominence is given to the predicate of a clause. Although such clause level tagmemes as subject and object are considered nuclear to Erima clauses, they are not obligatory. The only obligatory tagmeme of the clause in Erima is that of predicate. Typically a sentence may consist of a string of perhaps five or six predicates with very few subject, object, or other clause level tagmemes. Another feature of these chains of clauses is that there is a distinction made between *medial* and *final* clauses. Unless embedded, the verbs of clauses which occur before the final clause of a sentence take medial form suffixation. Thus the basic structure of sentences formed by clause chaining may be formulated as:

$$(10) \quad \pm (\text{Medial Cl})^n + \text{Final Cl}$$

In addition, medial verb suffixes are classified as to whether they are *endocentric* or *exocentric*.³ Endocentric suffixes are those suffixes which relate to the clause internally. They include causation, object, benefactive, aspect, tense, and subject person-number. Exocentric suffixes relate to outside of the clause, that is, to the clause following. There are two types of exocentric suffixes, expressing two types of inter-clausal relationships: time sequence between clauses, and subject co-reference. These exocentric suffixes will be explained more fully below. The final clause of a sentence has a verb inflected with final verb suffixes. A final verb has endocentric suffixes, and differs from medial verbs in that it does not have exocentric suffixes. In addition, medial verb suffixes indicating tense and subject person and number differ from those of final verbs.

The endocentric suffixes of medial verbs are illustrated as follows. Time sequence suffixation depends on whether the actions of two clauses occur simultaneously (termed *temporal overlap* and abbreviated as TO) or sequentially (termed *temporal succession* and abbreviated as TS). In temporal overlap, the actions of the two clauses overlap in time as in (11):

- (11) M Cl (no da nyi-bona-Ø) F Cl (yaf-a-i)
 he food eat-TO-SR sit-rp-3sS
 *He ate food as he sat.*⁴

In temporal succession the action of the preceding clause is completed before

the action of the following clause occurs, as in (12):

- (12) M Cl (no da nyi-du-Ø) F Cl (yaf-a-i)
 he food eat-TS-SR sit-rp-3sS
 He ate, then sat down.

The second type of exocentric suffixes are those indicating whether or not the subject of a medial clause is coreferential with that of the clause following it. Coreferentiality is indicated by a zero morpheme. If the subject referents differ, the suffix -nga (*different referent marker*) occurs indicating that the subject referent of the clause it occurs in is different from that of the clause following it. In other words, the first verb indicates whether the second verb has a coreferential subject. (11) and (12) above are examples of a clause which is coreferential with that of the clause following it. In the examples, SR indicates 'same referent follows' and DR indicates 'different referent follows'. (13) below shows two clauses (i.e., the first and second) which are not coreferential and two clauses (the second and third) which are:

- (13) fai ete goi-g-a-i-nga nomo gauna fere taga-du-Ø
 man a go-TO-rp-3sS-DR his dog also follow-TS-SR
 goy-a-i
 go-re-3sS
 As a man went along, his dog, having followed him, also went.

To show more clearly the function of same versus different referent suffixes, consider the English sentence (14):

- (14) He saw him, then he ran away.

Out of context, we cannot tell whether the subject pronoun of the clause containing the verb *saw* is coreferential with the subject pronoun of the second clause (containing the verb *ran*). Who ran away, the one who saw, or the one who was seen? We cannot tell. Because of same versus different referent suffixes in Erima, there are two translations of (14) possible into Erima, i.e., (15) and (16):

- (15) no ure-du-Ø faga-wa-i.
 he see.him-TS-SR run.away-rp-3sS
 He_i saw him_j, then (he_i) ran away.⁵
- (16) no ur-Ø-a-i-nga faga-wa-i
 he see.him-TS-rp-3sS-DR run.away-rp-3sS
 He_i saw him_j, then (he_j) ran away.⁶

Erima does not have the type of ambiguity seen in (14). Speakers are obligated by the grammar to explicitly state whether the subjects of the two clauses are coreferential or not. It is also possible for a medial same referent clause to be manifested as a verb root less suffixation. (For an example see (137) in section 6.2).

Beekman and Callow (1979:45) state that semantically all units of communication may be classified as being in one of two types of relationships to other units. Units which are of equal prominence are said to be in an *addition* relationship, whereas those of unequal prominence are in a *support* relationship. This usually corresponds to the grammatical categories of coordinate versus subordinate relationships, although skewing often occurs between deep and surface structures. As in the Usan language (Reesink 1978), Erima makes use of clause chaining (i.e., medial verb suffixation) as the syntactic device for

combining clauses into a coordinate relationship. That is, they encode prepositions in the semantic relationship of addition. Halliday and Hasan (1976:222), as noted by Reesink (1978:1), state that a clause complex (i.e., two or more clauses directly related in structure) will be in either a *paratactic* or *hypotactic* relationship. (These terms paratactic and hypotactic correspond to the terms coordinate and subordinate.) They state that clauses which are in a paratactic relationship have equal status and those in a hypotactic relationship have unequal status. This parallels the statement of Beekman and Callow above regarding relationships between communication units. Halliday and Hasan (1976:222) state that in a paratactic clause complex 'the relevant paratactic relation is that of coordination, i.e., 'and' and 'or' as well as apposition and quotation. Erima clause chaining encodes the coordinate 'and' relationship. Halliday and Hasan go on to define the three hypotactic types of relationships as: 'CONDITION (expressed by clauses of condition, concession, cause, purpose, etc.), ADDITION (expressed by non-defining relative clause) and REPORT'. It will be seen that the syntactic relationship of subordination (i.e., the paratactic relation) is often accomplished in Erima by constructions involving the deictic articles. That is, propositions or propositional clusters in an addition relationship are syntactically encoded by clause chaining devices (i.e., medial exocentric suffixes), whereas the relationship of support is encoded by constructions which usually have the deictic article as a constituent.

2.4 The deictic articles with relative clauses

I now turn to the function of deictic articles as a constituent of constructions encoding the syntactic relation of subordination. The first notable occurrence involves relative clauses as in (17):

- (17) F Cl (ji F Cl (fai wa yaure-Ø-na) wa bolou
 I man that yell-pr-3sS that voice
 is-o-ne bo-ne)
 hear-f-1sS intent-1sS
 I want to hear (the) voice (of) that man (who) is yelling.

There are two things to note about relative clauses in Erima that may be seen from (17). A comparison of (17) with (18)

- (18) fai wa yaure-Ø-na
 man that yell-pr-esS
 That man is yelling.

shows that in Erima when a clause is embedded, the clause structure is unchanged from its independent form as in (18). The order of the clause constituents remains identical, and the suffixes of the verb remain the same. Secondly, note that the embedded clause appears as a final form clause even though it is medial. In fact, no unassailable example of an embedded medial clause has been found to date. It may be claimed that clauses, as such, do not embed in Erima, but rather, sentences embed, since all embedded clauses derive from a sentence. A sentence in Erima is defined as a final form clause plus final intonation and pause. More will be said regarding relative or embedded clauses in Section 5. In (17) above, the deictic article *wa* occurs after the embedded clause. It is possible to have *be* or *wo* occur as well, but *be* and *wo* are generally used only in situations where the referent may be physically pointed out. As this is not normally the case, *wa* occurs much more frequently. This has to do with exophoric versus endophoric reference as will be discussed in section 6.1.

2.5 The deictic articles as topic markers

The deictic article often appears to mark an NP as topic as in (19):

- (19) *fai wa ji no ur-ei uwa*
man that I him see-nom not
That man (topic), I did not see him.

or a clause as topic as in (20):

- (20) F CL (*ji mini-ne-fa*) *wa*
I go.down-lsS-CA that
 M Cl (*no buriga elege-Ø-ta-nga*)
he buriga gather-TS-ip.3sS-DR
 F Cl (*ure-ne-fa*)
see.him-lsS-CA
(Regarding my) going down, he had gathered buriga (fish) and
I saw him.

It is difficult to adequately translate (20). The sense of it is *I am talking about how I went down to the beach, and what I have to say about that is that he had gathered buriga fish and I saw him.*

2.6 The deictic articles as connectors of clauses in various logical relationships

The deictic article *wa* also occurs as a connector of clauses or sentences which are in various logical relationships such as adversative, content-reporting, reason-result, result-reason, purpose-means, grounds-conclusion, and condition-consequence.

2.6.1 The deictic articles as adversative markers

In this function, the deictic article appears to have the meaning of 'but' as in (21) and (22):

- (21) *ji min-e-ne wa ji no ur-ei uwa*
I go.down-rp-isS that I him see.him-nom not
I went down, but I did not see him.
 (22) *nere hepos bagu wa ada goi-goi-Ø-de*
they aid-post with but not go-go-pr-3pS
They have an aid post, but they don't habitually go there.

Another possible translation of *wa* in (22) is *although*, in which case sentence (22) would mean *Although they have an aid post, they don't go to it.*

2.6.2 Content-reporting

Clauses, or semantically speaking, propositions or propositional clusters which are in a content-reporting relationship involve verbs of perception such as *alai know*, *isi hear*, and *ure see*. The first proposition reports the content of the second proposition. In each case, the units are connected by the deictic article *wa* as in (23), (24), and (25):

- (23) F Cl (no ala goi-ta) wa-fa F Cl (ji alai)
 he where go-ip.3sS that-emp I know
I know where he went.
- (24) F Cl (no ala goi-ta) wa-fa
 he where go-ip.3sS that-emp
 F Cl (ji isi-ne-fa)
 I hear-1sS-CA
I heard where he went.
- (25) F Cl (no ala goi-ta) wa-fa
 he where go-ip.3sS that-emp
 F Cl (ji ure-ne-fa)
 I see-1sS-CA
I saw where he went.

2.6.3 Reason-result

When propositions are joined together in a reason-result relationship, the clause stating the reason is joined to the one stating the result by a conjunction composed of the deictic article *wa* and *bo-* which means *for*. The root *bo-* always occurs with a personal pronoun suffix which is in agreement with the person and number of the clause it precedes. Recalling that *wa* can mean either *that* or *there*, it is interesting to note that *wa* and *bo-* together can literally be translated as *therefore*. In examples (26) and (27), the deictic article and *bo-* are seen in their function of conjoining propositions in a reason-result relationship:

- (26) F Cl (no taura t-a-i) wa bo-na
 he sickness get-rp-3sS there for-3sS
 F Cl (no um-a-i)
 he die-rp-3sS
He got sick, therefore he died.
- (27) F Cl (no m-ei uwa) wa bo-ne
 he come-nom not there for-1sS
 F Cl (ji yaf-ei uwa)
 I sit-nom not
He did not come, therefore I did not stay.

2.6.4 Result-reason

The logical relationship of result-reason is composed of two propositions combined with a conjunction composed of either (28) or (29):

- (28) wa taate bo- because
 that what for
 wa taate hugu bo- because
 that what reason for

Note from (30) and (31) that in order to ask the reason for something happening, the same construction is used as was in (28) and (29):

- (30) taate bo-na // Why? Why did he/it?
 what for-3s

- (31) taate hugu bo-na // Why?
 what reason for-3s

However, when the same construction occurs with the deictic article as a conjunction meaning *because*, falling intonation and pause occur only at the end of the sentence, that is, at the end of the second (i.e., reason) proposition as in (32) and (33):

- (32) F Cl (no um-a-i) wa taate bo-na /
 he die-rp-3sS that what for-3s

F Cl (no taura t-a-i) //
 he sickness get-rp-3sS
He died because he got sick.

- (33) F Cl (ji yaf-ei uwa) wa taate hugu bo-na /
 I sit-nom not that what reason for-3s

F Cl (no m-ei uwa) //
 he come-nom not
I did not remain because he did not come.

2.6.5 Purpose-means

Two propositions in a purpose-means relationship are joined together again by a conjunction formed optionally with the deictic article and obligatorily with *bo- for*, as in (34) and (35):

- (34) Nominalised Cl (no hilou yaf-einomo)
 he good sit-nom
 wa bo-na F Cl (taura mata goy-a-i)
 that for-3s sick house go-rp-3sS
He went to the hospital in order to get well.

- (35) Nominalised Cl (no da tau-weinomo)
 he food plant-nom
 bo-na (haga goy-a-i)
 for-3s garden go-rp-3sS
He went to the garden in order to plant food.

Note that in these constructions the first proposition is encoded by a nominalised clause. Also note that in order to translate the sentences back into English, the propositional order is reversed to means-purpose.

2.6.6 Grounds-conclusion

The logical relationship of grounds-conclusion uses the same conjunction as reason-result or purpose-cause, with the deictic article being optional:

- (36) F Cl (nomo ima inyi-Ø-na)
 his fishing.pole be-pr-3sS
 wa bo-na F Cl (no laanga min-ei uwa)
 there for-3s he beach go.down-nom not
 His pole remains, therefore he did not go to the beach.

Sentence (36) would be uttered in the context of some people going to a man's house. They wonder if he is at home or if he has gone fishing down at the beach. As they approach the house, they notice that his fishing pole is hung up outside, so they conclude that he has not gone to the beach since they know that he would not go without his pole.

2.6.7 Condition-consequence

The condition-consequence relationship may be broken into three types: argumentative, future oriented, and non-future oriented (i.e., hypotheticality).

2.6.7.1 Argumentative condition-consequence

At first glance this does not appear to differ from grounds-conclusion:

- (37) F Cl (nomo ima inyi-Ø-na) wa
 his fishing.pole be-pr-3sS if
 F Cl (no yafa-Ø-na)
 he sit-pr-3sS
 If his pole remains (is here), then he is here.

However, (36) differs from (37) in two significant respects. In (37) the deictic article is obligatory and bo- cannot occur. If bo- did occur, the meaning would be changed from *if his pole is here*, or *since his pole is here*. They also differ as to when they can be uttered. (36) could only be uttered upon arrival at the person's house and having already actually seen the pole, whereas (37) could be uttered either before arrival or afterward.

2.6.7.2 Future oriented condition-consequence

The logical relationship of future oriented condition-consequence again involves two clauses linked by the deictic article with the meaning of 'if'. Both clauses, of course, must have future tense verbs as in (38):

- (38) F Cl (yaage m-o-na) wa
 rain come.down-f-3sS if
 F Cl (ji ada m-o-ne)
 I not come-f-1sS
 If rain comes, I will not come.

Note that this contrasts with (39) in which the same two propositions are encoded using the clause chaining syntactic device, producing a coordinate relationship:

- (39) M Cl (yaage me-g-o-Ø-nga)
 rain come.down-TO-f-esS-DR
 F Cl (ji ada m-o-ne)
 I not come-f-lsS
 When rain will come, I will not come.

(39) has another possible translation, namely, *If rain comes, I will not come.* Compare (39) with (40) in which it is seen that the condition-consequence interpretation of (39) is purely from semantic grounds and is not syntactically signalled:

- (40) M Cl (nere Irima matane yafa-g-o-nga)
 they Erima village sit-TO-f-DR
 M Cl (ji Dogia goy-o-ne bo-ne)
 I Dogia go-f-lsS intent-ls
 While the Erima people remain in their village, I will go to Dogia (village). or
 The Erima people will remain at their village and I will go to Dogia.

A condition-consequence reading for (40), although possible, is rather unlikely, whereas it is very likely for (39) and the only reading possible for (38). Granted that semantically the first proposition in (39) and (40) is subordinate to the second, the syntactic structure, however, is coordination via clause chaining. This contrasts with (38) in which the clauses are not chained (i.e., are not a medial plus final clause string monitoring temporal overlap versus succession, and same versus different referent), but rather two final clauses are combined in a subordinate relationship both syntactically and semantically by the deictic article.

2.6.7.3 Non-future oriented condition-consequence

In the non-future condition-consequence relationship, hypotheticality is encoded as in (41):

- (41) F Cl (yaage m-age) wa
 rain come.hypo.3sS if
 F Cl (ji yaf-ege)
 I sit-hypo.1sS
 If rain had come, I would have remained.

2.7 Conclusion

In this section examples have been given of the deictic articles as they occur in various constructions. It has been seen that they occur as locatives, definite articles, demonstrative pronouns, the third person singular non-human pronoun, topic markers, adversatives, relativisers, and as conjunctions in various logical interclausal or interpropositional relationships. This section

has merely been a survey to provide the reader with a feel for the data. For this reason an elaborate explanation of the deictic articles in each context has not been given. Before attempting an explanation of what is really happening with the Erima deictic articles (section 5), we turn to a look at how other linguists have analysed the deictic articles in some other languages of Papua New Guinea.

3. ANALYSIS OF OTHER NON-AUSTRONESIAN LANGUAGES

This section takes a brief look at three other non-Austronesian languages of Papua New Guinea. In each of these languages the deictic articles have functions similar to those shown for Erima in section 2. A survey made by Ger Reesink of the Summer Institute of Linguistics in Papua New Guinea, indicates that many other languages of the country also have this feature (personal communication). Time and availability of data restrict the present section to a brief look at Siroi, Waskia, and Suena. The purpose of the section is to present previous analyses made of the deictic articles in other languages for purposes of discussion in later sections.

3.1 Classification of the three languages

Two of the languages, namely Siroi and Waskia, are also located in the Madang Province (cf. figure 2, p.210). Siroi is spoken only some fifteen miles from Erima, in the Rai Coast area. Waskia is more distant, being located on Karkar, a volcanic island about seventy miles from Erima. Z'graggen (1975) identifies both Siroi and Waskia as belonging to the Madang-Adelbert Range Sub-Phylum of Trans-New Guinea languages, as is Erima. Siroi and Erima both belong to the same super-stock (i.e., the Madang Super-Stock) and the same stock (i.e., the Rai Coast Stock). They differ, however, in that Erima belongs to the Nuru family, and Siroi to the Kabenau family. Waskia, on the other hand, belongs to a different super-stock than Siroi and Erima, namely the Adelbert Range Super-Stock. The third language to be examined, Suena, is also a Trans-New Guinea language, but a different stock (Binandere) and is located in the Morobe Province of the country.

3.2 Siroi

The data presented for the Siroi language are from Wells (1979). Siroi has two basic demonstratives, *te* meaning *this*, and *ta* meaning *that*. An examination of Wells' writeup of the Siroi grammar reveals that *ta* also has many other meanings and functions according to her analysis.

3.2.1 *Ta* as a conjunction

In her section on conjunctions (1979:16), *ta* by itself is said to be a conjunction meaning *if*, *when*, *but* and is a link in sentence margins. In conjunction with *-nu* it is a conjunction meaning *therefore* and is a link in corollary sentences. *nde* plus *ta* is said to be a conjunction meaning *if* and is the link in a conditional sentence.

3.2.2 Te and ta as demonstratives and locatives

As noted above, *te* and *ta* as deictic demonstratives (Wells' terminology) mean *this* and *that*. The addition of the specific clitic *-nge* changes the meaning of *te* to *here* and presumably the meaning of *ta* to *there*. (See Wells 1979:20.)

3.2.3 Ta as an included (relative) clause marker

Wells (1979:73) states that embedded clauses, or as she has called them, included clauses, are independent clauses marked as being embedded by the postponed demonstrative *ta* as in (42):

- (42) O(O S P) P
 am ruga-nge ngayo-ng-ina ta minya-ng-ina
 eye mud-spec ruin-cm-3s.pa that wash-cm-3s.pa
She washed the eye which the mud had injured.

3.2.4 Ta as linkage in corollary sentences

Wells (1979:104) states that "the link between the Bases of the Corollary sentence is the demonstrative *ta* *that* or the demonstrative *ta* plus the nominaliser *-nu*. When the sentence encodes circumstance *tanu* is used, and when it encodes frustrated modality *ta* is used". She also says that when the corollary sentence encodes circumstance, *ta-nu* means *so/therefore*, as in (43):

- (43) B1
 ndinsuku ngakmba Anut nu wamdus piro kareng-k-a
 ways all God he thought work hard-cm-dep
 Li B2
 te-sili-k-ina tanu kile sile tanu mbol-nge
 take-find-cm-3s.pa that now we that on-
 mayok ka-kik
 outside go-ld.ip
God thought hard to find ways (of helping) and now therefore
as a result we benefit.

When encoding "conditionality with a universal quantifier" she says that *ta* or *tanu* means *whenever* (1979:106) as in (44):

- (44) B1
 ambonga tambun mbol te-nge ngakmba min-it
 first moon on here-spec all be-3s.pr
 Li B2
 tanu sine wamdus kugatok ake min-eg
 that we thought without nothing be-lp.pr
Whenever the moon is full we do not think (about) catching
(whitebait).

Regarding hypotheticality she states that "in this encoding Link, *ta/tanu* has the meaning *if*". (Wells 1979:108). One of her examples is:

- (45) B1 Li
andde nu minge dubi nda-wa ta
one he mouth follow neg.3s.po that
- B2
nu kalabus mbol ka-ngat
he jail on go-3s.fu
If one does not obey he will go to jail.

The next relationship she says the corollary sentence encodes is that of frustrated modality. In this case "the link *ta* is used and has the meaning *but*". (Wells 1979:109). An example given is:

- (46) B1 Li B2
nu wi-nu tuku ta, nu kiko-na
he call-int rel that he shy-3s.pa
He wanted to call out but he was shy.

Finally, Wells discusses the corollary sentence as it encodes frustrated succession (1979:110-111). In this encoding she says that with frustrated succession in which the blocking circumstance is stated, *ta* means *but*, as in (47):

- (47) B1
 mafe-na le nane li-k-am tuka sa-k-inaig
dawn-3s.pa and they walk-cm-int rel ask-1s.pa
- Li B2
 ta nale mbul-nail
that they refuse-3d.pa
In the morning they spoke of going but the two refused
(to go with them).

In frustrated succession stating the opposite circumstances, she says that ta/tanu means *although*, as in (48):

- (48) B1 Li Bi
dokta kanger-naig tanu nane wakei-yam kumung kuga
doctor see-3p.pa that they treat-int enough not
Although the doctors examined him they could not treat him.

3.2.5 Ta as a conjunction in conditional sentences

Wells herself does not claim that the deictic article *ta* occurs as a conjunction in conditional sentences. However, we have already seen that in Erima the deictic article does occur with conditional sentences (2.6.7.) and it will be seen later that both Waskia and Suena use the deictic article in conditional sentences. For this reason it is quite possible that *ndeta*, which Wells (1979:127) says means *if*, is really composed of *nde* plus *ta*. An additional piece of evidence pointing to this is that she says *ndeta* can also take the clitic *-nu*, resulting in *ndetanu*, still meaning *if*. Recall that *tanu* occurs as a variant of *ta* in Siroi corollary sentences. *ndetanu*, then is quite likely *nde* plus *tanu*. An example of the conditional sentence is:

- (49) B1 Li B2
nu puro-wa ndeta nu kanger-am-ngat
he arrive-3s.po if him see-int-3s.fu
If he should come he will see him.

In summary, we have seen that the deictic articles in Siroi, and in particular the deictic article *ta* have been analysed as being demonstratives, locatives, and conjunctions. As conjunctions, Wells has said that they relate embedded independent clauses to the rest of a clause, and encode semantic relationships including circumstance, condition with universal quantifier, hypotheticality, frustrated modality, frustrated succession, and condition. As such, she claims that *ta* can mean, according to context and function, *that*, *there*, *if*, *when*, *but*, *although*.

3.3 Waskia

Data for this section are from Ross and Paol (1978). The authors of the Waskia grammar sketch have called the deictic articles 'determiners' (p.59). They have posited three classes of determiners for the language. The first class is composed of *mu*, which corresponds to the English *the* and means *this one and no other*. It can also sometimes occur pronominally with the meaning of *it*. The second class of determiners distinguishes between two or more objects in terms of their location to the speaker:

<i>pamu</i>	<i>this</i>	(near speaker)
<i>omu</i>	<i>that</i>	(nearer to speaker than <i>obumu</i>)
<i>obumu</i>	<i>that</i>	(further from the speaker)

Although the authors themselves do not suggest this, notice that it would appear that *pa-*, *o-*, and *obu-* encode the semantic component of proximity and combine with *-mu* (which encodes definiteness) to form demonstratives. The third class posited are said to distinguish "between items of whether they are 'given' or 'new' in discourse" (p.59). They are as follows:

<i>bo</i>	<i>a certain</i>	<i>another</i>
<i>manang</i>	<i>this</i>	(referring to a more recently 'given' item, i.e. a secondary topic)
<i>munta</i>	<i>this</i>	(referring to a less recently 'given' item, also a secondary topic). (p.59).

Turning now to the Waskia *mu*, it will be seen that it functions much like the Erima *wa*, and the Siroi *ta*.

3.3.1 Mu and embedding

In their section on embedding (p.24-27), Ross and Paol identify *mu* as an embedding device which follows a clause filling the head noun slot of a noun phrase. These clauses derive from independent clauses. As an example they give (50):

- (50) *ane kadi anega buruk usag-am mu arig-em*
I man my pig kill-ps.3s the see-ps.1s
I saw the man who killed my pig.

As in Erima and Waskia, the embedded clause is a final form clause whose constituent order is not disturbed and whose predicate suffixes retain their final (independent) form.

3.3.2 Mu as a constituent of the adversative conjunction

As with Erima and Siroi, the deictic article occurs with propositions in a relationship encoding contrast (p.16). When the two clauses being conjoined involve different referents, mu is used by itself with the meaning of *but* or in conjunction with mela *no*, *none* still meaning *but* as in (51):

- (51) nunga nuam-net inongi tair-un mu
 their 3.mother-father village come-ps.3p but.cd
 kulak itelala munta me bager-un
 boy two that.g not stay-ps.3p
Their parents came to the village, but those two boys weren't there.

When same referents are involved between two clauses, the conjunction tamu *but* is used. Again, considering that both Erima and Siroi use the deictic article in this very same function, and in light of mu being used in adversative sentences with a change of referents, e.g. (50) above, tamu looks suspiciously like ta plus mu, but this cannot be proved.

3.3.3 Mu as a constituent in cause-result relations

Ross and Paol state that cause-result relationships between clauses are signalled by muse (p.22). They call muse an adverb, and say it has the meaning of *so* or *for this reason*. In a later section, however, they themselves identify muse as being composed of mu *the* plus se *at, in, to, from* (p.26). An example of muse encoding cause is (53):

- (53) kadi mu ani-so-le mu-se me tair-uki
 man the sleep-pres.3s-cs the-at (so) not come-fut.3s
The man is sleeping, so he will not come.

Here we see a correspondence between Erima and Waskia, with the Erima wa and the Waskia mu corresponding to each other, and the Erima bo- corresponding to the Waskia se as in the Erima sentence (54):

- (54) fai wa agore inyi-Ø-na wa bo-na ada m-o-na
 man that sleep be-pr-3sS that for-3s not come-f-3sS
That man is sleeping so he will not come.

3.3.4 Mu as a constituent in purpose sentences

Purpose sentences in Waskia also use muse (p.22). Again this corresponds to Erima as a comparison of the Waskia example of a purpose sentence (55) and its Erima translation (56) reveal:

- (55) nu manga t-ako-se mu-se urat bite-so
 he money get-des-c the-at work do-pres.3s
He is working in order to earn money.
 (lit. *He wants to get money, so he is doing work.*)
- (56) no megemu t-einomo wa bo-na haruwe-Ø-na
 he money get-nom that for-3s work-pr-3sS
He works in order to get money.

The last four examples (i.e. (53) through (56)) establish the fact that the Waskia *se at* and the Erima *bo- for* correspond in their functions in relation to the Waskia and Erima deictic articles.

3.3.5 Mu as a condition marker

Ross and Paol in analysing Waskia conditional sentences have noted that the condition clause is marked by *mu*. However, they do not identify it as the determiner *mu* and state: "it is not clear whether there is any connection between the determiner *mu* and the conditional marker *-mu*." (p.24). (It will be seen in sections 4 and 5 below that there is indeed a connection.) Turning now to some examples of *-mu* used as a condition marker, examine (57) and (58):

(57) *nina den ik-ako-mu pala tair-anko*
you.p word hear-des-cond here come-imp.2p
If you want to hear a story, come here.

(58) *ito ane ikelako inela na-em-ale-mu kuer-em-ale*
If I yesterday too.much eat-ps.ls-c-cond die-ps.ls-c
If I had eaten too much yesterday, I would have died.

Note that (57) is a normal conditional, and (58) a hypothetical conditional sentence, and *mu* occurs in both.

In summary, we have seen that the Waskia determiner *mu* *the* corresponds to the Erima deictic article *wa* in its occurrence as a relator for embedded clauses, as an adversative conjunction meaning either *but* or *although*, as a conditional marker, and as a constituent of conjunctions encoding cause-result and purpose. Also, it was shown (section 3.3) that other Waskia determiners function as secondary topic markers.

3.4 Suená

Data for this section are from Darryl Wilson of the Summer Institute of Linguistics, Papua New Guinea branch. He has been involved in linguistic analysis of Suená for over fifteen years. Wilson (1974:26) has analysed Suená as having three proximity markers:

- e- very near the speaker*
- a- near the hearer*
- o- distant from both the speaker and hearer*

These three proximity markers combine with case markers to form demonstrative pronouns:

- mi Subject, Instrument*
- wa Location at of from*
- go Location at or toward; Object this*

(Suená data from this point on are from personal communication with Wilson.) In Suená, the proximity marker *a- there/that* (near the hearer) is the most frequently used deictic article in discourse because the other two (*e-* and *o-*) require that the objects referred to be in sight of the speaker and hearer, which is frequently not the case. All examples which follow use *a-*.

3.4.1 A- as an embedding device

Suena, as in the other languages examined above, embeds independent or final form clauses by use of the deictic *a-* as in (59)

- (59) *ema suna naso doisa a-mi tupia*
man dog my hit.he that-Subj come-he
The man who hit my dog is coming.

The use of different case markers, of course, results in different roles for the embedded clause:

- (60) *ema suna naso doisa a-wa...*
man dog my hit-he that-obj
The man who hit my dog
 (functioning as a clause level object)
- (61) *ema suna naso doisa a-mi-ra*
man dog my hit-he that-agent-of
The X of that man who hit my dog.
 (functioning as a clause level agent)
- (62) *ema suna naso doisa a-mi emo*
man dog my hit-he that-agent for
for the man who hit my dog.
 (functioning as a clause level benefactive tagmeme)

3.4.2 A- and conditionals

The deictic *a-* occurs with both future conditionals and hypothetical contrary-to-fact relationships between independent clauses as in (63) and (64):

- (63) *so wa wamunoya, a-wa na bayamunona*
place rain will.do that-0 I will.go
If it rains, I will go.
- (64) *so wa wamia a-wa bayamena*
place rain contra-fact.do that-0 contra-fact.go
If it had rained, I would have gone.

Wilson has analysed *a-wa* in these examples as functioning as a topic marker.

3.4.3 A- and content reporting

An independent clause plus the deictic in conjunction with a perception verb encode content reporting:

- (65) *nu Lae bamisia a-wa na gosinona*
he Lae went.he that-0 I know.I
I know that he went to Lae.

3.4.4 A- and reason-result

Reason-result relationships use the deictic, whereas the reversal of the relationships (i.e., result-reason) optionally use the deictic:

- (66) nu suna naso doisa a-mi emo na detena
he dog my hit.he that for I hit.I
He hit my dog, therefore I hit (him).
- (67) na nu detena, (a-wa) ne-ra ko-ta nu suna naso doisa
I him hit-I that-O what-of not-but he dog my hit.he
I hit him because he hit my dog.

To summarise the Suena data, we have seen that the deictic article functions as a relativisation device, condition marker (or as Wilson has called it, a topic marker), a content marker, and a marker used to designate reason-result relationships.

3.5 Summary

The purpose of section 3 has been to establish that not only in Erima, but in some other languages of Papua New Guinea, the deictic articles appear to have a vast variety of functions and meanings. We have seen that in published grammars the deictic articles have been called conjunctions, demonstratives, adverbs, topic markers, given markers, conditional markers, embedding devices, etc., depending on the context in which they appear. In each case one deictic article in particular carries the load for all these functions. In the case of the languages with the close, mid, and far distinctions in the deictic articles (i.e., Erima and Suena), the mid deictic is the one with the greatest variety of functions and meanings. For the two languages with a two-way distinction in the deictic articles (i.e., Siroi and Waskia), the article meaning 'that' is the most productive in Siroi, and the determiner meaning 'the' is the most productive for Waskia. The deictic articles have been assigned the meanings of 'here, there, this, that, the, it, but, although, if' and occur as constituents of conjunctions meaning 'therefore, so, because'.

Analysing the Erima *wa* as a demonstrative pronoun, a locative, a definite article, a third person pronoun, a topic marker, a relativisation device, and as a conjunction signalling such logical relationships between clauses as cause-result, ground-conclusion, condition-consequence, etc. may be perfectly legitimate. But the wide range of contexts in which it occurs seems to demand that a *wa*₁, *wa*₂, *wa*₃, etc. be posited to cover the meanings it seems to have. The analyses of Siroi, Waskia, and Suena would also support such an analysis of Erima.

But, as will be seen in section 5, a much tidier explanation of the deictic articles is possible. It is proposed that the analysis of the deictic articles as presented in section 2 and for Siroi, Waskia, and Suena in Section 3, is in fact an etic view of the deictic articles. The key that opens the door to an emic or unified explanation of the deictic articles is to examine Erima from a topic-comment perspective. We now turn to the work of John Haiman on the Hua language of Papua New Guinea.

4. IS WA A TOPIC MARKER?

In recent years several articles have been published by John Haiman concerning the Hua language, which is located in the highlands of Papua New Guinea.

Haiman (1978a) presents data for Hua which are quite similar to those given for Erima and the other languages examined in section 3. The functions encoded by the deictic articles in Erima, Siroi, Waskia, and Suena, however, are not encoded in Hua by deictic articles, but rather by the interrogative marker *ve*. The meanings and parts of speech that he has observed encoded by *ve* are:

(68)	Meanings	Part of speech
	Interrogative marker	as a verbal desinence
	conditional marker	verbal desinence
	disjunction	postnominal clitic
	topicalising particle	postnominal clitic
	response to calls	complete utterance
	(Haiman 1978a:2).	

Scattered throughout three of Haiman's articles (1976, 1978a, and 1978b) are insights which are productive for the understanding of the Erima deictic articles.

The first important insight is that "similarity in the superficial form of grammatical categories usually reflects an underlying similarity of their meanings." (1978b:565). In his 1978a article he establishes that the grammatical constructions in which the Hua *ve* occur all have the same superficial form, suggestive of a similarity of meaning.

Second, he shows that conditional clauses are in fact topics. He states that "conditionals of all descriptions share with topics the attribute that they represent givens or (pre) suppositions in a sentence that are not subject to interrogation or denial." (1978a:27). Sentence topics are generally defined as the old or given information of a sentence. Conditions, however, do not have a widely accepted general definition. Haiman observes that there seem to be two aspects of conditions which linguists note: that they are hypotheticals, and that they have a causal relationship with the following clause (1978a:29). He shows, however, that there are counter-examples to the claim that conditionals are necessarily hypotheticals as in (69):

- (69) (a) If I was a poor carpenter, I was a worse traitor.
 (b) If I seemed unkind, it was because I was distracted.
 (c) She's over fifty, if she's a day.

Haiman proposes that the first clauses in (69) are propositions which are granted, in other words, givens. He cites Ducrot (1972) as defining conditional clauses as follows: "A conditional clause is a given. A hypothetical clause is a hypothetical given." (Haiman 1978a:30). Haiman goes on to say that

Ducrot suggests that the act of uttering a hypothetical conditional consists in asking the listener to accept for a time a proposition *p* which provisionally becomes the framework of reference for the discourse, in particular for the principle proposition *q*. (p.30).

In both his 1978a and 1978b articles, Haiman posits that Ducrot's definition for conditionals fits the definition for topics. Haiman (1978b:585) defines a topic as follows: "The topic represents an entity whose existence is agreed upon by the speaker and his audience. As such, it constitutes the framework which has been selected for the following discourse."

The third observation Haiman makes which is relevant to Erima is that in Hua, as in many other languages, "the formal mark of topic status ... is often an interrogative morpheme or construction." (1978b:571). An example given by Haiman is:

- (70) e -si -ve baigu -e
 come 3sg.fut interrog will.stay 1sg.
 Will he come? I will stay or If he will come, I will stay.

This, he says, parallels the use of rhetorical questions as topics as in:

- (71) Is any among you in trouble? He should pray.

He cites Li and Thompson (1976:484) and Friedman (1976:142) as positing that one means of marking a NP as topic in English is by the formula 'You know NP?'. (Haiman 1978b:571). He concludes that

... the explanation for the similarity of conditionals and questions, it seems to me, is that conditionals (like other topics) are established in a discourse as given facts or entities with a formal device whereby the speaker seeks the agreement of his interlocutor as to their validity. This common formal device is the question, 'You know ___?' Hence the common interrogative morphology of conditionals and topics. (1978b:572).

How are these observations of Haiman's relevant to Erima? First of all, Haiman's statement that surface structure similarity of constructions suggests similarity of meaning alerts us to the possibility that there may not be as many meanings and functions for the Erima deictic articles as appeared in section 2. In Erima, relative clauses, topics, reason clauses, grounds clauses, etc. all have the surface construction of final (or independent) clause plus deictic article (i.e., *wa that*).⁷ Also, except for relative clauses, each one (condition clause, topic, reason clause, etc.) occurs as the left-most constituent of a sentence. Skipping for a moment Haiman's assertion that conditionals are topics, his third observation, namely that there appears to be a correlation in many languages between interrogative and topic constructions, also helps in understanding Erima. Although Erima does not morphologically mark interrogatives and topics in the same way, as opposed to Hua, anyone spending some time with speakers of Erima will quickly discover that they often put a question intonation onto the topic, condition, reason, grounds, etc. part of a sentence and many times actually pause, waiting for some sort of assent from the listener that he can identify the referent of the topic, or that he is willing to accept the particular proposition for the basis of the assertion the speaker is about to make. (See also Keenan and Schieffelin 1976:338). Recall Haiman's belief that conditionals "are established in a discourse as given facts or entities with a formal device whereby the speaker seeks the agreement of his interlocutor as to their validity". This leads naturally to the second observation Haiman made which we skipped, namely that conditionals are givens, or topics.

In analysing Hua, Haiman was led to connect conditions and topics on the grounds of both syntactic and semantic similarity. If it is true that syntactic similarity implies similarity of meaning, and if it is true that conditionals are indeed a type of topic, then it is possible that in Erima we should examine conditions and topics to see if they should be connected. Indeed, perhaps all constructions composed of a final clause occurring medially and followed by a deictic article have a common meaning. Haiman has said that both conditions and topics are entities whose existence speaker and hearer tentatively assume

for the basis or framework of the discourse to follow. This leads me to hypothesise that a final clause occurring medially and followed by a deictic article is in fact a topic. If so, it is also possible to conclude that the deictic article is a kind of topic marker in each case.

Remember that when data were given for Suena, it was stated that Wilson had analysed the deictic article in conditional clauses as being a topic marker (see 3.4.2.). Ger Reesink (MS in progress) has suggested that for Usan, another non-Austronesian language of the Madang Province, and indeed for all the languages with the same phenomenon as we have been examining, the deictic articles are markers of that which is 'given'. In relative clause constructions, then, the relative clause would represent a given, which is the claim made by Haiman (1976:267): "Relative clauses are generally the presuppositions in the sentence in which they occur".

At this point it would be helpful to define both *topics* and *givens*. Quite often in the linguistic literature, a sentence topic is defined as what a sentence is about. The *comment* is defined as what is communicated about the topic (see Beekman and Callow 1979:14, Lyons 1968:335). Apparently this definition was made popular by Hockett (1958:201). He states that in English and many languages of Europe the subject of a clause is the topic, and the predicate is the comment. Halliday and Hasan (1976:325-326) use the terms *theme* and *rheme* rather than *topic-comment*. There are those who state that in many linguistic works *topic* is being confused with *subject*. Chafe (1976:43,45) claims that *subject* is not merely a syntactic role, but is what the sentence is about. A true *topic* he defines as that which "sets a spatial, temporal, or individual framework within which the main predication holds." (1976:50). It is Chafe's definition of *topic* toward which Haiman leans.

Another way in which *topic-comment* is viewed is *given* (or *old*) versus *new* information. Halliday and Hasan (1976:326) state that all information units consist of two elements, a *new* element and a *given* element. A *new* element

... expresses what the speaker is presenting as information that is not recoverable to the hearer from other sources; and a *GIVEN* element, expressing what the speaker is presenting as information that is recoverable to the hearer from some source or other in the environment.

Given and *new* elements may occur in any position throughout a sentence. In fact, the sentence may not contain any *givens* at all, each part being *new* information. This seems to be a departure from the notion of *topic-comment* since literature generally states that all communication units have both a *topic* and a *comment* (as in Beekman and Callow 1979:33). Chafe (1976:3) defines *givens* in a very narrow way:

Given (or *old*) information is that knowledge which the speaker assumes to be in the consciousness of the addressee at the time of the utterance. So-called *new* information is what the speaker assumes he is introducing into the addressee's consciousness by what he says.

By this definition, *new* information is not information which is unknown to or unrecoverable by the hearer, but merely information not in the hearer's consciousness at the time of utterance. It must be noted that both Haiman and Reesink use the term '*given*' in a manner different from Chafe. For them, a *given* is that which the speaker presents as the framework for which an assertion is to be made. It is an entity which may either be factual or hypothetical.

As a hypothetical, it is a proposition which is agreed upon by the speaker and hearer to be tentatively accepted as the stage or point of departure for the act of communication. Thus, Haiman views both topics and givens in the same light, namely, as Chafe defined topics, they are "the framework within which the main predication holds".

In this section we have seen that the work of Haiman suggests that Erima be examined from a topic-comment perspective to see if this provides, as I believe it does, the key to understanding the function and meaning of the Erima deictic articles. This is the topic of the next section.

5. RELATIVISATION, TOPICALISATION, AND DEFINITE NPs

In this section an attempt is made to show that there is a rather simple way of viewing the data presented in sections 2 and 3 which ties together the various constructions using the deictic articles. It will be seen that the deictic articles do not have as many meanings and functions as a first glance would indicate.

5.1 Relativisation

In analysing the constructions containing deictic articles it is important to begin with clauses which are embedded in an *unmarked* object slot of a clause. By unmarked it is meant that the object occurs in its normal position in the clause, that is, after the subject and before the predicate. The reason that it is important to begin with such clauses is that they are clearly embedded and functioning as nominals. More will be said about this below.

Reesink (1979), citing Keenan and Comrie (1977) states that one factor in identifying the relativisation strategy for a particular language is the position of the relative clause in relation to the head noun it is modifying. There are three strategies suggested: postnominal (head noun plus relative clause), prenominal (relative clause plus head noun), and internal. As examples, Keenan and Comrie (1977:64) give (72) for postnominal, (73) for prenominal, and (74) and (75) for internal:

Postnominal:

	HN	RC
(72)	der (Mann,)	(der in seinem Buro arbeitet)
	<i>the man</i>	<i>who in his study works</i>
	<i>the man who is working in his study (German)</i>	

Prenominal:

	RC	HN
(73)	(in seinem Buro arbeitende)	(Mann)
	<i>the in his study working</i>	<i>man</i>
	<i>the man who is working in his study (German)</i>	

Internal:

- RC
- HN
- (74) itye ye (ne ye (so) min ye) san
man past I past horse which see buy
The man bought the horse that I saw. (Bambara)

- RC
- HN
- (75) (tənay (ʔəwa:) + Ø ʔəwu:w) + pu + L` ʔciyawx
yesterday house DO I-saw Def in I-will-sing
I will sing in the house that I saw yesterday. (Digueno)

(In the above examples I have added the bracketing and labels.) Postnominal RC's are of the form HN + RC and prenominal RC's have the form RC + HN. Internal RC's have the HN within the RC. That is, part of the RC precedes the HN and part follows the HN.

Downing (1978:383) states that there are "languages in which it is difficult to establish the position of the deleted head as preceding or following the clause. I therefore label headless RC's *replacive relative clauses* when the clause stands in place of the nominal it is used to modify". One of his examples of replacive relative clauses comes from Bambara:

- RC
- (76) tyè bè n ye so mìn ye dy'
man the-C I-C house REL see erect
 (C = nominal classifier)
The man is building the house that I saw.

(Bracketing is Downing's, labeling is mine.) A comparison of (74) and (76), which are both from Bambara, shows that both have the same structure. I conclude that Keenan and Comrie's internal RC's are equivalent to Downing's replacive RC's. Keenan and Comrie's analysis is that the head noun occurs within the RC, whereas Downing's position is that the head noun is deleted, and the RC stands in its place, functioning as the head noun as well as modifier of that deleted head noun. He represents such RC's as having the form

[NP[S ... REL NP ... V]]

Now I turn to Erima relative clauses. There are two relativisation strategies found in the language. The prenominal RC strategy occurs as a secondary strategy as in:

- RC HN
- (77) (haruwe te-g-ou) (fai) mai-Ø-na
work get-hab-nom man come-pr-3sS
The workman is coming.

I call prenominal RC's in Erima a secondary strategy because they are statistically rare. Typically such RC's have a deleted subject NP and the verb is in an infinite form with tense suffixes and subject person-number suffixes deleted. In their place the nominalising suffix -ou occurs.

Much more frequently occurring, however, are relative clauses such as (78) - (80) below, which I have bracketed to show that they are parallel to Keenan and Comrie's internal RC's.

- (78) Laanga mini-du-Ø
beach go.down-TS-SR

RC

HN

(feeyo (kuluma ima) laanga mata la tafa-ne-fa)
yesterday bottle fishhook beach house at put-1sS-CA
wa-fa te-ne-fa
that get-1sS-CA
*I went down to the beach and got that fishing bottle that I put
in the beach house yesterday.*

RC

HN

- (79) (Saul (kongkong da) hino-ta) wa-fa,
Saul kongkong taro bake.3sS.ip that-emp
yame nganononga tafa-hai-ta
my two put-for.me-3sS.ip
Those kongkong taros Saul baked, she set aside my two for me.

RC

HN

- (80) ji (feeyo (fai ei) yame gauna war-a-ne)
I yesterday man three my dog hit-rp-3pS
wa-fa nerige-Ø-ne
that-emp see.them-pr-1sS
I see those three men who hit my dog yesterday.

In each of the three examples above from Erima, the head noun occurs internal to the RC (Keenan and Comrie's viewpoint). Downing's perspective of the same phenomena is that the head noun (which either precedes or follows the RC - it is impossible to tell) is deleted and the RC is a clause with the NP relativised upon retained in full form. Under such an analysis, the NP in (80) can be viewed as having the structure of either (a) or (b) of (81):

- (81) a) HN RC
- | | | | | | | | |
|-----|-----------|-----|-------|------|-------|-----------|----------|
| (Ø) | (feeyo | fai | ei | yame | gauna | war-a-ne) | wa-fa |
| | yesterday | man | three | my | dog | hit-p-3ps | that-emp |
- RC HN
- b) (feeyo fai ei yame gauna war-a-ne) (Ø) (wa-fa)
- | | | | | | | | |
|---|-----|-------|----|-----|-----------|--|----------|
| yesterday | man | three | my | dog | hit-p-3ps | | that-emp |
| Those three men who hit my dog yesterday. | | | | | | | |

As quoted above, Downing says that a replacive RC, of which the Erima (78) - (80) are examples, "stands in place of the nominal it is used to modify". I take the words 'stands in place of' to mean that the RC functions not just as a modifier, but actually functions as the head noun of that NP. In (80), therefore, the RC functions as the head noun of the NP filling the object slot. That is, the filler of the head noun slot of the NP is the RC.

Notice from a comparison of (80) and the independent active sentence (82) that the RC in (80) is an independent (i.e., final form) clause:

- (82) feeyo fai ei yame gauna war-a-ne
- | | | | | | |
|---------------------------------|-----|-------|----|-----|-----------|
| yesterday | man | three | my | dog | hit-p-3ps |
| Yesterday three men hit my dog. | | | | | |

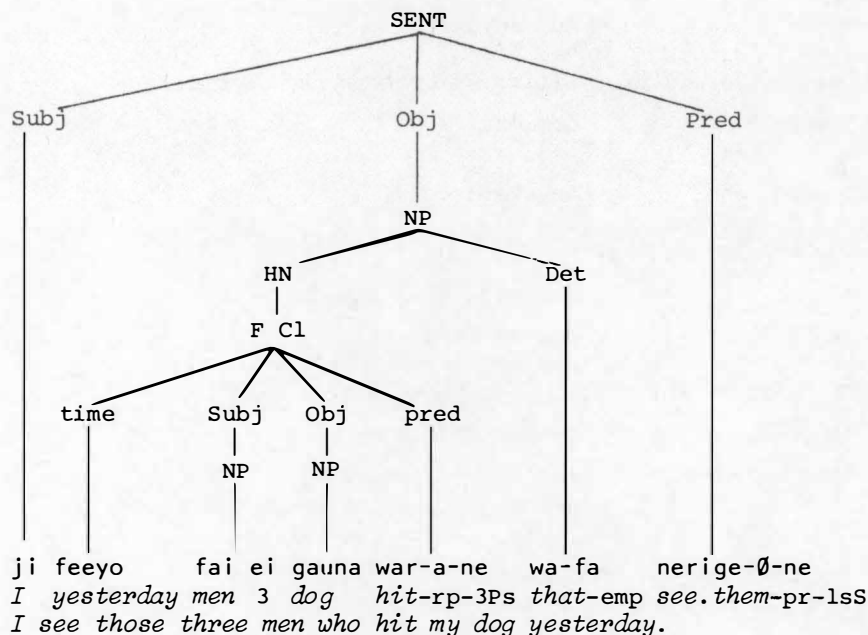
The final form clause (82) is embedded in the head noun slot of the NP filling the object slot in (80). It is important to note that the final form clause is not changed in any way when it is embedded.

At the beginning of this section (5.1), I stated that in analysing the constructions composed of a final form clause plus deictic article it is important to begin with final form clauses embedded in an unmarked object slot of a clause. I said this because when a final form clause embeds into an unmarked object slot there is no controversy over the status of the final form clause. In such a position, since it occurs between the subject and predicate of the matrix clause, it can only be analysed as being embedded and functioning as a nominal. On the other hand, once that same embedded clause, which is the object of the matrix clause, is shifted to a marked (i.e., sentence initial) position, it is easy to lose sight of the fact that it is embedded and that it is the filler of the head slot of a NP marked as being definite by a deictic article. Instead it is incorrectly viewed as not embedded and as being the filler of the first base slot of a sentence. Indeed, this fact becomes obscured in past analyses (e.g. Well's analysis of Siroi). Losing sight of this fact is part of the reason that the deictic articles appear to have so many functions.

(80) above is an example of a final clause plus deictic article as filler of an unmarked object slot. I want to stress that the embedded final form clause functions as a nominal and is the filler of the head noun slot of an NP. The deictic article is filler of the determiner slot of that same NP, marking it as definite. The point I want to make is that it is a *definite NP* which fills the object slot of the matrix clause in (80).

On the basis of my above analysis, (80) may be represented as follows:⁹

(83)



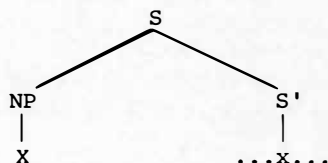
5.2 Topicalisation

Analysing Erima from a topic-comment perspective is very productive in that it explains a large amount of data. Gundel (1975:27) quotes Chomsky (1965:221) as suggesting that

Topic-Comment is the basic grammatical relation of surface structure corresponding roughly to the fundamental Subject-Predicate relation of deep structure where Topic is defined as "the left-most NP immediately dominated by S in the surface structure" and the comment is "the rest of the string". (cf. Hockett 1958:201).

Notice that it is the NP which is focused upon as topic. Gundel goes on to posit that the underlying structure of all sentences is:

(84)



where the NP is topic and S' is the comment. Note the following Erima sentences analysed from a topic-comment (NP-comment) perspective:

- (85) Topic Comment
 NP
 yame babo no anyukaro
 my brother he big
 My brother is big. (Lit. My brother, he is big.)
- (86) Topic Comment
 NP
 yame babo anyukaro
 my brother big
 My brother is big.
- (87) Topic Comment
 ji age-fe dig-a-i
 I eye-my climb.up-rp-3sS
 I forgot. (Lit. I, my eye climbed up.)
- (88) Topic Comment
 ji ogo-fe dig-a-i
 I stomach-my climb.up-rp-3sS
 I was full. (Lit. I, my stomach climbed up.)
- (89) Topic Comment
 NP
 yame babo um-a-i
 my brother die-
 My brother died.
- (90) Topic Comment
 NP
 yame babo no um-a-i
 my brother he die-rp-3sS
 My brother died. (Lit. My brother, he died.)

There are several things to note about the above examples of topic-comment. First, note that the difference between (85) and (86), as well as the difference between (89) and (90), is that in (86) and (89) the subject NP is functioning as both grammatical subject and topic. In (85) and (90), the NP *my brother* functions as topic, while the anaphoric pronoun is the subject of the clause functioning as the comment. Secondly, note that in both (87) and (88) there is a clear difference between the referent of the topic part and the referent of the comment part of the sentence. The topic has as referent *ji I*, whereas the comment involves the eye or the stomach, (with the possessive suffix in agreement with the topic) and the predicate is third person singular in agreement with the subject of the clause filling the comment slot, rather than the topic. (87) could be paraphrased 'As for myself, my eye climbed up'. (An idiom meaning 'I forgot.') Erima has many body part idioms which cannot be understood except from a topic-comment viewpoint.

As exemplified by the above examples, a topic is defined as the left-most NP or, as will be seen later, as the left-most *axis-relator* phrase. In some cases the left-most NP may also be the grammatical subject. Topic is defined as the proposition or propositions that are syntactically encoded as the left-most NP or ARP of a sentence and (following Haiman and Chafe (section 4.0)) function to set the stage or framework within which the assertion to follow holds.

As mentioned previously, an object NP following the subject clause is in an unmarked position. The object NP may be *topicalised* by fronting or left-dislocation. The normal SOV pattern changes to OSV, marking the object as topic. Compare (80) with (91):

(91) Topic

feeyo fai ei yame gauna war-a-ne wa-fa
yesterday man three my dog hit-pr-3pS that-emp

Comment

ji nerige-Ø-ne

I see.them-pr-1sS

Those three men who hit my dog yesterday (topic), I see them.

Note that (91) could just as easily have been stated as:

(92) Topic

feeyo fai ei yame gauna war-a-ne wa-fa
yesterday man three my dog hit-rp-3pS that-emp

Comment

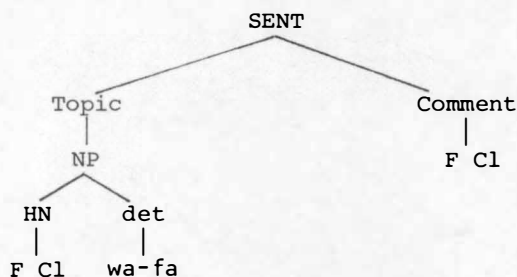
ji nere nerige-Ø-ne

I them see.them-pr-1sS

Those three men who hit my dog yesterday (topic), I see them.

In (91) the object moves to a marked (i.e. topicalised) position. In (92) the object tagmeme has the anaphoric pronoun *nere* *them* as filler, showing that the topic NP no longer functions as object, but purely as topic. Again, it is important to realise that the filler of the topic slot of the sentence is a NP, not an independent (final) clause. That is, the clause is functioning as a nominal and filling the head noun slot of a NP. (92) is represented as:

(93)

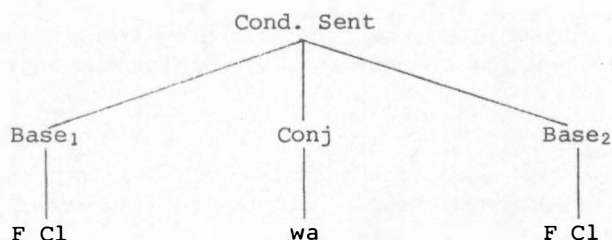


It is at this point that we turn to the data which were causing problems. Perhaps because of an English language bias, and also because of the final or independent form of both clauses, the most natural reaction to a conditional sentence such as the Erima example (94) is to think that two independent clauses are being conjoined by *wa*, which should now be glossed *if*:

(94) yaage mo-o-na wa ji yaf-o-ne bo-ne
rain come.down-f-3sS that I sit-f-1sS intent-1sS
If rain comes, I will stay.

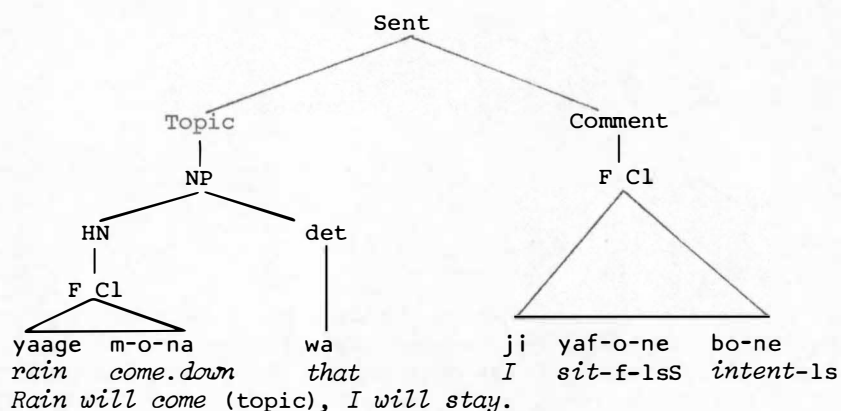
That is, (94) is interpreted as containing two independent clauses both on the same level of the grammatical hierarchy (i.e., both fill sentence level slots) and conjoined by the sentence level conjunction *wa*, as represented below:

(95)



This is precisely how Wells (1979:108) has analysed Siroi equivalents of (94). She states that "when a Corollary Sentence encodes hypotheticality, potential tense is used in the Predicate of Base 1, and future tense in Base 2. In this encoding the link *ta/tanu* has the meaning *if*". She previously states that "the link between the Bases of the Corollary Sentence is the demonstrative *ta* *that* or the demonstrative *ta* plus the nominaliser *-nu*." (p.104). Note from this quote that Wells views the deictic article as a conjunction (in her terms a link) and the two predicates as fillers of the base slots of the sentence. In other words, she views the deictic article and the predicates as being on the same level in the grammatical hierarchy and the predicates as being in a paratactic relationship. It is at this point, I believe, that the data are viewed improperly. We have already seen that the Erima example (91) is a case of a topicalised object NP, with the head noun slot filled by an embedded independent clause. That seems self-evident. But a comparison of (91) and (92) shows no grammatical difference between the two as far as clause structure and sentence structure are concerned. In an etic view both cases show a final clause plus a deictic article plus a final clause. What I am asserting here is that there is no real difference between (91) and (94) apart from lexical differences.¹⁰ The grammatical structure on the sentence level is identical. That is, (94) should be viewed as:

(96)



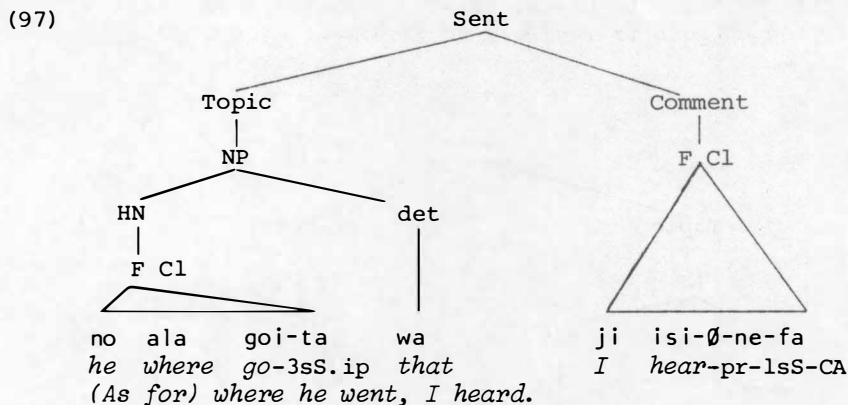
We have already seen that Haiman claims that conditionals are topics (section 4.0.). There are not only semantic grounds for this, but in Papua New Guinean languages such as Erima there are syntactic grounds. What I am claiming here is that a final clause plus a deictic article is nothing other than a topicalised NP. Nominalisation is achieved merely by position, i.e., by filling the head noun slot of a NP. That NP in turn becomes topicalised by virtue of its position in the sentence (i.e. left-most NP).

As evidence that conditions are topics in Erima, I offer the following observations. First, conditional clauses in Erima have structure identical to any Erima topic containing a verb (which is usually the case). That is, a final form verb plus deictic article is common to both. Second, conditional clauses have the same sentence position as topics (i.e., they are both the left-most constituent). Third, conditions are marked as definite by the deictic article, as are topics. Definiteness, as we will see in a later section, is the characteristic of topics. And last of all, I believe that Erima adds further weight to Haiman's belief that the fact that so many languages throughout the world have identical encoding for conditions and topics suggests that the two notions are related. This identical encoding of conditions and topics is found in many often unrelated languages of Papua New Guinea. For these reasons, I believe conditions are topics in Erima.

In section 2. I stated that the deictic article was not only a locative or a demonstrative pronoun in function, but also a conjunction encoding various inter-clausal relationships. I have argued, however, that what at first appeared to be conditional sentence is in fact a topic-comment construction. The conditional notion is conveyed by the tense of the predicates of the two clauses (i.e. both are future tense). We now turn to each of the other logical relations mentioned in section 2. to examine them from a topic-comment viewpoint.

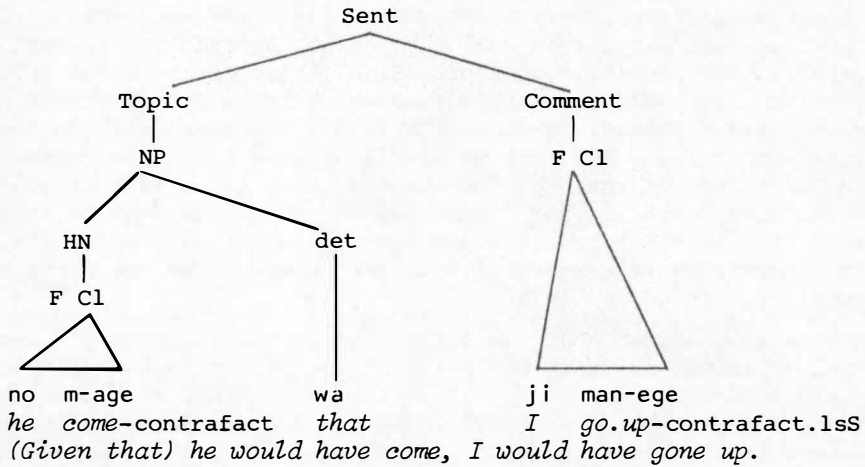
In section 2., the following relationships were said to be encoded by the deictic article in its function as a link between the bases of sentences: content-reporting, reason-result, result-reason, means-purpose, ground-conclusion, adversative, and condition-consequence (with its three subtypes of future-oriented, non-future oriented, and argumentative condition). It will be seen in the following examples that in each case the syntactic structure is the same, namely, a F Cl plus the deictic article, plus a F Cl. In each case the first clause is actually a nominal; it is filler of the head noun slot of a NP. The deictic article is filler of the determiner slot of that same NP. That NP is the filler of the topic slot of the sentence, and the second final clause is filler of the comment slot. (Cases involving *bo- for* are discussed below.) Based on this analysis we may propose tree structures as follows:

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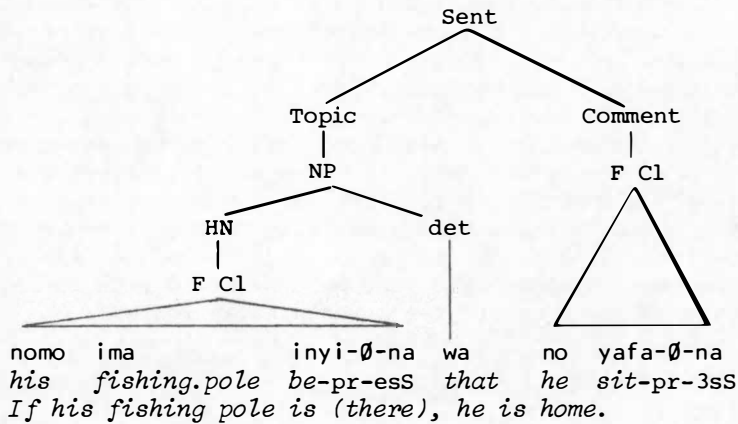
Non future oriented-condition:

(98)



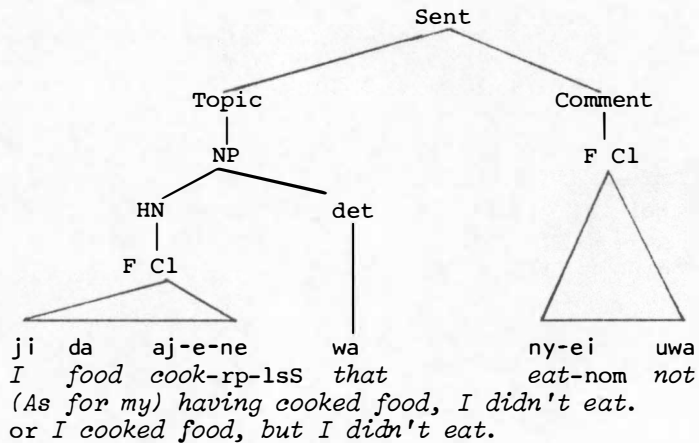
Argumentative conditional:

(99)



Adversative:

(100)



It is difficult to give a translation of (98) and (99) into English which retains the topic-comment flavour found in the Erima. If it is kept in mind, however, that the topic proposition states the framework within which the following proposition holds, it can be seen that it truly is a matter of topic comment. The assertion in (98) that 'I would have gone up' holds within the domain of 'his having come'. The assertion 'he is home' in (99) holds within the framework of 'his fishing pole is (there)'. The force of (100) could perhaps best be expressed by the paraphrase 'You know how I cooked food? Well I didn't eat (it)!' which has two constituent parts: a question demanding assent, which encodes topic, and a second sentence which encodes an adversative relationship, without an overt marker such as the English 'but'.

I turn now to relationships involving *bo-* *for*, as in:

- (101) no taura t-a-i wa bo-na um-a-i
he sickness get-rp-3sS that for-3s die-rp-3sS
He got sick, therefore he died.

It would seem that here is a true case of the deictic article functioning as a sentence conjunction together with *bo-*. But such is in fact not the case. Again the final clause plus *wa* is functioning as a NP. This can be seen from the series of examples below (i.e., 102-105). *bo-* is actually a reason or purpose marker on a clause level as in:

- (102) no gei idada-weinomo bo-na mani-ta
he betel.nut buy-nom for-3s go.up-3sS.rp
He went in order to buy betel nut.
- (103) no gei idada-wo-na bo-na mani-ta
he betel.nut buy-f-3sS for-3s go.up-3sS.rp
He went in order to buy betel nut.
- (104) no gei bo-na mani-ta
he betel.nut for-3sS go.up-3sS.rp
He went for betel nut.
- (105) no bemu bo-na mani-ta
he brother for-3s go.up-3sS.rp
He went because of his brother.

Note that (102) and (103) involve reason or purpose tagmemes on the clause level, filled by axis-relator phrases, with a nominalised clause filling the axis slot in (102), an embedded final clause (future tense) filling the axis in (103), a noun in (104), and a possessive noun phrase in (105). To someone unfamiliar with Erima, (105) appears to be a case of benefaction, but this is not so. Erima has verbal suffixes to encode benefaction. So, if an Erima speaker wished to say 'I am going to buy betel nut for my brother', he would say,

- (106) ji yame babo gei idada-fu-weinomo bo-ne
I my brother betel.nut buy-for.him-nom for-1s
mani-Ø-ne
go.up-pr-1sS
I am going to buy betel nut for my brother.

The above examples of purpose or reason tagmemes are represented by the following clause formula:

- (107) Nuc:subj + Mar:purpose + Nuc:predicate

It is possible to topicalise the purpose margin of the clause by moving it to topic position via left-dislocation, as in exemplified by (108) and (109):

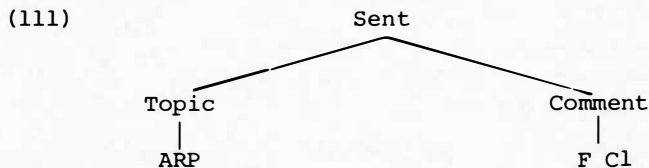
(108) *ji babo bo-ne ada isi-Ø-ne*
I brother for-1s not hear-pr-1sS
I don't think about my brother.

(109) *babo bo-ne ji ada isi-Ø-ne*
brother for-1s I not hear-pr-1sS
(As for) my brother, I don't think about (him).

Compare (109) and (110), in which is seen the same structure as (101):

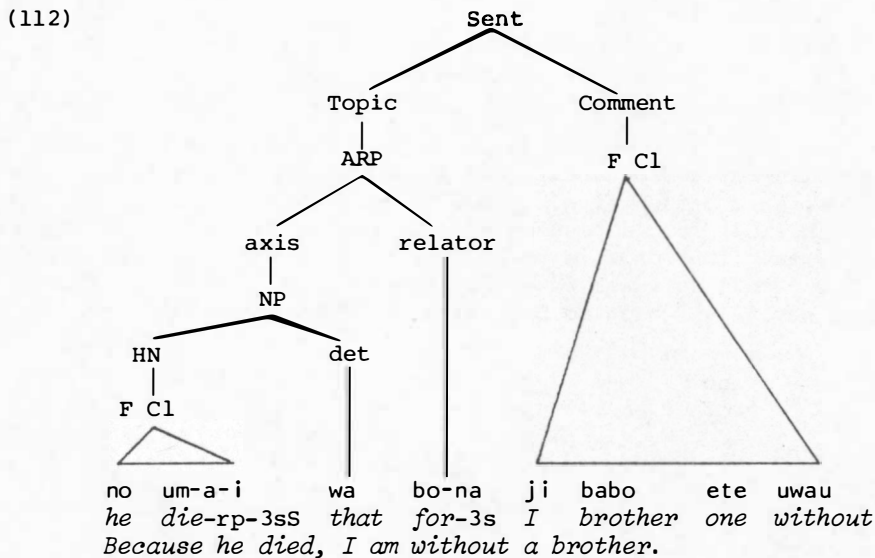
(110) *babo wa bo-ne ji ada isi-Ø-ne*
brother that for-1s I not hear-pr-2sS
(As for) that brother, I don't think about (him).

In the case of (110), the purpose or reason tagmeme has been topicalised and is filled by an axis-relator phrase in which the definite NP 'that brother' fills the axis slot. In (101) the reason tagmeme is also topicalised, and is filled by an axis-relator phrase, but the filler of the axis slot is a definite NP which has embedded independent clause as filler of the head noun slot. Both (101) and (110) can be diagrammed as:



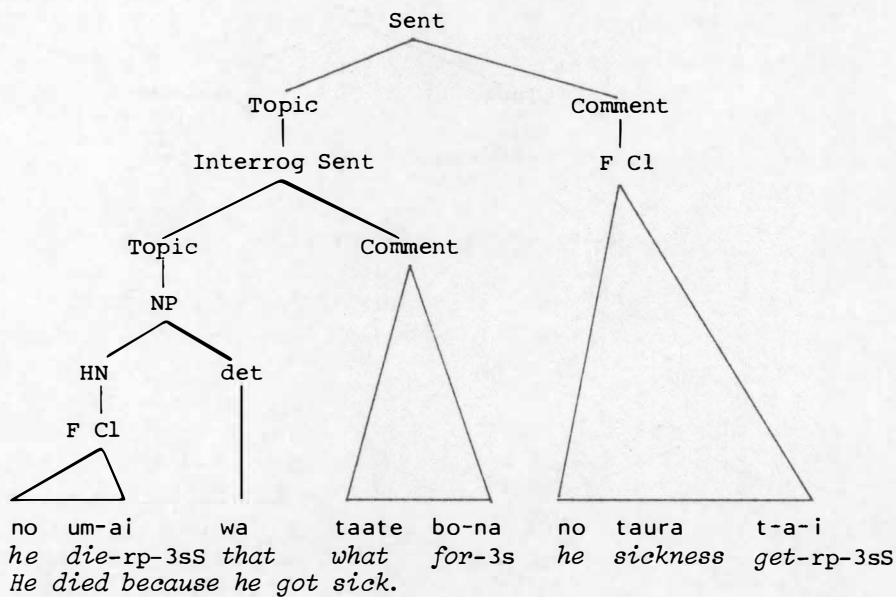
In light of this analysis we continue with examples of various inter-clausal relationships encoded by topic-comment. Note the following tree structures:

Reason-Result:



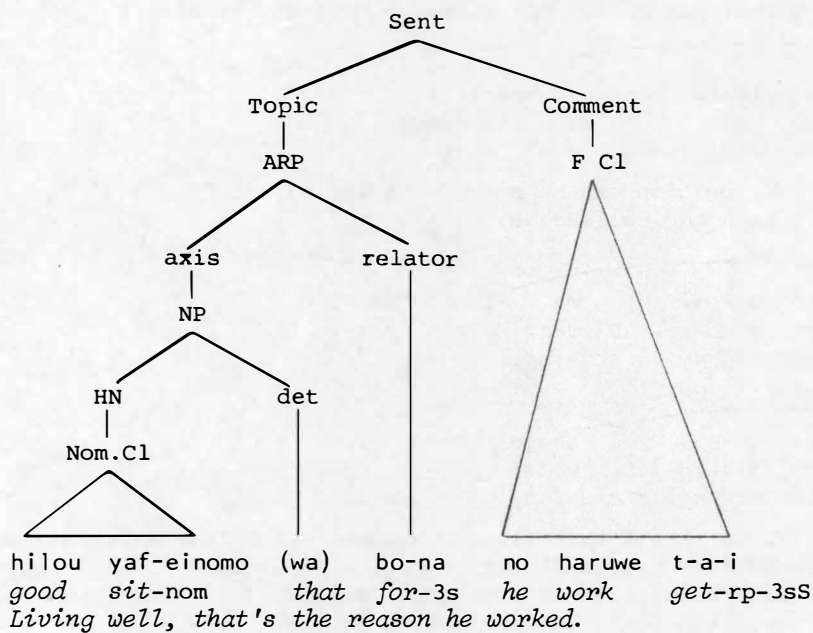
Result-reason:

(113)



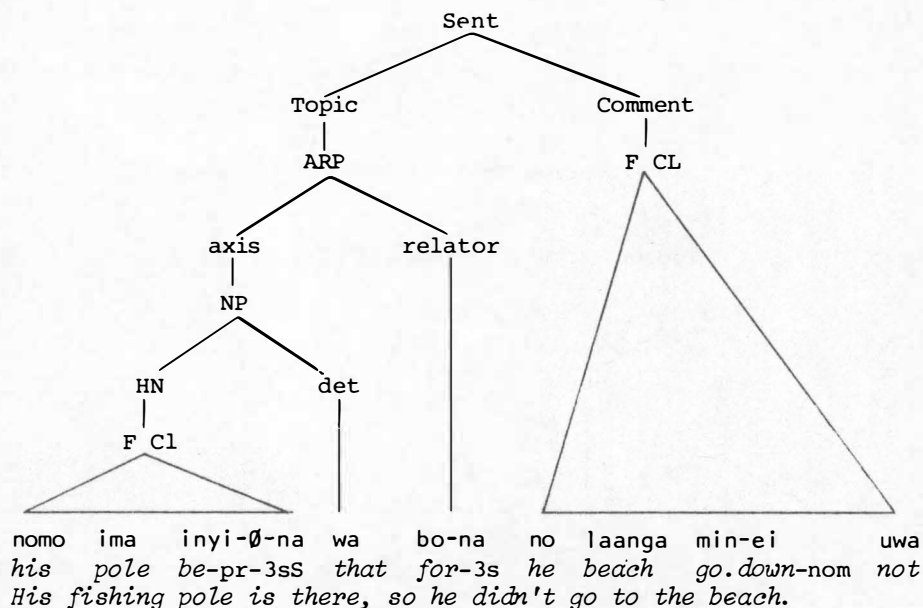
Means-purpose:

(114)



Argumentative:

(115)



In order to understand (113) properly several things must be known. First, (116) is the normal way to ask the question 'Why did he die?':

- (116) no taate bo-na um-a-i //
 he what for-3s die-rp-3sS
 Why did he die?

Second, the same question can be asked with the clause 'He died' filling the head noun slot of a topicalised NP:

- (117) no um-a-i wa taate bo-na
 he died-rp-3sS that what for-3s
 (Regarding) his dying, why (was it)?

- (118) no um-a-i taate bo-na //
 he die-rp-3sS what for-3s
 (Regarding) his dying, why (was it)?

Returning to (113), recall that Li and Thompson (1976) (see.4.0) have suggested that 'You know NP?' is a topicalisation device in English. (113) is precisely the same sort of structure where the question (117) fills the topic slot of (113). That is, (113) could be represented in English as 'Why did he die? (rhetorical question as topic) He got sick'. The difference is that in Erima a final pause does not occur, and the intonation pattern rises at the end of the topic segment, that is, sentence medial intonation occurs:

- (119) *no um-a-i wa taate bona / no taura t-a-i //*
he die-rp-3sS that what for-3s he sickness get-rp-3sS
He died because he got sick.

To summarise at this point, I have argued that constructions involving the deictic articles following final clauses are cases of topicalised NPs or ARPs. This has been argued on the basis of the observation that NPs function as fillers of the object slot of unmarked object tagmemes (i.e., in SOV sequences). In such cases the final clause is clearly embedded into the head slot of the noun phrase. An object NP may be topicalised by left-dislocation. Reason or purpose margins in clauses can also have final clauses as the filler of the head slot of the NP filling the axis of the ARP, and they too may become topicalised by left-dislocation. Thus the topic-comment construction is the basis for the various interclausal relationships we have seen, and it explains the wide variety of interclausal relationships encoded by constructions using the deictic article. A question which remains, however, is the meaning and function of the deictic article in such constructions. We have already said that the deictic article should not be glossed with such meanings as 'if' or 'but', etc. Should it then be considered a topic marker, or a marker of 'givens'? This too would be a misunderstanding. To see this it is necessary to investigate the nature of definite NPs in relation to topics.

5.3 Definite NPs

According to Li and Thompson (1976:461), "one of the primary characteristics of topics is that they must be definite". They go on to add that "according to this characterisation of definiteness, proper and generic NPs are also understood as definite".

However, not all linguists would claim that a topic must be definite. This is exemplified by Sgall, Hajičová, and Benešová (1973:197) who state that "it is well known that the NP's in the topic primarily are definite (or generic) but that this is not the only possibility". This tendency for topic NPs to be definite is the reason that in Erima the deictic articles occur so often in the constructions filling the topic slot of sentences. And, this helps show why the deictic articles are not to be considered topic markers or markers of givens. Topicalisation or givenness is encoded by virtue of the NP's position in the sentence (i.e. it is the left-most NP). If this is not the case, if the deictic article is to be understood as a topic marker, then how could (120) be explained?

- (120) *yame babo ji no bo-ne ada isi-Ø-ne*
my brother I him for-ls not hear-pr-lsS
My brother (topic), I don't think about him.

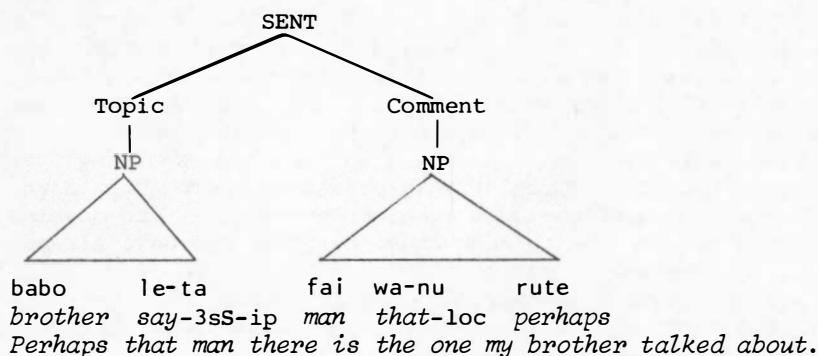
In (120), the possessive noun phrase *yame babo my brother* is clearly marked as topic. How? By a deictic article? No, by virtue of its sentence position. And, (121) can just as easily be uttered:

- (121) *yame babo wa-fa ji no bo-ne ada isi-Ø-ne*
my brother that-emp I him for-ls not hear-pr-lsS
That brother of mine (topic), I don't think about him.

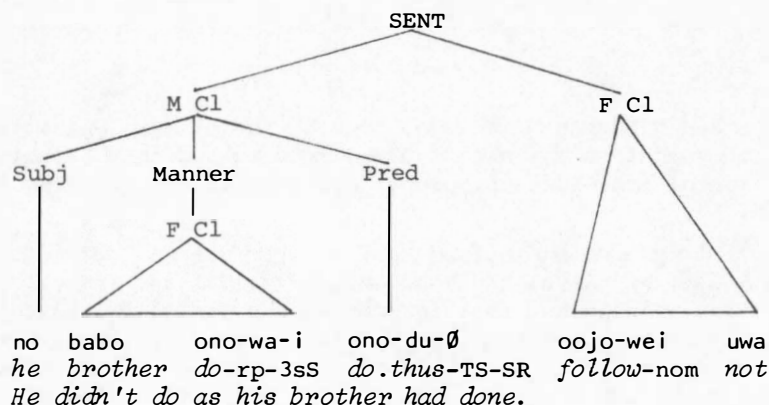
In each case, with or without the deictic article, topic is encoded by sentence position. For this reason, the deictic article is to be considered not as a topic marker or a marker of givens, but as the determiner of a NP which may happen to have a final clause embedded in the head noun slot.

Further evidence that points away from calling the deictic article a topic or given marker is that many times in texts the embedding of final form clauses is recognised merely by their position within a clause, and they do not have a deictic article following:

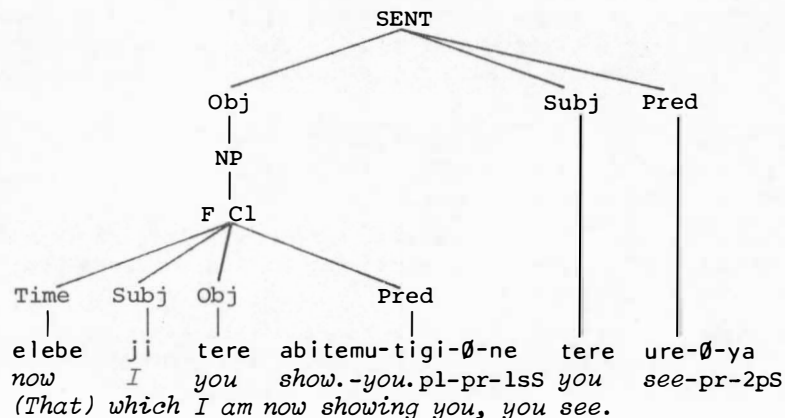
(122)



(123)



(124)



In each of these three examples, a final form clause occurs sentence medially without a deictic article following it. (122) and (124) are examples of final clauses functioning as topic NPs, and (123) is an example of a final clause embedding into the manner slot of a clause.

5.4 Summary

I have argued that the deictic articles in Erima have but two basic meanings and functions which correspond to the English demonstrative adverbs (*here* and *there*) and demonstrative pronouns (*this* and *that*). Constructions in Erima and other languages of Papua New Guinea which seem to have the deictic article functioning as sentence level conjunctions meaning 'if', 'but' 'although', etc., are in fact topicalised definite NPs or ARPs which contain a definite NP as filler of the head noun slot or axis slot (in the case of ARPs). The deictic article in such cases functions as the determiner of the NP (i.e., it marks it as definite). The majority of cases involving topicalised NPs have to do with definite NPs (and therefore deictic articles) because a definite NP is more likely to be a topic than an indefinite NP.

A question which may be raised at this point concerns ambiguity. Since so many semantic notions (e.g., adversative, condition-consequence, reason-result, etc.) are all encoded identically in Erima, how do hearers know which notion the speaker is encoding? Although I cannot fully answer this question, I would suggest that the following clues aid the hearer in decoding an utterance.

First, native speakers share a cultural world view and knowledge of their universe. This would aid a hearer in understanding the intent of the speaker. A case at point is the notion of adversative relationships. All languages have a certain *script* they follow. Specifically, the occurrence of one action will immediately result in an expected action sequence. Such *expectancy chains* may be universal or culture specific. (100) above involves a universal expectancy chain which is frustrated. It is expected probably in all societies that having cooked food, one would eat it. Therefore, in (100), although the surface encoding is identical to that of many other notions, the frustration of the expectancy chain (i.e., 'I cooked food ... I did not eat it.') signals the adversative relationship between the two propositions.

Secondly, the immediate context provides clues for the hearer to understand what notion is encoded. Finally, the very choice of lexical items also provides clues. As far as conditionals are concerned, tense suffixes encoding the future tense would be indicative of a future condition. Contrafactual conditions, on the other hand, are clearly marked morphologically as in (98) even though they still use a deictic article.

6. DISCOURSE FUNCTIONS OF THE DEICTIC ARTICLES

This section covers not only the role of the Erima deictic articles in discourse, but also touches on the discourse functions of grammatical constructions of which the deictic articles are a constituent (i.e., sequences of embedded final form clause plus deictic article).

6.1 Referential cohesion

There are various semantic features which go into making a text. Halliday and Hasan (1976) state that one of the most important of those semantic features is cohesion. Cohesion is what makes the constituents of a text or discourse hang together, creating a unified whole. They state that

... cohesion occurs where the INTERPRETATION of some element in discourse is dependent on that of another. The one PRESUPPOSES the other, in the sense that it cannot be effectively decoded except by recourse to it. When this happens, a relationship of cohesion is set up, and the two elements, the presupposing and the presupposed are thereby at least potentially integrated into a text. (Halliday and Hasan 1979:4).

They identify five types of cohesion: reference, substitution, ellipsis, conjunction, and lexical. Of these, the notion of reference has relevance to the Erima deictic articles.

In English, there are various ways in which referential cohesion is established. Among these is the use of the definite article, demonstrative pronouns, and the demonstrative adjectives. We have seen in previous sections (see 2.1 and 2.2) that Erima deictic articles have functions corresponding to these three English grammatical categories. According to Halliday and Hasan (1976:31), a lexical item in a language is referential when its interpretation cannot be determined from the item itself, but only by recourse to something else. Such is the case with the definite article and demonstratives in English, and the deictic articles in Erima. For example, if someone opens a book and in the middle of a paragraph reads, *The man wore a green hat*, he can certainly understand the sentence as a whole, but the interpretation of 'the man' depends on recourse to the previous context. As Halliday and Hasan were quoted as saying above, when the interpretation of an item is dependent upon recourse to some presupposed item, cohesion is established. In this case it is referential cohesion which is established.

Reference may be classified as to whether the lexical item has reference to something outside of a text or within a text. ('Text' is being used here to mean both oral and written discourse.) Reference to something outside of a text has been called by Fillmore (1975:40) '*gestural*' reference. By this he means that the lexical item "can be properly interpreted only by somebody who is monitoring some physical aspect of the communication situation". This is what Halliday and Hasan (1976:18) call *exophoric* reference. For example, if someone overhears someone else say *Look at that fire!*, the only way that may be accurately interpreted is by recourse to the physical environment. In the case of reported dialogue a different type of exophoric reference occurs. In a narrative text in which one participant uttered *Look at that fire!* to another participant, the interpretation of *that* (that is, the identification of its referent) cannot be made by the hearer of the reported dialogue by recourse to the physical environment. In such cases, say Halliday and Hasan (1976:18), the reader (if the text is written) or audience (if the text is oral) create in their minds a 'context of situation' in order to interpret the demonstrative. Neither type of exophoric reference is cohesive.

On the other hand, if the interpretation of an item may be made by reference to another item within the text as in (125), the type of reference is termed *endophoric* by Halliday and Hasan (1976:33):

- (125) A man stood impatiently waiting for a train to London.
When the train arrived he shoved his way on board.

In (125), both 'the' in 'the train' and 'he' are cases of endophoric reference. Their interpretation is dependent upon recourse to the bit of text preceding their occurrence.

Endophoric reference may be broken down into two types: reference which refers backward and reference which refers forward in text. Although some writers (e.g. Fillmore 1975:40 and Lyons 1977:650) call both backward and forward reference *anaphora*, Halliday and Hasan (1976:14ff) call reference back to an item in text *anaphoric reference*, and reference forward to an item in text *cataphoric reference*. 'The' in 'the train' in (125) is an example of anaphoric reference. In (126) below, 'this' is a case of cataphoric reference its interpretation depends on the text following it:

- (126) This is what he said, "Jones is fired for incompetence".

To summarise, reference is either endophoric (within text) or exophoric (outside of text). Endophoric reference may be further categorised as anaphoric (referring back in text) or cataphoric (referring forward in text). In English, according to Halliday and Hasan (1976:68-75), of the demonstratives and the definite article only *this*, *these*, and *here* provide cataphoric cohesion, although they may also function anaphorically. *The*, *that*, *those*, and *there* provide only anaphoric cohesion. (*The* may occur cataphorically only in a *non-cohesive* way.) For the purpose of typologies, and for the purpose of translating materials from one language to another, it is important in the analysis of a language to determine if the demonstratives, etc. in the source language match those of the target language in their usage endophorically and exophorically. While in English *this* may be used both anaphorically and cataphorically, it is possible that in another language the equivalent demonstrative may be used only cataphorically. Or, while the English *that* may only be used anaphorically in a cohesive way, it is possible that the equivalent demonstrative in another language may be used both anaphorically and cataphorically.

Erima, as has been discussed in earlier sections, has three deictic articles: *wo that, those, there (far distance)*, *wa that, those, there (mid-distance)*, and *be this, these, there (close by)*. Of the three, *wo* is not used endophorically.¹¹ Although *be* does occur endophorically, it is more often used exophorically. *wa* is used more often endophorically than exophorically.

First, examples of the Erima deictic articles used exophorically will be given:

- (127) umamu isoki-tu-wa-i, "Jei, wo fai wei
father ask-3sO-rp-3sS dad, there man who
mai-Ø-na yo?"
come-pr-3sS yes
(He) asked (his) father, "Dad, who (is) (the) man coming there?"
- (128) nomo oya isoki-wa-i, "Ei, ne haya wa
his wife ask-rp-3sS hey, you plates those
adadu elege-ne-fa"
how get.pl-2sS-CA
His wife asked, "Hey, how did you get those plates?"

- (129) ere ira-gonga esuwa ebere kaafa be
 we tomorrow-become afternoon our game this
 aji-du-Ø nyei-nomo
 cook-TS-SR eat-pl.inclusive.S
*Tomorrow afternoon we (inclusive) will cook and eat this
 game of ours.*

Of course, without the context it is impossible to know whether or not the deictic articles in the above examples were used exophorically. However, their context (not given here for the sake of brevity) clearly indicates exophoric usage.

As mentioned previously, there is a type of exophoric reference which does not refer to the physical environment per se. It is what Halliday and Hasan (1976:18) call context of situation: "in instances where the key to the interpretation is not ready to hand, in text or situation, the hearer or reader CONSTRUCTS a context of situation in order to supply it for himself". (127)-(129) are all quotes of part of a dialogue between participants in a traditional Erima narrative text. They illustrate exophoric reference to both the physical environment and the context of situation. For the father and son in (127), *wo* makes exophoric reference to the physical environment. But, since this is quoted speech in part of a narrative text, for the audience to whom the narrative was related, *wo* did not make exophoric reference to the physical environment. The individual telling the story did not point someone out to the audience. Instead the audience must supply the context of situation from the text. They must imagine the situation based on that portion of the narrative. This type of reference occurs often in discourse, where the hearer must construct an appropriate context in order to interpret the referential item. Another example of exophoric reference to the context of situation is:

- (130) fai nganononga nere ulate wo golo-Ø
 man two they side there walk-SR
 bo-dere goy-a-re. Dogia ulate onoufe.
 and-3d go-rp-3ds Dogia side like
*Two men went walking (on the) distant side there. Like,
 (for example, from here to the other) side of Dogia (village).*

In (130) the narrator uses *wo* in an exophoric way. *wo* has no anaphoric referent. The audience is not told where *there* is. The message communicated is that the two men went some distance away from their village. To help the audience construct the context of situation, the narrator adds the piece of information that the distance involved was equivalent to the distance from where the audience was sitting to the village of Dogia.

The following are examples of endophoric reference. (131) and (132) are specifically anaphoric reference:

- (131) tei bitaro afo aro tuwa langa yaf-a-i.
 possum big feet long branch on sit-rp-3ss
 nere tei wa elege-du-Ø bo-de muju
 they possum that get-TS-SR and-3p flesh
 faae-boro-wa-ne.
 butcher-completely-rp-3ps
*(A) large possum (with) long legs sat on a (tree) branch.
 They got that possum and then butchered its flesh thoroughly.*

- (132) ... fai nomo stori be.
 man his story here
 This (was) the man's story.

(132) occurs at the end of a narrative text, although it is not the closure device for the text. The deictic article *be* *this* has anaphoric reference to the entire preceding text.

One function of the deictic article *wa* is to signal closure of a text when used in conjunction with the clitics *-fa* and *-nga*:

- (133) wa-fa-nga
 that-emphatic-just
 That (is) all.

All Erima discourses are closed in this way.

Turning now to cataphoric reference, only *be* is used to refer forward in text. Its most common cataphoric usage is in the opening of a text, as in:

- (134) agage be-fa fai ete laanga la haga t-a-i.
 story this-emphatic man a beach at garden get-rp-3sS
 In this story, a man got (= planted) a garden at a beach.
- (135) Laanga matane hiiri t-a-i, nomo asa.
 Laanga village ocean get-rp-3sS its narrative
- Wa be-neufe:
 that this-like:
 The story of Laanga village being taken by the sea is like this:

be is also used cataphorically to introduce quoted speech as in:

- (136) bele ete fere le-nir-a-i be-neufe, "Ur-a-ru! ..."
 talk one additional say-3dO-rp-3sS this-like look-C-2dS
 He said an additional word to them like this, "Look! ..."

Whenever *be* is used to introduce a quotation, *-neufe like* must also occur.

As has been seen, English and Erima are similar in that *that* and its equivalent *wa* cannot be used cataphorically. If it turns out that *wo that*, *those*, and *there* (far distance) can occur endophorically, then a further dimension will be present in Erima anaphoric reference.

6.2 Tail-head linkage

A feature common to discourse structure in many languages of Papua New Guinea is *tail-head linkage*. A sentence will occur consisting of a series of medial form clauses, followed by a final form clause. When tail-head linkage occurs, the first clause or clauses in the next sentence will be a repetition of either the last clause of the preceding sentence, or the last few clauses of the preceding sentence, or a pro-verb which refers back to the last clause or clauses. (Parentheses around Erima indicate clause boundaries):

- (137) (me-Ø) (afo-Ø dagi-Ø) (owo-Ø dagi-du-Ø)
 come.down-SR leg-his tie-SR arms-his tie-TS-SR
- (te-Ø) (matane ta-Ø man-a-ne). (mani-Ø)
 get-pl village get-SR go.up-rp-3pS go.up-SR

(nebere feta mo wa la-nga taf-Ø-a-ne-nga)
 their.pl manhouse front there at-emp put-TS-rp-3pS-DR

(inya-a-i).

be-rp-3sS

They came down, tied his legs, tied his arms, then took him and went up to the village. (They) went up, hung (him) up in the front of their manhouse, and (there) he stayed.

Free translation:

They came, tied his hands and legs, and then took him up to the village. Upon arriving they suspended him in front of the manhouse, and there he stayed.

- (138) (matane la mai-Ø) (wa la ega kolili-du-Ø)
 village at come.up-SR there at again circle-TS-SR
 (man-a-ne). (kolili-du-Ø) (mani-Ø) (ega gi-du-Ø)
 go.up-rp-3pS circle-TS-SR go.up-SR again come.back-TS-SR
 (me-du-Ø) ...

come.down-TS-SR

(They) came up to (the) village, then circled there again and went up (away from the village). Having circled, (they) then went up, came back again (and) having come (back) down (to the village again and) ...

Free translation:

They came into the village, circled the central part of the village and went back out. Then they returned to the village again and ...

In (137) the last clause in the first sentence is repeated as the first clause of the second sentence (i.e. ... man-a-ne. Mani-Ø). In (138) the last two clauses of the first sentence are repeated as the first two clauses of the second sentence (i.e. kolili-du-Ø man-a-ne. Kolili-du-Ø mani-Ø ...). Note that when the final clause of the preceding sentence is repeated in the second sentence, that final form clause becomes a medial form clause. The actual repetition involves the verb root.

It is not always the case that tail-head linkage is achieved by repetition of the last clause or clauses. Just as pronouns have traditionally been described as substituting for nouns, so the verb *ono- do.thus* may function as a pro-verb, substituting for a clause, a sentence, or even a larger unit, providing tail-head linkage:

- (139) nere magana hiiri mou wa golo-Ø-Ø bo-de
 they children ocean shore there walk-TO-SR and-3p

le-wa-ne, "Tei aro, tei aro".

say-rp-3pS, possum big, possum big

Ono-Ø-wa-ne-nga nere fai hilou hilou mai-Ø
 do.thus-TS-rp-3pS-DR they men good good come-SR

ure-du-Ø le-wa-ne, "Hilou ete-nga".

see-TS-SR say-rp-3pS, good one-emp

The children walked there, (at) the ocean shore, and said, "(A) big possum, (a) big possum!" (They) having done thus, the bigmen came, saw it, then said, "Very good!"

Free translation:

As the children walked along the beach they saw a possum and shouted, "A big possum! A big possum!" Hearing their shouting, the men came, looked at the possum and said, "Great!"

In (139) the pro-verb *ono-* substitutes for and refers back to the entire preceding sentence.

One of the functions of this tail-head linkage seen in the above examples is to provide cohesion between sentences by the repetition of lexical items. Another function is to slow down the rate at which new information is being introduced into the text.

This tail-head linkage has been briefly described as background for the following. In (137)-(139) the repeated clauses which initiate the second sentence of each example were clauses joined in a coordinate relationship via the clause chaining suffixes described in section 2.3. A different sort of tail-head construction also can occur as exemplified by:

(140) "Be *fai* *umura*, *fai* *adifa* *mai-ta*,"
 here *man* *old* *man* *where*.from *come-3sS*.ip

goy-a-re. *Goy-a-re* *wa*, *no* *yafa-g-a-i-nga*
go-rp-3dS *go-rp-3dS* *that* *he* *sit-TS-rp-3sS-DR*

nere *umege-Ø-wa-re-nga* *le-nir-a-i*,
they *frightened-TS-rp-3dS-DR* *say-3dO-rp-3sS*

"*Adai* *umege-waru*. *May-a-ru*. *Ji* *we*
do.not *frightened-C-2dS* *come-C-2dS* *I* *myself*

yafa-Ø-ne", *nir-a-i*.
sit-pr-1sS *3dO-rp-3sS*

"This (is) an old man, (a) man who has come from what place?", (they said and) went (over to him). Regarding that going of theirs, as he sat, they were frightened, then he said to them, "Don't (be) afraid! Come here! (It is) me sitting here", (he said) to them.

Free translation:

"Where did this old man come from?" they said, and then went over to him. Regarding that going of theirs, as he sat there they became frightened and then he said to them, "Don't be afraid! Come here! It's just me sitting here", (he said) to them.

Note that tail-head linkage occurs with the sentence ending with *goy-a-re go-rp-3ds*, and the one beginning with *goy-a-re wa*, which has been translated *regarding that going of theirs* in order to capture the topicalisation and nominalisation of the clause functioning as head in the tail-head linkage. What must be kept in mind, however, is that in the Erima the verb *goy-a-re* is not in a gerund form as in the English translation. It is identical in form to the final verb in the sentence preceding it, i.e. it is suffixed as a final form verb. And, as in the sentences examined in section 5, this clause is embedded in the head noun slot of a NP. Such NPs by virtue of being constituents of a tail-head linkage provide cohesion to the text. This cohesion is both referential due to the anaphoric usage of the deictic article and lexical via repetition of the verbs. In addition, such a NP is topic of its sentence.

This is contrastive with tail-head linkage in which the head clause (i.e., the first clause of the second sentence) is in a coordinate relation with the next clause, in which case it is not the topic of the sentence:

- (141) "Be fai umura, fai adifa maita",
 here man old man where.from come-3sS.ip
 goy-a-re. Goy-Ø-a-re-nga no yafa-g-a-i-nga ...
 go-rp-3dS go-TS-rp-3dS-DR he sit-TO-rp-3sS-DR
"This (is an) old man, (a) man who has come from what place?",
(they said) and went (over to him). They went (over to him)
and then, as he sat ...
 Free translation:
"Where did this old man come from?" (they said) and then went
over to him. They went over to him and then, as he sat there ...

In (141), goy-Ø-a-re-nga merely serves a cohesive function, whereas in (140) goy-a-re wa has the additional function of topic, acting as the framework within which the propositions to follow hold. Although at this point I have not completely analysed the structure of discourse in Erima, there is some evidence that a topicalised NP functioning as head in tail-head linkage signals an *episode break*. This is certainly true of one narrative text examined, but at present remains a tentative hypothesis.

Below are further examples of topicalised definite NPs as constituents in tail-head linkage, including pro-verbs embedded in the head noun slot of topicalised NPs marked as definite by the deictic article. In each case the topic NP also appears to signal the beginning of an episode. The examples are from the same text, and are sequential but not contiguous to each other in the text. Each one has several paragraphs separating it from the others:

- (142) fai ete no done gamu golo-Ø-Ø bo-na
 man a he jungle middle walk-TO-SR and-3s
 goy-a-i. Ono-wa-i wa haya dauri itou
 go-rp-3sS do.thus-rp-3sS that plate dauri god
 no goi-Ø yefi la hamoi fasi-g-a-i.
 he go-SR adze with grubs pull.out-repeatedly-rp-3sS
A man went walking in the middle of the jungle. Regarding
that going of his (topic), the god of the dauri plate went
(and) kept pulling out grubs (from a tree) with an adze.
 Free translation:
Once a man went walking deep in the jungle and this is what
happened there: the god of the wooden plates was chopping
away at a tree and getting grubs out of it. And ...
- (143) Haya dauri itou no done gamu goi-g-a-i-nga
 plate dauri god he jungle middle go-TO-rp-3sS-DR
 fai ngalenga haya wa aule-du-Ø bo-na
 man real plate those shoulder-TS-SR and-3s
 nomo matane goy-a-i. Goy-a-i wa nomo
 his village go-rp-3sS go-rp-3sS that his
 mata la-nga logosi-wa-i.
 house at-3mp stack-rp-3sS

As (the) god (of the) dauri plates went in (the) middle (of the) jungle, (the) real man shouldered those plates and then went to his village. Regarding that going of his (topic), he stacked them at his house.

The god of the wooden plates went off deep into the jungle, and the man placed the plates on his shoulders and went back to his village. And this is what happened there: he stacked the plates in his house, and ...

- (144) Nomo yefi te-Ø aule-du-Ø done gamu goy-a-i.
 his adze get-SR shoulder-TS-SR jungle middle go-rp-3sS
 Goy-a-i wa, haya dauri itou no hamoi fasi-Ø-Ø
 go-rp-3sS that plate dauri god he grubs pull.out-TO-SR
 bo-na
 and-3s

He took his adze, shouldered it, then went (to the) middle (of the) jungle. Regarding that going of his (topic), as the dauri plate god was pulling out grubs ...

Free translation:

With his adze on his shoulder, he went off into the middle of the jungle. And this is what happened: The god of the wooden plates was again pulling out grubs from a tree, and ...

(142)-(144) are the only occurrences of tail-head linkage in which the head is a topicalised NP in the narrative text about the god of the dauri plates. In (142) the transition which occurs is that of moving from the introduction of the text to the main body. In (143) a change of setting occurs, as well as a change of participants. The man's having stacked the plates he had obtained from the god of the dauri plates resulted ultimately in dire consequences. The man's brother sees the plates and wants to get some for himself. (144) occurs when the man's brother sets off to find the god and obtain plates for himself. Again a change of setting and participants occurs. In the end the man's brother is killed. This text has three episodes and each one is begun with tail-head linkage with a topicalised NP. This leads me to hypothesise that when a NP with an embedded final form clause is the head in a tail-head link, it is a signal that the sentence, paragraph, or larger unit preceding it becomes the topic for the following episode and marks the beginning of a new episode. (Topic in this sense does not refer to the subject matter, but rather the framework for the part of the discourse following it.)

7. TOWARD A CLASSIFICATION OF ERIMA ACCORDING TO THE LI AND THOMPSON TYPOLOGY

In forming language typologies there are various classificatory systems possible. For example, languages may be classified as to whether the object occurs before or after the verb, as in Lehmann (1978). However, a new typology has been proposed by Li and Thompson (1976) based on the classification of languages as *topic-prominent* versus *subject-prominent*. This system yields four possibilities: *topic-prominent*, *subject-prominent*, both *topic* and *subject-prominent*, or neither *topic* nor *subject-prominent*.

Li and Thompson claim that for some languages a more insightful analysis results when the notion of topic is taken to be basic to the language (1976:460).

Such languages are presumably topic-prominent. The previous sections of this study have illustrated Li and Thompson's claim in that a more simplified and, I believe, insightful analysis of the deictic articles in not only Erima, but in the other three New Guinean languages examined results when the data are viewed from a topic-comment perspective. This perspective not only simplifies the analysis of the deictic articles, but reduces the number of sentence types which must be posited for these languages.

The fact that the notion of topic results in a more insightful analysis in Erima suggests that Erima be examined to see if it is a topic-prominent language. Li and Thompson list eight diagnostic characteristics of topic-prominent languages. In this final section, Erima is examined in light of these characteristics in order to tentatively classify Erima according to the Li and Thompson typology.

7.1 Surface coding

The first characteristic of topic-prominent languages discussed by Li and Thompson is that of surface encoding. They state that in topic-prominent languages there will always be some sort of surface encoding for topics, such as sentence-initial position or topic markers, whereas subjects may or may not be encoded in the surface structure. Such is the case for Erima. As has been seen in the preceding sections, topics in Erima are always indicated by position, i.e., they are the left-most NP. On the other hand, subject NPs do not have a fixed position in the sentence (although they normally occur before the object), nor does some sort of a subject marker (e.g. a suffix or free morpheme) occur with Erima subject NPs. A NP is determined to be subject by appealing to the semantics of the sentence and its agreement with the subject person-number suffixes of the verb. For example, in (145) and (146) below,

(145) fai no yame babo war-a-i wa-fa ji ure-Ø-ne
 man he my brother hit-rp-3sS that-emp I see-pr-1sS
 The man who hit my brother (topic), I see him.

(146) fai no yame babo war-a-i wa-fa ji yerie-Ø-na
 man he my brother hit-rp-3sS that-emp I see.1s0-pr-3sS
 The man who hit my brother sees me.

the first NP (i.e., fai no yame babo warai wafa) functions as topic. In (145) it is the object as topic, and (146) it is the subject as topic. The only surface differences between the two involve the verb. In Erima the verb meaning 'to see' is suppletive, having nine forms according to the person (first, second, third) and number (singular, dual, plural) of the object. The object NP in both (145) and (146), therefore, is that NP co-referential with the verb root in person and number. The subject NP is that NP co-referential with the subject person and number suffix of the verb.

Topics in Erima have a distinct surface coding, namely position, whereas subject NPs do not.¹²

7.2 Passive constructions

Whereas passive constructions are common in subject-prominent languages, they are not widespread in topic-prominent ones. (Li and Thompson 1976:467). In Erima passive constructions do not occur at all.

7.3 'Dummy' subjects

Subject-prominent languages have 'dummy' or 'empty' subjects such as the English 'it' and 'there' as in (147) and (148):

(147) It is raining.

(148) There are five men walking down the road.

Such examples show the primacy of the notion of subject in subject-prominent languages; in these cases a subject is required even though it plays no semantic role (Li and Thompson 1976:467).

'Dummy' subjects do not occur in Erima. A sentence such as (147) is stated as:

(149) yaage me-Ø-na
rain come.down-pr-3sS
Rain comes down.

Other examples of Erima sentences which do not have 'dummy' subjects as in English are:

(150) ha agugu inyi-Ø-na
place darkness is-pr-3sS
The place is dark. or It is dark.

(151) be la ngaasu
here at hot
It is hot here.

(152) pusi ete haga la inyi-Ø-na
pussy a garden at is-pr-3sS
There is a cat in the garden.

Except for (150), the above examples are Erima equivalents of examples given by Li and Thompson.

7.4 'Double' subject

Sentences with the so-called 'double' subject are, according to Li and Thompson, "the clearest cases of topic-comment structures". (1976:468). This is because both topic and subject co-occur and there is no selectional relation between the topic and the verb. Some of the examples they give are:

(153) sakana wa tai ga oisii (Japanese)
fish top. red snapper subj delicious
Fish (topic), red snapper is delicious.

(154) nèike shù yèzi dà· (Mandarin)
that tree leaves big
That tree (topic), the leaves are big.

(155) tā tóu téng (Mandarin)
he head ache
He has a headache.

Li and Thompson believe that all topic-prominent languages have such sentences, and that no pure subject-prominent language does (1976:468).

In Erima, 'double' subjects do occur. Their most readily seen form is in predications involving body parts as was seen in the Mandarin example (155) above. An Erima example is:

- (156) no mora-Ø mai-Ø-na
 he head-his go.up-pr-3sS
 He has a headache. Lit. He (topic), his head goes up.

In cases such as (156) it may not be clear to someone not familiar with Erima or languages like it whether the pronoun *no* is coreferential with the subject suffix of the verb until it is compared with sentences such as:

- (157) ji (yame) mora-fe mai-Ø-na
 I my head-my go.up-pr-3sS
 I have a headache. Lit. I (topic), my head goes up.

The thing to note in (157) is that the subject person-number suffix on the verb is third singular. This shows that *ji* *I* is not the subject, but rather *mora-head* is the subject. *ji* is clearly a topic; it has no selectional relation with the verb, and it is not in agreement with the verb as far as person and number. (In this example and the ones below, the pronoun *ji* cannot be interpreted as a genitive for reasons given in note 9.) Other examples of 'double' subjects are:

- (158) ji ogo-fe dige-ta
 I stomach-my climb.up-3sS.ip
 I am full. Lit. I (topic), my stomach climbed up.
- (159) ji age-fe dige-ta
 I eye-my climb.up-3sS.ip
 I forgot. Lit. I (topic), my eye climbed up.
- (160) ji au yari-Ø-na
 I liver hits.me-pr-3sS
 I feel compassion. Lit. I (topic), (my) liver hits me.

Sentences such as (160) were a mystery to me for a long time. It appeared to be a type of passive construction meaning *I was hit by my liver*, yet other 'passives' could not be found. Viewing this sentence from a topic-comment perspective has cleared up the problem, showing that it is not a passive at all.

7.5 Controlling coreference

Coreferential constituent deletion in topic-prominent languages is controlled not by the subject, but by the topic. Examples (from Mandarin) given by Li and Thompson (1976:469) are:

- (161) nèike shù yèzi dà, suǒyǐ wǒ bù xǐhuān
 that tree leaves big so I not like
 That tree (topic), the leaves are big, so I don't like it.
- (162) nèi kuài tián dàozǐ zhǎngde hěn dà,
 that piece land rice grow very big
 suǒyǐ _____ hěn zhìqián
 so very valuable
 That piece of land (topic), rice grows very big, so it
 (the land) is very valuable.

In both cases the deleted constituent has reference to the topic, not the subject.

Unfortunately, I have no data at the present to show whether or not topics control coreference in Erima.

7.6 V-final languages

According to Li and Thompson and others (1976:470), there is a tendency for topic-prominent languages to be verb-final. This is, as has been seen, the case for Erima since it is a SOV language.

7.7 Constraints on topic constituents

Topic-prominent languages have no constraints on what may be topic, whereas subject-prominent languages do. As an example showing such constraints, Li and Thompson give three Indonesian sentences (1976:470):

- (163) Ibu anak itu membeli sepatu
mother child that buy shoe
That child's mother bought shoes.
- (164) Ibu anak itu, dia membeli sepatu
mother child that she buy shoe
That child's mother, she bought shoes.
- (165) Anak itu, ibu-nja membeli sepatu
child that mother-poss.suffix buy shoe
That child, his mother bought shoes.
- (166) *Sepatu itu, ibu anak itu membeli
shoe that mother child that buy

In the above Indonesian examples, the subject in (163) becomes topicalised in (164), and the genitive of the subject in both of them becomes topicalised in (165). The object, however, cannot be topicalised as seen in (166). This limitation of what may be topicalised is a characteristic of subject prominent languages.

On the other hand, as can be seen from the following examples, there are no restraints in Erima as to which NP can be topicalised:

- (167) magana wa-fa nomo anya su idada-wa-i
child that-emp its mother shoe buy-rp-3sS
That child's mother bought shoes.
- (168) magana wa-fa nomo anya, no su idada-wa-i
child that-emp its mother she shoe buy-rp-3sS
That child's mother, she bought shoes.
- (169) magana wa-fa, nomo anya su idada-wa-i
child that-emp its mother shoe buy-rp-3sS
That child, its mother bought shoes.
- (170) su wa-fa magana wa-fa nomo anya idada-wa-i
shoe that-emp child that-emp its mother buy-rp-3sS
Those shoes, that child's mother bought (them).

Note that the ambiguity seen in (168) and (169) as to whether it is the genitive NP (i.e. *yame magana*) that is topic, or the whole possessive NP (i.e., *magana wa-fa nomo magana*) that is topic, is resolved by intonation.

From my knowledge of Erima I believe that all NPs in the language may be topicalised whether they function as subject, object, indirect object, location, or instrument. Since at the time of writing this section I do not have access to a native speaker, this assertion is tentative.

7.8 Basicness of topic-comment sentences

Regarding the basicness of topic-comment sentences in topic-prominent (Tp) languages, Li and Thompson (1976:471) state that

... perhaps the most striking difference between a Tp language and a non-Tp language is the extent to which the topic-comment sentence can be considered to be part of the repertoire of basic sentence types in the former but not the latter.

Topic-comment sentences in topic-prominent languages are considered basic because they are not derived from any other sentence type (1976:471). Although Li and Thompson concede that derivations can sometimes be formulated, they are not desirable since "the data which these Tp languages present are most naturally accounted for by taking the topic-comment sentences to be basic and not derived". (1976:471).

Assuming that topic-comment sentences are basic in Erima more naturally accounts for the features of the language than not assuming such. This was seen with the deictic articles and with sentences of the type exemplified by (156)-(160) in section 7.4.

A further illustration of the explanatory power of taking topic-comment structure to be basic in Erima concerns pronominal copy, a feature of many Papua New Guinean languages in which a pronoun optionally follows a noun phrase and is coreferential with it. Graham Scott in his grammar of Fore has a section on pronominal copy in his discussion of Fore phrase structure. He states that "a noun phrase may be followed by its pronominal copy, a device particularly used when the noun phrase is long." (1978:100). One of his examples is:

- (171) *temeni nkaba: ae kana-y-e*
Temeni-oblique.case his.father he come-he-indicative
Temeni's father is coming.

Note that Scott says the pronominal copy *may* occur (i.e., it is optional) and that it particularly occurs when the noun phrase is long. I would suggest that such 'long' noun phrases are topics, their length due to embedded clauses. This explains the pronominal copy — the pronoun is the subject of the clause filling the comment slot. If these cases of pronominal copy are indeed topic-comment, Scott's analysis could be simplified. The same holds for the analysis of Erima presented in Colburn (1979). In that analysis I posited an optional margin of pronominal copy for noun phrase structures. I now believe that data in which pronominal copy occurred were cases of topic-comment. Consider the two sentences below:

(172) yame babo um-a-i
 my brother die-rp-3sS
My brother died.

(173) yame babo no um-a-i
 my brother he die-rp-3sS
My brother (topic), he died.

Sentences such as (172) and (173) occur quite commonly. The difference in surface structure (i.e., the pronominal copy) demands explanation. That explanation, I have said, is topic-comment structure. In support of my claim that pronominal copy is a matter of topic-comment structure, consider (174):

(174) ji yame babo um-a-i
 I my brother die-rp-3sS
I (topic), my brother died.

In (174) the pronoun *ji* functions as topic. Sentences such as (174) are heard quite frequently in discussions regarding an Erima speaker's family. However, an expression which has never been heard is (175):

(175) *(?) ji yame babo no um-a-i
 I my brother he die-rp-3sS
I (topic), my brother (topic), he died.

I believe such a sentence as (175) cannot occur because two unrelated topics are encoded by it. If two or more NPs are topics of the same sentence, they must be coreferential and in an appositional relationship as in:

(176)	Topic		Topic
	tere elebe magana nere be,	heig-a-ne be,	
	you. now child they here	arrive-rp-3pS this	
	Topic	Comment	
	tere ure-Ø-ya be, nere ila onodu		
	you.pl see.pr-2pS this they some like.this		
	ada heige-Ø-de		
	not arrive-pr-3pS		
	<i>These children here (topic), these (ones who) have arrived</i>		
	<i>(topic), these (ones who) you now see (topic), some of them</i>		
	<i>did not arrive like this.¹³</i>		

The assumption that topic-comment structure in Erima is basic solves many problems of analysis and simplifies the grammatical description. In addition, I see no evidence that topic-comment sentences in Erima should be considered to be derived from some other sentence type.

7.9 The classification of Erima

Of the eight characteristics of topic-prominent languages posited by Li and Thompson, Erima clearly has five of them: *surface encoding of topic*, *'double' subjects*, *verb-final ordering*, and *lack of passive constructions or dummy subjects*. At present it is not known if topics control coreferential constituent deletion, and there is no evidence that topic constructions are derived from another sentence type. Finally, there does not appear to be any constraint on what can become a topic, though this needs investigation.

In light of this, how then should Erima be classified? It definitely has evidence in favour of its being classified as a topic-prominent language. However, I believe that Erima is not a pure topic-prominent language and should be instead classified as both topic- and subject-prominent. Although other reasons can probably be found, there are two features of Erima grammar which have been seen in earlier sections which establish the role of subject in the language. These two features are verb serialisation and switch reference.

Sentences with a series of coreferential clauses typically have a subject tagmeme manifested only in the first clause. Furthermore, except in certain cases, with such sentences only the final clause will indicate subject person and number. In such instances, the interpretation of the subject for each medial clause depends upon reference to the subject tagmeme of the first clause (if it is present) and/or reference to the subject person-number suffix of the final clause as seen in:

- (177) ne matane mani-du-Ø le-tu-du-Ø ega
 you village go.up-TS-SR speak-3sO-TS-SR again
 gi-du-Ø m-a-u.
 back-TS-SR come-C-2sS
*You go up to the village, then tell him (and) turn back
 (and) come (here).*

- (178) me-Ø afo-Ø dagi-Ø owo-Ø dagi-du-Ø
 come-SR foot-3sP tie-SR hand-3sS tie-TS-SR
 te-Ø matane ta-Ø man-a-ne.
 get-SR village get-SR go.up-rp-3pS
*They came, tied his feet, tied his hands, (and) then got
 him (and) went to (the) village.*

As stated above, the notion of subject is not only relevant in verb serialisation, but in, of course, switch reference. Switch reference is entirely dependent on the notion of subject since the subject referent of each clause is monitored and each verb has a suffix indicating whether or not its subject is coreferential with the next clause. Examples of switch reference were given in section 2.3 so will not be given here.

My tentative conclusion, therefore, regarding the classification of Erima according to the Li and Thompson typology is that Erima is both topic and subject-prominent.¹⁴

Although I have used Li and Thompson's criteria for determining whether a language is topic-prominent or subject-prominent, I have reservations about certain features they claim are indicative of topic-prominent languages. Specifically, I question their assertion that a language that lacks passives and has a final position verb indicates that it is a topic-prominent language. Lehmann (1978:22) states that the prominence of passives is a characteristic of SVO languages, and the lack of passives a characteristic of SOV languages. Li and Thompson, as noted above, say that a characteristic of topic-prominent languages is that they tend to be verb-final. If this is the case, then we would expect such languages to lack passives simply because they are verb-final languages. Therefore I regard Li and Thompson's use of the lack of passives and final position of the verb to both be indicative of a topic-prominent language as being circular in reasoning. According to Lehmann we expect a verb-final language to lack passives, so how does a lack of passives indicate a topic-prominent language since topic-prominent languages are usually verb-final anyway?

One feature, however, which I do believe is valid as an indicator of topic-prominent languages is that of dummy subjects. Subjects play such an important role in subject-prominent languages that a subject is necessary even when it has no semantic content as in 'It is raining'.

Li and Thompson's typology is interesting and I think it is worth pursuing, although certain features which they list for topic-prominent versus subject-prominent languages seem to be inconclusive.

Finally, I want to call attention to an assertion which has been made by Longacre (1980:29) that in establishing a topic- versus subject-prominent typology it is important to take into account the discourse types which topics occur in, and in comparing languages, there should be a consistency as to what discourse type is being examined in each of the languages. Longacre believes that except for embedded exposition, topics are rare in narrative discourses, but are a prominent feature of expository discourses. Therefore, if expository texts were examined in one language, but only narrative in another, the analyst might be led to believe one language was topic-prominent and the other not. Since I only recently have had access to Longacre's article, I have not been able to pursue this claim as far as Erima discourse and topics are concerned.

8. CONCLUSION

Before actually beginning this study my goal was to discover why the Erima deictic articles seem to have so many functions and meanings. I also had hoped to determine the function and meaning of the clitic *-fa*, which optionally occurs with the deictic articles in their non-locative function. Unfortunately, I still have no idea what *-fa* means or does in Erima. I am, however, satisfied that the deictic articles do not have as many meanings and functions as a first look indicates, or as some linguists have claimed. The deictic articles have been found to be constituents of topic-comment constructions. They occur as the determiner in topicalised NPs.

A by-product of this study has been evidence that the notion of topic-comment is extremely productive in the analysis of the language. Not only does the notion of topic-comment simplify the analysis of the deictic articles, it significantly reduces the number of sentence types that must be posited for the language. I believe that I now have a better grasp of the sentence level constructions of the language and have gained a good entry into levels beyond the sentence. Future study will focus on a detailed analysis of the function of topics in Erima discourse. Related areas which need investigation are the notions of givenness, theme-rheme, and background versus foreground information.

The fruitfulness of the application of the notion of topic-comment structure to the analysis of constructions composed of final-form clause plus deictic article in Erima, as well as the many characteristics which Erima shares with topic-prominent languages suggest that topic-comment may play an important role in Siroi, Waskia, and Suena, as well as in other Papua New Guinea languages in which the deictic articles seem to have many functions and meanings.

ABBREVIATIONS

Erima

adv	adverb
ARP	axis-relator phrase
CA	completed action
det	determiner
DR	different referent follows
f	future
F Cl	final clause
hab	habitual
HN	head noun
ip	immediate past tense
loc	locative
Mar	margin
M Cl	medial clause
nom	nominaliser
NP	noun phrase
obj	object
p	past
pr	present tense
pred	predicate
pl	plural

r	relator
RC	relative clause
subj	subject
rp	remote past tense
SR	same referent follows
TO	temporal overlap
TS	temporal succession
1sP	1st singular possessive
1sS	1st person singular subject
2sS	2nd singular subject
3dS	3rd dual subject
3sO	3rd singular object
3sS	3rd singular subject
2pS	2nd person plural subject
Ø	zero morpheme
/	pause
//	final pause

Siroi

B1	Base 1
B2	Base 2
cm	class marker
dep	dependent
fu	future
int	intention
ip	immediate past
Li	link
O	object
P	predicate
pa	past

po	potential
pr	present
rel	relator
S	subject
spec	specific clitic

ld	1st dual
lp	1st person plural
3s	3rd person singular
3d	3rd person dual

Waskia

c	connective
cd	connective, different subject
cond	conditional
cs	connective, same subject
des	desiderative

imp	imperative
ps	past simple tense
ls	1st person singular
3s	3rd person singular

NOTES

1. Each time I introduce a technical term I follow the convention of underlining it. Subsequent occurrences of that term are not underlined.
2. For a similar analysis see Kramsky 1972:18ff. Givón (1976:157) believes that in the Bantu languages of Africa also the definite article derived from demonstratives.
3. I am using these terms in a way different from Bloomfield's (1933:194) classification of resultant phrases.
4. Throughout the paper, parentheses around Erima examples indicate clause boundaries.
5. Throughout the paper, in interlinear translations, a hyphen indicates morpheme boundaries, and two or more words conjoined by a period (e.g. third.sing) indicate either that that item is a portmanteau morpheme as in *ure- see.hím*, or that two or more words are required to render it into English. For example, the Erima verb root *faga-* requires two English words to translate it. Hence it is rendered as *run.away*.
6. *ure-* in (15) changes to *ur-* in (16) due to morphophonemic changes. A verb root ending in a vowel loses that vowel if the suffix following it is also a vowel.
7. It is interesting to note that according to Schachter (1973:25), Illonggo, a Philippines language, uses the lexeme *ang* as marker of both relative clauses and topics. This shows that the phenomenon that is the topic of this paper may perhaps occur in other non-New Guinean languages.
8. The tree diagrams which follow are not to be taken as the phrase markers of transformational grammar. They are merely convenient ways of presenting the structure of the examples given.
9. In (87) and (88), *ji I* is not to be mistaken as being in a genitive relationship with the noun following it. This is seen by such examples as:

<i>ji yame</i>	<i>ogo-fe</i>	<i>dig-a-i</i>		
<i>I my</i>	<i>stomach</i>	<i>climb.up-rp-3sS</i>		<i>I am full.</i>
<i>ji yame</i>	<i>babo</i>	<i>um-a-i</i>		
<i>I my</i>	<i>brother</i>	<i>die-rp-3sS</i>		<i>I, my brother died.</i>

In these examples the pronoun *ji* clearly is not in a genitive relationship with the noun following it.
10. This would include differences in tense.
11. One case does occur in a text that an Erima speaker transcribed for me. This was the first text he had ever transcribed and he occasionally makes mistakes in his transcription. Since I do not have access to a native speaker or the tape of the text at this time, I cannot confirm whether *wo* is correct in the text or not.
12. It can be argued, however, that a form of surface encoding of the subject takes place in agreement between the subject NP and the subject person-number suffixes of the verb. My point, however, is that there is no way to identify the subject NP by its position in a clause or by some sort of a case marker occurring with the subject NP.

13. This sentence makes no sense without the context. It comes from a text regarding male initiation. The leader is saying, "Now you see they are men. Some of them came to the initiation not as men, but as children". The onodu *like.this* refers to their manhood.
14. Another language which has been classified as both topic- and subject-prominent is Japanese. (cf. Li and Thompson 1976.)

BIBLIOGRAPHY

ANDERSON, Stephen

- 1976 On the notion of subject in ergative languages. In Li, ed. 1976: 1-23.

BEEKMAN, John and John CALLOW

- 1979 The semantic structure of written communication. MS. Dallas: Summer Institute of Linguistics.

BLOOMFIELD, Leonard

- 1933 *Language*. London: George Allen & Unwin.

CHAFE, Wallace L.

- 1976 Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In Li, ed. 1976:25-55.

CHOMSKY, Noam

- 1965 *Aspects of the theory of syntax*. Cambridge, Mass: M.I.T. Press.

CHRISTOPHERSEN, Paul

- 1939 *The article: a study of its theory and use in English*. London: Oxford University Press.

COLBURN, Michael A.

- 1979 Erima grammar essentials. MS. Ukarumpa, Papua New Guinea: Summer Institute of Linguistics.

DOWNING, Bruce T.

- 1978 Some universals of relative clause structure. In Joseph H. Greenberg, ed. *Universals of human language*, vol.4. Syntax, 375-418. Stanford: Stanford University Press.

DUCROT, Oswald

- 1972 *Dire et ne pas dire: principes de sémantique linguistique*. Paris: Hermann.

FILLMORE, Charles J.

- 1975 *Santa Cruz lectures on deixis*. Indiana: Indiana University Linguistics Club.

FRIEDMAN, Lynn A.

- 1976 The manifestation of subject, object, and topic in American sign language. In Li, ed. 1976:125-148.

GIVÓN, Talmy

- 1976 Topic, pronoun, and grammatical agreement. In Li, ed. 1976:149-188.

GUNDEL, J.M.

- 1975 Left-dislocation and the role of topic-comment structure in linguistic theory. *Ohio State University Workpapers in Linguistics* 18:72-131.

HAIMAN, John

- 1976 Presuppositions in Hua. *Papers of the Chicago Linguistic Society* 12:258-270.
- 1978a A study in polysemy. *Studies in Language* 2/1:1-34.
- 1978b Conditionals are topics. *Language* 54/3:564-589.

HALLIDAY, M.A.K and Ruqaiya HASAN

- 1976 *Cohesion in English*. London: Longman.

HOCKETT, Charles

- 1958 *A course in modern linguistics*. New York: Macmillan.

KEENAN, Edward L. and Bernard Comrie

- 1977 Noun phrase accessibility and universal grammar. *Linguistic Inquiry* 8:63-99.

KEENAN, Elinor Ochs and Bambi B. SCHIEFFELIN

- 1976 Topic as a discourse notion: a study of topic in the conversations of topic in the conversations of children and adults. In Li, ed. 1976:335-384.

KRÁMSKÝ, Jiří

- 1972 *The article and the concept of definiteness in language*. The Hague: Mouton.

LEHMANN, Winfred P.

- 1978 The great underlying ground-plans. In Winfred P. Lehmann, ed. *Syntactic typology*, 3-55. Austin: University of Texas Press.

LI, Charles N., ed.

- 1976 *Subject and topic*. New York: Academic Press.

LI, Charles N. and Sandra A. THOMPSON

- 1976 Subject and topic: a new typology of language. In Li, ed. 1976: 457-489.

LONGACRE, Robert E.

- 1972 *Hierarchy and universality of discourse constituents in New Guinea languages vol.1: Discussion*. Washington, D.C.: Georgetown University Press.

LONGACRE, Robert E.

- 1980 Discourse typology in relation to language typology. MS. University of Texas at Arlington and the Summer Institute of Linguistics, Dallas.

LYONS, John

- 1968 *Introduction to theoretical linguistics*. Cambridge: Cambridge University Press.
- 1975 Deixis as the source of reference. In Edward L. Keenan, ed. *Formal semantics of natural language*, 61-83. Cambridge: Cambridge University Press.
- 1977 *Semantics*. 2 vols. Cambridge: Cambridge University Press.

MAXWELL, Daniel N.

- 1979 Strategies of relativisation and NP accessibility. *Language* 55:352-371.

REESINK, Ger. P.

- 1978 Conjunctions in Usan. MS. Ukarumpa, Papua New Guinea: Summer Institute of Linguistics.
- 1979 Some typological features of PNG languages with focus on the relative clause. MS. Ukarumpa, Papua New Guinea: Summer Institute of Linguistics.
- 1980 Being negative can be positive. MS. Ukarumpa, Papua New Guinea: Summer Institute of Linguistics.

ROSS, Malcolm, with John Natu PAOL

- 1978 *A Waskia grammar sketch and vocabulary*. PL, B-56.

SCHACHTER, Paul

- 1973 Focus and relativisation. *Language* 49:19-46.

SCOTT, Graham

- 1978 *The Fore language of Papua New Guinea*. PL, B-47.

SGALL, Petr, Eva HAJIČOVÁ and Eva BENEŠOVÁ

- 1973 *Topic, focus, and generative semantics*. Kronberg: Scriptor.

WELLS, Margaret A.

- 1979 *Siroi grammar*. PL, B-51.

WILSON, Darryl B.

- 1974 Suena grammar. *Workpapers in Papua New Guinea languages* 8:1-170. Ukarumpa, Papua New Guinea: Summer Institute of Linguistics.

Z'GRAGGEN, J.A.

- 1975 *The languages of the Madang district, Papua New Guinea*. PL, B-41.