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Determinacy and participant formation: *De Marmore Angeli*

Baker, John Wade, Ph.D.

Rice University, 1994

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DETERMINACY AND PARTICIPANT FORMATION:
DE MARMORE ANGELI

by

John W. Baker

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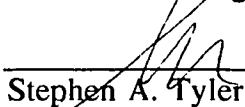REQUIREMENTS FOR THE DEGREE
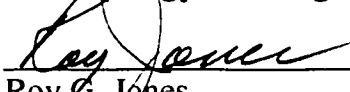
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ABSTRACT

Determinacy and Participant Formation: *De Marmore Angeli*

by

John W. Baker

The semantics of determiners in field data from two Philippine languages, Ilokano and Yogad, is characterized and compared. In Ilokano, this content appears as gradations along a cline of "individuation." In Yogad, the semantics represents successive degrees of "actualization." In both languages, the function of this semantics is to form and delineate participants by segregating these from the ground of quality and event and also to orient within an existing matrix of knowledge the participants thus formed. The name "determinacy" is given to this participant-forming semantics as a means of comparing it across languages.

Determinacy, as exemplified in Ilokano (individuation) and Yogad (actualization), is motivated by the cognitive principle FOCUSSED--DIFFUSE. This principle is inherent in the process by which variance in focal attention organizes the continuum of the cognitive experience of an organism. Variable focal attention is the cognitive-psychological basis for determinacy and, therefore, for participant formation in language.

The operation of the FOCUSSED--DIFFUSE principle in connection with focal attention outside of language is illustrated in human vision and visual perception and in sonar echolocation in bats. Because the FOCUSSED--DIFFUSE principle is a cognitive universal and is a parameter of meaning characteristic of intelligence itself, we conclude that determinacy is also a linguistic universal, i.e., that it is a constant presence in language, even in languages which lack determining forms.

In proposing a cognitive motivation for determinacy, this study challenges the privileging of discourse pragmatics in recent attempts to understand the function of determiners. The analysis of the Ilokano and Yogad data shows that in these languages determiners are not involved in the management of information flow in connected discourse.

The study rejects the notion of the modularity of language or of linguistic intelligence; it argues that determinacy in language cannot be adequately described apart from understanding the way in which the FOCUSSED--DIFFUSE principle operates in other cognitive domains.

To

Candy

Acknowledgements

I would like to express my sincere thanks to the director of my dissertation, Prof. Philip W. Davis. I owe him a great debt, both for the theory of language which underlies this study and for his generous and unfailing assistance in helping me bring the project to fruition.

I consider myself exceedingly fortunate in having been in the Dept. of Linguistics at Rice University, which provided me with a uniquely stimulating and supportive environment for my studies. My thanks go to the members of my committee who have all guided me from my first steps in linguistics. I especially want to express my gratitude for the Mitchell Fellowship, which made my studies financially possible.

In addition to my teachers at Rice, I am conscious of a tremendous and long-standing debt to a number of other teachers of language with whom I have been privileged to study over the years and whose knowledge and love of language have inspired me: Professors James A. Hitt, Prescott H. Williams, Jr., W. Eugene March, Peter F. Abboud, Jerrold S. Cooper, J. J. M. Roberts, Delbert R. Hillers, Samuel Iwry, and Dietz O. Edzard.

I dedicate this dissertation to my wife, Candy. Ultimately, it has been her love and belief in me which have made this possible. These were my

mainstay during an unusually long and protracted program of graduate studies.

Gen. 18:12 ...וַתִּצְחַק שָׂרָה בְּקִרְבָּהּ

Gen. 21:6 ...וַתֹּאמֶר שָׂרָה צְחֹק עָשָׂה לִי אֱלֹהִים כָּל־הַשֹּׁמֵעַ יִצְחַק־לִי

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When that which is divine in us doth try
To shape a face, both brain and hand unite
To give, from a mere model frail and slight
Life to the stone by Art's free energy.

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The best of artists hath no thought to show
Which the rough stone in its superfluous shell
Doth not include: to break the marble spell
Is all the hand that serves the brain can do.

- Michelangelo Buonarroti [1475-1564]

From The Sonnets of Michael Angelo Buonarroti,
translated by John Addington Symonds (1912).

Chapter One

Introduction

Many of the grammars of English which were used in American

schools of the eighteenth century were written by British authors. One of

the most influential of these grammars was Lowth 1775 [see Downey,

1979:vii-xviii]. Most grammarians of that era described the English articles

from the perspective of Latin and Greek grammar, but Robert Lowth[1]

[1710-1787] was the first to describe the English articles as representing an

independent part of speech without apology to the Classical languages.

Lowth (1775:10) defined articles as words prefixed to substantives 'to point

them out, and to shew how far their signification extends.' He distinguishes

a and *the* from each other in this way (1775:11):

> '*A* is used in a vague sense to point out one single thing of
>
> the kind, in other respects indeterminate: *the* determines what
>
> particular thing is meaned.'

Lowth thus described the articles in terms of their capacity to limit or

restrict the 'signification' or scope of reference of the substantive to which

they were 'prefixed.' It is worth noting that Lowth's (1775:11) description

is made in connection with his observation that:

'A substantive without any article to limit it, is taken in

its widest sense [emph. mine, JWB]: thus *man* means all

mankind..*A man* means some one or other of that kind,

indefinitely; *the man* means, definitely, that particular

man who is spoken of: the former is therefore called the

Indefinite, the latter the Definite article.'

In other words, his view of the articles as modifiers of 'signification'

derives partly from the fact that he does see the articles as forming an

independent word-class and therefore attempts to give a general description

of the meaning of the class as a whole. By comparing the meaning of either

article against the situation in which no article is used at all, Lowth arrives

at the description of the latter as implying 'the widest sense' of substantives

and therefore concludes that the presence of an article restricts this by way

of indicating 'how far their signification extends.'

These descriptions of Lowth are the first representatives of a

significant tradition within the literature about determiners which describes

them in terms of their capacity to manipulate the semantic precision of

substantives. The observation can be made about the literature on the

subject that, in general, those who have attempted to describe the difference

between either article and no article have also been those who have

described them in terms of semantic focus, (cf. Guillaume, Hjelmslev,

Chesterman, and Davis, below). On the other hand, those who have concentrated upon elucidating the difference between *a* and *the* belong to a different tradition within the literature which, cutting across several schools of linguistics, has emphasized a componentially-conceived determiner semantics comprised of the properties of 'existence' and 'uniqueness' or 'identifiability' (cf. Russell, Searle, Givón, and Hawkins).

One of the earliest examples of this latter group was Russell (1905), in reply to Frege (1897), in which Russell analyzed determiners by explicating the logical propositions which he supposed to underlie expressions containing determining forms, or 'denoting phrases,' as he termed them. Russell (1905:481-2) observed that *the* involved 'uniqueness':

> 'Now *the* , when it is strictly used involves uniqueness...
> Thus when we say 'x was *the* father of Charles II.' we not
> only assert that x had a certain relation to Charles II, but
> also that nothing else had this relation.'

The existential component came into Russell's 'Theory of Descriptions' by way of his portrayal of 'denoting phrases' as logical propositions, in which terms can only appear through hypothesizing their existence. Thus, the expression 'a man' takes the form of some such expression as 'There exists x , such that x is human...' or 'Let there be x ,

such that...' Russell (1905:481) says,

> 'Take as an instance 'the father of Charles II was executed.'
>
> This <u>asserts</u> <u>that</u> <u>there</u> <u>was</u> [emph. mine, JWB] an x who was
>
> the father of Charles II and was executed.'

Russell (1905:491) was interested, for reasons having nothing to do with

determiners, in eliminating from his logic Meinong's concept of a null-set

composed of unreal individuals; instead he held that, for logical purposes,

all individuals in 'denoting phrases' were real:

> 'With our theory of denoting, we are able to hold that there
>
> are no unreal individuals; so that the null-class is the class
>
> containing no members; not the class containing as members
>
> all unreal individuals.'

Thus his description sets forth two properties in connection with *the* :

the assertion of uniqueness, and the predication of existence; the former,

explicitly, and the latter, by virtue of the shape of the logical proposition

which was supposed to underlie the 'denoting phrase.' The result was that

his description of the articles in terms of the logic of denotation introduced

into the literature a certain preoccupation with the issue of their existential

force.

This approach has had an enduring influence on what might be

described as the philosophical or mathematico-logical tradition in the

literature, represented by such as Searle (1969), and Chomsky (1965 and 1975) (cf. below). It is additionally important because its influence has extended beyond this tradition in setting the agenda for more traditional grammarians, such as Christophersen (1939), and more recently, Hawkins (1978), Chesterman (1991), and even Givón (1978 and 1987).

Russell's twin emphases reappear with Searle (1969) in the form of the two axioms which are held by Searle to be neccessary conditions of definite reference. The 'axiom of existence' states that (Searle 1969:82):

'...there must exist one and only one object to which the

speaker's utterance of the expression applies.'

Searle's second rule, the 'axiom of identification' states that (1969:82):

'...the hearer must be given sufficient means to identify the

object from the speaker's utterance of the expression.'

The 'axiom of existence' combines within itself both of Russell's properties of existential force and uniqueness. The 'axiom of identification' refers to a kind of pragmatic result of the uniqueness that is being discussed here, i.e., because the object is 'unique' within the frame of discourse it is also therefore identifiable to the hearer. In more recent writings of the mathematico-logical type, 'identifiability' displaces Russell's property of 'uniqueness' as a component of definiteness. Cf. Chomsky 1975 and Givón 1978, below, for example.

Within the generative idiom in linguistics, Russell's approach to the determiners has been followed in broad outline, i.e., as a formalist explication of a purported underlying structure, if not in terms of the specific properties of 'existence' and 'uniqueness.' In Chomsky 1965 (107-8) articles are described as a specific realization of the larger category, *Det*, for 'Determiner,' and their specific surface structure is a realization of the binary feature [± Definite]. In essence, this says only that the articles are a kind of determiner and can either be 'definite' or 'indefinite.' Chomsky (1965:107) adds to this very brief description only the observation that there are rules:

'...that realize Definite as *the* and non-Definite as null

before a following non-Count Noun.'

As these terse statements might suggest, the problems associated with determiners did not receive much attention in early formulations of generative theory. In Chomsky 1975 (99) the feature [± def] is further explicated in mathematico-logical terms, either elegantly or simplistically, depending on one's point-of-view, as determining whether 'we are talking about the whole set or a subset [of the subject of predication].' Beyond this, Chomsky spoke only of [± def] as a quantifying feature, taking [- def] as 'existential quantification' and [+ def] as 'universal quantification.' Thus he says (Chomsky 1975:101):

'...the sole meaning [emph. mine, JWB] of the definite article
can be taken to be 'universality.' In the sentence 'the book we
ordered arrived,' the definite article determines that all
members of a unit class arrived, and in 'the books we ordered
arrived,' it determines that all members of a class of cardin-
ality greater than or equal to 2 arrived. Thus [± def]
corresponds here to universal-versus-existential quantification.
The meaning of 'the,' then, is not that one and only one object
[emph. mine, JWB] has the property designated by the
common noun phrase to which it is attached; rather, it is
universal quantification.'

That this statement, notwithstanding its rejection of 'uniqueness,' is heir to

the approach of Russell (1905) is apparent. The placement of determiners

within a generative theory of syntax was in its details more worked out by

his followers than by Chomsky himself. For example, Carlota Smith (1964)

attempted to work out the basics of phrase structure rules for three classes

of 'determiners' (taken to include relative clauses and other determining

structures): *Unspecified* ('any,' 'all,' etc.), *Specified* ('a,' 'the,' zero), and

Unique (zero, with proper names). Postal (1966), on the other hand,

derived articles from binary features of the noun in the phrase rather than

by means of phrase structure rules. Perlmutter (1970) argued that while

the and *a* were on a par with one another on the level of surface structure,

on the level of deep structure *a* was not an article but was the numeral *one*.

Beginning with Chomsky, each of these shares the common characteristic

that they describe *the* in terms of simple, usually binary, oppositions and,

following Russell (1905), they understand articles as belonging to a larger

class of determining ('denoting') forms. It may be noted that determiners were rather a <u>post</u> <u>hoc</u> consideration in early generative theory, and perhaps that may help explain why Smith, Postal, and Perlmutter differ so widely as to where to locate the binary features that underlie surface articles within the (already-existing) theoretical framework of generative grammar.

The treatment of determiners by subsequent generative theorists has been as diverse as the various grammars which have been developed through the continual modification and revision of Chomsky's original work. The review of this vast literature is beyond the purposes of the brief sketch presented here, which is only intended to illustrate the indebtedness of early generative theory to the mathematico-logical work of Russell in terms of its general approach to understanding determiners. This is not to say, of course, that Chomsky and his followers were in agreement with Russell. However, they are subject to the same criticism made against Russell by Strawson (1950:333) and which applies equally to Searle and others who attempt to describe language from a mathematico-logical standpoint :

> 'The general moral of all this is that communication is
>
> less a matter of explicit or disguised assertion than
>
> logicians used to suppose.'

Strawson (1950:344) argues further that:

> 'A literal-minded and childless man asked whether all
>
> his children are asleep will certainly not answer 'Yes'
>
> on the ground that he has none; but nor will he answer
>
> 'No' on this ground....Neither Aristotelian nor Russellian
>
> rules give the exact logic of any expression of ordinary
>
> language; for ordinary language has no exact logic [emph.
>
> mine, JWB].'

The first significant post-Chomskyan approach to the meaning of determiners was that of Hawkins (1978). Although clearly still within the framework of transformational generative grammar (Hawkins 1978:16), Hawkins (1978:11) argued that syntactic facts alone could not adequately predict grammaticality and that pragmatic and semantic facts had to be incorporated into a general theory of the articles. Indeed, Hawkins saw semantic considerations as having 'the fundamental role...in predicting all and only the grammatical sentences of a language' (1978:12). He rejected the notion of Autonomous Syntax and supported the general model of Generative Semantics (1978:19).

Hawkins' perspective on 'definiteness' is in terms of a speech-act theory of referentiality, which he calls the 'Location Theory' (1978:106-71). He summarizes it as follows (1978:167):

'According to my location theory the speaker performs the
following [speech] acts when using a definite article. He (a) intro-
duces a referent (or referents) to the hearer; and (b)
instructs the hearer to locate the referent in some shared
set of objects...and he (c) refers to the totality of the
objects or mass within this set which satisfy the referring
expression.'

We should note with regard to speech act (a), as pointed out by Chesterman
(1991:24), that 'Hawkins is concerned exclusively with reference.' [emph.
mine, JWB] The pragmatically-based concept of the 'shared set' in (b) is
the most salient part of Hawkins' location theory. Hawkins acknowledges
his indebtedness here to Christophersen's (1939) concept of 'familiarity'
(cf. below) and presents the location theory as a refinement of
Christophersen's familiarity theory (Hawkins 1978:99-106).

The third speech act (c) in Hawkins' location theory is more logic-
based than pragmatic. The property of the definite article to refer to the
totality of the shared set is called 'inclusiveness' by Hawkins (1978:161 *et
passim*). Chesterman (1991:22) observes that Hawkins' concept was
intended to overcome the criticism of Russell's idea of 'uniqueness,' which
worked well with singular count nouns but not as well for definite mass
nouns and plurals. Hawkins used the concepts of 'inclusiveness' and

'exclusiveness' to describe the difference between *the* and *a /some* . With regard to the latter he says (1978:186):

> 'Thus, what unites all these cases of indefinite reference
>
> is that the hearer must be able to understand the reference
>
> as belonging to a proper subset only of the total number of
>
> objects in a shared set, if he is actually to locate the
>
> referent(s) in this set...And just as the definite article
>
> refers inclusively to all objects, we might say that the
>
> indefinite determiners refer 'exclusively' to some only.'

Definite and indefinite reference in Hawkins' view are comparable in terms of speech act (a), the introduction of a referent, but contrast in terms of speech act (c), 'inclusiveness.' As Chesterman (1991:18) points out, it is significant that in the description of indefinite reference here there is no contrast to speech act (b), i.e., indefinite reference may or may not instruct the hearer to locate the referent in a shared set (Hawkins 1978:187). Thus, using Chesterman's (1991:18-19) examples, sentence (1) implies a shared set while (2) does not:

(1)   Bill lost *a finger* in the war.

(2)   Bill found *a ten-pound note* yesterday.

In the same year that Hawkins' book was published, Talmy Givón wrote a paper (Givón 1978) which has had a lasting influence on

subsequent discussion of determiners (cf. Polinsky 1992). Givón's

description of determiners was universalist in orientation and not limited to

English, it having been published as part of Greenberg 1978. Despite being

outside the generative stream, Givón 1978 is nevertheless squarely within

the mathematico-logical tradition that goes back to Russell. Although

functionalist in style, Givón 1978 presents a componential analysis of

determiner semantics into two binary features, 'referentiality,' and

'definiteness,' which are described in terms directly traceable to Russell

(1905). Givón says of referentiality (1978:239):

> '[R]eferentiality is a semantic property of nominals. It
>
> involves, roughly, the speaker's intent to 'refer to' or
>
> 'mean' a nominal expression to have non-empty reference
>
> - i.e., to 'exist' [emph. mine, JWB] - within a particular
>
> universe of discourse.'

This is clearly the same existential notion of reference introduced by

Russell (1905) and repeated in Searle (1969).

Of the second component of universal determiner semantics,

'definiteness,' Givón (1978:296) says:

> 'The notions 'definite' and 'indefinite,' so far as
>
> referential [emph. in original] nominals are concerned,
>
> are used here strictly in their discourse-pragmatic

> sense, i.e. 'assumed by the speaker to be <u>uniquely</u>
>
> [emph. mine, JWB] identifiable to the hearer' vs.
>
> 'not so assumed,' respectively.'

Again, Givón's language here is very reminiscent of Russell's (1905)

concept of 'uniqueness,' which Chomsky (1975) and Hawkins (1978) had

rejected, of Searle's (1969) 'axiom of existence,' which said that there

existed 'one and only one' referent, and also, clearly, his 'axiom of

identification.'

Givón (1978:296) arranges combinations of these binary component

values into wheel diagrams, introducing a third component, 'non-definite':

> 'The category NON-DEFINITE may be viewed as a
>
> subcategory of referential-indefinite, in the sense that while
>
> the verbal expression indicates that the speaker is committed to
>
> the <u>existence</u> [emph. in original] of <u>some</u> individual, the actual
>
> identity of that individual is left unspecified, presumably
>
> because it is of no import in that particular communication.'

In using his wheel diagram to project the componential values, 'definite,'

'indefinite,' 'non-definite,' 'referential,' and 'non-referential,' Givón's

instinct seems to be that the semantics he is describing is scalar. The

problem is reconciling this with the binary nature of the components. This

same conflict is seen also in Polinsky 1992 which follows the Givónian

model in describing Maori determiners. Polinsky (1992:241) proposes the

following 'hierarchy of referentiality / definiteness':

<u>Individuation Hierarchy</u>

+ ref		+ ref		+ ref		- ref		- ref
	>		>		>		>	
+ def		± def		- def		± def		- def
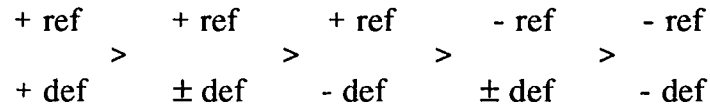
Figure 1

In this diagram, the values of the nodes along the scale are taken to

represent algebraic sums of the values of the binary features in the two

rows. Note, however, that the binary character of these components creates

an inelegance. A discontinuity in the lower row results from positioning

the value [± def] (apparently Givón's 'non-definite') on the scale in <u>two</u>

locations, both to the left and to the right of the [- def] in the middle of the

scale. To compound this, [- def] is also found at two non-adjacent points

along the scale. The infelicity of this disjointed arrangement of values is

not lessened by Polinsky's (1992:240) assertion that:

> 'While referentiality is a function of syntax, definiteness
>
> is a function of the text or situation, thus <u>subordinated to</u>
>
> referentiality [emph. mine, JWB].'

This statement is apparently intended to minimize the importance of the double locations of [± def] and [- def] along the scale since [+/- ref] would, according to this, be more salient than [def] in defining the scale of values. However, the dislocations in Polinsky's scale show the difficulty created by Givón's componential analysis into binary features: such an analysis is ultimately incompatible with a scalar projection. This confirms once again the wisdom of Strawson's (1950) warnings about the application of mathematical logic to ordinary language.

Givón's (1978) analysis, which identifies determiner semantics as composed of 'definiteness,' i.e., unique identifiability, and 'referentiality,' i.e., a committment on the part of the speaker to the existence of an object, echoed Russell's (1905) 'Theory of Descriptions' as few recent writers have.[2] Hawkins (1978) presents in the 'Location Theory' a more integrated theory of definite reference, i.e., a speech act theory of reference, identifiability in terms of pragmatically-shared sets, and either inclusive or exclusive reference.

All of the literature surveyed to this point has been preoccupied to some degree with understanding determiner semantics in terms of referentiality. The problem is that non-referential nouns can be definite or indefinite; and the greater the role referentiality plays in a theory, the more problematic these non-referential nouns become. In Givón's terms,

the problem becomes one of accounting for 'definiteness' apart from 'referentiality.' Declerck (1986) attempted to explicate the meaning of definiteness in non-referential NP's, as in the following pair (1986:30):

(3)   John is *a* good player.

(4)   John is *the* good player.

In both examples the predicate NP is non-referential, i.e, a referent is not intended by the speaker's use of *good player*; instead what is meant is the predication of a quality or characteristic to the subject, *John* . Declerck argues that the difference between the two cases is that *the good player* is 'a uniquely determining property' attributed to the subject, while *a good player* is not. The former means that there may be other good players while the latter means that there is only one. As Declerck (1986: 30) points out, 'uniquely determining property' is 'the nonreferential counterpoint of the notion of inclusiveness.' A noun that is non-referential is more in the nature of an adjective, i.e. adjective-like, than a referential noun. What Declerck argues is that for such an adjective-like form the contrast definite vs. indefinite relates to the scope of the quality or characteristic, i.e., whether the participant described is the only one included in the description or whether there exist others who might be so described.

Chesterman (1991:25) objects that Declerck has too quickly

abandoned Hawkins' concept of 'locatability.' Chesterman argues that locatability is fully compatible with non-referential NP's using Declerck's own examples:

(5)   John is *the acme* of courtesy.

(6)   These copiers are no longer *the machines* they used to be.

He points out that both of these NP's are postmodified and that the modifiers, *of courtesy* and *they used to be* serve to provide 'the location, the shared set, for the definite NP' (Chesterman 1991:25). Thus, according to him, the only difference is that referential NP's refer and non-referential NP's do not.

Chesterman's point is well-taken. Declerck, perhaps does abandon 'locatability' too readily. Nevertheless, the applicability of the concept of location to non-referential definites is dubious. There is a semantics there, to be sure, but 'locatability' seems hardly an adequate description of it. It stretches the concept too far to say that what we have in these cases is 'locatability' absenting reference. Nor does Declerck's reliance upon 'inclusiveness' to explain non-referential definiteness seem to be entirely satisfactory. Chesterman is correct in thinking that there must be more to it than that.

At this point, we will temporarily lay aside the research tradition which concerns itself with referentiality and consider an entirely different

approach alluded to earlier, which did not so much attempt to elucidate the difference between 'definite' and 'indefinite,' but rather the difference between 'determiner' and 'absence of determiner.' As we will see, an entirely different understanding of determiners arises from this orientation and one which helps us move beyond the impasse created by the notion of referentiality.

Guillaume 1919 was a study of the meaning of determiners in French which has influenced a number of students of the English articles, for example, Jespersen, Christophersen, and Hjelmslev, although it represents a research tradition which has been somewhat neglected in recent years (cf., however Chesterman 1991 and Hewson 1972). Guillaume based his theory on a Saussurian distinction between *nom en puissance* , belonging to *langue* , and *nom en effet* , belonging to *discours.* A noun which is part of *langue* is in its maximum conceivable state of generality and abstraction. Guillaume held that it was the function of articles to delimit and restrict these abstract concepts, to actualize them, to make them concrete, and thus enable their use in *discours* . He summarizes his thesis is the following statement (Guillaume 1919:305):

> 'Réduite à l'essentiel, la thèse du présent ouvrage peut être formulée comme suit. Le discours se développe en une suite d'images réelles momentanées plus ou moins étendues, c'est-à-dire plus ou moins générales ou particulières. Pour former ces images réelles momentanées, on se sert des images

virtuelles permanentes de la langue, qui sont plus générales
que les images les plus générales du discours, car elles
enferment *en puissance* non pas seulement la plus grande
étendue concevable de l'idée, mas encore toutes les autres
étendues moindres. On passe ainsi d'un plan où les noms
existent virtuellement à un plan où ils s réalisent effective-
ment. Dénoter les *cas généraux* de cette transition
constitue le rôle de l'article, simple signe de relation
entre une idée et un fonds d'idées.'

Guillaume's cognitive theory of articles has been described very well by

Bodelsen (1949:285):

'Language is like a room. The ceiling represents the world

of abstract conceptions, the floor that of concrete reality.

Under the ceiling hang a number of balloons; they are the

words as they exist in language (as opposed to speech), ...and

in order to make those balloons which represent substantives

available in speech they must be brought down to the floor.

This is done by attaching to each of them a weight, and this

weight is an article. Those which represent proper names

need no weight, because they are always on the floor.'

The dimension along which substantives 'move' as articles bring them from

langue into *discours* is called 'extensivity' by Guillaume. He contrasts it

with another term, 'extension.' The difference between these has recently

been illustrated by Hewson (1972:49):

'To include *wolf* in the notion of *dog* is to enlarge its

extension, but not necessarily its extensivity. To evolve

from *dog* a more abstract notion of *doggishness* is to

enlarge its extensivity but not necessarily the extension.'

Guillaume's theory influenced both Christophersen (1939) and

Hjelmslev (1928). Hjelmslev also adopted the view that the presence of an

article resulted in 'concretization,' i.e., that it separated concrete from

abstract meaning. Christophersen referred to Guillaume's theory as a type

of 'actualization theory.' He acknowledged Guillaume's influence on his

own work but rejected the application of his theory to the English articles.

Christophersen (1939) described *the* and *a* not as opposites but as having

two entirely different meanings. The article *the* was explained as

embodying 'familiarity,' which Christophersen (1939:72) understood to

mean :

> '[An] association with previously acquired knowledge, by
>
> which it can be inferred that only one definite individual
>
> is meant.'

The article *a* , on the other hand, was described as conveying simply

'unity.'

It is worth pointing out that Christophersen (1939), and subsequently

Jespersen (1949), emphasized the importance of distinguishing the

distribution of articles with noun classes distinguished in terms of the

opposition 'count' vs. 'mass.' Jespersen called the classes 'countables' and 'uncountables' and later 'unit-words' and 'mass-words.' Christophersen referred to them as 'unit-words' and 'continuates.' It goes without saying that this distinction has had an enduring influence in the field of English grammar. The point to be noted, however, is that from Guillaume's perspective these purported classes do not exist as such, they are the artifacts of a certain analysis of the facts. Even Christophersen (1939:27) admitted that they were not absolute classes. There are many words that are capable of being 'unit-words' and also 'continuates,'. As Chesterman (1991:42) points out:

> 'The overlap between these two classes is extensive: con-
> sider the innumerable set of nouns that can take either *a*
> or zero, depending on the context: *breakfast, chalk, coffee,*
> *experience, life, man, stone, wind,* etc. In spite of this,
> the establishment of the two groups inevitably makes the
> overlapping cases into some kind of exceptions [emph. mine,
> JWB]: some words are of this class, others of that, but some
> may belong to both classes.'

Guillaume would likely have argued that *cake* as in *Cake is bad for my waistline* and *I baked a cake* or *I enjoyed the cake* are all the same substantive (*en puissance*) and that the creation of two classes to assign

these uses to was a false distinction (cf. Chesterman 1991:42). Although he would not have used these words to describe it, from the perspective of Guillaume's theory of articles the distinction between 'mass' and 'count' appears to be another example of the inadequacy of <u>binary</u> distinctions for the description of language. The point is that it would not have been necessary for Christophersen to make the distinction between 'unit-words' and 'continuates' had he not rejected Guillaume's theory of extensivity. To be sure, the English language makes a distinction, but not necessarily in terms of separate 'classes' and certainly not in binary terms.

Chesterman 1991 presents a theory of definiteness which utilizes the concept of extensivity. Basing his theory on a study of English and Finnish, Chesterman conceives of definiteness as analyzeable to a matrix of three binary features: locatability, inclusiveness, (adapted from Hawkins location theory), and extensivity, (from Guillaume). Chesterman (1991: 2) makes the claim that his theory has sufficient generality to account for both referential and non-referential nouns and also generics. For English, Chesterman proposes five determiners: *the* , *a* and unstressed *some* , plus 'zero' (indefinite, with mass and plural nouns), and 'null' (definite, with singular proper nouns and some singular count nouns). He concludes (1991:182) that definiteness is 'ultimately not a binary phenomenon at all, but a scalar one' and arranges the five determiners as follows:

```
most indefinite------------------------------most definite

    zero    some    a    the        null
```

Figure 2

Chesterman (1991:183) observes:

> 'If definiteness is a cline, and if there are more than two
>
> articles, it does not make much sense to speak of a definite
>
> article being 'in opposition to' an indefinite article. Rather
>
> each of the English article forms should be treated more
>
> as an independent semantic marker, imparting a particular
>
> facet of meaning to its NP.'

Although this statement is undoubtedly a correct conclusion, it is difficult

to see how it, and also the scale just illustrated, can be consistent with

Chesterman's three binary components. Nor is it clear what a binary

concept of extensivity, for example, would mean. Chesterman 1991 is

valuable, nonetheless, for attempting to incorporate the insights of

Guillaume and Hawkins into a general theory of determiners and,

additionally, for its excellent presentation of earlier literature, which has

been relied on heavily here.

Davis 1989 described the semantics of the English articles as the interaction of two semantic dimensions, 'identifiability,' which is presented as a two-valued feature within the context of a matrix composed of the parameters 'identifiable particular' and 'in-/outside experience', and 'boundedness,' a scalar quality. It was the latter semantics mentioned which is the significant contribution of this paper to the literature on the subject. 'Boundedness' is the semantics associated 'with the presence of delimiting boundaries' (Davis 1989:137). Part of the function of the semantics of delimitation is to establish 'particulars.' In addition, since boundedness is involved in the manipulation of precision, it plays a role in creating generic expressions. Davis (1989:139) cites the following examples as indication of the special sensitivity of certain expressions to the presence of *a* in their failure to convey generic semantics:

(7) (a) Tigers live in Asia and Africa.

(b) The tiger lives in Asia and Africa.

(c) ? A tiger lives in Asia and Africa.

The sentences of example (7) are expressions in which the verb, *live(s)* , creates a certain degree of precision which begins to strain the capacity of these statements to convey 'genericness.' Of the three, it is the one with *a* which appears to be the most sensitive to the more precise context and thus no longer satisfactory as a generic expression. Davis (1989:140) argues that

the reason for this is because:

'*A* appears to be the semantically 'least generic' of the

three forms in that is most sensitive to contextual inter-

ference and also in that it more cleanly delineates a

PARTICULAR.'

In less precise contexts, *a* is perfectly suited to the expression of the idea

of generic as Davis (1989:139) shows in example (8), below:

(8)   (a)   Tigers are fearsome animals.

       (b)   The tiger is a fearsome animal.

       (c)   A tiger is a fearsome animal.

The sentences of example (8) are all generic expressions and *a* accords

with generic semantics in (c). The difference between (8) and (7) is that in

(8) the precision of the verb *is / are* is not as great as *live(s)* in (7).

On the basis of the test of its suitability for expressions with generic

semantics, which suitability seems to disappear beyond a certain level of

contextual precision, Davis (1989:141) concludes that:

'*A* appears to require more strongly than *the* the semantics

of delimitation and BOUNDARY....[and further,] *a* --- more than

the --- is associated with more precisely delineated

PARTICULARS.'

The result of this analysis is that *the* occupies a position between 'no

article' and *a* on a (Davis 1989:141):

> 'scale along which content is increasingly 'formed' or
>
> semantically BOUNDED from article-less generalities to
>
> the *the*-established DOMAINS to *a*-established PARTICU-
>
> LARS: a semantic scale along which an amorphous content
>
> becomes increasingly precise and focused.'

If the unsuitability of *a* to generic expression in certain contexts, as compared to *the* and 'zero' is taken to be the test of a greater degree of boundedness associated with *a*, then it should be noted that *the* also fails to convey genericness in Davis's examples if it is coupled with a plural count noun. Consider again the sentences of (7), now as (9) below, but with the addition of sentence (d):

(9) (a) Tigers live in Asia and Africa.

  (b) The tiger lives in Asia and Africa.

  (c) ? A tiger lives in Asia and Africa.

  (d) ? The tigers live in Asia and Africa.

In example (7) from Davis 1989, sentence (a) had zero article, with *tigers*, in the plural, while (b) and (c) with *the* and *a*, respectively, had *tiger*, in the singular. In sentence (d) when *the* is coupled with the plural *tigers*, we see that it fails to convey genericness just as does *a* in (c). At least in terms of this test, then, *a* does not appear to have more boundedness than *the* .

While the scale of boundedness which Davis (1989) proposed represents a
significant insight into the semantics of the English articles, a case can thus
be made for locating *a* <u>between</u> 'zero article' and *the* , instead of at the
extreme end of the cline. This would also have the advantage of allowing
identifiability, which is greater in *the* , to align with the direction of
greatest boundedness or delimitation, taking it also as a cline rather than a
two-valued quality. This approach produces the arrangement shown in
Figure 3:

least boundedness----------------------greatest boundedness

no article   *a*   *the*

least identifiability-------------------greatest identifiability
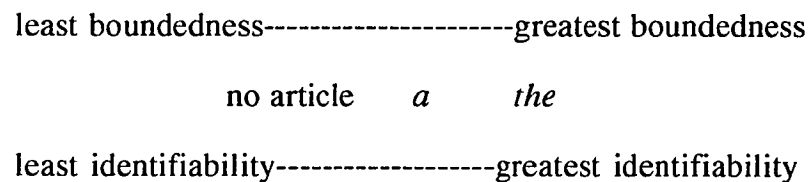
Figure 3

It is worth noting, as pointed out earlier, that the concept of the cline of
boundedness compares favorably with Guillaume's idea of extensivity and,
indeed, also with the statements of Lowth, that the articleless noun was
'taken in its widest sense,' and that articles were prefixed to substantives
'to shew how far their signification extends.'

If the very earliest discussions of determiners were confined to the

Greek ἄρθρα, and by way of comparing the situation in Greek to that of Latin, which manages without any articles, recent discussion has for the most part been limited to the English articles. Beyond what has been said already in reviewing the literature, the present study does not attempt to solve specifically the problems connected with the analysis of the English determiners. It is, instead, based on a functional study of the semantics of determiners in two Philippine languages, Ilokano and Yogad. On the surface, the determiners in Ilokano and Yogad share little in common with English articles. However, the advantage of studying determiners in languages such as these is precisely that it enables one to look at determiners while standing <u>outside</u> English and the English-specific issues which have dominated the research literature on the subject.

In order to compare the semantics of determiners cross-linguistically, the term 'determinacy' was adopted as a name for the semantics which is associated with determining forms, although not limited to such forms and found in languages which do not possess such forms. The determinacy which is found in Ilokano is ostensibly of a different character from that found in Yogad. Nevertheless, both have certain similarities which will be described in the chapters that follow, and these similarities lead us to the conclusion that the varieties of determinacy which we see in these two languages are specific manifestations of a more general principle

of determinacy, which resembles Guillaume's concept of 'extensivity' and Davis's 'scale along which content is increasingly 'formed' or semantically bounded.' This more general determinacy, while having a somewhat different character in different languages, nevertheless can be described with sufficient generality to be universally recognized across languages. The central thesis of this dissertation is that this more general determinacy is motivated by the cognitive principle FOCUSSED--DIFFUSE.3 This principle can be recognized both in language and in other cognitive domains within general intelligence which lie outside of language. Determinacy will thus be present in all languages, the absence of determining forms notwithstanding. It will be described here as a semantics of participants whose function is <u>to create</u> participants and <u>to orient</u> participants with respect to the matrix of knowledge within which language functions.

One advantage of understanding determinacy in this way is that whatever is learned about the meaning of the FOCUSSED--DIFFUSE principle in extra-linguistic cognition may have applicability to our understanding of the way determiners function within language. A number of studies in the past decade have approached determiners in terms of their communicative function (pragmatics) in narrative discourse, among them Du Bois 1980 and Wright and Givón 1987. Both of these studies have examined in particular the way determiners are used to mark referents as

either 'definite' or 'indefinite' as new participants are introduced and then

tracked through narratives. Certain patterns emerge from such discourse

studies, such as introducing referents as indefinites and subsequently

marking as definites in later mentions. Du Bois, however, reports that his

study also revealed numerous examples of <u>definite</u> initial-mentions, and

also many examples of late <u>indefinites</u>. He concludes (Du Bois 1980:272-

73):

> 'Speakers exert a considerable degree of control over their
> choice of alternatives. With the <u>curiosity of the</u> <u>addressee</u>
> in mind, the speaker makes judgements as to the <u>salience</u> of
> tracing an object's identity. He may decide that continuity of
> identification with an earlier mention is not salient, in which
> case one or another type of idefinite mention may be used...Or
> he may decide to mark a first mention as identifiable even
> though in a strict sense it is not, if the referent is part of a
> small frame-defined set of objects between which distinctions
> are not salient [emph. mine, JWB].'

Wright and Givón discuss patterns that are employed by several languages

for introducing participants in narrative discourse and for indicating

whether the new participant is pragmatically salient in the narrative which

is to follow (Wright and Givón 1987:16). They conclude (1987:29):

> '[T]he grammar of reference in human language is sensitive
>
> first and foremost to the pragmatics of <u>importance</u> [emph.
>
> in original].'

In these statements, DuBois and Wright and Givón connect the use and

function of determinacy to discourse-pragmatic salience / importance, and

they emphasize the centrality of salience in understanding the way deter-

miners are used in discourse. In doing so, however, they actually point

beyond discourse-pragmatics to general cognition as the realm in which the

motivating principle for determiners is to be found. As DuBois (1980:272-

73) says :

> 'The overall intent has been to describe how a speaker uses his
>
> cognitive capacities in conjunction with a variety of available
>
> grammatical resources in order to fulfill the expressive need
>
> of conveying his thoughts to the addressee [emph. mine,
>
> JWB].'

The import of this observation is that the actual patterns of determiner use

in tracking participants through discourse, to the extent that these are even

observable or isolable, will be complex and varied, as DuBois 1980

demonstrated. On the other hand, this observation also means that what is

known about general cognition may enable an approach to determiners

from that side.

For example, Du Bois describes how the speaker must gauge how the

hearer's curiosity shifts with regard to discourse participants. Curiosity and

interest are notoriously fleeting things, and it is this property of theirs

which makes of importance or salience a more-or-less fluid factor, as

opposed to a fixed quantum, in discourse. These facts might be somewhat

discouraging with regard to attempts to understand how determiners

function were it not for the fact that curiosity / interest and salience /

importance are each definable with respect to <u>focal attention</u>, the former

being subjective concomitants of attention, and the latter being external

projections upon that which is attended. While attention is no less fleeting

than curiosity or interest, its behavior is well-understood and much-

discussed, accounting for a large percentage of the literature of

psychology. In the following chapters we will argue that the operation of

focal attention organizes cognitive experience according to the principle

FOCUSSED--DIFFUSE, and that it thus represents the cognitive basis of

determinacy. The value of describing determinacy in this way, therefore, is

not only that it enables us to speak about it as a semantics which is

independent of determining forms, thereby allowing us to include in our

discussion languages which do not possess such forms, but that it opens the

problem of understanding determiners to illumination from the side of

cognition.

1   Robert Lowth was Bishop of London; his earlier career was spent as professor of poetry at Oxford [1741-1750]. In addition to the grammar of English (1775) he also wrote a commentary on Isaiah (1778). He is known to biblical scholars for his study of the forms of Hebrew poetry, *De sacra poesi Hebraeorum Praelectiones Academicae* (1753; translated, and with added notes by J. D. Michaelis, 1793), in which he coined the term *'parallelismus membrorum'* to describe the semantic parallelism characteristic of Hebrew poetry and of Semitic poetry generally.

2   More recently, Givón (1982) has explicitly and vigorously rejected the validity of the mathematico-logical approach to 'referentiality' and 'definiteness' in favor of an approach based entirely on discourse pragmatics. In speaking of his earlier views, he says, 'In the earlier paper [Givón 1973] I noticed only the logical contrast, but not the pragmatic one. We live and learn' (1982.87, n.8).

3.   This principle was first discussed in connection with event semantics in a 1987 Rice dissertation by Lillian Huang, which has now been published in Huang 1988. Philip Davis discussed the principle in connection with patterns of verb reduplication in Ilokano in Davis 1991b.

Chapter Two

Determinacy in Ilokano

2.0 Introduction

Ilokano is an Austronesian language spoken in northwestern Luzon

in the Philippines.[1] Word order in Ilokano is VSO. Departures from the

basic word order are also possible and will be found in some of the

examples below. The language has three different particles which may

precede nominals and which function as determiners,[2] as seen in the

following:

(1) Na-ited   ni Agustu ti asu iti ubing.
     [pfx- give NI Agosto   TI dog ITI child]
     'Agosto gave the/a dog to the/a child.'

The particles *ni, ti, and iti,* which appear before the nouns *Agustu, asu,* and

ubing, respectively, indicate that the referents of the nouns are individuals

rather than groups or classes.[3] These determiners do not simply gloss with

'the' or 'a,' however. Both 'child' and 'dog' in sentence (1) can be either

definite or indefinite depending on context.

The determiners may appear to mark familiar syntactic relations but

their overlap with the notion of case is actually minimal. Compare, for

example, the distribution of the determiners in (1) with their distribution in

this sentence in which the Agent is preceded by *ti*, the Patient by *iti*, and the

Possessor by *ni* :

(2)   Kumagat **t i** asu   **iti** ramay   **n i** Agustu.
             [bite   TI dog   ITI finger   NI Agosto]
             'The dog bites a finger of Agosto.'
             [We don't know which finger the dog bites].

Clearly, these determiners are different from the sort that most

English speakers are familiar with.[4] This study will characterize the

semantics of these determiners and will show how Ilokano exploits this

semantics in various contexts. The position taken here is that the basic

function of the particles is to mark degrees of participant individuation.

2.1 Contrasts Between *ni* and *ti*

The particle *ni* appears most frequently before proper nouns and is

the determiner of those participants which are maximally differentiated,

i.e. those having personal names or titles.[5] An NP with *ni* may function as

an Agent, Patient, or Possessor. Sometimes this determiner appears along

with the nominal conjunction *ken* in the phrase *ken ni*. We will say more

about this later.

The particle *ti* indicates a less-particularized participant than does

ni. This determiner may also be used for NP's functioning as Agent,

Patient, or Possessor. Like *ni* , *ti* can appear before a proper noun, but if

it does, it makes it less specific than if it were preceded by *ni* , as the

following minimal pair shows:

(3)   (a)   N i Hwan   nag-desgrasya   ti ta'u.
                [NI Juan   pfx- harm   TI person]
                'Juan harmed the person.'

        (b)   T i Hwan   nag-desgrasya   ti ta'u.
                [TI Juan   pfx- harm   TI person]
                'Someone named Juan harmed the person.'

The particle *ti* also precedes nominals which represent independently

existing, unnamed individuals or entities. Compare the following sentences

which show contrasts between *ni* and *ti* :

(4)   (a)   N i kabsat-ku   inted-na   ti asu   ken ni Agustu.
                [NI brother-my gave he   TI dog   KEN NI Agosto]
                'My brother gave the dog to Agosto.'

        (b)   T i kabsat-ku   inted-na   ti asu   ken ni Agustu.
                [TI brother-my gave he   TI dog   KEN NI Agosto]
                'My brother gave the dog to Agosto.'

        (c)   N i kabsat   inted-na   ti asu   ken ni Agustu.
                [NI brother gave he   TI dog KEN NI Agosto]
                'Brother gave the dog to Agosto.'

        (d)   T i kabsat   inted-na   ti asu   ken ni Agustu.
                [TI brother gave he   TI dog KEN NI Agosto]
                'A brother gave the dog to Agosto.'

These utterances differ in regard to the form and meaning of the term

kabsat 'brother.' In (a) the form *kabsat-ku,* with the possessive suffix

attached, refers to the speaker's family relation. Since it is preceded by *ni,*

a blood-relation is implied and as well the fact that the individual being

referred to is well-known to the listener. If *kabsat-ku* is preceded by *ti*, as in (b), no blood relation is implied and the term may in fact refer to a stepbrother or stepsister. The form *kabsat* without a possessive suffix is used to mean 'brother' in less personal terms than these. In (c), *kabsat* is preceded by *ni*. Here, it is being used as a title, and as in (a) the implication is that the listener is familiar with the individual being referred to. In (d), *kabsat* refers to a member of an organization and, being determined by *ti*, may be known or unknown to the listener. (Note that *Agustu* is in the role of recipient in all the examples and is preceded by *ken ni* rather than simply by *ni*. The determiner of proper nouns is used in this phrasal form before oblique participants).

The contrast between the semantics of *ni* and *ti* may also be used to indicate whether or not an individual being referred to (using a common noun) is well-known to the speaker:

(5)   (a)   Daytuy ti ufesina t i prufesur-na.
              [this   TI office TI professor-his]
              'This is the office of his professor.'

       (b)   Daytuy ti ufesina n i prufesur-na.
              [this   TI office   NI professor-his]
              'This is his professor's office.'

The context in (5) is that the speaker is giving a friend a tour of some university buildings. The difference between these two statements in Ilokano is that in (5b) the *ni* indicates that the speaker has in mind a

professor who is very well known to him, that there is perhaps even a close personal relationship between the professor and the speaker, while (5a) is an impersonal statement. When *ni* is used there is more than simply a title involved, or even a personal name. There also seems to be the idea of a personality, a face, if you will, and a relationship. (The sentence pairs in (3) - (5) show that *ni* does not 'mean' proper noun, although the content of proper nouns will often accord with the semantic content of *ni*).

The pairs in (6) show clearly the way in which *ni* and *ti* contrast in terms of personality:

(6)   (a)   Syasinnu **ni** Hwan?
                  [Who   NI Juan]
                  'What is Juan like?'
                  [His character...his traits]

       (b)   Syasinnu **ti** Hwan?
                  [Who   TI Juan]
                  'Who is [named] Juan?'
                  'Which one [of you] is named Juan?'
                  [Asking among a group of people]

The minimal pair in (7) again shows a sharp and dramatic personal vs. impersonal contrast. When *ni* is used with *pangulu*, as in (7a), the speaker signals a living, currently functioning president who is respected.

(7)   (a)   Nabaknang **ni** pangulu.
                  [Wealthy   NI leader]
                  'The president is wealthy.'
                  ['Mr. President.' Personalized. Name not there
                  but implied].

In (7b), on the other hand, *ti* is used with *pangulu* to show that no such

person is being referred to, whether because the person is no longer

functioning as *pangulu*, or because the speaker does not wish to imply any

feeling of respect or recognition. In (7b) the *pangulu* is a 'non-person':

(7)   (b)   Nabaknang   **ti**   pangulu.
                  [Wealthy   TI   leader].
                  'The president is wealthy.'
                  [About ex-president. About current president if you
                  respect office but not the person. Not personalized.
                  Like mail marked 'Occupant.']

The contrast between *ni* and *ti* can also be used with referents

which are not biologically animate. Consider the following pair:

(8)   (a)   Bultu   **ni**   Washington.
                  [Image   NI   Washington]
                  'The Washington Monument.'

           (b)   Bultu   **ti**   Washington.
                  [Image   TI   Washington]
                  'A [replica of the] Washington Monument.'

The difference between the two phrases is that in (8a) the reference is to a

structure which has been created in respect of the memory of a person. In

(8b) the object is only a derivative image of the original and was not

actually made to commemorate the person George Washington, but as a

memento of the Washington Monument.

2.2 Contrasts Between *ti* and *iti*

The particle *iti* characterizes NP's which follow it as being only slightly-particularized members of a group or class. NP's preceded by *iti* may not function as agents but may appear as patients or recipients. The participant preceded by *iti* is seen as an incompletely differentiated entity somehow still having a connection with its group or class, as in this case:

(9) (a) Nag-desgrasya ni Hwan iti ta'u.
     [pfx-harmed NI Juan ITI person]
     'Juan harmed a person (from among a group).'

    (b) Nag-desgrasya ni Hwan ti ta'u.
     [pfx-harmed NI Juan TI person]
     'Juan harmed a person.'

Even though an individual human being is referred to here, *iti* signals that the person is to be thought of as one of a group of people. In the (b) version, *ti* indicates that the patient was an isolated individual and also that the injury was comprehensive.

The following minimal pair also illustrates that the presence of *iti* brings into view the group or class from which the particular comes. Here an inanimate particular is seen along with its connection to the larger totality:

(10) (a) Gumatang-ak t i pagdesgrasya.
     [buying-I TI weapon]
     'I'm buying a weapon.'

(b) Gumatang-ak **iti** pagdesgrasya.
     [buying-I   ITI   weapon]
     'I'm buying one of the weapons [from a display case].'

We may now illustrate the semantics of the three determiners with the following diagram, including in it Ø, to indicate the situation of the noun which has no determiner at all:[6]

DIFFERENTIATED<----------------------->UNDIFFERENTIATED

individual   collective

ni   ti   iti   Ø

Figure 1

The substance of this continuum is the semantics of individuation or, perhaps more accurately, of the emergence of personality. It involves gradations in both individual distinctiveness and personal familiarity or recognition. At one end is the known, named, unique, independent, individual person; at the other is the anonymity of the undifferentiated collective or class.

As grammarians have been saying since the time of Aristotle, a noun refers both to an individual and to the class of like things of which the individual is a member. At the right end of the continuum is the broadly

connotative noun. In Ilokano, a NP with Ø before it is devoid of any

individual reference, e.g., *asu*, 'dog(s), canines' or, possibly, 'to be canine.'

If the NP is preceded by *iti*, there is some reference to a particular, but

only insofar as it is emergent from a group or totality, e.g. *iti asu*, 'some

dog, one of the dogs.' If the determiner is *ti*, it will mean that the

particular is an independent, though unnamed, entity, e.g., *ti asu*, 'a dog,

the dog.' The determiner *ni* determines the most precisely denotative

noun, i.e., the proper name or the title of an individual.

As one moves leftward along this continuum therefore, the semantic

focus sharpens. The nominal domain narrows until it includes only a single

member: an individual whose identity has coalesced and integrated to the

point that the semantics of a personal name is then evoked. These

developments are accompanied by the ever-greater perception of personal

familiarity, recognition, and connectedness as subjective or affective

concomitants of increasing identity formation, as we saw in sentences (4)

and (5). This semantics is exemplified in the following utterances, in

which *ni* is used more-or-less deictically, as an exclamation of recognition:

(11)   N i! Iti   kanawan ti   Astrodome.
         [NI ITI right   TI   Astrodome]
         'Now! On the right, the Astrodome.'

(12)   N i! Ni Filip!
         [NI NI Philip]
         'Look, here's Philip now!'

In the first example (11) a tour bus guide has been pointing out items of interest 'on the left' and 'on the right' for passengers. She utters this sentence as the bus comes to something of special interest to which she wishes to draw their attention. In (12) a group of people have been waiting for some time for Philip to arrive and as he does someone spots him and says this. What these two statements share is recognition of a unique particular which has great <u>interest</u> attached to it.

The determiner *ni* is the one which has the greatest affective component and it is used in the personification of inanimate, impersonal, or abstract referents. Personification only partially explains its use in such cases, however. For example, in Psalm 23:4, in the phrase *iti ginget ti sipnget ni patay,* 'in the valley of the shadow of death,' the word *patay,* 'death,' is determined with *ni* rather than *ti* . The phrase *ni patay* suggests despair, abandonment, etc., as well as simply the cessation of life. This richer range of meaning is best accounted for in terms of the highly affective semantic component which attaches to the semantics of individuation in its more personalized manifestations in Ilokano.

Movement in the direction of the right end of the continuum, by contrast to the above, implies increasing anonymity and emotional distance.

Individuals are defocussed and blend into classes and collectives; that which

is distinctive disappears into the imprecise.

2.3 Preposition-like Usages of *iti*

Consider now the following minimal pairs which have contrasts

involving *ti* and *iti*. These examples show contrasts having to do with

separation or isolation of the part from the whole. Because *iti* refers to an

ill-defined entity connected to a larger totality, i.e., to something which is

not integrated fully into that totality, the semantics of *iti* is employed by

the language to express partitive semantics. In (13a) and (13b), *ti* implies

that the book is a complete, independent entity and therefore the verb

refers to its composition:

(13) (a) Ag-sursurat-ak t i libru.
     [pfx-write-I TI book]
     'I'm writing a book.'

    (b) Ag-sursurat-ak ti libru-k.
     [pfx-write-I TI book-my]
     'I'm writing my book.'

In (13c) and (13d), *iti* indicates that only part of the book is being referred

to and, thus, the verb means that the speaker is inscribing his name in the

book, or the like:

(13) (c) Ag-sursurat-ak iti libru.
     [pfx-write-I ITI book]
     'I'm writing in/on a book.'

(d)   Ag-sursurat-ak   **iti**   libru-k.
         [pfx-write-I   ITI   book-my]
         'I'm writing [e.g. my name] in my book.'

Note that in both (13b) and (13d) a specific book ('my book') is described

but that in (13d) the specificity is defocussed by *iti* so that part (of a

specific book) is referred to instead of the whole book.

In (14a), an entire dog was seen while in (14c) the reference is to

something located on the dog:

(14)   (a)   Na-kita-k   **ti**   asu   idi   kalman.
             [pfx-see-I   TI   dog   yesterday]
             'I saw the dog yesterday.'

        (b)   Na-kita-k   **ti**   asu-k   idi   kalman.
             [pfx-see-I   TI   dog-my   yesterday]
             'I saw my dog yesterday.'

        (c)   Na-kita-k   **iti**   asu   idi   kalman.
             [pfx-see-I   ITI   dog   yesterday]
             'I saw something on the dog yesterday.'

        (d)   Na-kita-k   **iti**   asu-k   idi   kalman.
             [pfx-see-I   ITI   dog-my   yesterday]
             'I saw something on my dog yesterday.'

In (15a), Agosto has made a meal of fish, but in (15b) he has only

tasted a bite of a whole fish.

(15)   (a)   Nag-sida ni Agustu **ti** ikan.
             [pfx-eat NI Agosto TI fish]
             'Agosto's lunch was fish.'

        (b)   Nag-sida ni Agustu **iti** ikan.
             [pfx-eat NI Agosto ITI fish]
             'Agosto tasted (the) fish.'

In (16), we see the same sort of contrast evinced again. The

determiner *ti* signals the entirety of the thing referred to, while *iti* implies

only a part:

(16)   (a)   Nag-básha   ni   Agustu   **ti**   libru.
                [pfx-read   NI   Agosto   TI   book]
                'Agosto has read the/a (whole) book.'

    (b)   Nag-básha   ni   Agustu   **iti**   libru.
                [pfx-read   NI   Agosto   ITI   book]
                'Agosto has read in the book.'

In this pair of sentences (17), the (b) version fails because the

presence of the determiner *ti* would imply that the bench in its entirety is

to be occupied, while the (a) version means that only a part of the bench is

intended:

(17)   (a)   Ag-tugaw-ka   **iti**   bangku.
                [pfx-sit-you   ITI   bench]
                'Sit on the bench.'

    (b)   *Ag-tugaw-ka   **t i**   bangku.

In each of these cases (11-15), the noun preceded by *iti* represents a

part which is emergent from a larger whole and is nevertheless still seen in

terms of its connection with that totality in some sense, i.e., as not yet being

a fully individuated and independent entity, as not integral and hence as

partial. It is this semantics which makes *iti* well-suited for locative

purposes. If one is referring to a location, as in (13c), (13d), (14c), (14d),

(16b), or (17a), the location which is in focus is part of a larger whole to

which, pragmatically speaking, it is still connected. That it is the partitive semantics of incomplete emergence that is involved, and not simply the idea of location, is clear from cases such as (15b) and also the following example:

(18)   (a)   Bumasa   ti   swelu   **iti**   tudu.
                [Get wet   TI   floor   ITI   rain].'
                'The floor gets wet from the rain.'

        (b)   *Bumasa   ti   swelu   **ti**   tudu.

While purely locative semantics will not satisfy this example, the idea of partitive semantics explains both it and the locative examples as well.

This semantics is also demonstrated in examples such as (19a):

(19)   (a)   Ag-nilin-ak   **iti**   karne.
                [pfx-abstain-I   ITI   meat]
                'I abstain from meat.'

The speaker has been offered a serving of meat and uses *iti* to shape the hearer's focus upon it, not as a particular, but as something which is seen pragmatically in terms of its membership in a larger class, i.e., meat in general. If the speaker uses *ti* instead, it will mean that he does not eat a particular type of meat:

(19)   (b)   Ag-nilin-ak   **ti**   karne.
                [pfx-abstain-I   TI   meat]
                'I abstain from meat.'
                [...of a particular kind, e.g. pork]

The determiners *ti* and *iti* are also used by the language in adverbial

and circumstantial constructions, as illustrated by the following series of

statements:

(20)   (a)   Ag-trabahu   ni   Hwan   **iti**   alistu.
               [pfx-works   NI   Juan   ITI   fast]
               'Juan is working fast.'
               [on <u>multiple</u> projects]

    (b)   Ag-trabahu   ni   Hwan   t i   alistu.
               [pfx-works   NI   Juan   TI   fast]
               'Juan is working fast.'
               [on a <u>particular</u> project]

    (c)   *Ag-trabahu   ni   Hwan   ti.

    (d)   *Ag-trabahu   ni   Hwan   iti.

In examples (20a) and (20b), *iti* and *ti* are determining an adjective to

enable its use adverbially. (20c) and (20d) show that the determiners are

not functioning in the (a) and (b) versions to determine an elided NP but

form a phrase with *alistu*. Note how the choice of determiner in (20a) and

(20b) affects the character of the narrated event (single project vs. multiple

projects). This is reminiscent of the contrast we saw in example (19).

In (21) *iti* determines the abstract noun, *nalawag* , 'clarity' so that a

modicum of 'clarity' is separated, if you will, from the larger concept and

applied adverbially to the description of Juan's speaking ability:

(21)   Ag-sa'u   ni   Hwan   i t i   nalawag.
              [pfx-speak   NI   Juan   ITI   clarity]
              'Juan speaks clearly.'

It is proposed here that the adverbial and circumstantial usage of ti and iti

in examples like (20) and (21) is a secondary extension of the

more fundamental, i.e., more general, semantics of the determiners which

we have discussed to this point.

2.4 Interactions with Voice

We now move to a consideration of the way in which the semantics

of the determiners interacts with voice in Ilokano. The Ilokano verb is

modified by the attachment of affixes representing three voices, which have

a characteristic focus on Agent, Patient, or Circumstance, respectively.

Interestingly, the particular focus of the verb constrains the selection of

determiners for nominal arguments in particular roles, so that the syntactic

pattern reflects the underly-ing semantic interaction between voice and the

determiners.[7]

The following diagram shows the distribution of the determiners

(including the phrase *ken ni*) with NP's in various roles, as constrained by

voice, i.e., whether the role represented by the NP is focussed or

unfocussed by the verb [A=Agent, P=Patient, C=Circumstance]:

NP's in Roles	NP's in Roles		
Focussed by Verb	Not Focussed by Verb		

A or P or C	A	P	C
ni	*ni*	*ni / ken ni*	*ken ni*
ti	*ti*	*ti / iti*	*iti*

Figure 2

The following examples are illustrative of the distributions summarized in Figure 2:

Agent Focus

(22)   (a)   Ni Hwan nang-desgrasya ti ta'u.
                  [NI Juan pfx-harm   TI person]
                  'Juan injured a man.'

            (b)   Ni Hwan nang-desgrasya iti ta'u.
                  [NI Juan   pfx-harm   ITI person]
                  'Juan injured one of the men.'

In this example, the unfocussed Patient, *ta'u* , 'man', can be determined by either *ti* or *iti* , as required by pragmatics, encoding the semantics described earlier.

(23)   (a)   Mang-gatang ti maestra ti mangga iti dulyar.
                 [pfx-buy   TI teacher   TI mango ITI dulyar]
                 'The teacher bought a mango with a dollar.'

          (b)   Mang-gatang ti maestra ti mangga iti ubing.
                 [pfx-buy   TI teacher TI mango ITI child]
                 'The teacher bought a mango from the child.'

This example shows the use of the determiner *iti* to indicate that the

participant is in a circumstantial role, here an Instrument (a) and a Source

(b). Likewise, an unfocussed Beneficiary must be determined by *iti* , as in

(24a, repeated from 1):

(24)   (a)   Na-ited   ni Agustu ti asu   iti ubing.
                 [pfx-give NI Agosto TI dog   ITI child]
                 'Agosto gave the dog to the child.'

If *ubing* is instead preceded by *ti* this will prevent its interpretation as

Beneficiary with the unexpected result that *ubing* is then seen as direct

object:

(24)   (b)   Na-ited   ni Agustu ti asu   ti ubing.
                 [pfx-give NI Agosto TI dog TI child]
                 ?'Agosto gave the child to the dog.'

Patient Focus

(25)   (a)   Na-kita-k   ti asu   idi kalman.
                 [pfx-see-I   TI dog   yesterday]
                 'I saw the dog yesterday.'

(b) Na-kita-k   **iti** asu   idi kalman.
     [pfx-see-I   ITI dog   yesterday]
     'I saw something on the dog yesterday.'

In this example (14, repeated here as 25), because the verb is in Patient

Focus, the presence of the determiner *iti* before *asu* in (b) means that the

participant cannot be interpreted as Patient, but must be seen in a

circumstantial role. The semantics of this determiner already described

therefore suggests a locative sense in this case.

(26)   (a) Na-desgrasya   ti trak   **ti** ta'u.
             [pfx-injure   TI bus   TI person]
             'The bus injured a man.'

        (b) *Na-desgrasya   ti trak   **iti** ta'u.

The (b) version of this example shows that Patient Focus requires that the

patient be determined by *ti* . A circumstantial role for the participant *ta'u*

would theoretically be possible, but the available semantics suggests none

for the event described. Compare this example with the similar sentences

in Agent Focus (22a) and (22b).

Instrument Focus

(27)   Pag-sullat   ni Hwan   ti papel   **iti** abut.
        [pfx-seal   NI Juan   TI paper   ITI hole]
        'Juan will seal the hole with paper.'

(28)   Pag-dawat   ni Hwan   **ti** tasa   **ti** kafe.
        [pfx-ask   NI Juan   TI cup   TI coffee]
        'Juan uses the cup for asking coffee.'

These examples show that the focussed Instrument is determined by *ti* ,

while the unfocussed Patient may be determined by either *ti* or *iti*,

depending on which is more appropriate to the semantics and circumstances

of the event. In (27), *iti* seems to have been chosen because a locative

sense is required.

Several observations can be made about these distributions. All

nouns whose roles are focussed, including focussed Patients,[8] are

determined by either *ni* or *ti* . Furthermore, a participant in the role of

Agent, whether focussed or not, is always determined with either *ni* or *ti* .

In other words, *iti* is never acceptable for an Agent regardless of focus;

nor is *ken ni* .

If we now consider the distributions of Figure 2 solely in terms of

unfocussed roles, we see that the determination of unfocussed Patients

occupies a position intermediate to that of unfocussed Agents and

Circumstances, in that Patients may be preceded by either *ni* or *ken ni* ,

and either *ti* or *iti* . This shows that a role hierarchy (A > P > C)

underlies the pattern of Figure 2. The hierarchy parallels and therefore

correlates with the ranking of determiners along the continuum of Figure

1:

Agent   Patient   Circumstance

DIFFERENTIATED<---------------------->UNDIFFERENTIATED

ni   *(ken ni)*

ti   *iti*   *Ø*
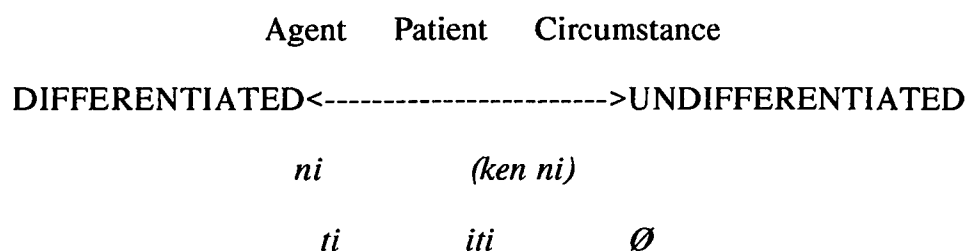
Figure 3

The determiners clearly relate to the propositional structure of

Ilokano in a definite way. It is suggested that the determiners serve to

identify (unfocussed) roles of nominal arguments by locating them within

the center or periphery of propositions. While the specific details of this

system lie beyond the scope of this study, the position taken here is that the

system is able to operate because of a correlation between the semantics of

the determiners, the role hierarchy just described, and the central-

peripheral axis of the Ilokano proposition. Figure 4 describes the

alignment of the continua which are implicit in this system:

[UNFOCUSSED ROLES]

Agent   >   Patient   >   Circumstance

DIFFERENTIATED<----------------------->UNDIFFERENTIATED

ni   *(ken ni)*

ti   *iti*   *Ø*

CENTER OF<--------------------------------------->PERIPHERY OF

PROPOSITION   PROPOSITION
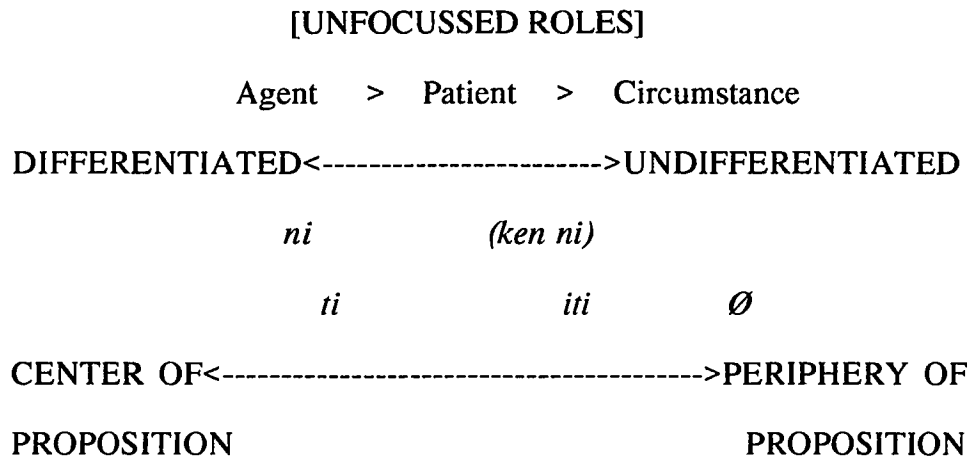
Figure 4

2.5 Conclusions

The corpus of Ilokano data has provided numerous examples in which the determiner *ni* , which as traditionally-conceived is limited to personal names, occurs with what we might call common nouns with the result that a more name-like semantics is imparted. Likewise, we have found a number of examples of the determiner *ti* , conventionally considered to occur only with common nouns, in which it appears with personal names with the result that the names are de-personalized in some sense. The distributions of these determiners clearly show that we are justified in comparing them on the same cline.

The semantic substance of the continuum *ni* -- *ti* -- *iti* -- *Ø* was shown to involve greater individuation toward the left end of the cline,

a semantics which was alternately described as expressing the emergence of personality. Participants are more delimited, individually distinctive, and more recognizable or familiar as they are located more leftward along the continuum of determiners. At the extreme left end is the known, named, unique, independent, individual person; at the other end the delimitation or boundedness separating one participant from another has disappeared and participants are only emergent entities and not fully separated from undifferentiated collectives or classes.

The semantics that we have been describing for *ni, ti,* and *iti* in terms of individuation or emergence of personality does not simply provide 'color commentary' on the nominal arguments which follow these determiners, however. The language exploits this semantics in partitive, prepositional, adverbial, and circumstantial contexts and also utilizes it in positioning nominal arguments within the propositional framework. In the case of *iti* , for example, it is easy to see from Figure 3 that it carries not only the semantics of the partitive, but of the peripheral (Circumstantial) as well. Likewise, the differentiated semantics of *ni* and *ti* correlates with the semantics of propositional centrality, so that we find these determiners used for all focussed roles and for agents. Although it is primarily word order with marks syntactic relations in Ilokano, Role assignments emerge as an epiphenomenon to the interaction between the semantics of the

determiners and the semantics of the voice affixes, and it is ultimately this

interplay which effectively structures propositions and fits them to their

pragmatic contexts.

1   The Ilokano data in this chapter were recorded from the Rev.

Dominador Layus, a native of Batak, Ilokos Norte. In the Ilokano examples

the comments enclosed in square brackets below the glosses are comments

of Rev. Layus. I wish to express my thanks to Rev. Layus for his patient

and generous help in sharing his language with us. An earlier version of

this chapter was read at the Sixth International Conference on Austronesian

Linguistics which was held in Honolulu, Hawaii, 1991. I am indebted to

those attending who shared their comments and suggestions with me. Of

course, any errors which remain are strictly my responsibility.

2   Constantino (1971a) refers to the particles *ti* and *iti* as 'articles'

(p.9), or 'oblique prepositions' (p.15), and *ni* is called a 'singular proper

article' (p.15). Constantino offers no explanation as to how these forms

differ from one another. They are referred to here as 'determiners.'

3   Although this chapter discusses the semantics of the Ilokano

determiners from the standpoint of the singular determiners, there exists a

parallel series of determiners, *da, dagiti,* and *kadagiti* , which are,

respectively, the plural counterparts of *ni, ti,* and *iti* . The plural

determiners embody the same semantic substance as their singular

counterparts.

4   On the subject of the semantics of the English determiners, cf. Davis

(1989:117-46). This article has relevance for Ilokano determiners in terms

of its conceptual approach to the semantic scale constellated by the

determiners and their absence (Davis 1989: 141ff.).

5   Note however that what constitutes a proper name in English is not

necessarily the same in Ilokano. For example, the largest river in the

Philippines is the Agusan. In Ilokano this is referred to as *'ti Agusan'*

however, and not **'ni Agusan.'* The semantics of *ni* overlaps the

semantics of English proper names in most cases.

6   The form *ken ni* is not placed on this continuum because, in terms

of individuation, it has not been shown to differ from *ni* , i.e., *ken ni* is a

determiner of named individuals just as is *ni* itself. The role semantics of

this phrase is demonstrated in Figure 4, however.

7   This phenomenon is fundamentally different from the situation in

Tagalog, for example, in which pre-nominal markers are actually

composed of the semantic substance of voice and role, rather than

exhibiting an independent determiner semantics which intersects with

voice, and from which role assignment emerges, as in Ilokano.

8   It would appear that Ilokano does not correlate with Tagalog in the
way expected by Bell (1978:1 and 7). The present chapter attempts to
answer for Ilokano, at least, the questions which Bell raised (with regard to
Cebuano and Tagalog) concerning the role of definiteness in role selection.

Chapter Three

Ilokano Discourse Analysis

The aim of this chapter is to make the content of the Ilokano determiners more precise by demonstrating that their application does <u>not</u> extend to the domain of information flow in discourse. In English, the determiners are available for marking the changing status which participants occupy in the ebb and flow of discourse content because the sense of the determiners is not so integrated with the semantics of propositions as is the case in the Philippine languages. In Ilokano (and many other Philippine languages) the content of determiners is sensitive to role and to voice, and this relation is independent of the information status of participants. We shall first demonstrate the independence of the Ilokano determiners from the content which orients a participant within the ever-changing discourse content, and we shall then confirm this independence of determiners by isolating those portions of Ilokano grammar which <u>do</u> manage this aspect of the experience of a conversation. Finally, we will address the issue of the comparability of the Ilokano determiners with the English and thereby begin to identify the basis which is common to determiners and which permits us to take determinacy as a universal in language.

We can demonstrate that Ilokano determiners are not sensitive to the information status of participants by looking at the distribution of determiners in a text and then correlating that distribution with the information status of the participants. The Ilokano text analyzed was Reading 22 from Moguet and Zorc (1988), a reader made up of stories and articles selected from Bannawag, an Ilokano weekly magazine. The full text of Reading 22 along with English gloss appears as Appendix 1. All occurrences of *ti / dagiti* and *iti / kadagiti* in Reading 22 were examined and tabulated to see if there was correlation between the determiner and the information status of the participants they were associated with. For each participant associated with a determiner it was noted whether the participant was being introduced into the discourse ('new') or whether the participant was known, identifiable, previously-mentioned, or calculable within the frame of the discourse ('old'). The occurrences, notations, and tabulated results for each section of Reading 22 are presented in the data section at the end of this chapter. The results of this investigation were:

	old	new
ti / dagiti	34	14
iti / kadagiti	37	16
total	71	30

There was no correlation therefore between the Ilokano determiners and the information status of the participants represented by nominals to which the determiners were attached. Of the 71 'old' participants, 34 were connected with *ti* / *dagiti* and 37 with *iti* / *kadagiti*. Of 30 'new' participants 14 were associated with *ti* / *dagiti* and 16 with *iti* / *kadagiti*. Thus, in each case the nominals occurred in approximately equal frequency with each type of determiner. The presence of *ti* / *dagiti* or *iti* / *kadagiti* cannot indicate the information status of the participant represented by the nominal determined.

The remainder of this chapter is concerned with demonstrating the means which Ilokano employs in managing information flow in discourse. Reading 22 again served as the basis for the investigation. The article which forms the basis of this reading discusses the possibility that the members of ASEAN (Association of South East Asian Nations), each of which has its own language(s), might one day create a new, artificial regional language 'for conferences and other important needs of its citizens' based on the common Malayo-Polynesian parent-language from which the various national languages arose. There are six languages or language groups which are introduced as participants and discussed in this reading. In order to see how Ilokano manages information flow, we will examine the way the writer introduces each of these languages and keeps

them separated as he discusses them. For sake of reference, however, we may number the languages as follows (in order of appearance) :

1. Non-Philippine ASEAN languages, eg., Malay, Indonesian

2. Philippine languages, eg., Pilipino, Ilokano

3. The new, artificial regional language

4. The Malayo-Polynesian parent-language

5. The Thai-Kadai language of Thailand (member of ASEAN)

6. English

Reading 22a contains a dialogue which begins with a brother-in-law (who has been working for companies in Malaysia and Indonesia) asking the question, *Konmusta, ipar?* 'How are you brother-in-law?' The first word, *konmusta,* is Malay for 'How are you?' and *ipar* means 'brother-in-law.' The point the writer is making is that even though he doesn't speak Malay (*ti ag-Malayo*) he is able to understand the question because *konmusta* sounds very much like Ilokano *komusta, Komusta ti kayat a sawen ti konmusta iti Malayo* '*Konmusta* means *komusta* in Malay.' Thus, language 1 has been introduced (*ti ag-Malayo, iti Malayo*) along with the idea that there is linguistic similarity between Ilokano and Malay that could perhaps be exploited for cross-linguistic communication.

The deictic form *idiay* is used three times in Reading 22a: *idiay Pangasinan* 'there in Pangasinan,' (as opposed to here, in Ilokos), *idiay*

Malaysia 'there in Malaysia,' and *idiay Indonesia* 'there in Indonesia.' It is

the locative form of the 'far' series of deictics, as these forms are described

in Moguet and Zorc (1988:ix) and, of course, it refers to the distance

separating Malaysia from the Philippines (or Pangasinan from Ilokos). The

writer also used the word *sadiay* 'far away over there' to describe the

company that the brother-in-law worked for in Malaysia, this word being a

deictic for extreme remoteness.

Reading 22b continues discussion of language 1, which was

introduced in Reading 22a: *kaaduan kadagiti balikas idiay Malaysia* 'most

of the words in Malaysia' or *dagiti sumagmamano a balikas a Malayo-*

Indonesian 'some of the words in Malayo-Indonesian.' Let us give some

closer consideration to the first phrase:

(1) kaaduan kadagiti balikas idiay Malaysia
     [most   det:pl.obl. words deix:loc Malaysia]
     'most of the words in Malaysia'

The noun *balikas* 'word(s)' refers to language 1 and is quantified by

kaaduan 'most,' determined by *kadagiti* 'the (pl. obl.),' and qualified by

idiay Malaysia 'there in Malaysia.' In Reading 22b *idiay* is used with

Malaysia and again with *Indonesia* in *Kasta me kano idiay Indonesia* 'It is

also said to be the same in Indonesia.' In Reading 22a, when Malaysia and

Indonesia were introduced into the discourse *idiay* was used to locate them

at a distant remove from the Philippines, and in Reading 22b, *idiay* is

again used when they are mentioned. Note what happens, however.

Language 1 is resumed as *kadagiti balikas idiay Malaysia,* i.e, as 'words' of

a <u>place</u> <u>name</u> mentioned here, as previously, with the deictic *idiay.* The

next mention of this language is in *dagiti sumagmamano a balikas a Malayo-*

Indonesian, i.e., as 'words' of a <u>language</u> <u>name,</u> this time without *idiay,*

allowing us simply to associate the word *Malayo-Indonesian* with the place

names, *Malaysia* and *Indonesia ,* which have each been used twice with

idiay . Thus, we had the sequence: *ti ag-Malayo* → *idiay Malaysia,*

...idiay Indonesia → *iti Malayo* → *balikas idiay Malaysia, ...idiay*

Indonesia → *balikas a Malayo-Indonesian.* The result is that language 1 is

now being mentioned in a way which grounds it to two previously-

mentioned place names, both of which had been located spatially by *idiay*

as 'over there.'

The reason that language 1 is now being connected with distant place

names in this way is in order to distinguish it from a new participant,

language 2: *iti pagsasaotayo* 'to our language' or *kadagiti balikastayo--iti*

Pilipino wenno Iluko 'to our words--in Pilipino or Iluko.' The use of

pagsasao instead of *balikas* to introduce language 2 helps avoid confusing

language 2 with language 1, and the pronominal suffix *-tayo,* 'our' further

separates it from the realm of *idiay* by connecting this participant with a

given, namely those of us involved in the discourse. At the subsequent

mention of language 2, the writer uses *balikas* again but then specifies *iti*

Pilipino wenno Iluko in contrast to *balikas idiay Malaysia.* Thus, we had

the (real-time) sequence *balikas idiay Malaysia* → *iti pagsasaotayo* →

idiay Indonesia → *balikas a Malayo-Indonesian* → *balikastayo--iti*

Pilipino wenno Iluko. Therefore the two mentions of language 2 were

separated in real time by two mentions of language 1, but the writer

managed to keep them from being confused with each other. He did this not

by using determiners, but by first connecting language 1 with *idiay* and the

distant place names, then by using a new noun when introducing language

2, attaching to it a pronoun which connects it (proximally) with the reader,

and finally, when resuming the previous mention, by adding the specifying

language names *Pilipino* and *Iluko.* At this point, language 1 has been

introduced and given the designation 'remote' by associating it with *idiay*

Malaysia and *idiay Indonesia,* while language 2 has been introduced and

marked 'proximal' by connecting it with *-tayo* 'our.'

Reading 22c begins by summarizing the lexical comparisons that

came at the end of Reading 22b. Language 1 is mentioned as *kaaduan met a*

balikas kadagiti kameng ti ASEAN 'most of the words of the ASEAN

members.' Language 2 is mentioned again as *kadagiti balikas wenno*

dialektotayo 'our words or dialects' and, interestingly, those provinces

where there are many isoglosses with Malayo-Indonesian are named using

idiay. Since these provinces and regions of the Philippines are not in Ilokos, the use of *idiay* locates them at a certain remove from the discourse but thereby also places them in the same realm as that of language 1, to which their dialects are being compared by way of isoglosses.

Three new participants are now introduced: languages 3 , 4, and 5. Language 3 is introduced as *iti maymaysa wenno rehional a lengguahe* 'a single or regional language' which might be devised by the members of ASEAN. Language 3 is mentioned again as *iti common working language para iti ASEAN* 'a common working language for the ASEAN (nations).' Language 4 is called *iti Malayo-Polynesian parent-language* 'the Malayo-Polynesian parent-language' in which languages 1 and 2 have their roots. Language 5 is referred to for the first time as *iti lengguahe a medio 'ganggannaet.'* 'a language that is somewhat 'foreign.'' It may be pointed out that although all of these first-mentions have the determiner *iti*, the determiners in the English glosses are <u>not</u> all the same. All of the examples are glossed with *a* except the first mention of language 4 which is glossed with *the*. Again, the English determiners are used to track discourse pragmatics while the Ilokano determiners, being involved in other grammar and sensitive to propositional semantics, do not. What keeps all of these participants separate and distinct for the reader is simply the

semantics of the qualifying and modifying descriptive phrases which accompany them, eg., *-tayo, kadagiti kameng ti ASEAN, rehional a lengguahe, parent-language, common working language, a medio 'ganggannaet.'* When a participant previously mentioned is resumed after a hiatus we will see that it is most often resumed by using these same (or similar) modifying phrases that were used to name it when it was first mentioned.

Reading 22d continues discussion of language 5 by introducing the American linguist Paul Benedict, who had published an article in which he reported finding some connections between Thai-Kadai and Malayo-Polynesian, language 4. Language 4 is mentioned twice as *iti Malayo-Polynesian* (it was so described at first mention in Reading 22c) while language 5 is referred to as *ti bokabulario ti Thailand* 'the vocabulary of Thailand,' and *Thai-Kadai ti Thailand a pagsasaona* 'the Thai-Kadai language of Thailand.' Clearly, proper names are used to distinguish the two languages.

Following the discussion of the article, languages 1 and 2 are mentioned and language 3 is re-introduced:

> *Gapu itoy nga artikulo, nagsuksokkami babaen ti panamag-*
>
> *diligmi kadagiti lengguahe ti Bahasa Indonesia, ti Pilipino*
>
> *ken Bahasa Malayo a nasurok a 200 milion nga umili ta*

mangar-aramat kadagitoy a lengguahe a mainaig iti panna-

kapaadda ti maymaysa a lengguahe para iti ASEAN.

Because of this article, we researched by means of our com-

paring the languages of Bahasa Indonesia, Pilipino and Bahasa

Malayo (more than 200 million citizens are using these languages)

relating to the creation of a single language for ASEAN.

After mentioning languages 1 and 2, they are described as *kadagitoy a*

lengguahe 'these languages.' The deictic *kadagitoy* is the oblique plural of

the 'closest' series of deictic forms described by Moguet and Zorc

(1988.ix). The languages of ASEAN member nations are thus tagged 'most

proximal,' and the conferences of ASEAN members are similarly tagged

with the main form of the same deictic series, *dagiti dadakkel a komper-*

ensia dagitoy a kameng ti ASEAN 'the big conferences of these members

of ASEAN.' The purpose of this seems to be so that when language 3 is

mentioned next, it will be felt as 'most proximal' in contrast to language 6,

English.

Language 3 is referred to as *ti maymaysa a lengguahe para iti*

ASEAN 'a single language for ASEAN,' and again as *ti maymaysa a*

lengguahe , 'a common language.' We should note that the phrase

maymaysa a lengguahe echoes the description of language 3 that was used

when it was introduced, *maymaysa wenno rehional a lengguahe* 'a

common or regional language,' and when it was mentioned again in

<u>Reading</u> <u>22c</u>, *iti common working language* . The final mention of

language 3 in this reading is in a context in which it is contrasted with

language 5, *Ingles* 'English,' and is described as *kabukbukodanda a*

lengguahe 'their [ASEAN members] very own language,' a way of

describing language 3 which echoes the use of *kadagitoy* and *dagitoy*

noted above.

<u>Readings</u> <u>22e</u> and <u>22f</u> are essentially discussions of lists of lexical

items. <u>Reading</u> <u>22g</u> contains only one reference to the six languages, that

being a final mention of language 5 which represents the theme of the

article, *iti maymaysa a rehional a lengguahe* 'a common regional

language.'

We can conclude from the study of this material that the management

of information flow in Ilokano relies to a great degree on distinguishing

between nominals at the lexical level, i.e., at each mention of a nominal it is

distinguised from others by the use of descriptive phrases or names which

define it in some distinctive way. The other means which the language

exploits in managing information flow is the system of deictic forms which

we encountered in the reading. According to Moguet and Zorc (1988:ix),

Ilokano has three series of deictic forms which locate their referents in

space or time in three zones, respectively: 'closest,' 'near,' or 'far.' In

addition, we found one instance of the deictic *sadiay* which indicates

'extremely remote.'

The English 'definite article,' *the* , developed from a demonstrative

pronoun or deictic, and across languages determiners and deictic forms

have a similar orienting function. In some Philippine languages also, the

distinction between determiner and deictic is not always sharply drawn.

Consider the following example from Tagalog (Wiens 1986:93):

(2) (a)   Nasaan   ang   lapis?
              [Where   det   pencil]
              'Where is the pencil?'

     (b)   Nasaan   iyong   lapis?
              [Where   deictic   pencil]
              'Where is the pencil?'

The form *iyong* is a deictic in Tagalog and in example (2b) is used in place

of the <u>determiner</u> *ang*. From the opposite standpoint, we may recall from

Chapter Two that there were examples of the Ilokano determiner *ni* used

in <u>deictic</u> contexts (examples (11) and (12), page 42).

In English, the determiners enter into the management of

information flow in discourse. In Ilokano, however, we can see that it is

instead the deictics which are used to assist in managing information flow.

The semantics of the determiners is preemptively exploited by the focus

(voice) system in Ilokano and other Philippine languages, and this

semantics also does not seem to have sufficient deictic force in any case to allow the determiners to be used for signalling information status. Determiners and decitics are both determining forms and both express the semantics of determinacy. Both kinds of forms serve to create participants and to orient them within experience, although in somewhat different ways. From language to language, therefore, it can be predicted that these semantic functions will place deictics and determiners in similar roles. What cannot be predicted, however, is whether the signalling of information-status will be assigned to determiners or to deictics in any given language.

Because the English determiners are so thoroughly bound up with the management of information flow in discourse, it may be difficult for those who are primarily familiar with English determiners to understand how the Ilokano forms can really be determiners, seeing that they are so indifferent to discourse pragmatics. However, once it is admitted that these forms are indeed determiners, it becomes immediately clear that if there is a universal semantics of determiners it cannot be based entirely on discourse pragmatics or otherwise such forms as these would have to be left out of consideration. In the next chapters we will begin to suggest what shape such a semantics might take, leaving for the final chapter to say what English and Ilokano determiners might have in common. At this point,

however, we can say that while the proposed semantics will <u>account</u> <u>for</u>

discourse pragmatics, it will not present this as the <u>defining</u> function of

determining forms.

Tabulation of Data

<u>Reading 22a</u>

ti balikas nga IPAR	old
gapu iti balikas a KONMUSTA	old
ti ag-Malayo	new
iti dakkel a kompania sadiay	new
iti dua a tawen	new
ti kayat a sawen	old
ti KONMUSTA	old
iti Malayo	old
ti IPAR	old

	<u>old</u>	<u>new</u>
ti / dagiti	4	2
iti / kadagiti	2	2

Reading 22b

kadagiti employerda	old
kadagiti balikas idiay Malaysia	old
iti pagsasaotayo	old
dagiti sumagmamano a balikas a Malayo-Indonesian	old
kadagiti balikastayo	old

	old	new
ti / dagiti	1	-
iti / kadagiti	4	-

Reading 22c

iti panagsukisokmi	old
kadagiti kameng ti ASEAN	new
kadagiti balikas wenno dialektotayo	old
dagiti kameng ti ASEAN	old
iti maymaysa wenno rehional a lengguahe	new
dagiti bokabolario ti Pilipino...	old
iti Malayo-Polynesian parent-language	new
dagiti lingguista	new
ti umno a koordinasion ken panagkaykaysa	new
iti common working language	new
kadagiti kameng ti ASEAN	old
ti laeng Thailand ti agus-usar	new
iti lengguahe a medio "ganggannaet"	new

	old	new
ti / dagiti	2	3
iti / kadagiti	3	5

Reading 22d

ti nakadiskobre	new
ti ramut	old
ti bokabulario ti Thailand	old
iti Malayo-Polynesian language	old
ti Thai-Kadai ti Thailand a pagsasaona	new
ti mainaig...	old
kadagiti sumagmamano a unitna iti Malayo-Polynesian language	
	old
ti panamagdiligmi	old
kadagiti lengguahe	old
ti Bahasa Indonesia,...	old
ti mangar-aramat	old
iti pannakapaadda ti maymaysa a lengguahe para iti ASEAN	
	old
dagiti dadakkel a komperensia dagitoy a kameng ti ASEAN	
	old
ti maymaysa a lengguahe	old
ti relasionda	old

	old	new
ti / dagiti	9	2
iti / kadagiti	4	-

Reading 22e

ti panagbilang dagiti Malaysian ...	new
dagiti Indonesian, Malaysian, Singaporean	old
iti letra "r"	old
iti impluensia dagiti Insik	new
ti letra "l"	old
iti Pilipino	old
iti Iluko	old
iti Pilipino	old

a balikas iti Malaysia	old
ti umarngi	old
iti Iluko	old
iti Tagalog	old
iti Pilipino	old
kadagiti balikas dagiti Maguindanao	old
ti umasping kadagiti balikas dagiti Malaysian...	old
ti dialekto dagiti Samal ken Badjao	new
iti Bahasa Indonesia ken Malaysia	old

	old	new
ti / dagiti	4	2
iti / kadagiti	10	1

Reading 22f

ti bengngat	old
dagiti Singaporean...	old
ti British influence	new
ti Pilipino	old
iti Espanol ken Ingles	new
ti bengngat dagiti Indonesian	old
iti Dutch	new
dagiti sumagmamano a balikas	old
ti ispeling	old
iti nadumaduma a pagilian	old
iti Singapore ken Kuala Lumpur	new
kadagiti Tagalog	old
iti Jakarta	new
kadagiti Indonesia	old
iti Pilipino	old
kadagiti Malaysian ken Singaporean	old
dagiti balikas nga agkakaarngi	old
iti Tagalog	old
iti Tagalog	old
ti sao nga UTANG	new
iti intero nga Indonesia, East ken West Malaysia...	old

	old	new
ti / dagiti	7	2
iti / kadagiti	7	4

Reading 22g

iti Filipinas	old
kadagiti uppat a kameng ti ASEAN	old
dagiti inaldaw nga ar-aramatentayo a balikas	old
iti protesta, telebision...	old
dagiti balikas	old
dagiti nadumaduma a pagilian	new
iti Ingles	old
ti ispelingda	old
ti naggiddiatan dagiti tradision ken ken pammati	new
dagiti kameng ti ASEAN	old
ti panangrambaktayo iti Paskua....	new
dagiti Natay	new
dagiti linguistic experts	old
iti sangalubongan	old
iti asideg a masakbayan	new
ti ASEAN	old
iti maymaysa a rehional a lengguahe	old
para iti komperensia	old
dagiti umilina	old

	old	new
ti / dagiti	7	3
iti / kadagiti	7	4

Chapter Four

Determinacy in Yogad

4.0 Introduction

The data presented in this chapter are from Yogad, a Philippine

language spoken in Echague and several nearby towns in Isabela Province,

which is located in the Cagayan Valley in central eastern Luzon.[1] Yogad is

classified by Reid (1989:57) as belonging to the Cagayan Valley sub-group

of the Northern Cordilleran languages, along with Gaddang, Itawis, Agta,

Ibanag, Atta, and Isneg. Previous treatments of Yogad include Healey

1958 and an M.A. thesis by Galeng (1974).

Yogad is typical of the Philippine languages in that it is VSO and that

it contains a number of Voice affixes which focus upon Agent, Patient,

Recipient, Instrument, etc.[2] Consider the following sentences:

(1) nang-ámpat si John tu lappáw
   [AF-pick.up SI John TU flower]
   'John picked up flowers.'
   'John picked up a flower.'

(2) in-ámpat ni John yu lappáw
   [PF-pick.up NI John YU flower]
   'John picked up the flower.'
   'John picked up a flower.'

(3)   nang-ámpat yu yáma ni John tu lappáw
        [AF-pick.up YU father NI John TU flower]
        'John's father picked up the flower.'
        'John's father picked up a flower.'
        'John's father picked up flowers.'

(4)   in-állu nu doktor maka-inúm kan tu kafé
        [PF-say NU doctor can-drink I TU coffee]
        'The doctor said I can drink coffee.'

(5)   mat-tángit yu anák
        ⌊AF- cry YU child]
        'The child is crying.'

If we look at the forms immediately preceding *John, lappáw* 'flower,'

yáma 'father,' *doktór* 'doctor,' *kafé* 'coffee,' and *anák* 'child,' we find

the following:

(6) (a)   si

     (b)   tu

     (c)   ni

     (d)   yu

     (e)   nu

Frequently, those forms appear to be glossed into English as 'the' or 'a,' as

the plural, or without using an article at all. Cf. *tu lappáw* in (1) and *yu*

lappáw in (2). Sometimes, they seem also to have functions other than

those associated with determiners. Cf. *ni John* in (2) and in (3). In (2), *ni*

seems to be one of the determiners which appears before proper nouns, but

in (3) it appears to have a prepositional gloss 'of.' The discussion here

focusses upon the forms which accompany non-proper content, i.e. *yu, nu,*

and *tu,* plus one other. The following triplets of Yogad sentences introduce

another form *ya,* and they demonstrate the problematic nature of

determiners as a formal class in the Yogad language:

(7) (a)   tatáw ku pa y u mapí
                  [know I also YU good]
                  'I also know what is good.'

     (b)   tatáw ku pa tu mapí
                  [know I also TU good]
                  'I also know it's good.'

     (c)   tatáw ku pa ya mapí
                  [know I also YA mapi]
                  'I also know it's good.'

(8) (a)   na-sim ku y u allún nu táwlay ya mang-afút si Bush
                  [PF-hear I YU say NU people YA AF-win SI Bush]
                  'I heard that the people are saying 'Bush will win'.'

     (b)   na-sím ku tu allún nu táwlay ya mang-afút si Bush
                  [PF-hear I TU say NU people YA AF-win SI Bush]
                  'I heard that the people say that Bush will win.'

     (c)   na-sím ku ya allún nu táwlay ya mang-afút si Bush
                  [PF-hear I YA say NU people YA AF-win SI Bush]
                  'I heard that the people say Bush will win.'

(9) (a)   ma-pénat y u assílong nu wagí-m a lalakí
                  [PF-quiet YU playing NU sibling-your YA[3] male]
                  'Your brother is playing quietly.'

     (b)   ma-pénat tu assílong ni Santos
                  [PF-quiet TU playing NI Santos]
                  'Santos plays quietly.'

(c)   ma-pénat ya assílong nu wagí-m a lalakí
        [PF-quiet YA playing NU sibling-your A male]
        'Your brother plays quietly.'

If we look first at the formal contexts and begin with the impression that

yu and *tu* are determiners, then two things follow. The <u>first</u> is that *ya* is

also a 'determiner' because it is found in the same formal environments as

the first two. The <u>second</u> is that the choice of 'determiner' is not predict-

able by rule; the choice of a form is meaningful in itself and apart from the

choice of other forms. The alternative to this second conclusion would be

that the forms which precede noun-like forms are correlated with other

grammar, are constrained by it, and therefore are entirely predictable

from the choice of other forms. In Yogad and other Philippine languages,

those other forms would be the verbal affixes which mark voice. Consider

possible alternatives to (1) and (2):

(10) (a)   nang-ámpat si John tu lappáw
              [AF-pick.up SI John TU flower]
              'John picked up the flower.'
              'John picked up a flower.'
              'John picked up flowers.'

      (b)   *nang-ámpat ni John yu lappáw

(11) (a)   in-ámpat ni John yu lappáw
              [IF-pick.up John YU flower]
              'John picked up the flower.'

      (b)   *in-ámpat si John tu lappáw

The choice of *si* with John (as well as the *tu* with *lappaw*) in (10)

correlates with the verbal prefix *nang-*. This prefix precludes the choices

in (10b); but those precise choices are permitted by the prefix *in-* in (11).

And now the choice of *si* with *John* and of *tu* with *lappaw*, which were

the required ones in (10) are the precluded ones in (11). The prefix *nang-*

is a voice affix which selects the Agent role as can be seen by the possible

question with *nang-* :

(12) (a)   sinní yu nang-ámpat tu lappáw
                   [who YU AF-pick.up TU flower]
                   'Who picked the flower?'

      (b)   *gani yu nang-ámpat ni John

A wh-question focuses upon the particular questioned with respect to some

role; and (12a) asks 'Who?' with respect to the role of '_____ picked the

flower.' The infelicity of (12b) shows that *nang* - is not appropriate for

questioning *gani* 'What?' with respect to the Patient role of 'John

picked _____.' To arrive at that question, *in* -can be used:

(13) (a)   gani   yu in-ámpat ni John
                   [What YU PF-pick.up NI John]
                   'What did John pick?'

      (b)   *sinní yu in-ámpattu lappáw

And conversely, (13b) shows that *in* - is not appropriate to the question of

'Who?' Given the association of *tu* with content which is non-questioned

and therefore not selected by voice in (12), and given the association of *yu*

with content which is questioned and therefore selected by Voice in (12), it

does <u>not</u> follow, however, that one can predict from expression of voice on the verb to the choice of form *yu, tu,* or *ya* before other constituents which follow. Sentences such as (7) and (8) demonstrate this independence and establish the semantics of the forms in (6) as a problem to be settled independently of voice. And this problem is one which involves the semantics of determinacy.

An adjunct to the problem of describing the semantics of determinacy in Yogad will be that of identifying what forms are to be counted as properly belonging to this range and which are not. In the following discussion, it will become clear that the response to that question cannot be a categorical 'yes' or 'no.' The semantics of determinacy will gradually merge with the semantics of other ranges of grammar, and that intersection will further inform us as to the character of determinacy in general

In what follows there is a discussion organized around a number of Yogad sentences, their glosses, and the contexts in which these sentences might be uttered. The pragmatics of the situations in which these utterances are embedded are as much a part of the data as are the numbered sentences. Therefore, these utterances will not be adequately described simply by referring to them as isolated sentences nor should they be thought of in this way. Although the utterances are separate and do not form a connected

narrative, as, for example, the data in the next chapter, the discussion which follows is a discourse analysis, i.e., it is an analysis of controlled discourse in which utterances and their situational contexts are taken as forming an indivisible whole.

The gathering of the data from the native speaker proceeded in stepwise fashion by first focussing upon a spontaneous expression by the informant. He would be asked 'What is the word for x?', and then 'Can you make a sentence with the word x in it?' We would then discuss the context in which such an expression might be made. The speaker next would be asked if an alternate form would result in a grammatically acceptable expression. If the altered utterance were intelligible to the informant we would then seek to establish the meaning of the new statement by exploring the context of such an expression and the differences in the scenarios to which the two utterances belonged. Thus, while the data contain examples which do not form a connected narrative, the data were always carefully controlled with regard to meaning-in-context and constitute discourse because they were invariably connected by the speaker with situational contexts, whether real or hypothetical. By controlling the analysis in this way we eliminated the possibility that there might be among the data a sentence like the English, 'Colorless green ideas sleep furiously,' which,

though grammatically acceptable, has no pragmatic dimension because it

cannot be linked with any familiar situational context.

4.1 Contrasts between *tu* and *ya*

We will begin by examining the contrast between the choice of *tu*

and *ya*. Consider these utterances:

(14) (a) na-limunnán ku **tu** serádo yu daddamanán
   [PF-forgot I TU closed YU street]
   'I forgot that the street is closed.'

  (b) na-limunnán ku **ya** serádo yu daddamanán
   [PF-forgot I YA closed YU street]
   'I forgot that the street is closed.'

(15) (a) na-limunnán ku **tu** làsang yu kótye
   [AF-forgot I TU red YU car]
   'I forgot that the car is red.'

  (b) na-limunnán ku **ya** lásang yu kótye
   [AF-forgot I YA red YU car]
   'I forgot that the car is red.'

(16) (a) ma-panónot ku **tu** s=in=erán ku yu pwérta
   [PF-remember I TU close=PF I YU door]
   'I remember that I locked the door.'

  (b) ma-panónot ku **ya** s=in=erán ku yu pwérta
   [PF-remember I YA close=PF I YU door]
   'I remember that I locked the door.'

(17) (a) allú-n ni Santos **tu** ma-takít yu ngipán na
   [say-PF NI Santos TU PF-hurt YU tooth his]
   'Santos says that his tooth hurts.'

(b)   allú-n ni Santos ya ma-takít yu ngipán na
         [say-PF NI Santos YA PF-hurt YU tooth his]
         'Santos says that his tooth hurts.'

(18) (a) in-állu ni Juan tu mapí si Santos
           [PF-say NI Juan TU well SI Santos]
           'Juan says that Santos is well.'

      (b) in-állu ni Juan ya mapí si Santos
           [PF-say NI Juan YA well SI Santos]
           'Juan says that Santos is well.'

(19) (a) ma-íta tam tu mapí ya bagginá
           [PF-see we TU well YA self]
           'We see that she is OK.'

      (b) ma-íta tam ya mapí ya bagginá
           [PF-see we YA well YA self]
           'We see that she is OK.'

(20) (a) ma-íta tam tu mapí yu síne
           [PF-see we TU good YU movie]
           'We see that the movie is good.'

      (b) ma-íta tam ya mapí yu síne
           [PF-see we YA good YU movie]
           'We see that the movie is good.'

(21) (a) na-diskúbre ku tu mapí yu gawagawayán na
           [PF-discover I TU good YU health his]
           'I discovered his health to be good.'

      (b) na-diskúbre ku ya mapí yu gawagawayán na
           [PF-discover I YA good YU health his]
           'I discovered his health to be good.'

Both sentences of (14) claim that the speaker has forgotten that the street is

closed. In the first utterance of (14a), the street is now a cul-de-sac, but in

the second the blockage is perhaps by sawhorses. The difference between

the two circumstances is that the street closing in (14a) is permanent and in (14b), the impression is that the closing is temporary. In (15), a different but related situation explains the difference between the two sentences. In (15a), the speaker had knowledge that the car was red, while in (15b), there was 'no idea that the car had been red before.' The thread that connects the pairs of (14) and (15) is made clearer in (16). The manner in which the recollection emerges is distinct. In (16b), the speaker has to replay the events in her mind to determine whether the door was closed or not. There is a level of uncertainty as when one drives home and then cannot recollect the events of the trip and has to reply them to see if one can recall, say, passing a certain intersection. In (16a), the knowledge is conscious and certain; there is no need to replay the events in order to determine whether the door is closed. The 'certainty' of *tu* in (16) may be extended to its use in (14a) and (15a). In (14a), the 'certainty' is present as the 'permanence,' while in (14b) the lesser degree of 'certainty' lies in the chanciness of a 'temporary' closing. In (15), the ongoing knowledge just slipped the speaker's mind. The Yogad consultant comments that 'You had knowledge it was red, but you just forgot it.'

The sentences of (17) extend the contrast between *tu* and *ya*. The difference here lies in how the speaker comes to be able to make the claim that she does. In (17a), she heard the news that Santos' tooth hurts directly

from him, but in (17b) that news is mediated from a third party. It is

reported to the speaker who, in turn, passes it on. A similar kind of

distinction recurs in (18). In (18a) it is generally acknowledged that Santos

is well, while in (18b) the claim is more subjective and represents the

speaker's personal judgment. The Yogad consultant comments about (18)

that (19a) with *tu* sounds more 'objective.' and (19b) with *ya* is more

'subjective.' Such evaluation is confirmed by (20) in which the first with *tu*

would be said about a movie generally acknowledged to be good, e.g.

Casablanca. And the second in (20b) with *ya* would be about a movie that

was not generally acclaimed to be good. This difference is also supported

by the sentences of (22):

(22) (a)   *nebulún tu allú si John **tu** mapí a máystru si Santos

      (b)   nebulún tu allú si John **ya** mapí a máystru si Santos
             [agreed SI John YA good A teacher SI Santos]
             'John agreed that Santos is a good teacher.'

The locution in (22a) is doubtful because it claims that John agreed that

something which is generally known to be so, i.e. that Santos is a good

teacher, is the case. The impression here must be something like John

agreeing to the fact that water is wet. Why would someone accede to what

is common knowledge when he should know it to begin with? Yet when

the same assertion is framed with *ya* , so that the content is more

problematic and so that there is something more contentious to be agreed

with, the sentence succeeds. Finally, the sentences of (21) add consistency

to the behavior of *tu* and *ya* . The claim of (21a) is appropriate to a

patient who is obviously healthy and it merely confirms the doctor's

preliminary opinion. The second of (21b) might be said of someone who is

not so apparently healthy. The doctor may expect a negative report from

the tests, but finds that the patient is healthy despite appearances.

Consider next the following pair of sentences, both of which report a

statement and differ in the way they filter the reported intelligence:

(23)   allú-n ni Santos **tu** ma-takít [ya bagginá]
            [say-PF NI Santos TU PF-painful/sick (YA himself)]
            'Santos says it is painful / he is sick.'

(24)   allú-n ni Santos **ya** ma-takít [ya bagginá]
            [say-PF NI Santos YA PF-painful (YA himself)]
            'Santos says that it is painful.'

The root *takít* may refer to either 'pain' or to 'illness.' One is the more

fleeting and nonce and the other is more ongoing and permanent. Sentence

(23) means either '...it is painful' or '...he is sick' regardless whether the

phrase *ya bagginá* , 'he' is present or not. In (24), *ya* focusses upon the

fleeting sense of *takít* and can only therefore refer to pain; it cannot be

used to say that Santos is not in pain but also ill. If *ya bagginá* , 'in/of

himself' is not present, the sentence means '...it is painful' while if it is

present it has the meaning '...he is sick.' The presence of *ya* in place of *tu*

in this example seems to impart a more subjective semantics to what is

being reported. That is, in order for the meaning 'sick' to be conveyed unambiguously the phrase 'in himself' must be added. Without it we are only able to think that Santos is in pain and we may not go so far as to interpret this to mean that he is actually sick. The presence of *tu* alone, however, is sufficient to indicate either that there is sickness or pain being reported. Both statements are subjective, to be sure, but the presence of *ya* makes what is being reported less of an objectively observable fact and therefore more in the nature of subjective opinion, i.e. a nonce observation.

A slightly different contrast is evident in this pair of sentences:

(26)   allú-n ni Santos **tu** ma-takít yu ngipán na
         [say-PF NI Santos TU PF-hurt YU tooth his]
         'Santos says that his tooth hurts.'

(27)   allú-n ni Santos **ya** ma-takít yu ngipán na
         [say-PF NI Santos YA PF-hurt YU tooth his]
         'Santos says that his tooth hurts.'

About these two sentences, the speaker says, 'They almost mean exactly the same, but I think that there is a difference ... *allún ni Santos tu matakít yu ngipánna* he himself is saying that it hurts; *ni Santos ya matakít yu ngipánna* 'you heard from a third person.' Here, the semantics of subjectivity shows up not in the distinction between pain vs. sickness, but in terms of the certitude of the speaker about Santos's reported statement. The statement reported with *tu* means the speaker can verify that Santos made

the statement because he personally heard him say this. In the version with

ya , the objective certainty is not present; the statement made by Santos was

received through the mediation of a third party.

In the minimal pair which follows, *ya* and *tu* are used to introduce

a clause which functions to complete the meaning of *mawag ku* 'I need.' In

the first sentence, as the speaker says, the statement is a commentary on the

condition of the patient:

(28)   mawág ku tu itá-n ku yu pasyénte.
        [need I TU see-PF I YU patient]
        'I need to see the patient.'
        ['Focus is on *pasyente*...serious, gravely ill.']

If a doctor were making this statement to someone the idea would be 'I

need to leave right now and go to the hospital because of the condition of

this patient.' In the next sentence the thought is entirely different:

(29)   mawág ku ya itá-n yu pasyénte.
        [need I YA see-PF YU patient]
        'I need to see the patient.'

Here the idea is that the doctor who makes this statement is saying that he

cannot make a proper diagnosis over the telephone. He must see the patient

in order to be able to determine what the problem is. The patient may not

be in serious condition at all; this relates to the limitations of the physician.

Depending on what was reported to him on the telephone he might have the

patient make an appointment for the next day and would not necessarily be

rushing to the hospital based on this statement. This statement is more about the doctor than about the patient.

Both *ya* and the other determining forms can be used to introduce reported speech. The following pair illustrates the difference in the determinacy which is imparted to the reported speech clause by *ya* and *tu* :

(30)   allú-n ni Juan **tu** máystru si Santos.
          [say-PF NI Juan TU teacher SI Santos]
          'Juan says Santos is a teacher.'

(31)   allú-n ni Juan **ya** máystru si Santos.
          [say-PF NI Juan YA teacher SI Santos]
          'Juan says Santos is a teacher.'

The latter is 'more about Santos' according to the speaker. While the first example relates to a reported statement by Juan, the second one reports what Juan was saying in summary and does not claim necessarily that he used these exact words.

The next pair of sentences illustrates much the same idea. Speech is not being reported, but hand signals or body language are being interpreted instead. Since we are not dealing with words in either case, the difference between the two hinges more upon subjectivity vs. objectivity:

(32)   i-w=in=aragíwag na yu kamá na **tu** mapí ya bagginá.
          [IF-waved=PF he YU hand his TU well YA himself]
          'He waved his hand that he is OK.'

In (32) the facts are a perception by the speaker rather than a conscious signal by the skier, who brushes snow off his arm after a skiing accident.

The speaker observes this and concludes that the skier must not be seriously

injured. In (33),

(33)   i-w=in=aragíwag na ya kamá na ya mapí ya bagginá.
            [IF-waved=PF he YA hand his YA well YA himself]
            'He waved his hand that he is OK.'

the skier falls and then looks at the speaker and intentionally gives a

'thumbs up' signal to indicate that he is all right. Thus, the determinacy of

tu implies more focussed semantics while *ya* conveys a more diffuse

semantics and the difference is manifest in terms of the quality of the

communication, i.e., whether it was a message overtly signalled and

objectively observable, or whether it was a subjective impression based on

the movement of the arms.

tu	*ya*
permanent	temporary
certain knowledge	less fixed knowledge
direct knowledge	mediated knowledge
common knowledge	personal knowledge
objective	subjective
obvious knowledge	problematic knowledge

Figure 1

Figure 1 summarizes the differences between *tu* and *ya*. A common

thread is now more apparent. The content following *ya* is less fixed, more

problematic that the content following *tu*. It carries the uncertainty of the

circumstance and the contingency of the assertion being made. With *tu*

that uncertainty is lessened, there is less contentiousness; the content

preposed by *tu* is less arguable and there is a lesser degree of assertion to

be attributed to it. There is a more 'real' status to the content conveyed

with *tu* and a less 'real' status to the content accompanied by *ya*. In this

regard compare the utterances of (34):

(34) (a) *na-limmunnán ku tu iséra yu pwérta

     (b) na-limmunnán ku ya iséra yu pwérta
        [PF-forget I YA lock YU door]
        'I forgot to lock the door.'

One cannot forget to do what is already established as actual by *tu*, and for

that reason (34a) fails, while (34b) passes muster. But now compare the

similar sentences of (35):

(35) (a) na-limmunnán ku tu ma-bukkát yu pwérta
        [PF-forget I TU can.open YU door]
        'I forgot that the door can/could be opened.'

     (b) na-limmunán ku ya ma-bukkát yu pwérta
        [PF-forgot I YA can.open YU door]
        'I forgot that the door can/could be opened.'

The difficulty which *tu* has in (34a) is alleviated in (35a) by altering the

aspect from one of an unrealized condition *iséra*, and one whose window

of opportunity is past, to one which is an actual, if as yet unrealized,

condition, *mabukkát* .

Other grammar supports the contrast between *tu* and *ya* which

emerges in Figure 1. Content which appears after preposition-like forms

may take *tu* but not *ya* :

(36) (a) mat-tangít yu anák **gafú tu** kabbá na yu angáy tu síne
[AF-cry YU child GAFU TU want it YU go TU movies]
'The child is crying because of the fact that it wants to go to
the movies.'

(b) *mat-tangít yu anák **gafú ya** kabbá na yu angáy tu síne

The form *gafú* refers to a pre-existing condition, and for that reason *tu* is

appropriate here; but *ya* fails to mark its content as sufficiently established

and cannot, therefore, constitute a 'cause.'

4.2 Contrasts between *yu* and *ya*

The form *ya* also contrasts minimally with *yu* . Consider these

examples:

(37) (a) ma-pénat y u assílong nu wagí-m a lalakí
[PF-quiet YU playing NU sibling-your YA male]
'Your brother is playing quietly.'

(b) ma-pénat y a assílong nu wagí-m a lalakí
[PF-quiet YA playing NU sibling-your YA male]
'Your brother plays quietly.'

(38) (a) kanáyun **yu** attakít nu allikúd ku
[constant YU hurting NU back my]
'My back hurts all the time.'

(b) kanáyun **ya** attakít nu allikúd ku
[constant YA hurting NU back my]
'My back hurts all the time.'

In these, the contrast is between a more immediate content and a more

remote one. When *yu* is used, the content is in the immediate context.

Thus, (37a) is used when the brother is here and present as the sentence is

uttered; but in (37b) the brother is not present. This is reflected in the

English contrast 'is playing' versus 'plays,' i.e. on the verb, whereas in

Yogad the contrast is located on the choice between *yu* and *ya*. In (38),

(38a) is a response to the doctor when the patient is asked the purpose of

his visit. Thus, (38a) is a response to any of the questions of (39):

(39) (a) taáy te nangáy ka saw
[why prt-come you here]
'Why did you come here?'

(b) ganí yu mat-takít niká
[what YU AF-hurt you]
'What pains you?'

(c) kassándi yu allikúd nu sawwé
[how YU back your now]
'How is your back now?'

But (38b) will not answer these questions; it is a description of the backpain

as constant, but without reference to any present circumstance or situation.

Thus, the content of (38b) is more remote than that of (38a). The

determinacy differences between *yu* and *ya* are reflected in terms of the relative proximity of these predications within the discourse. This is a somewhat different manifestation of the FOCUSSED--DIFFUSE continuum than we have seen in connection with the complementizer-like functions described in the previous section. Nevertheless, both can be understood in terms of a dimension of reification or actualization. In the examples above, relative actuality is interpreted in terms of the opposition immediate-remote, while in the complementizer examples of the previous section it is interpreted in terms relating to the quality of the knowledge reported. Upon reflection, it is not difficult to see the connection between these two semantics. It is in the nature of human cognition and human psychology that whatever is proximate to us, because we are more able to interact with it, presents itself to us with greater actuality or reality, as it were, than what is remote or absent. It hardly needs to be pointed out that this is the semantics involved when we refer to a 'live performance' or when audiophiles speak of a sound recording as having 'presence,' and so forth. Certainly there is a connection between the semantics exhibited in (37) and in (38) and that which we have seen in the previous examples.

4.3 Contrasts between *yu* and *nu*

The following examples exhibit contrasts between *yu* and *nu* :

(40) (a)   mal-lábat y u disyémbre
          [AF-cold YU December]
          'December is cold.'

    (b)   pal-lábat nu disyémbre
          [IF-cold NU December]
          'December ...cold.'
          'the coldness of December...'

(41) (a)   ammé na maskí namítta pal-lábat y u disyémbre
          [not it even once IF-cold YU December]
          'December didn't even once get cold.'

    (b)   ammé na maskí namítta ya pal-lábat nu disyémbre
          [not it even once YA IF-cold NU December]
          'December didn't even once get cold.'

Sentence (40a), in 'describing the month of December,' as our Yogad

speaker says, focusses upon the factual character of December, i.e. that it is

a cold month. But (40b), in his words, focusses more upon 'the way' in

which December is cold, the contingent implementation of its character.

The difference in (41) is that the claim of (41a) is certain, whereas that of

(41b) is more of a prediction such as might be uttered by a weather

forecaster, and it still could be falsified by the weather.

The form *nu* also contrasts with *tu* :

(42) (a)   ammé na maskí namítta na-lábat tu disyémbre
          [not it even once PF-cold TU December]
          'It never got cold in December.'

    (b)   ammé na maskí namítta pal-lábat nu disyémbre
          [not it even once IF-cold NU December]
          'It never got cold in December.'

In (42b), one is 'talking more about ... the object is more December ... It

never once got cold ... It never got cold even once in December.'

We have now examined the semantics of four forms, *yu, tu, nu,* and

ya by looking at these forms in contexts in which each form in turn

contrasts minimally with the others. We have not to this point, however,

put forth a description of the way in which these four forms relate to one

another, inclusively. In all four forms, *yu, nu, tu,* and *ya,* there appears a

recurrent theme of the actuality of the content following the forms. That

property comes in degrees. The form *ya* has the least of it, and the form

yu has the maximum degree. The others are aligned between the two

extremes as in Figure 2.

yu-----nu-----tu-----ya

Figure 2

At the left extreme, the actuality of *yu* emerges in the immediacy of the

current context. Cf. (37) and (38). As one moves towards the right

extreme, that immediacy decreases and the content becomes more remote

until finally it loses all formation as an independent fact and begins to

merge with the assertion itself.

We can now return to such contrasts as those in (8) and offer an explanation. In (8a), the contact with the content following *yu* is so immediate that the person who reports it has herself heard the words and offers them as a quotation. In (8b), the speaker has also heard the words but offers a synopsis and also it seems that the encounter was sometime ago. This contrast between a maximally immediate *yu* and a more remote *tu* is perceived in the difference in acceptability of (43a) and (43b):

(43) (a)   na-sím ku y u allún nu táwlay sawwé ya mangafút si Bush
               [PF-hear I YU saying NU people now YA win SI Bush]
               'I heard that the people are saying now 'Bush will win.'

     (b)   ?na-sím ku **tu** allún nu táwlay sawwe ya mangafút si Bush

Because *tu* points us to a more remote encounter with the content of *allún nu táwlay sawwé ya mangafút si Bush* 'The people are saying now that Bush will win' in (43b), the presence of *sawwé* 'now' is problematic and questionable. It sounds strange. The presence of a content of 'immediate' emerges especially in considering the meaning of *yu*.. It is the 'immediacy' of a circumscribed and delimited entity, and individual, e.g. 'the one who...' At the other extreme 'immediacy' recedes as does the 'delimitation' and the content of unbounded 'assertion' takes over, creating not an individual but a 'fact,' in the shape of a nominalized proposition. Combining the content of 'delimitation' and 'immediacy' under the rubric

of FOCUSSED and combining the content of 'non-delimited' and 'remote'

under the rubric of DIFFUSE, Figure 2 takes the form of Figure 3:

FOCUSSED   yu --- nu --- tu --- ya   DIFFUSE

Figure 3

The terms 'FOCUSSED' and 'DIFFUSE' refer to the cognitive principle

which was introduced earlier, and which was presented as underlying the

semantics of determinacy in general. Note that verbal focus, i.e. voice, is

not the same thing as the cognitive-semantic descriptive term 'FOCUS-

SED,' but that the evidence presented in the previous chapter shows that it

is compatible with it, and that it correlates with it and also with proposi-

tional centrality.

In describing the semantics of the Ilokano determiners, we named

this continuum 'individuation,' but this designation is not appropriate for

the semantics of the Yogad determiners, which seem to hinge upon

epistemic issues. The question is, 'What is the specific character of this

continuum as it is manifested in Yogad?' We will argue here that the

FOCUSSED--DIFFUSE continuum (i.e., determinacy) in Yogad is

composed of variations in the semantics of 'actualization.' Inasmuch as the

presence of a determiner creates participants, the gradations in actualization in Yogad will be expressed along a range of participancy between the limits of discrecte individuals at one extreme and nominalized propositions at the other.

4.4 The Determinacy of the linker *ya*

At this point, our discussion of determinacy in Yogad will move from the determiners proper to say more in detail about the 'linker' *ya* (and its allomorph *a*), a form which has sufficient determinacy to form participants, but which is unable to orient participants within the frame of known experience apart from merely linking them to some other content. As we have already seen, there are a number of syntactic contexts in which either *ya* or one of the determiners may occur. We have seen examples in which a complementizer-like function can be taken by either *ya* or a determiner such as *tu* or *yu* , and this has been our first indication that the semantics of determinacy is not confined to the determiners in this language. The linking particle *ya* is found in some additional syntactic contexts in which it contrasts with determiners and we will look at what those contrasts reveal about the nature of determinacy in Yogad. We will begin, however, by looking at some examples of the more simple syntactic patterns associated with *ya* .

Nouns linked with adjectival or pronominal modifiers are very frequent in the data. When a noun in Yogad is modified (attributively) by an adjective or demonstrative pronoun, the noun is immediately preceded by *ya* . In the simplest case, the modifier also precedes the noun and the linker stands between the adjective or pronoun and the following noun.

(44)   yína ya táwlay
        [that YA person]
        'that person.'

(45)   yína ya táwlay ay sínni
        [that YA person AY4 who]
        'Who is that person?'

(46)   danína ya táwlay
        [those YA people]
        'those people.'

(47)   danína ya táwlay ay sínni sirá
        [those YA people AY who they]
        'Who are those people?'

(48)   ma-karéteg ya baggíná
        [thin YA him-/herself]
        'S/He is thin.'

(49)   ngisít ya atú.
        [black YA dog]
        'the/a black dog.'

(50)   na-kolóran ya retráto
        [PF-colored YA picture]
        'the/a colored picture.'

In the last example, *nakolóran* is used as an (attributive) adjectival modifier of *retráto* and the two words are simply linked by *ya* . In the

following example, *kinolóran* modifies *retráto* , but as a predicate

adjective and for this meaning *ya* is no longer appropriate and the

determiner *yu* must be used instead:

(51)   k=in=olóran [nu máystru] y u retráto
         [colored=PF= (NU teacher) YU picture]
         'The picture was colored (by the teacher).'
         ['Colorized like Ted Turner does.']

In this example, it is understood that the picture is not naturally colored,

i.e., it was a picture to which color has somehow been added by someone

and the agent can be specified if desired. The picture was 'colorized,' in the

same sense that Ted Turner makes color movies from black and white

ones.

   In all of the examples cited to this point, *ya* precedes the modified

word rather than the modifier. It is also possible, for a noun to be modified

by an adjective in an arrangement in which the adjective is the element

which is preceded by *ya* rather than the noun. For example, (49) above

can be reversed to give the following:

(52)   atú ya ngisít
         [dog YA black]
         'the/a black dog.'

In addition, either of the following sentences is also possible:

(53)   nap-píto kan tu kansyón ya mapí
         [AF-whistle I TU song YA good]
         'I whistled a song that is good.'

(54)   nap-píto kan **tu** mapí **ya** kansyón
            [AF-whistle I TU good YA song]
            'I whistled a good song.'

The difference in the determinacy of *ya* vs. the determiners is more complex than can be conveyed by assigning one to attributive contexts and the other to predicative contexts. Consider the following two sentences (55) and (56):

(55)   ma-pénat **ya** assílong nu anák.
            [PF-quiet YA playing NU child]
            'The child is playing quietly.'

In this case, the child playing is <u>not necessarily present</u>. In fact, the speaker may not have a specific child in mind. The statement could be describing a child which naturally plays quietly, or perhaps a store with a playroom where a (non-specific) child can play quietly while her mother shops.

(56)   ma-pénat **yu** assílong nu anák.
            [PF-quiet YU playing NU child]
            'The child is playing quietly.'

In sentence (56), the child <u>must be present</u> with the speaker. Perhaps the speaker is describing a situation in which a child is now playing quietly after having had a temper tantrum. Certainly in this case a specific child is being referred to. The difference in the semantics of the two forms *ya* and *yu* as evinced here is manifested in terms of specificity of reference, proximity to the speaker, and essential nature vs. temporary characteristic.

The linker *ya* can also be used to link an adverbial modifier with the word it modifies in the same way that adjectives are linked to nominals:

(57)   nadagán a d=um=ánga danú bisíta.
                [early YA arrive=AF the guests]
                'The guests arrived early.'

(58)   na-píto kan tu kansyón ya madagán
                [AF-whistle I TU song YA easy]
                'I whistled the song easily.'

And in a manner similar to the adjectives, inversions are possible so that *ya* can be attached to either the word or the modifier. Sentence (57) above can be inverted to produce the following:

(59)   d=um=ánga ya nadagán danú bisíta
                [arrive=AF YA early the visitors]
                'The visitors arrived early.'

(60)   map-pasá yu bulán ya madagán
                [PF-pass YU month YA quick]
                'The month will pass quickly.'

(61)   madagán ya map-pasá yu bulán
                [quick YA AF-pass YU month]
                'The month will pass quickly.'

This kind of adverbial interpretation is even possible when the adjective is preceded by a determiner instead of *ya* , as in the following sentences:

(62)   nap-píto kan tu kansyón tu mapí
                [PF-whistle I TU song TU good]
                'I whistled a song very well.'

(63)   nap-píto kan tu kansyón tu madagán
[AF-whistle TU song TU fast]
'I whistled the song fast.'

The distinction between adjective and adverb in Yogad is, therefore, not

one which is simply marked by the presence of *ya* or of a determiner

before the modifying word. Clearly, the difference between modifier and

modified is also somewhat different from the situation in English.

The determinacy which the linking particle *ya* exhibits allows its use

in determining entire clauses, as we have seen in the case of its use in

contexts in which it is used as a complementizer to introduce clauses. The

next group of examples to be presented shows contexts in which the linker

ya or a determiner is used to introduce clauses which are glossed as

purpose clauses in English:

(64)   na-i-pét-an si Bill tu librú ya bibbidán
[PF-IF-show-PF SI Bill TU book YA reading]
'Bill was shown a book to read.'

(65)   wará kaddá ngisít ya atú ya ilaku maw
[exist question black YA dog YA sell you]
'Do you have a black dog to sell?'

(66)   b=um=atá kan tu sinnún ya paf-funát tu lamésa
[wet=AF I TU cloth YA IF-wet TU table]
'I will wet a cloth to wipe the table.'

(67)   mag-imfún kan tu kwártu ya i-gatáng ku tu kótye
[AF-save I TU money YA IF-buy I TU car]
'I'll save the money to buy me a car.'

The use of *ya* in this way is not the only way of introducing a purpose

clause in Yogad. The language also has the phrase *take tu* , 'in order to'

for such contexts:

(68)   mag-imfún kan tu kwártu **také tu** i-gatáng tu kótye.
        [AF-save I TU money TAKE TU IF-buy TU car]
        'I'm saving money in order to buy a car.'

Now, we consider two sentences which have a purpose clause glossed

by 'to break the window.' In the first, the clause is introduced by *ya* and in

the second it is introduced by *yu* .

(69)   in-aláp ku y u lyábe   ya pab-bakká tu bintána
        [PF-get I YU wrench   YA IF-break TU window]
        'I got the wrench to break the window.'

The situation described here is that the speaker is locked out of his house

and in order to get in has gone to his car to fetch a wrench to break the

window with. Sentence (70),

(70)   ʔinaláp-ku y u pab-bakká tu bintána y a lyábe

seems to say the same thing but the result sounds strange. The problem

with this sentence is that by placing *yu* before it the clause, *pabbakka tu*

bintana becomes a description of an established and pre-existing type of

wrench which the speaker went for and, of course, there is no such wrench

which is made for the purpose of breaking windows. That is, one can go to

the store and ask for a wrench-for-removing-lugs (i.e. a lug-wrench) but

not a wrench-for-breaking-windows (i.e. a window-wrench). The

difference here is the result of the different kinds of determinacy embodied

by *ya* and *yu* . The determinacy of the determiner *yu* implies something

which is too reified (actualized) to be described for the nonce usage to

which this wrench is being put. The pair of sentences in example (71)

confirms this semantic distinction by showing that the converse is also

problematic, i.e., the determinacy of *ya* is insufficient for use with a

content which is so reified as that implied in a proper name, as in *ya*

Santos :

(71) (a) kabbat-ku si Santos ya mab-burasi tu anak
           [ask - I SI Santo YA AF-dress TU child]
           'I will ask Santos to dress the child.'

      (b) *kabbat-ku si mab-burasi tu anak ya Santos

It is clear from these examples that determinacy is involved in

shaping a Yogad clause to the semantics of purpose. It is also clear that the

determining forms differ greatly in terms of the semantic nuances which

they impart to their clauses and that this semantic variation seems to hinge

upon the degree of actuality or reification contained in the statement of

purpose. In terms of the continuum of Figure 2, the fully realized

semantics of *yu* , which implies actuality or reification, is appropriate to

the designation FOCUSSED, while the more casual or nonce purposes

implied by *ya* have a semantics which is described as DIFFUSE .

Sometimes the presence of *ya* signals a meaning as a clause-

introducer which results in the clause being rendered into a relative clause

in English. Consider the following two sentences:

(72) Question: sinní yu nap-pa-burási tu anák
       [who YU PF-Caus.-dress TU child]
       'Who asked/let the child dress?'

(73) Answer: yu yéna ya nap-pa-burási tu anák
       [YU mother YA PF-Caus.-dress TU child]
       'The mother who asked/let the child be dressed.'
       [Not the mother's child...unless you say y u nappaburási]

In the first, the determiner *yu* precedes a clause which means, 'the one

who got the child dressed.' In the second one, which is an answer to the

first question, the same clause is preceded by *ya* and appears in the gloss as

a relative clause. Note the comment of the Yogad speaker, who points out

that if *ya* precedes *nappaburási* the mother in question is not the child's

mother, while it is if *yu* is used. The difference between these two

expressions, again, is in the immediacy (actualization) of the participant

which the determiner creates. With *yu* the mother is more fully realized

and this is interpreted in terms of connection to the other participant, *tu*

anák. The examples which follow illustrate the differences between *ya* and

the determiners in this sort of context.

The first two examples which follow show different ways in which Yogad can render the English 'I know the man that Santos brought.' In the first example, *ya* is attached to the phrase *niyági ni Santos* with the result that this phrase modifies the phrase, *yu lalakí* . In the second, this situation is turned around and *ya* is attached to *lalakí* with the result that it modifies the phrase, *yu niyági ni Santos* :

(74)   tatáw ku yu lalakí ya niyági ni Santos
         [know I YU man YA brought NI Santos]
         'I know the man that Santos brought.'

(75)   tatáw ku yu niyági ni Santos ya lalakí
         [know I YU brought NI Santos YA man]
         'I know the man that Santos brought.'

The two sentences appear to mean the same thing. The difference, insofar as our speaker is able to separate the two, is that in the first 'the emphasis is on the man' and in the second it is on Santos' act of bringing the man. Since this is an option we do not have in English insofar as relative clauses are concerned, it is difficult to render the two Yogad sentences into two different relative clauses in English. Sentence (73) is accurately rendered into English as, 'I know the man that Santos brought.' Sentence (74) might be more accurately translated, 'I know (about) the bringing by Santos of the man' or 'I know the brought-by-Santos man.'

The next examples form another minimal pair illustrating this same principle of contrasting emphasis:

(76)   in=akkán ni Bill yu pan a dyaw tu duyúg.
               [PF-eat NI Bill YU bread YA location TU plate]
               'Bill ate the bread that was on the plate.'

(77)   in=akkán ni Bill yu dyaw tu duyúg a pan.
               [PF-eat NI Bill YU location TU plate YA bread]
               'Bill ate the bread that was on the plate.'

In the first sentence the 'emphasis' is on the bread and in the second it is on

the fact that the bread is located on the plate, perhaps to distinguish it from

other bread located elsewhere on the table. The same distinction in

'emphasis' in Yogad can also be used in a sentence in which the main clause

is verbless:

(78)   dyaw sáw yu lalakí ya niyági ni Santos
               [location here YU man YA brought NI Santos]
               'The man that Santos brought is here.'

(79)   dyaw sáw yu niyági ni Santos ya lalakí
               [location hereYU brought NI Santos YA man]
               'The man that Santos brought is here.'

In the pair which follows we can perhaps see more clearly the

semantic difference which results from the contrast in 'emphasis' signalled

by the use of *ya* or *yu* :

(80)   PNB yu bánku ya pag-imfun-án-ku tu kwártu-ku.
               [PNB YU bank   YA IF-save-PF I TU money my]
               'Philippine National Bank is where I save my money.'
               ['Explanation']

(81)   PNB yu pag-imfun-án-ku tu kwártu-ku ya bánku.
               PNB YU IF-save-PF I TU money my YA bank]
               'Philippine National Bank is where I save my money.'
               ['Endorsement']

As the speaker says in his comment, the first statement is explanatory. The speaker is telling where he saves his money, perhaps in contradistinction to another bank where he carries out his bill-paying activity or where he stores his valuables in a safety deposit drawer. The second statement could be from a commercial in which a celebrity is endorsing the bank. These two very different messages result from the choice by the speaker as to which phrase to place in 'emphasis,' i.e., on which to make FOCUSSED (with *yu*) and which to make DIFFUSE (with *ya*). In the first sentence 'bank' is emphasized and 'where I save my money' is an action ancillary to identifying the bank, as in the English sentence, 'This is my sávings bank.' In the second, it is 'where I save my money' which is in focus, that is, an essential property of this bank, while 'bank' is subordinated, as in the English sentence, 'This is a móney-saving bank (i.e, a bank that can save you some money).' This recalls the contrast of (69) and (70), with the difference that there can be an 'I-save-my-money bank' while there can not be such a thing as a 'break-the-window wrench.'

In the next pair of sentences the clause of the type we have been looking at is not glossed as a relative clause. Nevertheless, it is clear that the same semantics is involved and again there is a contrast between *ya* as the clause-introducer vs. *yu* .

(82)   bullákbullák ya um-inúm ka tu medisína.
          [drink.in.sips YA AF-drink you TU medicine]
          'You take this medicine in small amounts.'

This statement is focussed on the medicine and what is being described is a

characteristic of the medicine. It is a medicine which is taken in sips, as

opposed to one which is put in the eye, or applied to the skin, or which

dissolves under the tongue, etc. In other words, all patients would take the

medicine in this manner. Consider now the following:

(83)   bullákbullák y u pag-inúm mu tu medisína.
          [drink.in.sips YU IF-drink you TU medicine]
          'You take this medicine in small amounts.'
          ['You sip it to keep it down.']

This statement focusses on the manner in which this patient is advised to

take the medicine. Because the patient on whom attention is focussed is

nauseated to begin with, the medicine should be taken in sips in order to

keep it down. The medicine might not need to be taken this way by all

patients, although they are 'not in the picture' of (83) and we have no

special knowledge of them and can refer to them as non-delimited,

'generic' patients. Thus, we see again that the FOCUSSED--DIFFUSE axis

is manifested in Yogad in terms of the semantics of actuality, which in this

instance appears in the contrast between the nonce semantics of ya and the

conventionalist semantics of yu .

4.5 Preposition-like Usages of *tu*

It is in the nature of the semantics of determinacy that it intersects with and can be utilized within various areas of grammar. In Philippine languages, forms which have a determinacy of the more FOCUSSED sort are exploited by the Voice systems to correlate with verbal Focus, since determinacy is compatible with although distinct from verbal Focus. In contrast, those whose determinacy is more DIFFUSE associate with peripheral semantic roles with the result that some determiners are used like prepositions. Unfocussed determiners in Yogad are employed in this manner and are mostly locative. The determiner *tu* is used for common nouns in unfocussed roles.

(84) yína a kóngit ay maggafú tu makína
      [that YA noise AY come TU refrigerator]
      'That noise is coming from the refrigerator.'

(85) yogad yu pag-gábid ku ammá dyaw kan tu ityáge
      [Yogad YU IF-speak I when location I TU Echague]
      'I speak Yogad when I am in Echague.'

(86) wará   yu kasíb tu atú
      [exists YU bite TU dog]
      'There is a bite on the dog.'

(87) na-babbatá   kan tu bébay [= báybay]
      [PF-get.wet I TU ocean]
      'I got wet in the ocean.'

(88) ma-waragíwag yu bandéra tu póste
      [PF-wave YU flag TU flagpole]
      'The flag is waving on the flagpole.'

Some of the examples of *tu* in this type of usage form a sub-group in which the determiner conveys the semantics of an adverb of manner or of an (unfocussed) Instrument:

(89)   kassándi yu pag-gábid nu   tu   yogad
        [how   YU IF-speak you TU Yogad]
        'Do you know how to speak Yogad?'

(90)   si John k=in=ánna na   si Bill tu batú
        [SI John hit=pret= he SI Bill TU stone]
        'John hit Bill with a stone.'

(91)   nat-túrak kan tu lápis
        [AF-write I TU pencil]
        'I wrote with a pencil.'

Focussed Instruments are expressed using the Instrument Focus (IF) affix *pinaC-* (i.e. *p=in=aC-*) on the verb together with a focussed determiner, such as *yu* :

(92)   pinat-túrak ku   tu túrak yu lápis
        [IF-wrote I   TU letter YU pencil]
        'I wrote the letter with a pencil.'

Other peripheral roles (Recipient, Beneficiary) usually require the use of determiners together with an additional form:

(93)   gatáng-an ku yu kótye para tu anák ku
        [buy-BF I YU car PARA TU child my]
        'I'll buy the car for my child.'

(94)   mapí para ni kán.
        [good PARA NI me]
        'It's good for me.'
        [e.g., Exercise]

(95)   i-péta   ni Philip yu librú   na   **tu kuní** Angel
                [IF-show NI Philip   YU book his   TU KUNI Angel]
                'Philip is showing his book to Angel.'

In the following example, however, a determiner without preposition

suffices for a participant in a peripheral role (Recipient):

(96)   i-péta   ni Philip yu librú na   **tu** yéna na
                [IF-show NI Philip YU book his TU mother his]
                'Philip is showing his book to his mother.'

Pronominal suffixes in Yogad usually indicate the role of Possessor.

Because of the way in which the semantics of determinacy interacts with

the semantics of role and the Central-Peripheral propositional axis, the

choice of determiner sometimes has an influence on the role associated with

a pronominal suffix. The following sentences illustrate this effect:

(97)   alap-án   nu abogádo y u kwártu ku
                [get-PF NU lawyer YU money my]
                'The lawyer will get my money.'
                ['My check is in the mail.']

(98)   alap-án   nu abogádo ku y u kwártu
                [get-PF NU lawyer my YU money]
                'My lawyer is going to get the money.'

(99)   mang-aláp yu abogádo **t u** kwártu /kwártu ku
                [AF-get   YU lawyer TU money/ money my]
                'The lawyer will get the money/my money.'

(100)   mang-aláp yu abogádo ku **t u** kwártu / kwártu ku
                [AF-get YU lawyer my TU money / money my]
                'My lawyer will get the money / my money for me.'

In the examples above, when *kwártu* is an unfocussed Patient (with *tu*) it loses some of its FOCUSSEDNESS / Centrality and the pronominal suffix takes on the role semantics of Beneficiary in addition to (or instead of) those of Possessor. The following diagram summarizes this principle:

(*yu* NP) + pron   (*tu* NP) + pron

FOCUSSED---DIFFUSE

Central   Peripheral

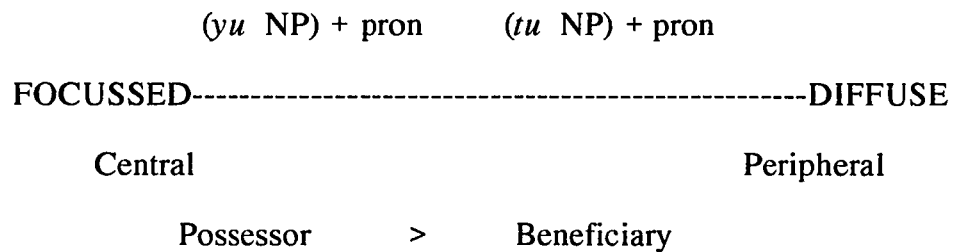Possessor   >   Beneficiary

Figure 4

In addition, the schema of Figure 4 presents the evidence of examples (97) - (100) in such a way as to make the claim that Possessor in Yogad is a more Central semantic role than is Beneficiary. Evidently, Yogad views possession as more agentive / central that benefit, which is more patient-ive / peripheral.

4.6 The Semantics of *nu*

We have reserved our discussion of the syntax and semantics of the determiner *nu* until now because its characteristic features are best

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understood in terms of the FOCUSSED--DIFFUSE continuum which we

have been explicating. The reason for this is that *nu* is described as

occupying a position on that continuum which lies between *yu* and *tu*.

Without the theoretical framework which the proposed continuum provides

it is difficult to see the characteristic semantic features of this form as

belonging to a unified field of meaning. The Yogad determiner *nu* is used

with common noun Unfocussed Agents, with the alternate form *ni* for

unfocussed Agents which are proper nouns, as in example (2) and (4)

above. The following examples illustrate some uses of the determiners *nu*

and *ni* :

(101)   na-inúm **nu** anák yu medisína.
               [PF-drink NU child YU medicine]
               'The child drank the medicine.'

(102)   i-waragíwag   **nu** babbág yu bandéra
               [IF-make wave   NU wind   YU flag]
               'The wind makes the flag wave.'

(103)   in-akkán **ni** Bill yu pan   ya   dyaw tu duyúg.
               [PF-ate   NI Bill YU bread YA location TU plate]
               'Bill ate the bread on the plate.'

(104)   in-állu   **nu** doktór maka-inúm kan tu kafé
               [PF-say NU doctor can-drink I TU coffee]
               'The doctor said I can drink coffee.'

(105)   in-állu   **ni** Santos maka-inúm tu kafé
               [PF-say NI Santos can-drink TU coffee]
               'The doctor said Santos can drink coffee.'

In (101), the voice affix on the verb indicates Patient Focus and the Patient, *medisína* , is determined using *yu* , the focussed determiner. The Agent, *anák*, is unfocussed and is determined by an unfocussed determiner but not by *tu* , which is for unfocussed Non-Agents, but by *nu* , which is used with unfocussed Agents. Similarly, in (102) and (104) *nu* marks *babbág* and *doktór* , respectively, as unfocussed Agents. In (103) and (105) we have examples of *ni* being in the same way with proper nouns.

The more FOCUSSED determiners *nu* and *ni* can be used also to determine nouns in the role of Possessor, and this fits with the observation above about the relative centrality of this role in the language:

(106) binaláy **nu** anák
       [house NU child]
       'the child's house.'

(107) binaláy **ni** Bill
       [house   NI Juan]
       'Bill's house.'

Sometimes *nu* is used in certain expressions of proximal location in time, although these seem to be frozen expressions and the usage is not productive:

(108) ganí yu in-inúm   ni John **nu** fugáb
       [what YU PF-drink NI John NU afternoon]
       'What did John drink yesterday?'

(109) nap-péta   yu kótye tu tagénab **nu** gabí
       [AF-appeared YU car   TU dream NU night]
       'The car appeared in a dream last night.'

The word *fugáb* in example (108) means 'afternoon' and when preceded

by the determiner *tu* the resulting expression means 'in the afternoon.' In

(109), *gabí* means 'night' and when it is coupled with the determiner *tu*

the phrase has the meaning 'at night.' These examples show that when these

two words are determined by *nu* the time referred to is more proximal to

the time of utterance while the reference is generic when determined by

tu . The usage just decribed does not seem productive, however, because

there are few other examples in which *nu* is used in this way with other

time expressions which are found with *tu* :

(110)   *nu agáw (day)

(111)   tu agáw
               [TU day]
               'in the day'

(112)   *nu lélaw (morning)

(113)   tu lélaw
               [TU morning]
               'in the morning'

(114)   *nu bulán (month)

(115)   tu bulán
               [TU month]
               'in the month'

When two nominals are linked by *nu* a more tightly-connected

phrase results than when the same two are linked by *tu* . Consider the

following four sentences:

(116)   gubín **nu** binaláy yu palénke.
            [vicinity NU house YU market]
            'The market is near a house.'

(117)   *gubín yu palénke **nu** binaláy

(118)   gubín **tu** binaláy yu palénke
            [vicinity TU house YU market]
            'The market is near the house'
            'The market is near our house'

(119)   gubín yu palénke **tu** binaláy.
            [vicinity YU market TU house]
            'The market is near the house'
            'The market is near our house'

Several observations may be made on the basis of these four sentences.

First, we may note that the phrase, *gubín nu binaláy* may not be broken apart while preserving the meaning, as in (117). On the other hand, *gubín tu binaláy* can be separated and *tu binaláy* placed by itself at the end of the sentence with the meaning preserved, as in (119). Thus, the presence of *tu* in the phrase results in a looser linkage between the nouns than does *nu* .

Secondly, we may note that the semantics of *tu* in the phrase, *gubin tu binalay* , permits the interpretation of either 'the house' or 'our house' in the English gloss to (118). In example (116), however, we see that the presence of the determiner *nu* does not permit the interpretation 'our

house' but only 'a house.' Thus the two phrases, *gubín tu binaláy* , and

gubín nu binaláy , clearly do not mean precisely the same thing. From what

we have seen of the determiners to this point, it should be clear that the

phrase with *nu* indicates a genitive relationship between *gubín* and

binaláy , as in example (116) above. On the other hand, *tu* signals a more

oblique, dative sort of role for *binaláy* . The question, however, is how the

semantics of the determiners permits the interpretation 'our house' in the

one instance but not in the other. We have noted already that *tu binaláy* is

a more separable, free-standing phrase than is *nu binaláy* , which cannot be

separated from *gubín* . This means that *tu binaláy* is more open to

interpretation (such as the interpretation 'our house') than is *binaláy* when

determined by *nu* . The latter determiner links *binaláy* tightly and as

Possessor to *gubín* , with the result that *binaláy* becomes itself defined by

its co-term, *gubín* and thereby less available for additional associations. It

is as if *binaláy* becomes (through close linkage with *gubín*) less a nominal

participant and more adjective-like, when determined by *nu* , so that one

might represent the gloss of (116, 'The market is near-a-house' and the

gloss of (118) and (119), ' The market is near to the (= our) house.'

The semantics of *nu* and *tu* in such phrases is further exemplified in

the following pair of sentences:

(120) dyaw kán sína gubín **nu** alaséys.
[location I before vicinity NU six o'clock]
'I'll be there before six o'clock.'
['Just before six.']

(121) dyaw kán sína gubín **tu** alaséys.
[location I before vicinity TU six o'clock]
'I'll be there before six o'clock.'

In the first sentence, as the speaker indicates, the implication is that he will

arrive just before the hour of six, while the second sentence carries no such

implication and is less precise about how near six the arrival might be.

Again the tight linkage produced by *nu,* which places *alaséys* in a genitive

relation to *gubín* suggests, by way of iconicity, that the *gubín* in question

is, semantically-speaking, closer to the hour *alaséys* than that suggested by

the looser, dative relation signalled by *tu* . The semantics of 'proximate'

which associates with *nu* in example (120) is reminiscent of the semantics

of *nu* in expressions of location in proximal time which we observed in

examples (108) and (109).

In summary then, we have seen from the examples that *nu* is used in

connection with nouns in the following semantic contexts:

(1) Unfocussed Agents

(2) Possessor Role / Tight Phrase Linkage

(3) Proximal / Precise Time Location

The semantics associated with the presence of *nu* seems to be somewhat less-FOCUSSED / Central than the semantics of *yu* , but more FOCUSSED / Central than that of *tu* . The determiner *nu* can determine Agents which *tu* cannot, but *nu* can only determine unfocussed ones, while focussed ones are preceded by *yu* . Both *nu* and *tu* can be used somewhat like prepositions in locative contexts referring to time, but *nu* is only used in a few expressions which have a proximal semantics, which is reminiscent of Ilokano *ni* . The determiner *nu* is used also to conjoin two nominals in a possessive relationship and is able to do this because its less-Central semantics are appropriate to the role of Possessor, a role which lies between the focussed roles of Agent or Patient and the more peripheral roles of (unfocussed) Beneficiary or Instrument.

4.7 Summary

The data from Yogad have shown that determinacy in this language is found not only in the determiners themselves but also in the linker *ya* . Furthermore, we have described this determinacy as an expression of the continuum FOCUSSED--DIFFUSE.

In Ilokano, we described the ultimate manifestation of determinacy in terms of 'individuation' or 'emergent personality.' Determinacy in Yogad is occasionally reminiscent of this in those cases where there is a

kind of 'proximal affect' associated with it. However, the vast majority of the manifestations of determinacy which we have seen in Yogad cannot be adequately described in these terms. What is the essential character of this continuum?

When we look at complementizer functions of *ya* and *yu* , it seems that the characteristic of the reported intelligence at the *yu* end of the continuum is certainty, accepted, actual, first hand, obvious, or permanent, as described in Figure 1. These are epistemic values, i.e. qualities of knowledge, but are reflections of the determinacy of the complementizer in question upon the intelligence being reported. When the determinacy of *ya* is compared to that of the determiner *tu* , we see that the difference always seems to relate to the degree of reification of reported knowledge. Knowledge which is direct, immediate, obvious, accepted by concensus, permanent, etc. is so by virtue of its being more reified *(tu)* than is knowledge which is somehow problematic, subjective, remote, or contingent *(ya)*. Again, what is being played-out here in terms of epistemic values is the variation in levels of participancy created by the presence of a nominalizing determiner expressing the semantics of actualization, a semantics which is itself independent of epistemic value.

With regard to purpose clauses, *ya* can be used to introduce these because it has a determinacy which is DIFFUSE and allows the purpose

clause to be attached to a matrix verb <u>not</u> as an essential or primary

characteristic, but as an attribute, a surface quality, a secondary motive.

When *yu* is used, however, we get not so much a purpose as a name, an

accepted, conventional label which is essential, primary, <u>inherent</u>, and

which cannot be dissected away from the thing so labelled as an <u>adherent</u>

use to which it is being put. Thus, the determiners have a determinacy

which is too FOCUSSED to permit their use as purpose clause-introducers

in most cases, because purposes are ordinarily not inherent, built-in, telic

properties but are adherent, temporary ones. Again, qualities which are

part of the name of a thing are thereby more reified than those which

happen to attach to it in a given instance.

We observed contrasts involving determinacy in the construction of

relative clause-like expressions, a pattern which was also traced down to

the level of the simplest noun phrases in the language. We described this as

reflecting the operational choice of which element to emphasize by

making it FOCUSSED and which to subordinate by making it DIFFUSE.

This is the only contrast which we have described solely in terms of the

cognitive-semantic opposition FOCUSSED--DIFFUSE without venturing to

characterize it more precisely by way of reference to the particular way in

which this continuum is manifested in Yogad, i.e., in terms of reification,

and so forth. But if the continuum FOCUSSED-DIFFUSE manifests itself

in these relative clause constructions we should be able to show that what we see there is the same semantics that we see in purpose clauses and complement clauses. The common thread again is actualization. Apparently, Yogad employs determinacy in forming relative clauses as a means of assigning a kind of emphasis or prominence, and it is able to put determinacy to this use because the Yogad determiners are composed of the semantics of actualization. Yogad evidently interprets that which is more reified or actualized as also having the greater degree of delineation, and this allows the language to assign emphasis or subordination through determiner selection.

At the more DIFFUSE end of the continuum the determiner *tu* can appear in preposition-like usages and its semantics can manipulate the semantics of peripheral roles, such as Beneficiary, Possessor, Source, and Location. This represents a kind of exploitation of determinacy which is found in many languages and not merely in the Philippines. We have also seen the FOCUSSED--DIFFUSE continuum underlying the manipulation of semantic roles associated with pronominal suffixes.

The determiner *nu* proved to be interesting because it occupies an intermediate position on the continuum between *yu* and *tu* and helps illumine the larger segment of that continuum. It is an unfocussed determiner but it is more FOCUSSED than *tu* because it is used for

unfocussed Agents. Its presence in noun phrases results in tight linkage and the semantics of such phrases corresponds to their tight syntax. In addition, we found that *nu* is one example of a determiner which has a proximal affect associated with it in Yogad, as contrasted with *tu* . All of these semantic features can be understood in an integrated fashion as participating in the same meaning by appealing to the FOCUSSED--DIFFUSE continuum and by understanding where *nu* is located on that continuum.

1   The Yogad data which are presented here were recorded with the
assistance of Dr. Angel Mesa, a native speaker of Yogad and a life-long
resident of Echague who now lives in Sugar Land, Texas. Without the help
of Dr. Mesa in providing the data, and his thoroughness in re-checking it,
this portion of the dissertation would literally not have been possible. His
generosity in sharing his language with us and his dedication to this project
are gratefully acknowledged. Any errors which remain in connection with
the data despite his assistance are natually the sole responsibility of the
author. Acknowledgement is also due to Philip W. Davis, who generously
granted permission to include materials from a manuscript which he was
preparing on Yogad. These have been incorporated in portions of sections
4.0 - 4.3 without further citation.

2   The following abbreviations are used here in the morphological
analysis of Yogad: AF = Agent / Actor Focus, PF = Patient Focus, IF =
Instrument Focus. Infixes are set off by equals signs, eg. =um= and =in=.
The preterite is abbreviated prt. The causative affix, *pa* - is represented as
Caus-. Morphologically complex affixes are generally given a
semantically simplified designation, eg., *maka-* (= *ma* + *ka* -) is an
abilitative affix and is symbolized as can-. The combination *pag-* ...-*an*

marks location. The affix *pina- (= *pa + =in=)* is designated IF for Instrument Focus.

3   The form *a* is an allomorph of *ya* which is conditioned by rapid speech.

4   The particle *ay* marks what precedes it as topical and what follows it as rheme (approximately). Examples and discussion of this particle comprise much of the chapter which follows. Cf. also Baek ms.

Chapter Five

Yogad Discourse Analysis

5.0   Introduction

This chapter presents an analysis of a Yogad narrative, the text of

which is given in full, along with interlinear English gloss, in Appendix 2.

Numbered references to the text in this chapter refer to the numbering of

the sentences as found in Appendix 2. The text was transcribed from a tape

recording of a narrative by the Yogad speaker, Dr. Angel Mesa, in which

he related the story of coming to America along with his wife in 1990. Dr.

Mesa decided upon the subject of the narrative in advance, although the

telling of the story was unrehearsed and involved no written notes. The

overall story of the journey comprises four episodes, each of which has a

separate theme. The episodes can be named as follows:

  I. Deciding to Go to America, sentences (1) - (10)

  II. Getting Passports, sentences (11) - (22)

  III. Journey and Arrival, sentences (23) - (43)

  IV. Teaching Yogad at Rice, sentences (44) - (71)

The speaker indicates the beginnings of new episodes by changing the

subject matter, and he also tends to mark the beginning of episodes with a

certain formal introductory pattern. Episode II begins at sentence (11) with

the words, *tutá bulán nu húnyo ...,* 'In the month of June...,' episode III

begins at sentence (23) with, *tutá día nu októbre...,* 'In the month of

October,' and episode IV begins at sentence (44) with the words,

nalimmunán ku pa ya inallún namégafu tuta inéru, 'I forgot also to tell you

about how in January...' Thus, the speaker seems to use the pattern, *tutá*

(plus time expression), in order to orient the hearer temporally to what he

is preparing to tell about.

It should be emphasized in connection with *tutá* , that the

determining forms in Yogad do <u>not</u> have the discourse functions that are

associated with determiners in English. In English, the articles help to

mark participants as 'known / identifiable in the discourse' or 'unknown /

unidentifiable in the discourse.' The word *tutá* is a morphologically

complex form, being composed of the unfocussed determiner, *tu* , and the

form, *ta* , which adds the semantics of 'known, familiar.' Thus, while *tutá*

has some of the semantics of English *the* , i.e., 'known, identifiable,' it is

not the <u>determiner</u>-derived part of the morphology which carries this

semantics, but *ta.* The determiner system in Yogad, as in Philippine

languages generally, works cooperatively with the focus system of the verb

by marking participants for focus, so that the role selected by the verbal

focus affix may be assigned to the correct participant. As a result of this,

the determiners are not available for distinguishing between 'known' and

'unknown' participants, except insofar as the focus system, or more

particularly role itself, is used in the function of introducing or maintain-

ing participants in discourse.[1] The discourse functions that we associate

with the English articles are handled in Yogad by the linker, *ya* , and also

by the particle, *ay* , which our Yogad speaker usually describes as indicat-

ing, 'stress' or 'emphasis.' The following example illustrates how *ay*

contributes to its sentence a semantics usually associated with the English

determiner, *the* :

(1)   tu lunes g=in=atang ku yu libru.
        [TU Monday PF-buy I YU book]
        'I bought the book on a Monday.'

(2)   tu lunes ay g=in=atang ku yu libru
        [TU Monday AY PF-buy I YU book]
        'I bought the book on that / this Monday.'

In example (1), *tu lunes* , refers to a non-referential, non-identifiable

Monday, and this is reflected in the gloss as, 'a Monday.' In (2), however,

the presence of *ay* means that the phrase, *tu lunes* , refers to a Monday

which is 'known or identifiable in the discourse,' and this semantics is

reflected in the gloss as, 'this / that Monday,' i.e., a <u>particular</u> Monday is

referred to which is familiar to both speaker and hearer. Although

pronouns are used in the gloss, an alternative might have been, 'I bought

the book on the Monday (i.e., the one we have been talking about / know

about).' Thus, the semantics of *ay* , which will be explored in detail below,

are such that the presence of this form contributes referentiality to the expression lying to its left. One of the purposes of this chapter will be to show how *ya* and *ay* are used for discourse functions which we often associate with determiners and with participant semantics in English. We will discuss the way these forms function in each of the episodes in turn, and it will be shown that they signal 'known' and 'unknown,' besides other discourse semantics, and they do this by imparting their semantics not to participants exclusively, but also to non-determined phrases and clauses.

Before proceeding with the discussion of the episodes, it is necessary to give a general description of *ay* and *ya*. The form *ay* appears some 56 times throughout the text, appearing five times in episode I, fourteen times in episode II, seventeen times in episode III, and twenty times in episode IV. From separate sentences and sentence pairs which are found elsewhere in our data, it is clear that this form often serves to indicate the presence of new information or rheme. In answers to wh-questions, the semantic content of words which follow *ay* generally correspond to that requested by the wh-interrogative. Consider the following examples:

(3)   sinní yu mabútut.
        [who YU greedy]
        'Who is the greedy person?'

(4)   yu mabútut ay si Bill.
        [YU greedy AY SI Bill]
        'Bill is the greedy person.'

(5)   gani akwán ni John
        [what do NI John]
        'What is John doing.'

(6)   si John ay mappusit tu lappaw.
        [SI John AY AF-pick TU flowers]
        'John is picking the flower[s].'

(7)   si John mappusit tu lappaw
        [SI John AF-pick TU flower]
        'John is picking the flower[s].'
        [Better if you use *ay.*]

In (4) *si Bill* corresponds to the wh-question word, *sinní* 'Who?' in example (3). This phrase is preceded by *ay* in (4), which indicates that what follows it has the semantics of rheme. Likewise, in (6), *mappusit* 'picking' corresponds to *gani* 'What?' in (5) and it also is rheme. Note that while example (7) also answers the question of example (5), the speaker prefers the version with *ay.* In each of these examples, then, the form *ay* is associated with the semantic content which is asked for by the wh-interrogative and marks the new information which the answer provides in response to the question asked.

Word order in Yogad is VSO, however sometimes *ay* is associated with a leftward dislocation of subject (or some other element), and in this ordering, the sentence-initial word appears to have a semantics similar to that just described in connection with *ay,* as the following examples suggest:

(8)　　　sinní yu nangámpat tu lappaw
　　　　[who YU AF-pick TU flower]
　　　　'Who picked up the flower[s]?'

(9)　　　ganí yu inámpat ni John
　　　　[what YU PF-pick NI John]
　　　　'What did John pick up?'

(10)　　nangampat si John tu lappaw.
　　　　[AF-pick SI John TU flower]
　　　　'John picked up the flower[s].'

(11)　　si John ay nangampát tu lappaw.
　　　　[SI John AY AF-pick TU flower]
　　　　'John picked up the flower[s].'

Examples (10) and (11) both answer the question of example (8). In (10)

the word order is VSO, while in (11) the subject, *si John* is in sentence-

initial position, producing the order S *ay* VO. The form *ay* does not

appear to mark rheme in this sentence, since the information in (10) which

corresponds to the wh-interrogative in (8) is *si John* and this phrase

precedes *ay* rather than following it, as might have been expected. The

other interesting point that can be made about example (11) is that it can

also be taken as answering the question of example (9). In the context of

example (9) the information which corresponds to the wh-interrogative,

ganí, 'What?,' is represented in example (11) by *tu lappaw,* 'flower[s],'

and, again, these words do not directly follow upon *ay.* These examples

show that in certain contexts it is an oversimplification to describe the

semantics signalled by *ay* as 'rheme' for the nature of this semantics is more complex than this term implies.

If we look at ocurrences of *ay* throughout our text, a richer picture of the semantics of *ay* emerges. The opening sentence of the narrative is structured around *ay*. To the left of *ay* is *saw tu agáw*, 'Here today,' which, like *tutá* (plus time expression), contextualizes the story by grounding it to what is given, 'today.' The part which follows *ay* describes the content of the story which is about to be told, and this certainly fits the description of rheme. The next appearance of *ay* , however, is in sentence (6): *tutá dagún nu 1980 ammá ammé ku makkamali ay 1980* , 'In the year 1980... if I am not mistaken it was in 1980.' Here the presence of *ay* does not signal that what follows is rheme, since the date is the one that was just given. Instead, *ay* lends a sense of confirmation, as if to say, 'if I am not mistaken, it was 1980' or '...it was indeed 1980.' Another way of understanding *ay* in this context is to see it as marking '1980' as the logical conclusion to the premise, 'if I am not mistaken' taken with the fact that the speaker has just said 'it was 1980.' In other words, the two parts of the sentence are related to each other as premise is to conclusion. To be sure, *ay* does signal something about the information status of what follows it here, but it does not completely fit the idea of rheme, and we will point out other such examples in the discussion of the individual

episodes and we will attempt to arrive at some conclusions about the

meaning of *ay* from all of these.

We have already described *ya* in the previous chapter (3.4) and have

seen that it may be used to link modified phrases with all sorts of

modifying words, but that in whatever order the words are placed relative

to *ya*, the phrase which precedes it has greater 'emphasis' or 'weight.'

There are examples of sentences in the narrative text which are composed

of a multiple *ya*- phrases / clauses linked together in succession. The

semantic content of such phrases seems in every case to be in the nature of

explanation, characterization, secondary detail, or some other type of

background information, whether deriving from given information or

attaching to newly-introduced participants or facts. This discourse function

befits the semantic structure of *ya* -phrases / clauses since, with this

arrangement of words, the emphasis always seems to lie to the left of *ya* .

This is because, as strings of such units are processed in succession, the

semantic 'weight' builds steadily to the left, on the trailing edge of the

sentence, as it were. For example, if we have a string composed of W *ya* X

ya Y *ya* Z , it will be processed by the hearer as in Figure 1:

1. <u>W</u> *ya* X,

2. <u>W , X</u> *ya* Y,

3. <u>W , X , Y</u> *ya* Z

Figure 1

Interest builds progressively in the (underlined) part of the sentence to the left of *ya* as each modifier-modified pair is combined (commas), just as in 'This is the dog, that chased the cat, that ate the rat, that lived in the house that Jack built,' in the old nursery rhyme. Since emphasis is always toward what has preceded, this type of construction is well-suited for explanation, characterization, and backgrounding in discourse, and we will see that this is indeed the use to which such constructions are put in the narrative (cf. sentences (17) - (20), in the discussion below).

The constructions which are built around the form *ay* , on the other hand, locate semantic salience in what is on the right of the particle *ay* . When sentences are linked together in succession using *ay* , semantic 'momentum' shifts toward the leading edge of the construction, as it were, in contradistinction to those linked with *ya* . Constructions linked in succession in this manner, such as W *ay* X *ay* Y *ay* Z, are processed by the hearer as in Figure 2:

1. W *ay* → X

2.   *ay* → Y

3.   *ay* → Z

Figure 2

This makes *ay* constructions well-suited for foregrounding and for rapidly advancing the plot of a narrative, and we will see that this is the case in our text.

Another characteristic pattern found with *ay* constructions in Yogad has been pointed out in our text by Baek (ms.). The speaker has, at various places in the narrative, linked together a number of sentences with *ay* in such a way that what appears to the right of *ay* in one sentence is repeated as the content which falls to the left of *ay* in the next sentence, giving the pattern of Figure 3:

W	*ay*	X,
X	*ay*	Y,
Y	*ay*	Z

Figure 3

Baek points out that this has the effect of linking the sentences more tightly together semantically and forming a more coherent discourse unit. Therefore, this type of pattern with *ay* is found in the text in foregrounded contexts of various sorts. This linking pattern seems associated with a slower, steadier sequencing of story line events than the previous one. We will see several examples of this pattern as we examine occurrences of *ay* in the text, taking note of the type of discourse contexts in which *ay* occurs.

5.1 Episode I: Deciding to Come to America, (1) - (10)

We have already pointed out that the narrative opens with a sentence which is built around *ay,* and that this grounds what the speaker is about to say in the given context of *saw tu agáw,* 'Here today.' It also serves to interest the hearer in what is to be told by marking the summarized content of the upcoming story as a disclosure of previously unknown information. As we will see in many examples, a characteristic of sentences formed with *ay* is that the *ay* 'looks both ways,' i.e., the presence of *ay* not only marks what follows as new, but it simultaneously signals that what precedes it is known, familiar, or somehow topical. Indeed, there are cases, like example

(2), above, in which the latter function seems to have been the dominant function.

After the opening sentence (1), there follows a section, (2) - (5), which contains a number of *ya* - linked clauses and which has no occurrences of *ay*. The theme of this material is an explanation that although the Mesas' children had for many years wanted them to come to America, and although they had wanted to come also, they had decided to delay. The speaker tells us that when our story opens some eight or ten years have elapsed since their daughter, Marissa, had sent their visa applications. In other words, all this material is background information following upon and expanding *yu agangé mi saw tu amerika,* 'our coming here to America' in sentence (1).

Episode I concludes with sentences (6) - (10), which form a summary and conclusion for the episode, and it is at this point that we again find a series of sentences containing *ay*. Sentence (6) begins with *tutá dagún nu 1980 amma ammé ku makkamali ay 1980 ,* 'It was in the year of 1980, if I am not mistaken.' These words refer to the backgrounding that preceded and then orient the hearer to the temporal location of that content relative to what is about to be told. We may point out in this regard that the speaker here uses the pattern, *tutá* (plus time expression), which we had noted earlier as one frequently found in this narrative at the beginning of

new episodes. Although the story has already begun, we have had so much

background information presented that now the speaker in effect begins

anew in sentence (6) after recapitulating.

Sentences (6) - (10) form a closely-linked unit constructed according

the pattern described above (schematized in Figure 3): W *ay* X, X *ay* Y,

Y *ay* Z. The Yogad text of these sentences is presented here using

underlining to make this pattern clear:

> *(6) tutá dagún nu 1980 ammá ammé ku makkamali AY 1980*
>
> *yuyí ya naipetubúg na yu papéles kúnta ammé mi ya inindón tu*
>
> *aksyón. (7) tu ya dagún AY matuyág kamí tráppa ya*
>
> *magatawá. (8) saw tutá wara ra yu matagaynáp mi tu*
>
> *baggíbaggí mi áwstru natakit yu...si 'Mrs.' AY napanonómi yu*
>
> *angay balálamun saw tu amérika. (9) ántu TUTA dagun nu*
>
> *dyos, dagún mil nwéybe syéntos nubénte AY nangitubúg*
>
> *dammán yu anák ku tu papéles ya nagafú saw tu amérika yu*
>
> *ipitisyón nakamí ya alapán dammán. (10) saw, napanonómi ra*
>
> *ya angáy kamí balalamun.*

(6) It was in 1980, if I am not mistaken, it was 1980 that she

sent the papers, but we did not take action. (7) In that

particular year my wife and I were still strong. (8) Now we

felt something in our bodies and the Mrs. got ill so that we

began to think of going to America. (9) So, in the year of our

Lord 1990, my child sent papers from America as a petition

for us, to get us again. (10) Now, we again thought seriously

of going.

The tightly-linked sentences are (6), (7), and (8). They share the content of

the explanation about not taking action when Marissa sent the papers back

in 1980 because both Dr. and Mrs. Mesa were feeling well at the time. As a

thought unit, sentences (6) - (8) sum up the reason for the delay and end

with the statement that once the couple began to feel the effects of getting

older they decided they could delay no longer. Note that in sentences (6) -

(8), while we do find foregrounding, we do not have rapid development of

plot. Each of these *ay* - sentences has a topic, to the left of *ay* , and a

comment, to the right of *ay* . Each turns first toward some familiar fact, as

if to reflect upon it, and then makes a salient comment about it.

Sentence (9) then begins with another of the *tutá* (plus time

expression) phrases, which sets (9) and (10) off from (6) - (8). Sentences

(6) - (8) are a summary, while (9) - (10) form the conclusion which

follows upon this. Sentences (9) and (10) again contain foregrounded

material but do not involve rapid plot development. Like (6) - (8),

sentences (9) and (10) have are in the nature of topic and comment. All

together, sentences (6) - (10) represent the peak of episode I, and in them

the speaker has used *ay* to link the sentences into a semantic unit and to

foreground the following points (underlined):

1. What has preceded was the situation <u>back in 1980.</u>

2. At that time we were feeling <u>perfectly well</u>.

3. Once 'Mrs.' got ill <u>we started to think again about leaving</u>.

4. So in 1990 when Marissa <u>again sent papers we reconsidered</u>.

As mentioned above, the unit formed of sentences (6) - (10) provides a

summary and conclusion for the episode, with (9) marking the slight break

between the summary, sentences (6) - (8), and the conclusion, sentences (9) -

(10). The discourse function of this group of sentences in providing

summary-and-conclusion is a reflection of the topic-and-comment

semantics of the individual sentences which form the unit.

In this episode then, we have seen five examples of sentences built

around the form *ay,* one in the introduction, sentence (1), and four in the

summary and conclusion, sentences (6) - (10). The characteristic of such

sentences which makes them suited for introducing, summarizing, and

concluding, is that *ay* 'looks both ways.' It joins what is familiar, on its

left, with what is unfamiliar, on its right. The presence of *ay* assists with

foregrounding because it marks what follows it as salient or pertinent, but

it <u>also</u> marks what precedes it as familiar or known or contextual. The two

halves of the sentences are thus joined together as given context-new

content (eg., sentence (1)), premise-conclusion (e.g. sentence (6)), topic-comment or summary-conclusion (e.g., sentences (6) - (10)). It is because *ay* has all of these semantics, without <u>meaning</u> any one of them exclusively, that enables it to be used in the three discourse contexts we have seen in episode I.

5.2 Episode II: Getting Passports, (11) - (22)

The shape of this episode is similar to the preceding one. The form *ay* appears in this episode fourteen times with a few ocurrences near the beginning and eleven at the end, in sentences (17) - (22). It is in this latter part of the episode that the most exciting part of the story is found, for it is there that the speaker tells about an earthquake that ocurred while he and his wife were at the hospital for their physical exams. Certainly this is the part of the story where we would expect to find a lot of foregrounding using *ay* and that is borne out in examining the text.

The episode begins in sentence (11) and (12) with another *tutá* (plus time expression) followed by *ay* and a brief, foregrounded summary of the content which is to follow, *naprepera kamí ra ya angáy tu Manila ya mappainterbyú tu U.S. Embassy také tu malámi yu passport ya mawag tu pa...tu agangáy saw tu amérika, kúnta adáddu yu nesímmusímmu saw pa ya bulán,* 'we got ready to go to Manila to interview in order to get the

passport we need to go to America but there were many things which happened that month.'

Sentence (13) uses *ay* to tie in to *bulán,* 'month,' which was mentioned at the end of sentence (12), and to foreground the new and interesting information that a strong earthquake was one of the things that happened that month, *yaw ya bulán.* Sentence (12) tells us that many things happened, and now (13) selects one of those things for foregrounding. The relationship between the two parts of sentence (13) seems therefore to be one of topic and comment. Note that the gloss of sentence (13) refers to the earthquake twice as 'the strong earthquake,' i.e. a known or familiar earthquake. Because knowledge of this particular earthquake which hit the Philippines is part of our common experience (although perhaps forgotten by us, not previously mentioned in the discourse, and unconnected in our thinking with the events being related here) it may be considered to be known or identifiable, and the gloss supports this interpretation. The point however is that, although the English gloss uses a determiner to indicate 'known, identifiable,' the Yogad does not, but allows this conclusion to be drawn from the fact that *yaw,* 'this,' is referential, and from the fact that strong earthquakes are in the news around the world and therefore known about whenever they occur. We may also note that when the earthquake is mentioned in sentence (15), it is preceded by *nutá,* [*nu* plus *ta*], 'the, that

familiar one' to mark it as identifiable. The reason that *luníg* 'earth-quake,' follows *ay* is that the speaker wishes to point up the very interesting fact that this well-known earthquake took place (*nesímmu*) at the time when he and his wife were in the hospital in Manila for their exams. In other words, it is not the earthquake itself which is noteable, since it is identifiable by the hearers, but the occurrence of this earthquake within the particular context described in the words preceding *ay* , and thereby marked as topical. Since the point the speaker is making has to do with the <u>simultaneity</u> of these two things, this is an example of a sentence built around *ay* in which the marking of topicality to the left of the form is at least as pertinent as is the marking of what follows it as rhematic.

In sentence (15), the earthquake hits and this is foregrounded by *ay*. Sentences (17), (18), and (19) are tightly-linked using *ay* in the pattern described previously (cf. 4.0, 4.1). The *ay* - linkage in sentences (17) - (19) are of the slow-moving variety (underlining to show associated words):

(17) *yu luníg sika A Y tata ya ...tata tu kura danu 'forces*

majeur' <u>*yu mesimmusimmu tu*</u> *nature ya ammem ...ya ammem*

ya tatáw ya <u>*mesímmu tu*</u> *yaw a* <u>*nesímmusímmu A Y*</u> *káttu*

nakumbinsi ni kan ya wará <u>*yu dyos*</u> (18) *te tutá* <u>*nesímmu yaw*</u>

A Y <u>*atanán*</u> <u>*yu táwlay tuyí*</u> *unangngu ya dyaw tu ya building*

A Y awán tu <u>*pinanonóda*</u> *ammá bakkán ...* <u>*yu dyos*</u> (19) *atanán*

AY naddasál áwstru naddasál annu namalitúd AY yu dyaw tu

nonóda AY yu dyos talagá .

(17) The earthquake, you know, is one of the major forces

which happen in nature in which you don't know what is going

to happen when this occurs, but I was convinced that God

exists. (18) Because when this happened all the people inside

that building didn't think of any other thing but God. (19)

Everyone prayed and prayed and knelt, and what was in their

minds was really God.

In sentences (17) - (19), the speaker wishes not only to relate the fact that

he and his wife were on the fifth floor of the hospital when a strong

earthquake hit, but also to make the point that what he observed during

this experience convinced him of the existence of God. In this semantic unit

of linked sentences he uses *ay* seven times to foreground the following

points (underlined):

1. Earthquakes are <u>one of the major forces of nature that you don't</u>

   <u>know when they are coming.</u>

2. When this one happened <u>it convinced me that God exists.</u>

3. The reason for this is that when it happened <u>everyone in the</u>

   <u>building thought only of God.</u>

4. Everyone there <u>prayed and prayed and knelt.</u>

5. The sole thought in everyone's mind <u>was really God</u>.

There is no question but that the speaker has used *ay* to foreground those clauses which he wished to emphasize. These are the ones which make his point and he has linked them closely together with *ay* to form them into a semantic unit for this purpose.

In sentence (20), the point is made that three days after the events just related the couple went back to the hospital again, and that while they were there there was a strong aftershock. Both the statement about returning to the hospital and the one about the aftershock are preceded by *ay* because this is the salient information, and therefore the speaker foregrounds it. The interesting thing about this sentence is that the information status of the portions before and after the two *ay* 's does not fit the patterns of topic-rheme, given-new episode, topic-comment, summary-conclusion, or premise-conclusion. To the left of *ay* , the sentence begins *nesímmu yuyí nabalín a nesímmu yuyí nangé kamí ra tu binaláy áwstru tu méka talwaga...,* 'It happened that after this happened we went home again and on the third day...' The events described by these words appearing to the left of *ay* are subordinated or backgrounded, but what then follows is a temporal sequence, *...AY natóli kamí dammán AY wará dammán tutá dyaw kamí dammán tu utún wará dammán yu aftershock,* '...we went back again

and it happened again while we were there inside there again inside; there

was an aftershock again.' The speaker is thus using *ay* to background the

first clause, to foreground the second and third, and to provide fast-paced

sequential semantics to the events (in contrast to the slow-paced plot

advancement in (17) - (19)). What is being exploited here is the character-

istic way in which interest and semantic 'momentum' build to the right of

ay in *ay* - linkages. This 'momentum' is apparently sufficient, in the

presence of *dammán* 'again,' to impart the notion of successiveness to the

clauses, and so sentence (20) is an example which shows the way *ay* is used

for fast-paced advancement of the plot or story line in Yogad discourse.

The episode concludes with sentence (22), which contains two

examples of *ay* :

> *tu allángu dyos AY atanán yu physical eksaminasyón mi áddu*
>
> *ya magatawá AY mapí antu ya naprobán yu passport mi ya*
>
> *angáy saw tu amérika.*

> By the grace of God, since both of our physical examinations
>
> were good that's how our passports to come to America were
>
> approved.

This sentence serves as summary and conclusion to the whole episode by

foregrounding the favorable results of the physical examination and the

fact that the passports were then issued with visas to come to the United

States. The words to the left of the first *ay, tu allángu dyos,* 'By the grace of God,' are not topical or old information (although the speaker clearly feels that *tu allángu dyos* was what sustained all the people in the building during the earthquake), but they are really commentary upon what <u>follows</u>. What comes next is somewhat unusual because the words following *ay* are, *atanán yu physical eksaminasyón mi áddu ya magatawá,* 'all our physical examinations, for both of us.' This is not really a complete statement and is probably in the nature of an exclamation of joy, as in 'Good news: our exams! We passed!' Again, the fast-paced linkage pattern is appropriate to the semantics. The kind of linkage which *ay* provides in sentence (22) can be seen as a relation of cause and effect, or of condition and result: The fact of the grace of God → both of our exams → they were good, and so we got our passports to come to America.

5.3 Episode III: Journey and Arrival, (23) - (43)

The opening sentence (23) is interesting because it begins in the familiar way with *tutá* (plus time expression), but this is not followed by the form, *ay* . Instead, the words which follow upon the date are, *antú ra yu agangáy saw tu amérika,* 'that's when we arrived in America.' The reason that *ay* does not appear before these words is that it would seem inappropriate to foreground them in the present context, seeing that the

speaker is preparing to tell about the journey to America, while these words speak of the arrival at the end of the journey.

This episode is twenty sentences long and contains seventeen *ay* 's, all of which are in the first fourteen sentences. This episode therefore has a different shape from episode I or II, in that the sentences containing the form *ay* are found throughout the first two-thirds of the episode but not at all in the last third, as in I and II. It might be assumed that a speaker telling about a journey and arrival would use foregrounding at the end of such a story, particularly in this one, since the journey had been long, the arrival represented the culmination of a difficult process that had begun some ten years earlier, there were reunions with children and relatives not seen for years and grandchildren never before seen. But whatever the semantics signalled to the right of the form *ay,* they are not automatic. <u>Everything</u> that the speaker tells us is, in a sense, new information; but he selects from the content of his story those items which he wishes to mark for his hearers as salient or pertinent. In the unfolding of his narrative then, these are the participants and events which form the foreground. But we cannot predict in advance whether the foregrounding will occur at the beginning, middle, or end, of any given episode, nor whether it will occur in connection with any specific content, just as *ay* was not automatically used in sentence (23), simply because it was formally similar to other episode-initial sentences

containing that form. Apparently, for our speaker, 'getting there was half the fun,' as they say, and the step-by-step story of the trans-Pacific jet airliner trip was the part which he chose to foreground more than the part about the long-awaited arrival. In any case, the jet trip is the part of the episode in which the sentences are formed using *ay*, and the effect they produce is to keep the plot moving slowly and steadily as the speaker takes us through the landings, layovers, and plane changes on the trip from Manila to Houston.

Sentences (28) through (36) are one long chain of tightly-linked *ay* clauses that form a semantic unit in the manner described previously:

> *(28) mangá pig ya óras kami lan tu Chicago AY kami ra saw*
>
> *tu Houston. (29) tutá gubín kami ra saw tu Houston, Texas,*
>
> *AY maggafú sika tu Chicago AY na-change plane kami, tatá ya*
>
> *búllak da ya airplane ya inalámi. (30) yaw yu airplane A Y*
>
> *nagistopober tu Denver (31) áwstru tutá dyaw kami tu Denver ...*
>
> *magafu tu Denver AY nangáy kami ra tu Houston .(32) tuta gubin*
>
> *kami ra saw tu Houston AY pakubébut da amma insaw yu*
>
> *paddisagám mi .(33) yu paddisagam mi saw sika tu Houston AY*
>
> *addu yu airport .(34) yu airport AY yu Intercontinental addun nu*
>
> *Hobby (35) yu primeru ya nadisagan nu areplánu AY Hobby (36)*
>
> *yu dyaw tu panonómi AY maddiság kami ra tuyi.*

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(28) We were in Chicago just a few hours and then we came to
Houston. (29) When we were getting close to Houston,
Texas...coming from Chicago, you see, we changed planes, we
took a smaller plane. (30) This plane stopped over in Denver.
(31) And when we were in Denver...coming from Denver we
came already to Houston. (32) As we approached Houston,
they asked us where we were getting off .(33) In Houston
where we were to get off there are two airports. (34) The
airports are Intercontinental and Hobby. (35) The first place
the plane landed was Hobby. (36) What was in our minds was
getting off there.

The entire section is foregrounded through the use of some ten *ay* 's
which create slow and steady advancement of the story line. Note also that
the close-linking schema creates an information-flow pathway through
which new participants can be introduced, by placing them to the right of
ay, and then can be maintained in subsequent discourse, by placing them to
the left of the next *ay* .

The sentences which immediately follow this section, (37) - (43),
are constructed entirely of *ya* - clauses and contain no examples of *ay* .
All of this material is in the nature of background: explanation about how

it was that they were prevented from getting off at the wrong airport, how

their son-in-law Shyam picked them up, what type of work he does and

where, when they arrived at home, where they stayed then, and where they

stayed after that. Sentences (42) and (43) are good examples of the way

clauses and phrases are linked together with *ya* when the speaker is

presenting backgrounded content:

> *(42) túyi kami YA nagyán tu mangá walú o syam (Y)A bulán*
>
> *dagena nangay kami pádamman tu tatá dammán YA anak ku wagí*
>
> *balat ni Marissa YA tan anák .(43) sawwe YA baggina yu pagginán*
>
> *mi kigat sawwe YA bulán.*

> (42) There we stayed for about eight or nine months before
>
> we went to another place, to another of my children, also a
>
> sister of Marissa, who is younger. (43) Now hers is the place
>
> we stayed until this month.

Each of these linked phrases and clauses is anaphoric, i.e., it offers

explanation or clarifying detail about a word (underlined in Fig. 4) in the

preceding phrase or clause (the position of each *ya* is indicated by '←'):

tuyí kamí   ←   *nagyán tu mangá walú o syam*   ←   *bulán*

there   for about eight or nine

dagena nangáy kami pádamman , tu tatá dammán   ←   *anak ku ,*

                                        to one other

wagí balat ni Marissa   ←   *tan anák*

a sibling   of Marissa   a younger one

Figure 4

Since each phrase or clause is semantically tied to a preceding element, the overall effect of the repeated linking is of 'back-filling.' Each successive unit returns to a preceding word to fill in explanatory detail or to expand a preceding element. Although new information is added through this process, the new information is not foregrounded, as it would be if *ay* were used instead of *ya* . What is added with each new unit is actually a filling-in of secondary detail (or less-emphasized information, in the case of *tu mangá walú o syam ya bulán*) which doesn't really take the listener ahead, but simply acquaints us with particulars about what has already been said. This is, of course, precisely what makes *ya* so useful in discourse for backgrounding, because, as here, it allows new participants to be

introduced (*pádamman*) and characterized (*anak ku, wagí balat ni Marissa, tan anák*) without being foregrounded.

5.4 Episode IV: Teaching Yogad at Rice, (44) - (71)

In this episode, we again find a discourse contour which differs from the other three. In episode IV, it is the beginning and the end which are comprised of sentences containing *ay* . The episode contains the story of the speaker's coming to Rice University to teach Yogad to linguistics students The foregrounded portions are sentences (44) - (48), in which he explains why he agreed to teach the students here, and sentences (66) - (70), in which he speaks about returning to Echague one day to find out if the Peace Corps ever produced any work on Yogad, and explains that Yogad is now 'branching off' because of contact with other languages. The middle section, sentences (49) - (65), is mostly backgrounded, being composed primarily of a large number of units linked together with *ya* , and having only five clauses or phrases introduced by *ay* .

It may be useful to look at the few examples of *ay* which are found in the larger context of the backgrounded material in order to get an impression of the contrast between the semantics of these five fore-grounded sentences and that of the context in which they are embedded. The content of the long backgrounded middle section in this episode is

concerned with the speaker's observations about the nature of Yogad, the difficulty of trying to explain things about his language to the students in the absence of a grammar or textbook, the fact that it is the language of only one town, and that there are many words in Yogad which are Spanish or English loan-words. The first occurrence of *ay* after (48) is in sentence (52). After describing some of the difficulties he has found in trying to explain his language to the students, he says, *danu estudyante ku ...ay panáy ya intelihénte awstru panáy ya atánang yu ginugwám pa awstru talagá pa ya mapi tu...mapi yu ulu ra,* 'My students...are all intelligent and they all study it to a high level and also have really good heads.' The next example is in sentence (57) in which he gives his impression of what is studied in the Department of Linguistics and explains his amazement that there is a subject taught here called 'semiotics,' which he understands to involve 'using the science of symbols' to facilitate language learning:

> *yu yaw ay tata ya subject ya ituntúru na yu amma kassandi yu*
>
> *pagugwám mu tu tatá ya lingwáhe ya yúsana yu science nu symbols*
>
> *awstru yu amma kassandi yu íku nu amma kassandi yu ákkaku na,*
>
> *nu grammar nu tata ya language o dialect.*

> This is a subject that teaches how you can learn any language
>
> at all,using the science of symbols and how it is done, the
>
> grammar of any language or dialect.

The third example occurs in sentence (59), in which the speaker stresses the uniqueness of Yogad in terms of the small size of the Yogad-speaking community within Isabela Province: *allun ku tu kura yu Yogad ay talaga ya ábid nu tata ya lawang tu Isabela,* 'I tell them [the students] Yogad is really the dialect of one language in one town in Isabela.' The next two occurrences of *ay* are found in sentence (63) and (64). In sentence (63), the speaker mentions that in speaking Yogad, he sometimes says words that he knows are Spanish or English words, a point which he has mentioned from time to time in our work with him, somewhat apologetically, as a concern to him:

> *antu ya siggamítta embes púro Yogad yu metuntúru ku tu danu*
>
> *estudyánte saw ya massisím nikán ay angkárwan wara yu words,*
>
> *yu ábid ya mallú ku tu English or Spanish .*
>
> So once in a while, instead of pure Yogad, I teach the students
>
> here hearing me, there are sometimes words that I say in
>
> English or Spanish.

In sentence (64), he makes the point that Yogad has been very little studied previously, *yu Yogad ay tatá ya ábid ya bakkán tráppa tu adáddu yu naggugwám tu kuná ,* 'Yogad is one language for which there are still not many studies.' This point is made not simply because it means that he has no grammar that he can refer the students to, but because he personally feels that it is important that Yogad be studied (cf. sentence (48)) and has

worked very hard to help the students learn about his language.

The common thread which runs through each of these examples is that of personal interest. In these sentences, the content which appears to the right of *ay* is content which is meaningful, important, interesting, or impressive to the speaker. In (52), he speaks of how intelligent the students are. In (57), he tells about this interesting course they teach here. In (59), he emphasizes how small and isolated Echague is. In (63), he talks about his concern that he sometimes must use loanwords. In (64), he points out that hardly anyone has ever studied his language before. Some of the information in these various sentences is new, but the common feature is that all of it is information which he finds meaningful and interesting, whether new or not.

5.5 Conclusions

The semantics and discourse functions of two Yogad forms, *ay* and *ya* , have been examined here. The attempt has been made to present these forms in the variety of contexts in which they occur in the Yogad narrative. These two are by far the most frequent and most important forms in the text which are employed by the language in inter-clausal relations. The remarkable thing is that Yogad is able to exploit only two such forms for so many discourse functions.

Both forms are used to link elements together, but *ya* is used in

backgrounded contexts and *ay* is used for foregrounding. Within these

differing contexts, both forms can be used in the introduction of new

participants or events, or for the maintenance / characterization of

discourse-identifiable participants and events. The form *ya* can function in

bringing new participants into discourse by simply linking them to some

preceding element, the result being that the new participant is staged but is

not foregrounded. Once such a participant has been introduced in this way,

ya can be employed to characterize the participant while still keeping it

backgrounded. The form *ay* is somewhat more versatile than *ya* because

it signals one semantics about the content which lies to its left, and it signals

another semantics about the content on its right. This property allows it to

bridge two different types of material, and enables it to be used in

introductory, summary, and concluding contexts, among others. This form

is used in two different linking patterns in plot advancement, a fast-paced

and a slow-paced pattern. Although both arrangements lend themselves to

the management of information flow, the latter linking pattern is especially

suited for this purpose in extended foregrounded contexts, because it

establishes a format in which participants can easily and repeatedly be

introduced and maintained, as we have seen. Certainly many, if not most,

sentences constructed using an *ay* - linkage pattern also contain *ya* - linked

elements as well. The essential difference between the two forms, therefore, is that of backgrounding vs. foregrounding.

We have seen that the sentences which are built around *ay* not only appear in a number of different kinds of discourse contexts, but that within such sentences there is a great deal of variety as to the precise semantic relationship between the portion of each sentence which precedes *ay* and the portion which follows *ay* . In episode-introductory sentences, the relation is one between given context and upcoming story. In sentence (6), we noticed a logical relationship similar to that between premise and conclusion. Possibly the most frequent relationship found was that between topic and comment, i.e., the first half of the sentence dealt with what was currently under discussion in the discourse, and the second half contained not so much new information as some point about the topic which was being pointed out or emphasized by the speaker. In sentence (22), the relationship was between cause and effect or condition and result. In each case it was observed that what appeared on the right side of *ay* in the sentences was placed there because the speaker found it to be salient, meaningful, impressive, or in some other sense interesting. What specific content any speaker will position to the right of *ay* in any given instance is unpredictable and not automatic by any means. In the final analysis it is not

whether the information is 'new' which matters, but whether the speaker is interested in it.

In Yogad discourse, the determiners do not function in the management of information flow in the manner of the English determiners, and as a result, the Yogad determiners may seem to be atypical or somehow deficient. It is simply the case, however, that discourse pragmatics are encoded in other grammar than determiners in Yogad. The encoding of participant information status is served by the forms *ya* and *ay*, and they not only manage this but they also act as linkers, control the pace of plot unfoldment, and create backgrounding and foregrounding.

Since the present study is about determiners and determinacy, perhaps the most germane question to ask would be, 'Why, then, do the English determiners get involved in the management of information flow?' or, 'Why is determinacy involved in this function in English?' The answer lies in the the fact that determinacy is a semantics of participants; it creates participants and its gradations serve an orienting function with regard to participants. English exploits the orienting function of its determiners to manage information flow, marking new participants as 'unknown / unidentifiable in discourse,' and signalling old participants as 'familiar / identifiable in discourse.' Yogad manages information flow in discourse by exploiting the semantics of two linking forms, *ya* and *ay*, irrespective of

their determinacy, to assist in the function of assimilating novel experience to resident experience. Thus, it happens that the orienting semantics of the English determiners extends to include the semantics of 'known' and 'unknown,' and for this reason determiners are used in English discourse to manage information flow. In Yogad, this semantics does not attach to determiners but to two linking forms, and so they are used for this purpose. Presumably the semantics of information status is associated with a variety of classes of forms across languages. We can assume that the variety of ways in which information flow is managed in discourse across languages is correspondingly rich. What we cannot assume is that that function will always involve determiners.

1   The discourse function of focus affix selection (or role selection) in Yogad has yet to be investigated. Nevertheless, there does appear to be a patterning observable in the Yogad narrative according to which new human participants appear initially in the role of Patient (or Beneficiary / Recipient), whether focussed or unfocussed, and then advance to the role of focussed Agent or focussed Patient. In other cases, the shift from first mention to subsequent mention is marked not by a change in role but by change in focus alone, e.g. unfocussed Agent becomes focussed Agent. An investigation of the discourse functions of role and focus will require a larger sample of texts in order for coherent patterns to be established and correlated with their contexts.

Chapter Six

Comparisons and Cognitive Issues

6.0 Comparison of Language Data on Determinacy

The central hypothesis of this study is that determinacy is a constant

presence in language. Even if a language lacks the grammar of deter-

miners, it will continue to give expression to determinacy and, thereby, to

anchor participants in an orienting matrix of knowledge. Furthermore,

because determinacy is motivated by a universal cognitive principle, this

orienting matrix will itself be analogously configured from language to

language. We have examined separately the determiners of Ilokano and

Yogad. We will at this point examine the semantics of these forms once

more with a view toward identifying and elucidating any features which

they share.

We have described the semantics of the Ilokano determiners in terms

of a scale of values constituting emergence of personality, or individuation.

The Yogad determining forms were described as having a semantics which

involves degrees of actualization. The connection between these two

semantics is not immediately apparent. What does the emergence of

personality have to do with greater actuality? Conversely, what is the

connection between an increase in the level of epistemological certitude and individuation?

These questions can best be answered by juxtaposition of examples from the languages in question rather than by means of abstractions, and we will begin this chapter with a review of the semantics of determinacy in Ilokano and Yogad as exemplified in the numbered sentences of Chapter Two and Chapter Four, respectively.

In Figure 1, we present a review of the semantics of determinacy in Ilokano. The numbers in parentheses refer to the numbered examples of Chapter Two, and the dashed lines connect minimal pairs:

[Figure 1 on following page]

ni	*ti*	*iti*

named person   a name
   (3a)-----------------------------(3b)
blood-relative   step-brother
   (4a)----------------------------(4b)
the original   a copy / replica
   (8a)---------------------------(8b)
familiar person   acquaintance
   (5a)----------------------------(5b)
personal character   someone
   (6a)-----------------------------(6b)
Mr. President   a president
   (7a)-----------------------------(7b)
Look! Here!
(11)   (12)

                a person   someone from a group
                  (9a)------------------------------(9b)
                object   surface, part, piece
                (13 a,b)----------------------(13 c,d)
                (14 a,b)----------------------(14 c,d)
                (15a)--------------------------(15b)
                (16a)--------------------------(16b)
           specific variety   general class
                (19a)--------------------------(19b)

Figure 1

We have omitted the case of zero-determiner at the extreme right end of the contiuum for the sake of space, although we may repeat the example of *asu* , which may mean 'dog(s)' or 'canine(s)' when not preceded by a

determiner, and which may also represent the unmarked stem of a verb

meaning 'to be canine.' Figure 2, then, represents a summary of the

semantics of determinacy in Ilokano exemplified in Figure 1:

ni	*ti*	*iti*	*∅*
named person unique individual	impersonal entity, object	part of collective surface, part, piece	class quality event
	specific	representative of class	
vividness, immediacy originality	somewhat remote derivative		
familiarity relationship recognition	known acquaintance		
respect attachment	less respect		
proximity deixis			

Figure 2

In Chapter Two, this scale of determinacy in Ilokano was described as

being composed of the semantics of individuation, or as expressing the

emergence of personality, and we will now argue that this semantics is a

specific manifestation of the cognitive principle FOCUSSED--DIFFUSE.

If it is admitted that the scale represents gradations of individuation or

emergent personality, the application of the rubric FOCUSSED--DIFFUSE

will make the additional claims that the scale represents a participant

semantics which is coherent and continuous throughout the scale and that one

end of the scale represents that semantics with greater intensity, richness,

saturation, delicacy, or precision, justifying the description FOCUSSED,

while the opposite end displays a weaker, more vague, or less information-

dense form of this semantics and is appropriately called DIFFUSE. It should

be apparent that the scale of Figure 2 will now be represented according to

Figure 3:

FOCUSSED--DIFFUSE
               ni   *ti*   *iti*   *Ø*

            personal   anonymous
            immediate   remote
            individual   collective
            name   class
            recognized   unknown
            respected   unfamiliar

                        individuation
                    emergent personality
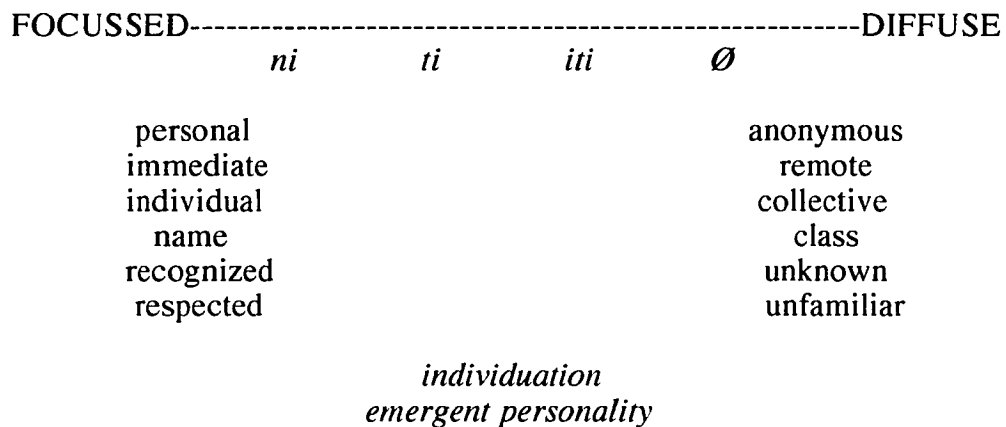
                        Figure 3

Since it is being proposed here that determinacy is a universal partici-

pant semantics, although one which is variously expressed from language to

language, we now want compare the semantics of determinacy in Ilokano

with that in Yogad. We begin by reviewing specific examples from Chapter

Four arranged into the continuum of Figure 4. Again, the numbers in

parentheses refer to numbered examples (of Chapter Four), and the dashed

lines connect minimal pairs:

[Figure 4 on following page]

_yu_	_nu_	_tu_	_ya_
		permanence (14a)-----------------	temporary (14b)
		aware of (15a)-----------------	unaware of (15b)
		remembered (16a)-----------------	re-played (16b)
		direct (17a)-----------------	mediated (17b)
		consensus (18a)-----------------	opinion (18b)
		special (28)-----------------	generic (29)
		apparent (32)-----------------	deduction (33)
immediate (37a)--			remote (37b)
constant / universal (38a)--			circumstantial (38b)
fact (40a)---------------	prediction (40b)		
predication (51)--			modification (50)
specific, proximal (55)--			abstraction (56)
			purpose (64-67)
named use (*70)--			nonce use (69)
tailored (83)--			generic (82)
		prepositions (84-100)	
	more precise (120)-----------------	less precise (121)	
	proximal time (108,109)	time	

Figure 4

The determinacy represented in these examples was characterized in Chapter Four as the semantics of actualization or reification, and was described at the end of that chapter in terms of the scale of values, FOCUSSED--DIFFUSE (cf. pages 126-130). We may now summarize this semantics according to the continuum of Figure 5:

FOCUSSED---DIFFUSE

yu   *nu*   *tu*   *ya*

realized   temporary
direct, immediate   problematic
obvious, accepted   contingent
named   subjective, remote
precise   imprecise
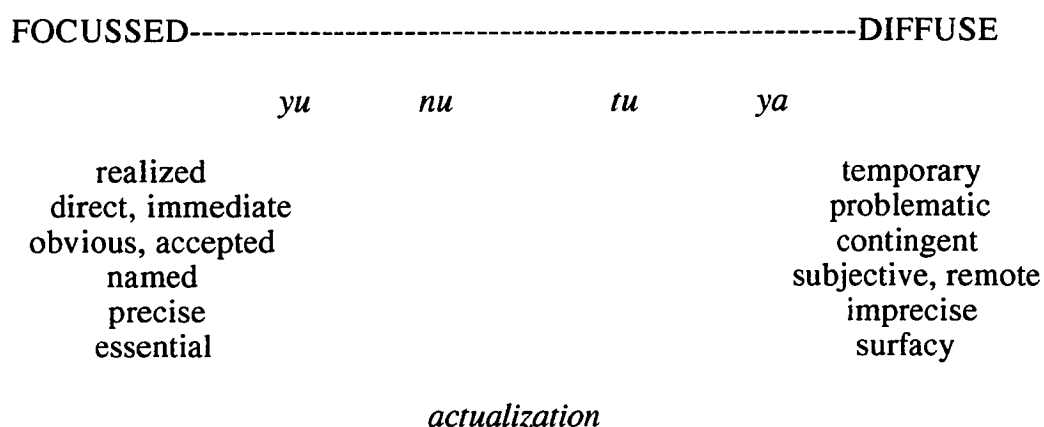essential   surfacy

actualization

Figure 5

In Yogad, the contexts in which we were able to isolate the determiners from the verbal focus system were primarily those involving complementation, i.e. the determination of whole clauses which involved reported intelligence. This fact shapes our impression of determinacy in this language. The presence of determiners creates participants, and in this

language we have encountered a large number of participants which have been created from propositions. A great many of the examples represented above, therefore, have a semantics which is registered in terms of epistemic values, as pointed out previously. The point here is that determinacy in Yogad is not itself to be understood as epistemic in nature; this is a reflection of the contexts in which it is employed in the language. Actualization in Yogad is thus independent of, but indexed by, epistemic values. It represents the capacity to form and delineate participants by segregating these from the ground of quality and event.

If we look at the participant-forming semantics in Ilokano and Yogad simultaneously, it should now be more apparent that the determinacy in these languages is similar. The FOCUSSED determinacy in both languages implies fully-emerged participancy expressed in the terms in which each language registers that emergence. In Ilokano, it is reflected in degrees of emergence of person; measured in the gradations of those characteristics that are attendant upon personhood: name, relationship, recognition, immediacy, respect, presence, attachment. In Yogad, emergence of participancy is expressed in terms of grades of realis, in gradations of semantic content usually associated with reification: permanence, convention, the established, the named, certainty, constancy, tangibility, precision, fact. DIFFUSE determinacy is the semantics of less-emerged participancy and is

expressed in terms of the weaker grades of these qualities. Again,

determinacy creates participants, and the grades of determinacy are simply

degrees of participancy expressed in those semantics which the language

employs to express this. This accounts for both the similarities and the

differences in determinacy from language to language. It also accounts for

the ineluctable association of determinacy with participants. Since

determinacy forms participants, once a participant is present determinacy

is, by the nature of things, present as well.

To this point, we have spoken of the continuum FOCUSSED--

DIFFUSE in terms of a scale of relative values. Determinacy appeared in

Yogad and Ilokano as a participant semantics which registered gradations

of participant emergence, and the rubric FOCUSSED--DIFFUSE was

applied to the respective scales as indicating something like 'greater' and

'lesser' degrees of the semantics in question. But something more is

intended by FOCUSSED--DIFFUSE than the relative intensity implied by

ni and *yu* as compared to *iti* and *tu* or *ya* . 'FOCUSSED' and

'DIFFUSE' are the names given to the ends of the scale, but of themelves

tell us nothing about the nature of the scale itself. What is the continuum

FOCUSSED--DIFFUSE? What is it 'composed' of? And why is the subs-

tance of this continuum (as opposed to some other) connected with

participancy and with determinacy?

FOCUSSED--DIFFUSE is a name for the scale of values by which variable focal attention organizes cognitive experience and for the organizing principle embodied in that scale of values. Focal attention is one of the implementations of intelligence, and it is the operation of focal attention upon the environment of an organism which results in 'FOCUSSED' perception and 'DIFFUSE' perception. Specifically, the directing and focussing of attention creates FOCUSSED images (visual, auditory, olfactory, and so forth) while indirect or oblique focussing creates DIFFUSE images. The continuum FOCUSSED--DIFFUSE is the outcome, the residue of the operation of focal attention. It is the trace which that <u>activity</u> has left behind. It embodies one of the principles by which cognitive experience is organized by all intelligent organisms, and it is inevitably found in every human cognitive domain. In saying that the principle FOCUSSED--DIFFUSE underlies determinacy, we are proposing thereby that focal attention is the cognitive-psychological basis and motivation for determinacy in language and for participant formation.

Wiens (1986) describes the determiner system in Limos Kalinga, a Philippine language in which it may clearly be seen that determinacy is motivated by focal attention. In Limos Kalinga, the noun-marking particles are complex strings composed of morphemes occupying four positions in sequence. The ones which are of interest to us are the last two positions in

the 'impersonal' particles, i.e. P3 and P4. The function of the particle at P3

is to indicate the relative distance of the referent from the speaker and the

hearer. The forms that are used at P3 are identical in shape to those of

relative pronouns and three choices are available, which are reminiscent of

the three series of deictics in Ilokano: *tu* indicates proximity to the

speaker, *nat* indicates proximity to the hearer, and *di* indicates that the

referent is distant from both. These forms, as we have described them to

this point, would appear to be ordinary deictic pronouns. According to

Wiens (1986:93), however, they are not, and it is the semantics of the

morpheme which occurs at P4 which distinguishes these forms from

deictics in his view. In order to explain this point, Wiens makes the

distinction between 'exophoric' and 'endophoric' reference. According to

this terminology, 'endophoric' refers to the given context of the present

communication within time and space and includes all events which have

not been completed (which would make them 'not present' by virtue of

being 'not current'), real and known places, referents which pertain to the

participants in the conversation, or those which are visible and tangible to

them. If a referent can be so contextualized, the speaker chooses - *N* at P4,

along with the appropriate distance marker at P3. If a referent cannot be

located in this frame of reference, i.e., if it involves an event which has

been completed and has therefore ceased to exist, if it involves fictitious

events or times and places, or if it is not visible or tangible to the partici-

pants, it is 'exophoric' and *di-* is chosen for P3 and *-t* at P4. If an

exophoric non-personal marker is used with the name of a person, as in the

following example, it would mean that the person is deceased (Wiens

1986:94):

(1)   <u>Sa-   di   -t   Wandaga, ossaana   nasuyop</u>
         Pl:sa- + P2:0 + P3:di- P4:-t   Wandaga alone-Lk slept

         <u>si   -t   boloy da.</u>
         Pl:si-   +P2:0 + P3:(di-) +P4:-t   house their

'The late Wandaga was asleep alone in their house.'

Deictics generally map relative proximity in terms of physical space or

time, while determiners perform their orienting function in other spheres

of reference. Deixis is a semantics which manipulates fully-determined

participants, thus extending the scale of emergence we are discussing in this

study along a new dimension: that of relative proximity. The markers of

relative distance to speaker and hearer at P3 are, at the least, unlike the

deictics we encounter in other languages because the semantics signalled by

the form at P4 assigns them to spheres of 'reality' to which deictics by

themselves do not normally refer, and because the contrasts implied by the

endophoric-exophoric distinction at P4 lie within the zone of less-than-full

determinacy.

Note that with endophoric reference, i.e., when -N is at P4, a choice

of distance markers is available at P3: near, middle, or remote. In

exophoric reference, however, i.e. when -t is at P4, only a remote distance

marker is possible at P3:

	P3		P4
	tu-	(near)	-N
Endophoric	*nat-*	(middle)	-N
	di-	(remote)	-N
Exophoric	*di-*	(remote)	-t

Figure 6

The significance of this observation is that it supports the contention that

distinctions of distance, whether in true deixis or, as here, in a form of

reference approaching deixis, only become possible after determinacy has

sufficiently shaped participants from the ground of event to be able to

impart a FOCUSSED semantics to them. We may locate the Limos Kalinga

(and Ilokano and Yogad) determiners along the horizontal axis of Figure 7,

on which FOCUSSED--DIFFUSE is expressed in gradations of the

emergence of participants from events. The Limos Kalinga (and Ilokano

and Yogad and other) deictics (identical in shape to the forms which occur

at P3) belong to the vertical dimension, on which FOCUSSED--DIFFUSE

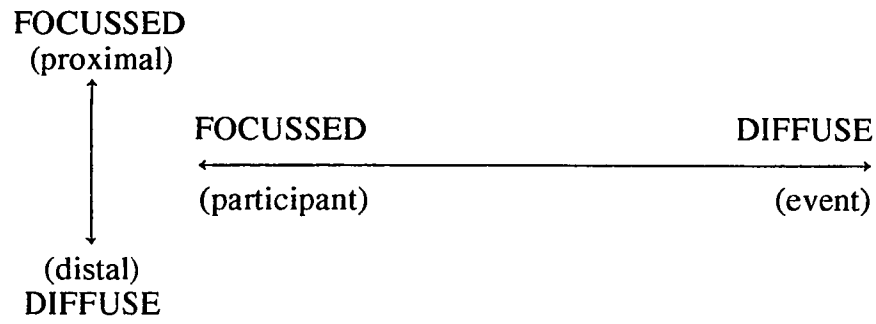appears in an array of forms indicating relative proximity:

```
FOCUSSED
(proximal)
    ↑
    |          FOCUSSED                              DIFFUSE
    |       ←————————————————————————————————————→
    |          (participant)                        (event)
    ↓
(distal)
DIFFUSE
```

Figure 7

Unlike Ilokano and Yogad, determiners are used in Limos Kalinga to

track the information status of participants in discourse. Endophoric

reference is used to introduce new participants into a narrative, often in

connection with the formula, *awad kad* (roughly) 'as for...' (Wiens

1986:94) New participants can, however, be introduced by endophoric

reference whether this formula is used or not. This also applies to any

participants to whom the speaker wishes to draw special attention and to

living participants in contrast to dead ones. Having been introduced,

participants are subsequently 'referred to either by name or with the

exophoric form *dit* [emph. mine, JWB]' (Wiens 1986:95). This seems the

reverse of what we might expect from the perspective of English, in which the more DIFFUSE, i.e. 'indefinite,' determiner commonly introduces, while the more FOCUSSED, i.e. 'definite,' determiner tracks previously-mentioned / topical participants. Again, we may appeal to focal attention to explain this. Focal attention is variable; it is not a quantum which once established becomes fixed, rather it requires constant input and feeds on the 'asymmetric' (in the sense of Davis 1991), attaching now to this, now to that. The scale FOCUSSED--DIFFUSE is the trace of that activity or process. There are two circumstances in which a participant might be perceived as DIFFUSE: when it is about-to-be-focussed (but has not yet been focussed); and when it was previously focussed (but is no longer focussed). In using determinacy to manage discourse pragmatics, English takes DIFFUSE in the sense of 'about-to-be-focussed,' and uses it to introduce new participants. Limos Kalinga, on the other hand, employs DIFFUSE determinacy to mean 'previously-focussed,' and uses it in the exophoric form to mark known / topical participants.

The characteristics of referents which are assigned by Limos Kalinga to the endophoric sphere make it clear that it is co-extensive with the zone of psychological attention. This is the realm occupied by referents which evoke interest and curiosity. To this sphere belong novel experiences and events which are un-resolved or not-yet-completed, i.e., events which,

because they are currently in-progress or about-to-commence, are immediately perceivable by the participants in the discourse. On the other hand, those events which are completed or resolved or fictitious are not tangible or are no longer tangible and are assigned to the exophoric sphere of reference. Whatever is tangible, lively, novel, just mentioned, interesting, and salient occupies the endophoric sphere; whatever is not tangible, past, of no interest, passé, previously mentioned, resolved, distant, or dead, belongs to the exophoric sphere. From these observations, we can see that the two spheres of reference are actually constituted and distinguished from each other by variance in focal attention.

Another indication of this is found in the cognitive-epistemic values which are attached to the two realms. The events and places which are located by the Limos Kalinga speaker within the endophoric realm must be real rather than fictitious, must be known by the speaker and hearer, and must be literally visible and tangible to these participants, as well. The opposite is true of the exophoric sphere. All of these characteristics seem to flow from the idea of attention to present experience. Visibility and tangibility are aspects of objects and events that are in our presence. Whatever is present to us is also better known to us than what is absent, since information can be extracted from something present through sense perception or some other kind of interaction. There is a kind of Berkeleyan

epistemological stance implicit in the Limos Kalinga determiner system:

everything which is present (visible, tangible, known, happening) to the

participants in the conversation (or within the narrative) is real (discourse

realis), while everything else is fictitious, unreal, unknown, and remote.

Wiens illustrates this with the following example (1986:93):

> 'Most participants in narrative discourse are marked as
> exophoric, either because they refer to completed events or
> because they are fictitious, have ceased to exist, or are simply
> not present for the communicator and audience to observe.
> However, when the narrator refers to specific, known places
> or reports the speech of participants, he switches to
> endophoric reference. So, for example, in a certain folktale
> about a monkey and a turtle, the narrator represents the
> referents as exophoric, using the *dit* form, but when referred
> to by one of the participants [in the narrative], the same
> referents become endophoric. When the monkey and turtle
> find a banana plant, the narrator refers to it by the exophoric
> *dit* , but when the turtle asks the monkey to climb the same
> plant he refers it by the endophoric *din*. From the point of
> view of the monkey and turtle [and of their discourse] the
> plant is real and visible, even though for the narrator the
> whole story may be fictitious, or at least the events he relates
> are not taking place at the time he is telling about them. And,
> of course, the narrator has already established these referents
> by earlier mention of them.'

A further example illustrates the 'immediate' semantics of the endophoric

reference even more clearly (Wiens 1986:94):

> 'In another narrative, which is an autobiographical account,
> the narrator represents most of the referents as exophoric,
> because they are either past events, things which no longer
> exist, such as the house where the narrator grew up, or things
> that are not in view at the time of the narration, such as his
> parents. However, when he refers to an actual illness that he

has at the time of the narration, he refers to it as *si-tu-n sakit ku* (P1:si- +P2:0 + P3:tu- +P4:-N) 'my sickness'.'

We may now summarize the determinacy of Limos Kalinga, which we will represent as expressing contrasts in immediacy, according to Figure 8:

immediacy

FOCUSSED--DIFFUSE

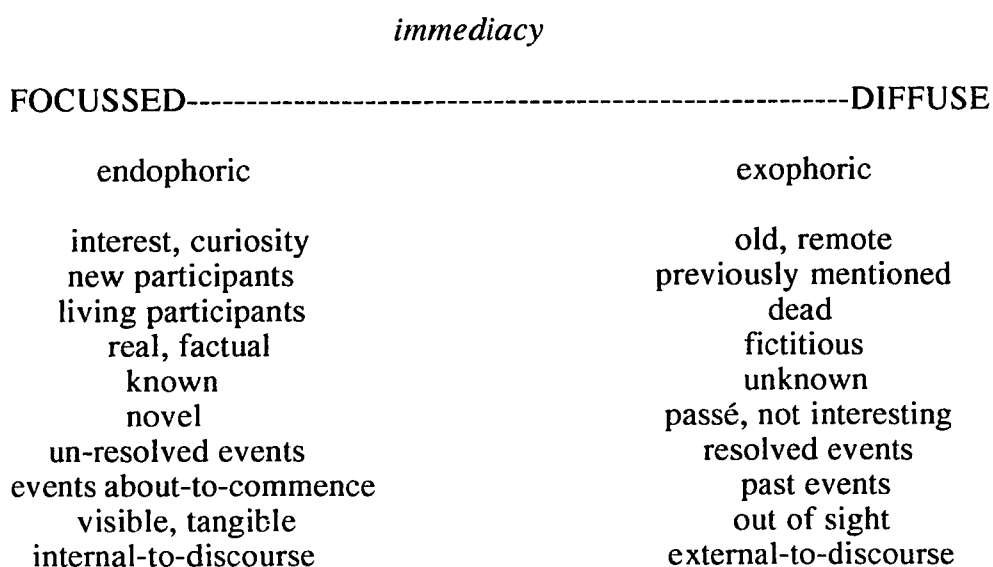| endophoric	exophoric
interest, curiosity	old, remote
new participants	previously mentioned
living participants	dead
real, factual	fictitious
known	unknown
novel	passé, not interesting
un-resolved events	resolved events
events about-to-commence	past events
visible, tangible	out of sight
internal-to-discourse	external-to-discourse

Figure 8

The parameters in which the determinacy of Limos Kalinga is constituted make it clear that focal attention underlies them, and also that attention provides a basis for comparing the determinacy of Ilokano, Yogad, and Limos Kalinga. The cognitive-epistemic semantics of the Limos Kalinga determiners appears in Yogad determiners as an index of the

semantics of actualization. From the Yogad examples, we may recall

sentences in which the choice of determiner hinged upon whether the

reported content had been directly experienced or was surmise, whether it

represented certain knowledge or heresay. In Limos Kalinga, these are the

same issues which are involved in assigning endophoric or exophoric

semantics to referents.

The Ilokano semantics of FOCUSSED individuation or emergence is

the same as that expressed in the endophoric semantics which Limos

Kalinga narrators utilize for introducing new participants, or for calling

special attention to participants. When attention is focussed on a participant,

that participant is subjectively perceived as more robust, as being more

animated, more lively or alive, and thus as having more 'presence,' and

more 'personality' than otherwise. This is but a differently configured

discourse-realis semantics. When attention is not focussed on a participant,

it is inevitably perceived as less immediate or less available and, therefore,

as less real or actual; a participant which is marginally attended is

perceived less vividly by the subject and, therefore, as possessing less

presence or individuation than otherwise. Individuation and actualization

are descriptions of the process by which the directing of focal attention

produces increasingly formed participants. The comparison of the

semantics of determinacy in these three languages, therefore, supports the

assertion that determinacy is a participant semantics which is motivated by

focal attention, is organized according to the cognitive principle

FOCUSSED--DIFFUSE, and is comparable across languages. We may

represent the comparison of these three expressions of determinacy in
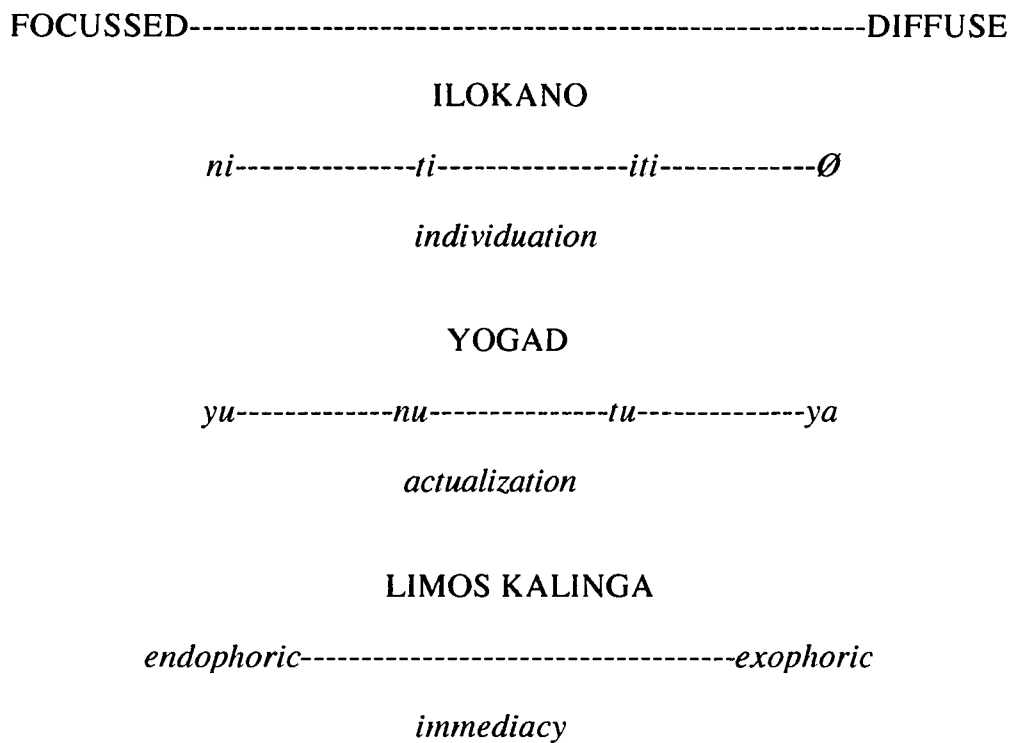
Figure 9:

FOCUSSED---DIFFUSE

ILOKANO

ni--------------ti----------------iti-------------Ø

individuation

YOGAD

yu-------------nu----------------tu--------------ya

actualization

LIMOS KALINGA

endophoric-----------------------------------exophoric

immediacy

Figure 9

6.1 Determinacy and Vision

We have argued now that the determinacy which appears in Ilokano

as individuation is the same as that which appears in Yogad as actualization and in Limos Kalinga as the contrast in immediacy which is signalled by endophoric or exophoric reference. More to the point, the claim is being made here that determinacy is a universal in language, i.e. that determinacy is present in all languages, even languages which do not have determining morphology. The basis of this contention is the recognition that there exists a principle of FOCUSSED--DIFFUSE which is a cognitive universal and is therefore a basic characteristic of human intelligence. According to this understanding, FOCUSSED--DIFFUSE is found both within language (where it is recognized in the configurations which it imparts to the participant semantics of determinacy) and outside of language.

One area where the FOCUSSED--DIFFUSE principle can easily be seen to operate is in vision, and particularly in the retina of the human eye, which has evolved alongside and functions in tandem with intelligence. In sections 6.2 - 6.7, we will present an extended discussion of the evolutionary development of the human eye, the retina, and both foveal saccadic movements and tracking movements of the eye. The aim of this is to demonstrate that the form and function of the eye are intimately bound up with the development of the human brain and the implementation of human intelligence. We will further argue that the FOCUSSED--DIFFUSE principle is basic to the cognitive processing which accompanies human

vision, and that the operation of this principle within general human intelligence accounts for certain parallels between the FOCUSSED--DIFFUSE principle in vision and determinacy in language, which will be pointed out.

Retinas with a histologically-distinct fovea and periphery are generally characteristic of animals in which visual processing occurs to a significant degree in the brain, as opposed to locally, within the retina itself. The peripheral retina is equipped with receptors which are adapted for picking up movement but have very limited resolving power. In contrast, those in the fovea are specialized for high resolution but are poor at detecting motion. Only animals above a certain level of intelligence have foveate retinas, and the brains of species with this type of retina organize visual information by exploiting these histological differences. The eye in these animals is moved by highly-developed oculo-motor systems so that the two parts of the retina are used cooperatively and the information arriving in the brain from them is integrated. When movement is detected in the peripheral retina, the result is that the eye is moved so as to cause the moving image to fall within the foveal region for greater resolution. If the animal is interested in the moving object, the eye will be directed to track the movement of the object, thus keeping the image centered within the fovea, giving it an apparent velocity of zero and, thus, making it appear as

though it is stationary with the background moving relative to it. All of this

complex activity is based on the cognitive principle FOCUSSED--

DIFFUSE. The basis of FOCUSSED and DIFFUSE visual perception is

built into the neurohistology of the foveal and peripheral retina.

Intelligence exploits the capabilities of the two portions of the retina by

using them conjointly through the oculo-motor system. The zones of the

retina impart FOCUSSED--DIFFUSE characteristics to the images which

fall upon them through the maneuvering of the orbit by means of the oculo-

motor system. The cumulative effect of this process is that the continuum

of visual experience becomes organized into gradations of the FOCUSSED-

DIFFUSE continuum as intelligence directs focal attention from point to

point within the visual field. Sections 6.2 - 6.7 will be directed toward the

illustration of this principle in the realm of vision in terms of the

evolution, microscopic anatomy, and function of the human eye.

6.2 The Evolution of the Human Eye and Visual Cortex

Evolution has provided the human with a specifically adapted eye

and a specially organized retina, both of which impart certain character-

istics to our vision. With the appearance in evolution of the type of eye

most closely related to ours, there began the development of a particular

kind of eye movement and also, and even more importantly, the elabora-

tion of complex neural 'support' for visual processing in the brain. We begin by examining these facts in some detail, in order to place the human eye and human vision in the context of the evolution of human intelligence.

All living protoplasm responds to radiant energy including light (phototaxis) to some degree. However, evolution favored the very early development in animals of cells capable of responding specifically to light. In the ectoderm of jellyfish and in earthworms there are primitive photo-receptor cells. These are distributed over the whole body of the organism but are also clumped together in certain spots. Essentially, the entire surface of the animal functions like an eye. These primitive receptors can scarcely do more than distinguish varying intensity or direction of light.

According to Polyak (1941:1), the next step in the evolution of visual organs was largely confined to animals higher than invertebrates:

> 'In some Annelids, Turbellarians, Leeches, Gastropods, Cephalopods, Onychophores or Protocheates, Arthropods...but above all the Vertebrates, the photo-sensitive cells are grouped in increasing numbers and are concentrated into compact agglomerations which conjointly with other ectodermal and mesodermal tissue elements form complicated organs of sight, the eyes.'

The value to the organism in having its photo-receptive cells grouped and concentrated in specific regions/organs was apparently that this enhanced the ability for these primitive eyes to fix the origin of a light source. As increasingly complex strategies for improving directional sensitivity

evolved, various additional capabilities developed in a sequence of three stages: the detection of motion, the detection of form, and finally, the detection of color (Sinclair 1985:xii). Indeed, according to Bruce and Green (1990:9) the improvement of directional sensitivity ought to be considered the primary motivation in every stage in the evolution of greater complexity in the eye; and the basis for the elaborations just mentioned.

As with all other features of an organism's structure, the precise form of its eye is highly adapted to its environment and lifestyle. Sinclair (1985:xii) isolates three lifestyle factors which are formative in the adaptation of the eye: (1) whether the animal is active primarily in the day (diurnal), at night (nocturnal), or both (arrhythmic), (2) whether the animal lives in land, sea, or air, or a combination of these, and (3) whether the animal is essentially predator or prey. Another example which Sinclair (1985:xii) provides of the linkage between eye and lifestyle, is that predators tend to have eyes located on the front of the head with overlapping visual fields that provide superior depth perception, while prey animals have eyes located at the sides of the head to provide them with peripheral vision.

The anatomical form of the human eye is the product of an extended period of development and adaptation. It is an eye which, through long

evolution, has been shaped by the requirements of human life and fitted to the parameters of human existence. There is, therefore, an intimate connection between the precise form of the eye and our lifestyle. We are essentially predators who are active mostly during daylight hours but also, to some extent, during the hours of darkness. We are equipped with color vision and great depth perception, we are able to accommodate for near and distant vision, and we have highly movable eyes which are extremely efficient at detecting motion and are also capable of high-resolution viewing. The point is that our eyes have a number of highly specialized characteristics which are closely linked to our mode of existence and, as will be demonstrated below, conform closely to the nature of human intelligence.

Only the vertebrate eye is an outgrowth of the brain itself, and as we will see, certain advances in brain-evolution took place in connection with developments in the vertebrate eye. Vision is also the only sense in vertebrates which has such a direct connection to the central nervous system. In the invertebrates, as indicated above, eyes evolved from photo-receptors found in ectodermal tissues. In the vertebrate eye, however, the neuro-histology of the eye closely resembles that of the brain, and in some primitive vertebrates some visual processing is actually done in the eye itself (Sinclair 1985:xiv). Local processing of this type is called 'coding.'

Evolution has produced three basic types of image-forming eyes: our camera-like eye, which focusses an image on the retina; the compound eye, which has a fixed focus with individual refractive units, each covering a portion of the visual field; and the rare and primitive scanning eye, which works somewhat like a TV camera, with two exterior lenses focussing light on a single interior lens that scans back and forth, often taking a second or more to 'build' a complete image (Sinclair 1985:2).

Within these three types, there is a stunning diversity of fascinating and exotic (and often bizarre) types of eyes, especially among the invertebrates. However, it is the vertebrates which interest us here, particularly the camera-like eye of the higher vertebrates. Insofar as we are interested in human vision, there is one structure in the vertebrate eye which concerns us above all and that is the retina, because it is so closely linked to the cognitive level of the species. As Ali and Klyne (Ali and Klyne 1985:115) have concluded:

> 'No other ocular structure is as closely related to the mode of
> life of the animals as is the retina; so much so that one can
> predict with reasonable assurance the habit of the animal from
> a histological examination of its retina.'

Amphibians, such as frogs have a retina which is divided into an upper zone which is specialized for the detection of movement and direction and function to help the animal to avoid predators, and a lower zone

which is specialized for searching out suitable landing sites for the next jump.

Reptiles were the first creatures to be able to accommodate, i.e., to focus on near and far objects, by using special muscles to alter the shape of the lens. This characteristic does not apply to the crocodile, however, which focusses light with its stenopaic pupil which contracts to form slits that work like a pinhole camera. Crocodiles have only rods (for dim light) in their retinas, while turtles have virtually all cones (for bright light) in theirs. Lizards have a very highly developed fovea and were perhaps the first creatures which developed foveas, a region of the retina specialized for enhanced acuity which shall be of particular interest to us. In the chameleon there are 750,000 cones per sq. mm. compared to 200,000 in our own (Sinclair 1985:83). Its eye has been called virtually 'a living microscope.' Anoles actually have two foveas, one which is centrally located and another which is peripheral.

Birds have retinas which have a far greater density of photo-receptors than those in human eyes. Hawks have one million per sq. mm. and even sparrows have about 400,000 per sq. mm. Not only are photo-receptors especially dense in the avian retina, but there is a tremendously high ratio of bipolar and ganglion cells to photo-receptors, so that virtually

all of what the eye 'sees' is transmitted to the brain. Hawks have peripheral vision which has probably twice the acuity of ours and frontal vision which is approximately eight times greater than ours in resolving power. In addition, the hawk has the ability to keep its entire visual field in focus simultaneously from edge to edge. Approximately 95% of all birds have foveate retinas and 54% of these have bifoveate retinas. The central fovea is for side vision, while the temporal / nasal fovea is for frontal vision. In addition, seabirds have a streak of specialized retinal cells which apparently are for scanning the horizon. Birds' eyes are larger in proportion to their bodies than any other vertebrates. This large eye enables great acuity at the price of the ability to move the eye within the head.

Above the evolutionary level of the birds, there is a discontinuity in the development of foveas. From the lizards to the birds the development is in terms of improvements in optics. The trend was toward the evolution of increasingly larger eyes in proportion to the body, retinas with high photo-receptor density, foveas with tremendous resolving power, and the development of retinas with multiple foveas. As mentioned previously, larger eyes meant decreased oculo-motor ability. The amphibians, reptiles, and birds have highly selective retinas, with most of the processing done locally and not in the brain. Although visual acuity and foveal resolution were highly developed in these species, what they actually 'see' is not

comparable to human visual perception. In place of form, the eyes of these

animals are adapted to the detection of motion (especially in the prey

animals) and rapid recognition of shape and pattern. When we consider the

next higher animals in the evolutionary scale after birds a discontinuity

becomes apparent.

Most mammals <u>do not have a fovea</u> but only a central area, in which

there is an increased density of nerve cells and photo-receptors. According

to Ali and Klyne (1985:117):

> 'All diurnal retinas have a specialized area of one shape or
> another where inner nuclear and ganglion cell layers are
> thicker than in the rest of the retina. This specialized area is
> known as the *area centralis* although it is not always centrally
> located.'

Among the higher mammals, it is only the primate which clearly has

a fovea. The primate retina is distinguished particularly in regard to its

area centralis, according to Polyak (1941:220):

> 'The extraordinarily numerous nervous elements that compose it
> [i.e., the primate retina] and that are imbedded in a neuroglial stroma
> are chiefly crowded into a small island-like area around the point
> where the visual axis touches this membrane. According to a rough
> estimate, roughly half of all the ganglion cells, for example, are
> deposited here.'

In all (diurnal) simian and anthropoid primates, therefore, there is not only

a central area but a pronounced inner foveal depression. According to

Polyak (1941:232), the fovea in monkeys is well-developed, although

somewhat smaller than that in humans, and is deeper, having steeper slopes

and a flat floor. The thinness of primate foveas, and also the flat floor

feature, permit a narrow bundle of light rays to impinge upon the outer

layer of photoreceptors unimpeded and, in the case of the flat floor,

without diffracting or deflecting them. It is also possible that the shape of

the fovea may have a magnifying effect (Ali and Klyne 1985:117).

In humans, the fovea is particularly well-developed. The human

fovea has an excavated appearance. This appearance is the result of the

lateral displacement of several inner (i.e., closer to the center of the eye)

layers of the retina. Within the fovea, the majority of human

photoreceptors are cones and are extremely slender and elongated, enabling

them to be packed to an extraordinary density found in no other area of the

retin. The photoreceptors in the center of the fovea are almost twice as

long as those in the periphery of the fovea and these are longer than those

in the periphery of the retina. The fovea in humans is approximately 1.5

mm. (150 microns) across and about 240 microns deep.

From the edge of the parafoveal region outward into the peripheral

retina, 'the structure of the retina becomes increasingly crude' (Polyak

1941:221). In the peripheral retina, receptor cells are thick and short and

are more widely spaced than in the fovea, with fewer and larger conduc-

ting neurons. It is clear from its histology and development in lizards and

birds that the purpose of the fovea is to increase visual acuity. In humans,

at least, the visual acuity of the parafoveal and peripheral regions is poor,

although it can detect shapes at a fairly gross degree of resolution. This is

certainly commensurate with the histological picture. What the human

parafovea seems to be well-adapted for is sensitivity to motion. In addition

its organization enables it in Polyak's (Polyak 1941:221) words:

> '...to cumulate and thus to summate weak stimuli; and in this
> way the periphery more readily elicits responses to weak
> photic stimulations which in the fovea would remain
> subliminal and would therefore likely produce no effect.'

When we reach the evolutionary level of the mammals, we begin to

distinguish between animals that 'see' almost entirely with their eyes and

have no foveas (such as the rabbit) and more advanced mammals (such as

the primates) who have foveas and perform a considerable amount of

processing of optic output in their brains. Here the discontinuity that we

mentioned in the evolutionary development of the fovea takes a new turn.

Although the foveas of the higher mammals still do not compare to the

refined and highly-developed structures in lizards and birds, the higher

mammals began to develop cognitive processing in the optic centers of

their brains along with sophisticated oculo-motor systems to enable

voluntary eye movements.

During the Russo-Japanese War, doctors who studied soldiers who had sustained head injuries discovered that some of their patients had been blinded through wounds to the back of the head despite having perfectly sound eyes. This was the first indication of the extent to which human vision is dependent upon the activity of the visual neocortex.

The brain of the rabbit is so primitive in this respect however, that even if a great percentage of the rabbit's neocortex is lost, the animal retains some vision. This low level of brain organization in the rabbit is inversely proportional to the high degree of 'selectivity' in its eye. According to Sinclair (1985:118)

> 'Sixty percent of the rabbit's receptor fields are selective, meaning that they respond to specific features of visual images. Selectivity is not good for form discrimination but good for telling size or location' [emph. mine, JWB].

By having retinas with a great deal of featural specificity, animals like rabbits and frogs can act much more quickly to visual stimuli because they do not require processing in the brain in order to identify and recognize what they see. The disadvantage of a highly selective retina, however, is that a great deal of the 'information' available to the animal by way of vision never reaches its brain for processing, because it is filtered out by selective receptors which only 'see' what they are 'prewired' to see.

Comparing the primitive brain of the rabbit with the brain of a primate, then, a significant difference is that the primate brain receives a tremendously greater input for processing, because the primate eye is essentially non-selective. The important point is that the eye and the brain are intimately connected with one another in development and function:

> 'Indeed, the vertebrate eye is not merely...an 'outgrowth' of the brain...the complex cellular organization of the eye preceded that of the brain (Sinclair 1985:128).'

The second half of Sinclair's statement refers to the development of neural support within the neocortex for processing optic output from a non-selective, foveate retina. In pointing to the close relationship between eye and brain, therefore, we are making the claim that vision is connected with a large amount of highly complex cognitive activity in all primates, and that it is a highly developed faculty in human intelligence. A significant portion of human intelligence is built around visual processing, and this makes vision more accessible for the study of human cognition than do our less-developed senses. Our aim here is to show that the FOCUSSED-- DIFFUSE principle which underlies so much of visual cognition gives rise to similar ways of organizing other domains of experience including language and discourse. While the same principle operates within hearing and olfaction, in order to study the principle in these domains we must look to other

species whose intelligence is more developed in terms of these capacities (see below, pp. 225-229).

6.3 The Evolution of Foveal Saccadic and Tracking Movements

There is a part of the brain that is involved with vision but which is not within the neocortex. This is the 'superior colliculus' and is known as the 'optic brain' in more primitive animals (e.g., reptiles) in which the midbrain constitutes the entire brain. (The neocortex of mammals is, as it were, an additional enveloping layer added on to the more ancient mid-brain.) It appears that it is this older part of our brains which is largely responsible for eye movement, the subject to which we now turn.

There are three basic types of eye movements: 1) saccades and fixations, 2) vergence and version, and 3) miniature eye movements. The first type is made of those darting movements which we make in following areas of interest in a visual scene or in reading. Vergence and version are movements the eyes make in order to accommodate, i.e., keep in focus, objects which are at varying distances from the eye. The third type of eye movement is one of which we are consciously unaware, but upon which all of vision depends. Even when we are fixating upon a point, our eyes make extremely small movements around that point in order to keep the retinal

photoreceptors from habituating to the stimulus and 'going blank.'

We are primarily concerned with the first type of eye movement because this type has a conscious cognitive component and is mediated by interest and attention. To the extent that we are aware of our own eye movements, we imagine that our eyes glide smoothly across lines of text or simply gaze without moving at larger interesting scenes. It has been known since the turn of the century, however, that when we read our eyes move across lines of print in a succession of little jumps (saccades) and pauses (fixations). The pattern of saccades and fixations also characterizes the way we look at pictures, landscapes, and both stationary and moving objects. Contrary to what we might imagine, saccadic movements are frequent, jerky, and rapid, and have the additional characteristic that once initiated they follow a pre-established trajectory whose parameters have been instantaneously calculated within the brain (Matlin 1983:48).

Animals which have no fovea, but only a homogeneous retina, rely upon brief head movements combined with 'reorienting saccades' to continually re-locate moving targets within their visual fields as they move beyond their peripheral vision. These are brief, rapid, highly predictable movements of the eyes 5 to 10 degrees ipsilateral to the movement of the head. Such movements of the eye are only found in these animals in combination with the simultaneous movement of the head as it follows the

item of interest.

Obviously, foveal saccadic movement is a characteristic eye movement pattern for humans, and it most likely arose at the same time as the development of foveate retinas (in higher mammals and primates). According to Whittaker and Cummings (1986:177):

> 'We suspect that the control of saccades is a phylogenetically ancient system, with the most primitive function being that of keeping the interesting aspects of a visual scene somewhat centered in the visual field [emph. mine, JWB].'

Saccadic movement is a voluntary type of movement. Voluntary eye movement is always associated with the presence of foveas. Most animals are unable to make voluntary eye movements, therefore, and those lower animals which are able to move their eyes voluntarily are invariably those with foveas (Ali and Klyne 1985). According to Whittaker and Cummings (1986:178), foveal saccadic movement arose because predatory animals needed to be able to pursue their prey visually without head movements which would alert their prey:

> 'Animals have evolved whose survival depended on an ability to locate and secure a mobile source of food. Predators required the ability to identify and localize prey. As a result, the retina of visually dominant predators often has a region specialized for the resolution of detail and spatial discrimination, an area centralis or fovea. As the retina became more specialized, oculomotor control had to follow suit to compensate for the decreased field of this specialized region of the retina. Retaining their ability to shift the eye quickly and with a minimum of visual disruption to a

particular position, saccades became more precise and their
final craniotopic position highly variable. Something of
interest would be selected in the peripheral field and gaze
rapidly shifted to position that interesting image into central retina
for further scrutiny' [emph. mine, JWB].

Everything we have said about foveal saccadic movement to this

point also applies to what happens in the visual tracking of moving objects.

The movements which the eyes make in this process are more complex,

however, and not as well understood (Fisher et al. 1981:32). Tracking eye

movement cannot be initiated voluntarily. The movement of the eyes in

this manner requires the presence of a moving object or its analog. By the

latter it is meant that foveal tracking eye movement has been produced in

totally darkened rooms using a moving sound source (Cushman et al.

1984). There are three separate kinds of eye movement which can be

found in foveal tracking upon analysis. One type of eye movement is, of

course, miniature eye movement, which is omnipresent in vision as

explained earlier. Secondly, there are saccadic movements, as we might

expect: brief, jerky shifts of the eyes which repeatedly attempt to locate the

object within the central fovea. These amount to repeated corrective

maneuvers. The third type of movement, or component, is a slower,

continuous kind of saccade related to the velocity of the target, which

appears to be the fundamental trajectory resulting from an algorithm based

on calculation of the projected path of the object. (Carpenter 1988:55)

This third type of movement is called 'smooth pursuit.' Naturally, if the motion of the object involves movement across foveal planes in the field of vision, then vergence and version will also be involved in foveal pursuit, this being the most complex type of eye movement.

In order for such complex movement as foveal tracking to be carried out successfully, the oculo-motor system must rely again on synergism between fovea and peripheral retina. If a moving object appears somehow in the fovea without passing across the peripheral field, there cannot be instantaneous commencement of pursuit. There is a latency involved in such circumstances of 0.1 - 0.2 sec, usually 0.15 -0.17 sec (Yarbus 1967:167). However, if the peripheral retina picks up an object moving across it, the information is used to plan a smooth pursuit based on the direction and velocity of the moving object. A saccade is made to place the object within the fovea. At this point (within milliseconds), smooth pursuit and foveal tracking begins. This means that the calculation of the projected path of the object and the algorithm for tracking it are either completed during the initial saccade or at least by the time of the initial fixation. Yarbus (1967:167) shows that commencement of pursuit procedures and initial saccade take place simultaneously. This surely evinces a very high level of integration of peripheral and foveal data, and a synergism between the two which is highly sophisticated.

The burden of this part of the presentation is the extent to which vision, here in terms of the movements of the eye, is motivated by focal attention and curiosity. We have shown that higher evolutionary levels of intelligence have developed increasingly sophisticated oculo-motor control within the 'phylogenetically-ancient' centers for directing eye movement. And, it is the oculo-motor system which intelligence employs to exploit the capabilities of the foveate retina, moving the eye so that the image of what is interesting to the animal falls within the fovea in order for the animal to extract more information from it. Refinement in oculo-motor control thus enabled the visual capacity of primates to implement their intelligence more fully.

The following points have been now been set forth in the foregoing presentation of the evolution of visual cognition:

1)   When photo-receptors began to be concentrated in specialized organs of sight instead of being located all over the surface of the organism, they imparted to the animal an enhanced ability to determine the direction of origin of light sources. The price of this development was the loss of the ability to attend to photo-stimulation from all directions simultaneously.

2)   Saccadic eye movement is a voluntary type of movement and is inevitably found in animals which have foveas. Increased oculo-

motor control was necessary as foveas evolved, because of the decreased field which accompanied increased retinal specialization. It enabled predatory animals to pursue their prey visually. Voluntary eye movement is driven by interest and attention.

3)   The primate / human retina, which is histologically organized into a central fovea and a peripheral region, was accompanied (in evolutionary terms) by the development of complex neural 'support' for processing optic output within the brain. In this way, the eye adapted to a certain type of brain, and conversely, human cognition was configured in a certain way to work with a particular kind of eye. There is an intimate relationship between retina and brain. We will present below a number of studies which show a high degree of cognitive interaction between the peripheral retina and the fovea. Clearly, the primate visual cortex developed in such a way as to enable it to process optic input from a foveate-peripheral retina and to organize visual perception in terms of the FOCUSSED--DIFFUSE principle inherent in the neurohistology of that retina.

The FOCUSSED--DIFFUSE principle is a defining characteristic of human cognition. It has actually helped to configure the brain itself, and it

underlies the operation of primate oculo-motor systems. Intelligence

orients the organism to its environment partly through the focussing of

attention on what the organism is interested in. The foveate retina and the

human oculo-motor system are, in essence, the instruments of visual focal

attention, and the basis of their function is the principle FOCUSSED--

DIFFUSE. When attention is concentrated and directed, the result is always

some type of FOCUS. Because we are unable to attend simultaneously to all

stimuli, the creation of focus inevitably means the non-focussing of every-

thing else in the environment. This applies to all cognitive domains, and so

it should not be surprising that this same principle appears in language, as

well as in vision, olfaction, hearing, and so forth. The presence of this

principle within language is evidence, however, of the non-modularity of

linguistic intelligence.

We may now point out the alignment of some characteristics which

have appeared repeatedly in our discussion of the manifestation of the

FOCUSSED--DIFFUSE principle in the evolution of human vision, listing

these as correlates of the opposition PERIPHERY--FOVEA (to the extent

that these can be assigned to separate paths of evolutionary development) in

order to solidify our growing impression of the FOCUSSED--DIFFUSE

principle. This alignment is presented in Figure 10 juxtaposed with the

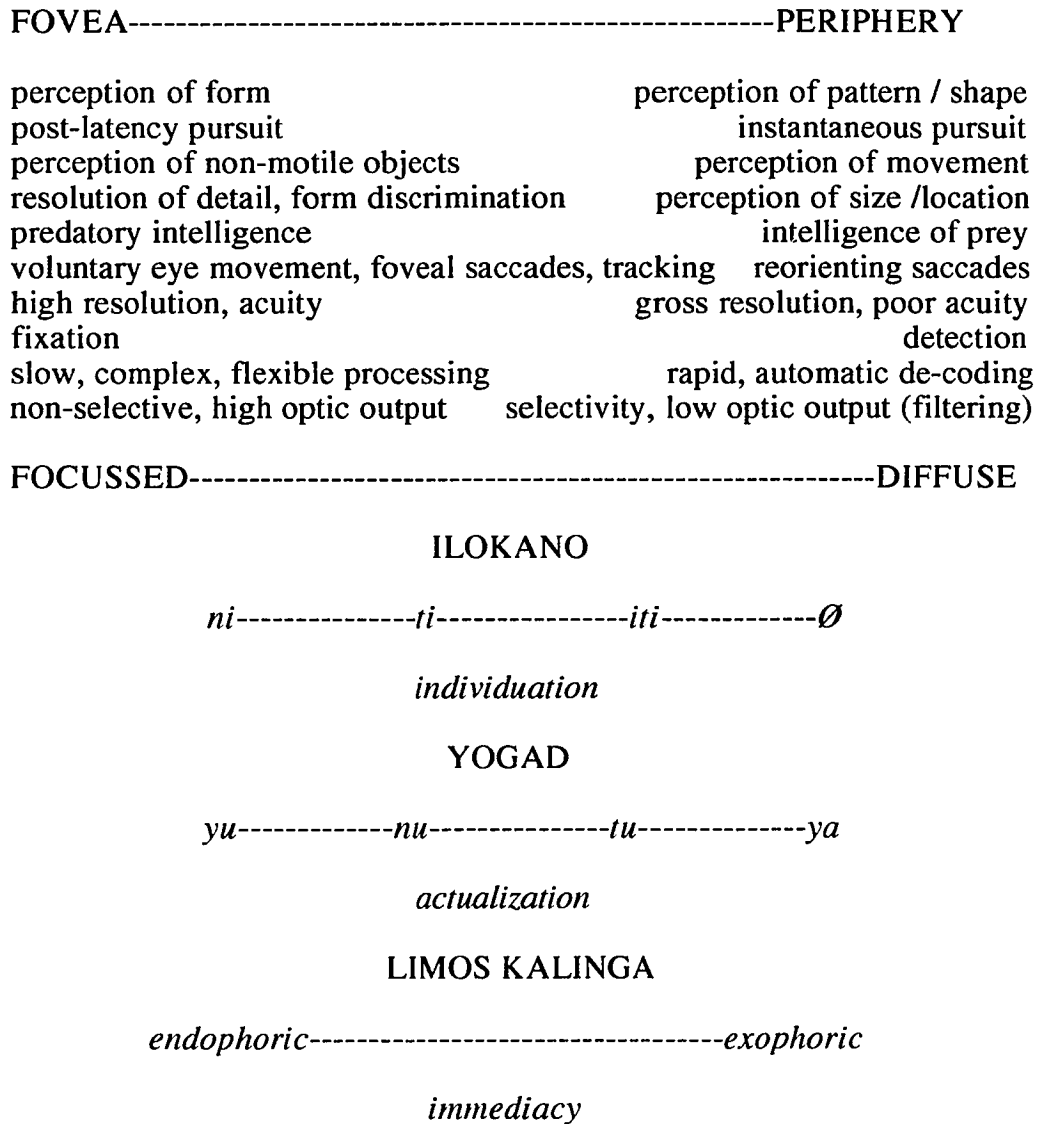alignments which were represented in Figure 9:

FOVEA--PERIPHERY

perception of form   perception of pattern / shape
post-latency pursuit   instantaneous pursuit
perception of non-motile objects   perception of movement
resolution of detail, form discrimination   perception of size /location
predatory intelligence   intelligence of prey
voluntary eye movement, foveal saccades, tracking   reorienting saccades
high resolution, acuity   gross resolution, poor acuity
fixation   detection
slow, complex, flexible processing   rapid, automatic de-coding
non-selective, high optic output   selectivity, low optic output (filtering)

FOCUSSED---DIFFUSE

ILOKANO

ni--------------ti----------------iti-------------Ø

individuation

YOGAD

yu------------nu--------------tu-------------ya

actualization

LIMOS KALINGA

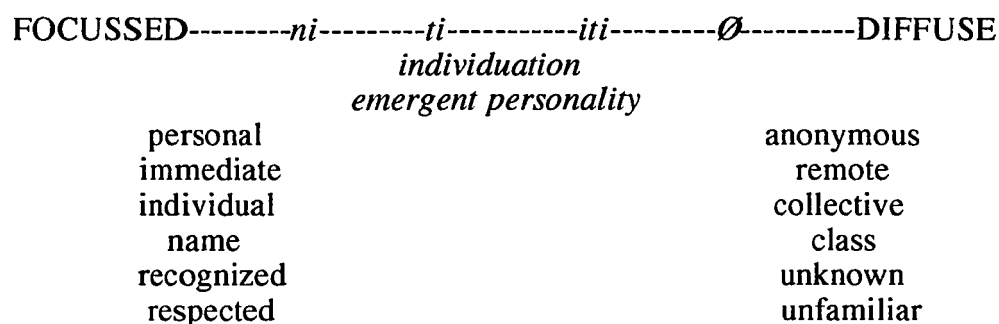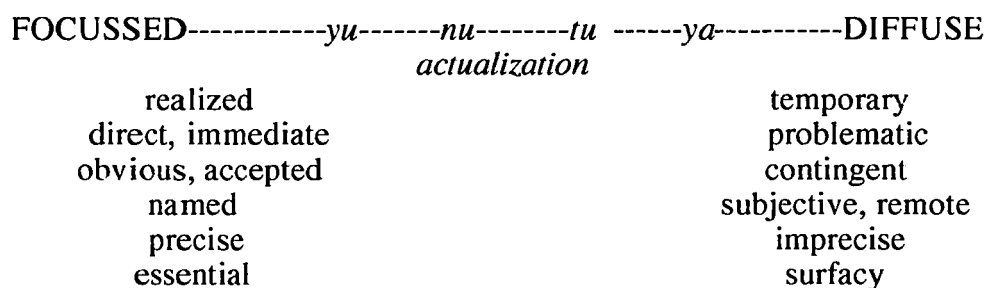*endophoric----------------------------------exophoric*

immediacy

Figure 10

The specific semantic contents which formed the basis for the continua in the three languages are recapitulated in Figure 11:

ILOKANO

FOCUSSED---------*ni*---------*ti*-----------*iti*---------*Ø*---------DIFFUSE
individuation
emergent personality

personal	anonymous
immediate	remote
individual	collective
name	class
recognized	unknown
respected	unfamiliar

YOGAD

FOCUSSED------------*yu*-------*nu*--------*tu* ------*ya*----------DIFFUSE
actualization

realized	temporary
direct, immediate	problematic
obvious, accepted	contingent
named	subjective, remote
precise	imprecise
essential	surfacy

LIMOS KALINGA

FOCUSSED-endophoric-----------------------------exophoric-DIFFUSE
immediacy

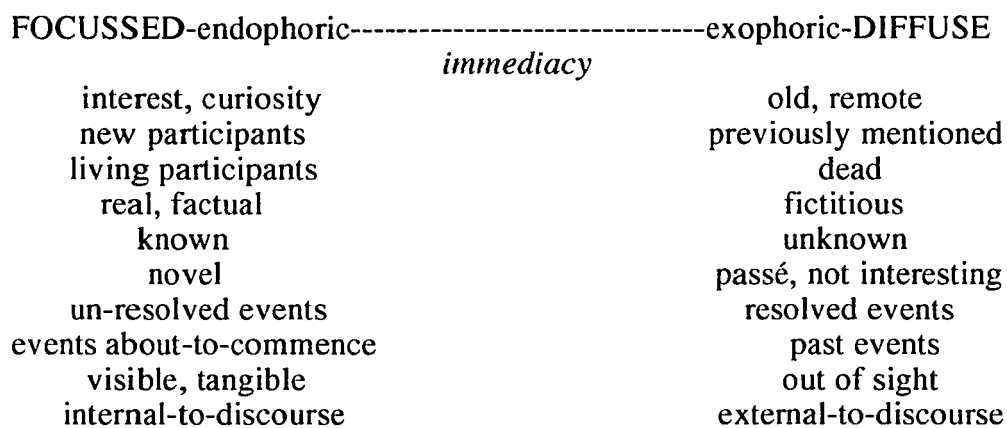|	
interest, curiosity	old, remote
new participants	previously mentioned
living participants	dead
real, factual	fictitious
known	unknown
novel	passé, not interesting
un-resolved events	resolved events
events about-to-commence	past events
visible, tangible	out of sight
internal-to-discourse	external-to-discourse

Figure 11

6.4 Foveal-Parafoveal Synergism in General Vision

Our concern now is to see how intelligence makes use of the particular kind of eye we have described in sections 6.2 - 6.3 , i.e. an eye whose retina is organized in terms of a histologically distinct fovea and periphery. Furthermore, we want to know why the eyes move in this peculiar way of sudden jumps and pauses. What exactly is this pattern of movement all about?

Innumerable studies have shown that the oculo-motor system developed in such a way as to utilize the fovea and periphery synergistically. It has been shown repeatedly that the parafovea / periphery are used to 'preview,' as it were, what is subsequently to be focussed within the fovea; that the information picked up from this source is used in directing the fovea toward the appropriate point. In this way, the peripheral retina 'primes' the recognition or identification process (for object recognition, cf. Henderson et al. 1989). It was pointed out above that there was an advantage to animals in having a highly selective retina, in that it enabled a rapid identification-like procedure to occur in the eye itself with little or no processing in the brain. Since primates do not have a high degree of retinal selectivity, the parafovea seems to have been highly adapted for

previewing and priming, to expedite the recognition process which we have to perform within our brains instead of our retinas.

Pollatsek, Rayner, and Collins 1984 is one of many studies which shows this foveal-parafoveal synergism. A line drawing of a simple object (e.g. tomato, cat, ball, horse, carrot, boy, fence, etc.) was presented in peripheral vision to the subjects. The subjects then made an eye movement to the picture. During the saccade, however, the first picture was replaced by a second one. Once the subjects had foveated the pictured object, they verbally identified it as quickly as possible. The results showed that the content of the first picture affected the speed with which the second picture was recognized and identified. If the two pictures were of objects which were semantically different (e.g. a picture of a boy and a cat), there appeared to be interference and inhibition from the competing semantics. If the two were visually identical, there was about 100-130 msec. facilitation in recognition as compared to a control. When the pictures were visually different but alike in semantics (e.g. two pictures of different horses), there was 90 msec. facilitation. There was also facilitation at the purely phonetic level, since rebus pictures, i.e., semantically different objects whose English names were phonetically identical (such as a picture of a baseball pitcher and a picture of a water pitcher), also produced a limited facilitation effect. Somehow, both the visual features and the name of the first

fixation survived to effect / affect identification and naming at the second

fixation. It is clear from this that one role of the peripheral retina is to

'preview and prime' cognitive processing in visual perception, and that

much more information comes to us through the parafoveal retina than we

realize.

The process of 'priming and previewing' also seems to be highly

analogous to one of the patterns for managing information flow in English

discourse: new participants in narrative are often introduced as 'indefinites'

(DIFFUSE) and then become 'definites' (FOCUSSED) when subsequently-

mentioned. It is possible that this discourse pattern is a reflection of the

same kind of foveal-parafoveal interaction that we see in Pollatsek, Rayner,

and Collins 1984. If the principle FOCUSSED--DIFFUSE is indeed basic to

human cognition, whether visual, olfactory, or linguistic, it will not be

surprising that so striking a parallel between vision and language should

exist nor that <u>both</u> vision and language closely resemble olfactory tracking

in this respect. There is evidently a principle underlying this pattern of

contextualizing and then tracking participants / images which is basic to

human intelligence.

Another way in which the parafovea and fovea seem to interact is in

parafoveal control of the angle of the visual field, or scope. Mackworth

(1965) measured the field of visual attention by giving subjects a cognitive

task requiring foveal fixation and the simultaneous comparison of the fixated items with other items placed at varying distances from the center (in the peripheral field). He found that performance fell off sharply when the periphery was overloaded with distractors, and that the drop-off in performance manifested itself in terms of a constriction of the visual field, which he called 'tunnel vision.' This effect apparently gives priority to processing information in the foveal region. However, the process can be carried to the extent that even parts of the fovea itself become involved. Williams (1988) shows that 'top down' general mechanisms (e.g. attitudinal bias) are also involved in this interference phenomenon.

Similar findings have come from studies of eye movements in toxic states. Belt (1969) found, for example, that alcohol dramatically alters eye movement patterns for drivers. At 0.08% blood alcohol level (3 to 5 drinks, depending on weight) drivers doubled the amount of time they spent looking directly ahead. One such driver made no fixation on passing cars at this level. (Reported in Matlin 1983:51). Essentially, in this state the subjects are unable to allocate cognitive attention to anything beyond the central field of vision. The field may not constrict as in 'tunnel vision' but there is simply a reduction in attention to the periphery as evidenced by decreased peripheral eye movement.

In both of these studies, the 'overload' to the subjects was presumably in terms of cognitive processing, i.e., because of the conditions imposed on them by the experiment, the subjects exceeded the limits of what they were able to attend and maintain function. A somewhat unexpected result was shown in a recent study similar to these, in which the overload was in terms of affect (Shapiro et al. 1989). Control (non-anxious) subjects attended mainly to the central stimulus. Subjects who were given a 'musically induced anxious state' divided their attention between central and peripheral visual stimuli but actually attended predominantly to the periphery. Possibly in an anxious / fearful state animals are set up to search the peripheral field for intruders. There was no significant increase in reaction time to the cognitive tasks presented.

On the basis of the studies just described, therefore, it is clear that the retinal organization into foveal and peripheral zones is exploited in terms of eye movements which enable the focussing of attention on cognitive tasks. We tend to think of the fovea as being the area of the retina which is adapted par excellence for specific function (visual acuity). But these studies show that the parafovea and periphery of the retina are also highly adapted for such tasks as detecting motion, directing the next fixation, controlling size of visual field, and gathering information for pre-processing. Intelligence makes use of the neurohistological characteristics

of both regions of the retina synergistically, so that each plays its particular role in the overall cognitive functioning of the organism through vision. It is, in fact, the interaction between the two regions which to some degree overcomes the limitations imposed by 'de-selectivizing' the retina itself. 'Previewing and priming' have compensated for the fact that visual analysis is not carried on locally (within the retina itself), but in the brain, a much more complex, more flexible, but slower, processor.

6.5 Fovea and Periphery in Reading

The studies which perhaps have demonstrated most clearly the cognitive interaction between the peripheral retina and fovea have come from research in the psychology of reading (For literature and introduction, see Underwood and Maylor 1984). The precise nature of this interaction is still being worked out, but it has been known for some time that information gathered from the parafovea is used to plan the subsequent saccade and fixation, and that it is able to gather information about the location, size, and shape of words, along with something of their semantic content. Visual data detected separately by the fovea and parafovea / periphery are integrated relative to the cognitive task at hand. It used to be held that the timing of saccades and fixations in reading was rather automatic and based on a speed relative to a fixed norm which had been

selected by the reader after judging the difficulty of the text. More recent studies have supported a 'current fixation model' in which each movement is controlled entirely by the foveal and parafoveal information gathered during the current fixation. For example, Morris et al. (1990) show that letter information from an upcoming word allows that word to be encoded more rapidly when it is fixated. Parafoveal fixation of upcoming words therefore appears to facilitate lexical access when subsequently fixated. The parafoveally and foveaily fixated words seem to be processed separately without interference, since parafoveal letter information does not influence current foveal fixation length. Instead, the latter is mediated by purely lexico-semantic considerations. The parafoveal information helps calculate spatially where the next saccade will be, rather than assisting in calculation of temporal duration of fixations. Thus, two different mechanisms seem to be involved in determining when and where to move the eyes during reading, a central one which controls the temporal aspect, and a parafoveal one which controls the spatial coordinates.

As stressed by Taylor and Taylor (1983:136):

'Eye movements are sensitive to the information content of a text: The eyes fixate on informative words and parts and make regressive fixations when words and parts are ambiguous, important, complex, or not as predicted. The relative importance of a word must be predicted mostly before the reader's eye arrives at it. 'Prediction-before-fixation' is necessary because the reader moves the eyes rapidly; it is

possible because the reader uses syntactic and semantic context to predict what is coming, and because the readers use their peripheral vision efficiently.'

They conclude (1983:139):

'eye movements are under on-line, moment-to-moment cognitive control. Fixations tend to occur on informative words and clauses, and on the last words of sentences or paragraphs; regressions tend to occur on ambiguous or un-expected words.'

Thus, research on the psychology of reading has revealed that the processes involved are quite contrary to our intuitions about how we read. One of the most significant results of such studies from the perspective of determinacy has been the discovery that the cognitive connection between foveal and peripheral retina is exploited in reading to a degree heretofore unexpected. Many studies have shown that cognitive visual processing depends on moment-to-moment interaction between these two regions of the retina. We are led inescapably to the conclusion that this must be a characteristic reflection of the way in which the neocortex was configured to process optic output, and of the cognitive principles which underlie and organize that activity.

6.6 Fovea and Periphery in the Observation of Complex Objects

We now want to observe a few points about the operation of intelligence in saccadic movements connected with observation of complex,

motionless objects. To date, the most extensive study of eye movements

during observation of still photographs of complex objects is Yarbus 1967.

Yarbus attempted without success to find a correlation between the details

of objects pictured and the pattern in which viewers fixated on them in

terms of the numbers of details, relative brightness, color, contour, outline,

etc. His studies show that there is no way reliably to predict the points of

an object on which subjects will fixate, how long the fixation will last, or

how often the subject will return to fixate again. Instead, what drives

fixation is the subjective interest of the observer (Yarbus 1967:211):

> 'The human eyes voluntarily and involuntarily fixate on those
> elements of an object which carry or may carry essential and
> useful information. The more information is contained in an
> element, the longer the eyes stay on it. The distribution of
> points of fixation on the object changes depending on the
> purpose of the observer, i.e. depending on the information he
> must obtain, information can usually be obtained from
> different parts of an object. The order and duration of the
> fixations on elements of an object are determined by the
> thought process accompanying the analysis of the information
> obtained. Hence people who think differently also, to some
> extent, see differently.'

Mackworth and Morandi (1967) also performed a study using still

photographs, and they found that the viewers did not scan the entire picture

searching for points to fixate, but seemed to know where to look as soon as

they picked up the pictures. They were led to the conclusion that informa-

tion available to the peripheral vision was guiding choices of where the

subjects would make fixations. As they described it, 'The eye appeared to be searching for the unusual and irregular' [emph. mine, JWB] (reported in Haber and Hershenson 1973:223). The choice of which points to fixate is not simply automatic, therefore, since the selection of 'the unusual and irregular' is a subjective consideration and is under cognitive control. Here we are reminded of the observations of DuBois (1980:272-3, cf. above, p. 30-31), regarding the complexities involved in trying to understand how speakers use 'definiteness' and 'indefiniteness' in discourse. The gauging of the addressee's curiosity about different participants in a narrative, and the selection of points for visual fixation, are processes which are both motivated by attention and its concomitants: interest and importance. The result of both processes is that the continuum of experience (linguistic or visual) becomes organized in accordance with the principle FOCUSSED-- DIFFUSE.

The peripheral retina is adapted for the detection of movement but provides poorly-resolved images. It is in the peripheral retina that asymmetries (in the sense of Davis 1991) are detected and previewed. The foveal region, on the other hand, has high resolution but is poor at motion detection and is the region of the retina suited for detailed examination of non-motile objects. It is in the central retina that asymmetries are 'resolved' into symmetries.

The outer rhythm of eye movement, alternating between saccades

and fixations, is mirrored within the eye as an alternation between

centering and peripheralizing. The centering of points of interest within a

scene is something which takes place repeatedly over the span of a few

minutes of observation as intelligence keeps moving the eye so as to place

the point within the foveal region. It is the repeated centering of a

particular spot which cumulatively tags it as FOCUSSED data (cf. Haber

and Hershenson 1973: Figure 9.13). What is not centered is, of course,

tagged as DIFFUSE. Because resolution is vastly superior in the fovea,

points of the scene which are repeatedly centered will have more

information extracted from them than those which are not. Therefore, the

cumulative effect of repeated framing, at a firing rate of about 50 frames

per second, is that an entire scene or picture is organized into DIFFUSE

areas, about which only low resolution data are collected, and FOCUSSED

regions, from which high resolution data are gathered. In essence, what

happens is that repeated visual chunking and categorizing convert a scene

or picture into something analogous to a topographic relief map in which

the points of fixation are 'mountains' of varying height and the rest of the

picture is 'sea level.' Through this process, new and interesting information

is attended and also contextualized, rather than being visually isolated

somehow, as it would be if the retina consisted of a fovea only (recall the

experience of losing your place when working with a microfiche or when looking at a microscope slide). Again, this process seems to be highly analogous to the way in which determinacy is assigned to participants in the course of narrative discourse and to olfactory or auditory tracking along scent and sound gradients, respectively.

A further exemplification of this principle can be seen in Simmons 1989 (reprinted in Eimas and Galaburda 1990:155-99). This is a study of acoustic image formation in echolocating bats. Bats are able to track and capture flying insects using a biological sonar system with which they emit a series of ultrasonic sounds and construct images of surrounding objects from the echoes of the sounds which they send out. Some bats emit constant frequency (CF) sonar waves and interpret Doppler shifts created in the waves by the beating of insect wings. Other bats use a broad range of frequencies in frequency-modulated (FM) sonar. The cognitive processing which is involved in this system for locating and capturing flying insects in the air is highly complex. What is of interest to us here is the changing character of the bat's sonar emissions during the tracking and capturing process. Eimas and Galburda (161) published a spectrogram (from Simmons 1987) of the frequencies of emissions plotted against time in seconds prior to capture. The spectrogram makes it clear that the bat's

sonar behavior correlates with the focussing of its attention on the object

(Eimas and Galburda 1990:162):

> 'The first three sounds... sweep through a narrow range from
> about 28 kHz to 22 kHz in the first harmonic and from 56 kHz
> to 44 kHz in the second harmonic...These are signals that the
> bat uses to search for targets when flying in an open area, and
> they are emitted at a regular rate of roughly five to ten per
> second. When the bat detects the target and begins reacting to
> its presence, the sounds are emitted in a distinctive new
> pattern. The FM sweeps abruptly change from shallow to steep
> ...so that the after the target has been detected and pursuit is
> joined, the bandwidth of the sounds broadens considerably.
> During the active pursuit the first harmonic sweeps from 50-
> 60 kHz down to about 25 kHz, with the second harmonic
> sweeping from about 10 kHz down to 50 kHz...These broad
> FM sweeps introduced by the bat following detection of the
> target provide a wide range of frequencies with which to form
> sharp, information-rich images of the target (Simmons and
> Stein, 1980; Simmons et al., 1975). The bat's acoustic behavior
> during active pursuit documents that its attention is focused on
> the target - showing, for example, that the bat tracks the
> target's declining range by progressively shortening the
> interval between successive sonar emissions.
>   The pursuit maneuver culminates in a brief burst of
> rapidly accelerating sonar emissions and the actual capture of the
> target [emph. mine, JWB].'

As the bat shifts from searching to tracking and active pursuit, the bat's

attention becomes focussed. Three changes accompany the focussing of

attention by the bat: the range of frequencies swept during the sonar

emissions changes from narrow to broadbanded (from a 6 kHz range to

about a 35 kHz range), the rate of the frequency sweeps (as indicated by the

slopes of the sonar bursts against time) increases from shallow to steep, and

the frequency of the sonic bursts (bursts per unit of time) increases

markedly (the interval between bursts is dramatically shortened). This is a

signal demonstration of the principle FOCUSSED--DIFFUSE. The

spectrographic pattern of increasing bandwidth, more rapid rate of sweep,

and increasingly frequent emissions is analogous to the repeated centering

of points of visual interest which takes place when we view a scene or

picture. Qualitatively different perceptions arise from this variance in focal

attention, and these perceptual differences are utilized by animals in order

to serve different purposes. In both human vision and echolocation by bats,

DIFFUSE perception is associated with detection and searching (cf. pp. 222

and 226, above) while FOCUSSED perception is associated with exact

identification and precise orientation.

The bat genus *Eptesicus* has a capacity for determining range-to-

target approximately ten thousand times better than it actually needs to

capture prey (Simmons 1989:170). This suggests, in the words of Simmons

(170):

> 'that the bat may use the psychological dimension of delay or
> range to support other aspects of perception of targets than
> crude distance.'

Evidently a great portion of the bat's sonar system, i.e. its sonar intelli-

gence, is involved in precise identification of targets. In CF bats this is

done by analysis of Doppler shifts in echoes, as mentioned above. p. 225.

In FM bats, (171):

> '...the basis for target identification resides in the computa-
> tional capacities of the auditory system for creating images
> having spatial dimensions from sounds having acoustic
> dimensions.These computational 'sound-to-space' modules
> cannot be seen in most kinds of anatomical / physiological
> experiments on auditory mechanisms, but their presence is
> readily evident from behavior.'

Evidently, the bat's sonar intelligence has developed to a high degree

around those cognitive capacities in the bat which are associated with more

FOCUSSED echolocational perceptions. That the bat is exhibiting

intelligence in this cognitive behavior, and not simply automaticity, is

evidenced in a result which Simmons reports (1989:171-172) which is

reminiscent of the findings of Mackworth and Morandi (1967; see p. 222,

above) regarding the inability to predict which points in a complex picture

will be selected for visual fixation on the basis of shapes or geometrical

features:

> 'The ability of FM bats to discriminate among airborne targets
> on the basis of size and shape has been investigated in a series
> of experiments...When presented with mealworms thrown into
> the air in a large room, a flying bat will capture and eat them.
> When presented with inedible targets such as plastic spheres or
> disks, the bat will soon learn to avoid them while still captur-
> ing the mealworms...From the successful performance of bats
> at airborne discrimination of mealworms from disks, one
> would expect echoes from the mealworm to be quite readily
> distinguishable from echoes of disks. However, attempts to

determine what features of echoes distinguish mealworms
from disks, made at the time of the original experiments,
yielded <u>disappointing results....The</u> <u>acoustic</u> <u>signature</u> <u>of 'meal-</u>
<u>wormness' and 'diskness' was not obvious in the echo data</u>
(Griffin 1967) [emph. added, JWB].'

The researchers were, thus, unable to define the bat's capacity to discrimi-

nate in terms of an <u>automatic</u> response to some acoustic profile. These

results suggest that the 'unpredictabilty' of the bat's behavior may be

attributable to (higher-level, non-automatic) cognitive factors in the bat's

sonar intelligence. This would seem to be preferable, in any case, to

searching for putative acoustic features of 'mealwormness' or 'diskness'

upon which to formulate rule-based explanations of the behavior.

In the realm of language, we find the FOCUSSED--DIFFUSE

principle also linked with interest, curiosity, and intelligence, and

expressed in these same terms: relative information-richness, differing

levels of perceptual acuity, and varying precision of orientation to known

experience. Whether in discourse tracking, visual tracking in primates,

olfactory tracking in mammals, or sonar echolocation in bats, however, the

FOCUSSED--DIFFUSE principle always underlies image formation.

6.7 Fovea and Periphery in the Perception of Moving Objects

When motion is detected in the peripheral retina, it is often

interpreted as asymmetry and a saccade is made to centralize it within the

fovea. If the object is one which has continued to move, it will be tracked so long as it captures interest. The eye moves so as to nullify the apparent velocity of the object relative to the fovea. To the extent that the object is maintained in focus in the center of the retina, it is perceived as motionless. By contrast, the rest of the visual scene falls within the peripheral retina and is perceived as though in motion.

Moving objects are perceived in fundamentally different ways depending on whether they are seen in the peripheral or in the central retina. When movement is detected in the periphery, the perception is simply of that fact: a blurred movement, an unidentified action, an **event**. On the other hand, when a saccade is subsequently made to foveate the movement, it comes into focus and a thing emerges into our awareness: an object, an animal or person, an actor, a **participant**. The complete emergence of a participant from its event is then facilitated by the fact that once centered, it is seen as motionless against a moving background. This observation offers an explanation as to how the cognitive principle FOCUSSED--DIFFUSE motivates the creation of participants in discourse and establishes a scale along which participants can be cognitively organized and through which they can be contextualized in known experience. Focal attention 'creates' participants by causing them to emerge from events, whether this takes place visually through the operation of the retina,

or linguistically through the assignment of the semantics of FOCUSSED

determinacy. Note the adjectival, event-like semantics at the DIFFUSE end

of the scale of Figure 2, Chapter Six, and the indeterminate nature of roots

in Philippine languages generally, which permits their use as substantives

or verbs, depending on which affixes are applied.

There is a characteristic tendency in human vision to perceive an

actor or participant as separate from the background against which it is

seen. This is the well-known 'figure-ground segregation' described by

Gestalt psychologists, especially Rubin (1921). If two visual areas share a

common boundary, one will be perceived as a 'figure' with a distinct shape

and clearly defined edges, and the other will be seen as the 'ground'

situated behind it. One will appear as a 'particular' and the other as a

'domain.' Certain perceived characteristics will accrue to each. The figure

will be seen as a definite thing while the ground will be perceived as

substance-like. The ground will be seen as continuing behind the figure.

The figure will be perceived as the more dominant and will be more

psychologically impressive. In addition, the figure will be perceived as

somehow brighter. According to Shank and Walker (1989), the figure will

appear closer, will be more easily remembered, and will be more apt to be

connected with a meaning, feeling, or esthetics than the ground. Quite

clearly, the various characteristics that accrue to the perception of the

figure suggest asymmetry and <u>attention</u>, as well as psychological

projection, or affect. This speaks to the role which psychological factors

play both in the emergence of visually perceived participants and as well to

the determinacy-mediated emergence of participants in language which, as

we have now seen, is so closely linked with these same factors. Here we

may specifically recall the affective semantics which attaches to Ilokano *ni*

as summarized in Figure 2 (familiarity, relationship, recognition, respect,

attachment, and proximity) and also the similar semantics which aligns with

the FOCUSSED end of Yogad determinacy in Figure 5 (direct, obvious,

accepted, immediate, named). The segregation of figure from ground takes

place through the focussing of attention upon the figure in precisely <u>the</u>

<u>same</u> manner in which determinacy effects the emergence or formation of

participants in language. What we see in both cases is the extent to which

our perceptions, whether of figures in vision or participants in language,

are mediated by the various affective-psychological factors which accom-

pany the focussing of attention in humans.

6.8 Concluding Remarks

We have presented a description of determinacy as a language

universal, and have proposed that the cognitive principle which motivates it

is that of FOCUSSED--DIFFUSE. Because intelligence licenses variable

focal attention and operates by means of it, it is a general characteristic of intelligent organisms that they organize their cognitive experience in terms of the perceptual gradations created by variable attention and its concomitants, interest and importance / salience. One of the most basic cognitive principles, then, is the attention-based distinction between FOCUSSED and DIFFUSE, and this is clearly characteristic of intelligence-in-general and is not confined to language. Whatever is most salient to an organism receives the greatest attention, is perceived somehow with greater focus, and becomes cognitively organized as FOCUSSED; conversely, whatever is of marginal importance or interest receives oblique attention, is perceived more diffusely, and becomes cognitively organized as DIFFUSE. The specific perceptual characteristics attaching to FOCUSSED and DIFFUSE vary depending on the type of cognition involved. In language, the FOCUSSED--DIFFUSE principle appears in connection with propositional participants as the semantics of determinacy, which Guillaume (1919) described as 'extensivity' and which Davis (1989) conceives of as 'a scale of boundedness.' The function of determinacy in language is to create participants (segregating them from the ground of event and quality, shaping them to suit the purposes at hand) and to orient them to known experience. It is the thesis of this study that understanding determinacy in these terms better fits the observed facts, and has greater explanatory

power in describing the phenomena associated with determiners cross-

linguistically, than do models such as those reviewed in Chapter One.

It is because the scale FOCUSSED--DIFFUSE represents the trace of

focal attention that such qualities as 'referentiality' and 'existence,' and

'definiteness' and 'identifiability,' as well as 'locatability' and 'uniqueness,'

have been associated with determinacy. While each of these terms was

found to be descriptively inadequate, or at least problematic, when

considered separately, from the standpoint of attention it can be seen that

they are all legitimate aspects of the overall semantic picture. Each of these

represents a description of determinacy from a certain point of view and is

accurate to a degree. The recognition of the attentional basis of determin-

acy helps us to understand how they relate to one another and why it should

be that determinacy was described in all these terms. In the same

way, it helps us to understand how such different semantics as 'individu-

ation / emergence' and 'actualization' can be manifestations of a single

principle.

Another result of this study is that it challenges the privileging of

discourse pragmatics in recent attempts at understanding what determiners

are all about. Discourse pragmatics represents but one of a number of

functions for which the content of determinacy is employed in language. It

is a secondary characteristic of determiners rather than the constituting and

motivating principle behind this meaning. Such studies as Du Bois 1980,

Givón 1982, Wright and Givón 1987, and especially Hopper and Thompson

1984, have argued for an understanding of 'referentiality' as a parameter

which is based entirely in discourse pragmatics and as reflecting discourse-

salience or discourse-participancy as perceived by the speaker. Hopper and

Thompson (1984:711) propose to replace the semantic notion of

'referentiality' with the pragmatic value 'manipulability in the discourse as

this is perceived by the encoder.' They give examples from various

languages which show a correlation between low 'categoriality' (their term

for lexical category-prototypicality) and non-manipulable forms. This,

however, is not evidence that discourse pragmatics is the defining and

constituting basis of the phenomenon. Instead, it simply shows that

languages may employ an array of such forms to encode discourse

pragmatic distinctions. Conversely, languages may not always use

differences of this sort to encode discourse pragmatic contrasts at all.

Indeed, we have seen that, contrary to expectations, the determiners in

Ilokano and Yogad are clearly not used in this way. If we understand

determinacy as a semantic implementation of focal attention, as is proposed

in the present study, then discourse pragmatic values, such as 'importance

in discourse' (Givón 1984) or salience, and 'continuous identity over time'

(Du Bois 1980) can be seen as content which represents a secondary

application of determinacy; although quite an appropriate one, as we observed in Limos Kalinga, since salience as perceived by the speaker is precisely that which is tracked by focal attention and which sustains interest 'over time.' From this perspective, participancy in discourse, or 'manipulability in the discourse as perceived by the encoder,' is the product of focal attention; it is a value which the encoder projects onto a participant in the act of, and by means of, focussing attention on it.

Discourse pragmatics, therefore, is not the basis of determinacy, nor of 'categoriality' in the sense of Hopper and Thompson 1984, but represents one use to which determinacy or 'categoriality' is put. It is variance in the level of focal attention which, as it were, creates 'manipulable' or 'non-manipulable' participants, and this is indeed one of the functions of determinacy as a semantics of participants, as we have seen in Ilokano and Yogad. But a participant somehow created *in vacuo* would be meaningless, and it is characteristic of intelligence that it can only 'arrive at' meaning by contextualizing new experience within the matrix of prior experience. In fact, intelligence is contextualization. Thus, a collateral and unavoidable function of determinacy is that of orienting participants with regard to known experience, so that some such semantics as 'known' or 'identifiable' or 'locatable' inevitably associates with determinacy, although this semantics is not always encoded in determiners. Discourse pragmatics is

but one specific type of the more general sort of contextualization function for which determinacy exists in language. Since this general contextualizing function is cognitive in nature, determinacy should be understood to be 'broader' than discourse.

In Ilokano and Yogad, the orienting meaning of the determiners functions only in connection with voice and the assignment of role. Limos Kalinga, however, shows quite clearly how discourse pragmatic functions can grow very naturally out of the orienting function of determinacy. The distinction between semantics and pragmatics has been over-drawn in the literature of the past decade, discounting semantics at the single-sentence level and according a privileged status to discourse pragmatics. From the perspective of variable focal attention, it can be seen that the semantics of determinacy and the discourse pragmatics of determinacy are connected and, in some cases, indistinguishable. In Limos Kalinga, the difficulty of saying where semantics ends and pragmatics begins is especially evident. The difference, insofar as determiners themselves are concerned, is that the semantics we have described will always present in the determiners of a language, while discourse pragmatic functions will not automatically be present in these same forms. This study, therefore, rejects the views that semantics and discourse pragmatics can be rigidly distinguished from one

another, or that discourse functions are the only reliable basis for

understanding determiners or determinacy in language.

This study supports the concept of the non-modularity of human

language (pace Chomsky, passim; Fodor 1983, and Gardner 1983). The

basic argument presented here is that determinacy in language cannot be

adequately understood <u>apart</u> <u>from</u> its basis in focal attention and the

cognitive principle FOCUSSED--DIFFUSE. Far from being isolated from

the rest of intelligence, therefore, language is co-substantial and continuous

with human cognition in general. It is worth emphasizing that what is

claimed in this study is <u>not</u> that certain aspects of language are simply

analogous to certain phenomena in vision or visual perception, <u>nor</u> that

some way of describing vision is a metaphor for the way language works.

What has been argued is that language and vision (and hearing, olfaction,

taste,[1] etc.) are <u>different</u> <u>configurations</u> <u>of the</u> <u>same</u> <u>thing</u>, and that that

which they manifest exists outside of them, but also through them, in

intelligence-in-general. The similarities between the two are therefore due

to this common basis in an intelligence which acts in a characteristic way to

impose 'meaning' upon the environment in which it finds itself. The

cognitive principle FOCUSSED--DIFFUSE is one of the parameters of

meaning which constitute the signature of intelligence.

1.   Taste and smell are closely related and are the most primitive of our senses by hundreds of millions of years. They are unique in that they function by taking chemical molecules into the body for processing. Insects were among the first animals to have brains, and approximately half of their brains are olfactory computers. According to Edmund Arbas (reported in Freedman 1993:70), taste and smell were already distinct as two separate chemical senses in the arthropod ancestors of the insects from the time that they made the transition from sea to land.

The case of the land snail suggests the possibility that taste and smell are related to one another in terms of FOCUSSED--DIFFUSE:

'The land snail, which appeared some 350 million years ago,

also devotes about half its tiny brain to taste and smell affairs.

It divides the job neatly between its two pairs of antennae: one

pair is waved in the air to pick up smells, while the second

pair is dipped tongue-style into promising substances as a final

check before ingestion (Freedman 1993:70).'

Here we see smell functioning in detecting or locating (DIFFUSE) and taste functioning in fixating and identifying (FOCUSSED).

Taste and smell operate on chemical concentration gradients which exist in nature through the process of molecular diffusion. Vision and hearing, in those species in which these senses operate on the basis of the

FOCUSSED--DIFFUSE principle, seem to have internalized the gradient principle, inasmuch as these senses function by creating attentional concentration gradients, as it were, within the sensorium.

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Appendix 1

Ilokano Narrative Text

<u>Reading 22a[1]</u>

'KONMUSTA[2], IPAR?,' <u>inkablaaw ni bayaw idi   sarungkaran-</u>

[greet   brother-in-law   visit.he.us

<u>nakami idiay Pangasinan.</u>

   there Pangasinan

'<u>Kastoy latta,   bayaw,'   kinunami. Nupay   ganggannaet kaniak</u>

Just.like usual brother-in-law   say.we   Although foreign to me   ]

---

1   The readings, which are numbered '22a' through '22g,' originally

      comprised a single article in <u>Bannawag</u> which was divided into seven

      short readings when included in Moguet and Zorc 1988.

2   Words in upper-case letters are in Malay and are explained in the

      story.

ti balikas nga IPAR, ammok lattan a pakpakomustaannak

[word   know.I just   greet.he.I

gapu iti balikas a KONMUSTA.

because word

'Ammom   met gayam ti ag-Malayo,'   tinapiknak.

know.you too oh!   speak.Malay pat.on.shoulder.he.I

Aglima tawenen a mangmangged ni bayaw   idiay Malaysia

[be.five year   work   brother-in-law there Malaysia

a kas inheniero iti dakkel a kompania sadiay.   Nangged metten idiay

as   engineer   big   company over.there   work   also   there

Indonesia iti dua a tawen.

Indonesia   two year

Komusta   ti kayat a sawen ti KONMUSTA iti Malayo,

how.are.you   means   in Malay]

ken ti IPAR, bayaw kadatayo.

[and   brother-in-law to.us]

'KONMUSTA, IPAR?,' greeted (my) brother-in-law when he met us in Pangasinan.

'Just like always, brother-in-law,' we said. Although the word IPAR sounds foreign to me, I just know that he is greeting me because of the word KONMUSTA.

'Oh, you know (how to speak) Malay,' he tapped me on the shoulder.

It's been five years already that brother-in-law has been working in Malaysia as an engineer for a big company there. He also worked in Indonesia for two years.

How are (you) is what is meant by KONMUSTA in Malay, and IPAR is brother-in-law to us.

Reading 22b

Kinuna ni bayaw   a di unay marigatan a makitinnarus kadagiti

[say.he brother-in-law not very find.hard   guess   plural]

employerda   ta kaaduan   kadagiti balikas idiay Malaysia

[employer.they because most plural   word   there Malaysia

ti umarngi iti pagsasaotayo Kasta me kano   idiay   Indonesia..

sounds.like   speech.us   such too it.is.said there Indonesia

Dinakamat ni bayaw   dagiti sumagmamano a balikas a Malayo-

mention brother-in-law plural some   word   Malayo-

Indonesian nga umarngi   kadagiti balikastayo -- iti Pilipino wenno Iluko:

Indonesian   sounds.like plural   word.us   in Pilipino or   Iluko

ADI,   IPAR (bayaw a lalaki), ANAK (anak), BUNGSU

little brother   brother-in-law   child

(buridek),   BASAH (nabasa), PAYONG, LANGIT, BULAN

youngest child   being wet umbrella   sky   moon

MATA OTAK (utek), MUKA, (rupa), KUKU, (kuko), BANGON

eye   brain   face   fingernail   ]

(riingen), TAWA, (agkatawa), SAKIT (naut-ot), BANGSA (pagilian),

[wake up   laugh   painful   country

SABUN (sabon), GUNTING (kartib),   ken LAMPIN.

[soap   scissors   diaper]

Brother-in-law said he does not find it very hard to understand (lit: guess at) their employers because most of the words in Malaysia are similar to our language. It is also said to be the same in Indonesia.

Brother-in-law mentioned some of the words in Malay that are similar to our words -- in Pilipino or ILuko: ADI (younger brother or sister), IPAR (brother-in-law), ANAK (child), BUNGSO (youngest child), BASAH (being wet), PAYONG (umbrella), LANGIT (sky), BULAN (moon), MATA (eye), OTAK (brain), MUKA (face), KUKU (fingernail), BANGON (wake up), TAWA (to laugh), SAKIT (painful), BANGSA (country), SABUN (soap), GUNTING (scissors) and LAMPIN (diaper).

Reading 22c

Iti panagsukisokmi, kaaduan me a balikas kadagiti kameng ti

[research.us   most   too   word   plural   member

ASEAN[3] -- Filipinas, Malaysia, Indonesia, Singapore, Thailand, Brunei ken

   Philippines, Malaysia, Indonesia, Singapore, Thailand, Brunei

Pakistan -- ti umarngi kadagiti balikas wenno dialektotayo kas koma idiay

Pakistan   similar   plural   word   or   dialect.us   like   hopefully

Abra, Nueva Ecija, Nueva Vizcaya, Mindanao, Mindoro ken dadduma pay.

Abra   Nueva Ecija   Nueva   Vizcaya   Mindanao   Mindoro

Posible ngata a maaddaan dagiti kameng ti ASEAN iti maymaysa

Possible maybe have   plural   member of ASEAN   single

wenno rehional a lengguahe?

or   regional   language]

---

3   Acronym for 'Association of South East Asian Nations.'

Ipakita dagitit bokabolario ti Pilipino, BAHASA Malayo ken

[show   plural   vocabulary   Pilipino   Bahasa Malay   and

Indonesia a nangrugi wenno nagramutda iti Malayo-Polynesian parent-

Indonesian   start   or   be.rooted   Malayo-Polynesian parent

language. Patien dagiti lingguista a babaen   ti umno a koordinasion ken

language believe plural linguists by means of   right   coordination and

panagkaykaysa, mabalin a maaddaanda iti common working language para

unity   possible   have   common working language for

iti ASEAN

for ASEAN

Natakuatan a kadagiti kameng ti ASEAN, ti laeng Thailand ti agus-

Discover   plural   member   ASEAN   only   Thailand   use

usar iti lengguahe a medio 'gangganaet.'

language   little 'foreign']

In our research, most of the words of the ASEAN members -- the Philippines, Malaysia, Indonesia, Singapore, Thailand, Brunei and Pakistan -- are similar to our words or dialects such as in Abra, Nueva Ecija, Nueva Viscaya, Mindanao, Mindoro, etc.

Is it maybe possible that members of ASEAN can have a single or regional language?

The Pilipino, Bahasa Malay and Indonesian vocabularies show that they started or are rooted in the Malayo-Polynesian parent-language. Linguists believe that by means of proper coordination and unity, it is possible that they will have a common working language for the ASEAN (nations).

It was found out from the ASEAN members, that only Thailand is using a language that is somewhat 'foreign.'

Reading 22d

<u>Nupay   kasta, itay nabiit,   maysa nga American</u>
[although   like   just recently   one   American]

linguist, ni Paul Benedict, ti nakadiskobre a ti ramut ti bokabularyo ti

[linguist   Paul Benedict   discover   root   vocabulary

Thailand ti umasping ken naggapu   met laeng iti Malayo-Polynesian

Thailand   resemble and come.from also just   Malayo-Polynesian

languages. Gapu itoy,   kinunana a ti Thai-Kadai ti Thailand

languages For.this.reason say.he   Thai-Kadai   Thailand

a pagsasaona ti mainaig   met laeng kadagiti sumagmamano a unitna iti

   language   be.related also just plural   some   unit

Malayo-Polynesian language

[Malayo-Polynesian language

    Gapu itoy nga artikulo, nagsukisokkami babaen ti panamagdiligmi

    Because.of.this article   research.we   by.means comparison.we

kadagiti lengguahe ti BAHASA Indonesia, Pilipino ke BAHASA Malayo a

plural   language   Bahasa Indonesia, Pilipino and Bahasa Malayo   ]

nasurok a 200 milion nga umili ti mangar--aramat kadagitoy a lengguahe a

[more.than   million   citizen use   these   language

mainaig iti pannakapaadda ti maymaysa a lengguahe para iti ASEAN.

related.to   creation   single   language for   ASEAN

Nalabit a no mairusat dagiti dadakkel a komperensia dagitoy a

likely   if   begin   plural big   conference   those

kameng ti ASEAN babaen   ti maymaysa a lengguahe,

member   ASEAN by.means.of   single   language

ad-adda a sumiken ti relasionda   ta   adda kabukbukodanda

they   enhance   relation.they   because they own.very.they

a lengguahe, a saan   ketdi nga Ingles.

language   rather than   English]

     Nevertheless, recently, an American linguist, Paul Benedict,
discovered that the roots of Thailand's vocabulary are similar and also

originated from the Malayo-Polynesian languages. For this reason, he said

that the Thai-Kadai language of Thailand is also related to some of the units

of the Malayo-Polynesian language (family).

Because of this article, we researched by means of our comparing

the languages of Bahasa Indonesia, Pilipino and Bahasa Malayo (more than

200 million citizens are using these languages) relating to the creation of a

single language for ASEAN.

Probably if those big conferences of ASEAN members would start

off with a common language, they will have enhanced relations because

they would have their very own language, instead of English.

Reading 22e

Adtoy ti panagbilang dagiti Malaysian ken Indonesian nga agpada:

[Here   number   plural Malaysian and Indonesian   be.alike

SATU (1), DUA (2), TIGA (3), EMPAT (4), LIMA (5), ENAM (6),

TUJUH (7), DELAPAN (8), SEMIBLAN (9), ken SEPULUH (10).

Natakuatan nga agar-aramat dagiti Indonesian, Malaysian ken

[Discover use   plural Indonesian Malaysian and

Singaporean iti letra 'r,' idinto a kadatayo a Filipino, gapu ngata iti

Singaporean letter since to.us Filipinos because perhaps

impluensia dagiti Insik, ad-adda nga armatentayo ti letra 'l.'

influence plural Chinese they use. we letter

Ehemplo: KURANG, BUROK (bulok iti Pilipino, buyok iti Iluko),

example   'bulok' in Pilipino, 'buyok' in Iluko

SURAT, RASA (pagnanam, lasa iti Pilipino), ARAK.

taste, 'lasa' in Pilipino

Dagitoy met a balikas iti Malaysia, Indonesia ken Singapore ti

these also word Malaysia, Indonesia and Singapore

umarngi iti Iluko: BARU (baro), DARAH (dara), BERAS (bagas iti Iluko,

similar Iluko   new   blood   'bagas' in Iluko]

bigas iti Tagalog), ANGIN, DAUN (bulong, dahon iti Pilipino), MALAM

['bigas' in Tagalog   leaf, 'dahon' in Pilipino

(malem),   LIDAH (dila), KAYU (kayo).

afternoon   tongue   wood

Kaaduan kadagiti balikas dagitit Maguindanao ken Maranao ti

most   plural   word plural   Maguindanao and Maranao

umasping kadagiti balikas dagiti Malaysian ken Indonesian kas iti

similar   plural   word   plural   Malaysian and Indonesian

AGAMA (relihion), SURGA (langit), SEMBAYANG (agkararag),

religion   heaven   pray

LAKSA-MANA (admiral) ken PANGLIMA (pangulo, komander).

leader, commander

Umasping met ti dialekto dagiti Samal ken Badjao iti Bahasa Indonesia ken

similar   also   dialect   plural Samal and Badjao   Bahasa Indonesia and]

<u>Malaysia.</u>

[Malaysia]

Here are the numbers of Malaysian and Indonesian that are the same:

SATU (1), DUA (2), TIGA (3), EMPAT (4), LIMA (5), ENAM (6),

TUJUH (7), DELAPAN (8), SEMBILAN (9), and SELUPUH (10).

It was found out that the Indonesians, Malaysians and Singaporeans

are using the letter 'r,' whereas we Filipinos, maybe because of Chinese

influence, we'd more often use the letter 'l.'

Examples: KURANG (not enough), BUROK (rotten; bulok in

Pilipino, buyok in Iluko), SURAT (write), RASA (taste; lasa in Pilipino),

ARAK (liquor).

There are also words in Malaysia, Indonesia and Singapore similar to

Iloko: BARU (baro new), DARAH (dara blood), BERAS (bagas rice in

Iluko, bigas in Tagalog), ANGIN (wind), DAUN (leaf; dahon in Pilipino),

MALAM (malem afternoon), LIDAH (dila tongue), KAYU (kayo wood).

Most Magindanao and Maranao words are similar to Malaysian and

Indonesian words like AGAMA (religion), SURGA (heaven),

SEMBAYANG (to pray), LAKSAMANA (admiral) and PANGLIMA

(leader, commander). The Samal and Badjao dialects are also similar to Indonesian and Malaysian.

Reading 22f

Agpada ti benggat ken kaaduan a balikas dagiti Singaporean ken

[similar   accent and most   word plural Singaporean and

Malaysian babaen ti British influence. Idinto a ti Pilipino, medio naaringan

Malaysian by.means British influence While   Pilipino little   similar

iti Espaniol ken Ingles. Umargi met ti bengngat dagiti Indonesian iti Dutch.

Spanish and English similar also   accent   plural Indonesian   Dutch

Adtoy dagiti sumagmamano a balikas nga agpada ngem sabali laeng ti

here   plural some   word   same   except apart from

ispeling iti nadumduma a pagilian: AGOSTO -- OGOS iti Singapore ken

spelling   various   country   Singapore and]

Kuala Lumpur: Agosto kadagiti Tagalog ken AGUSTUS iti Jakarta.

[Kuala Lumpur Agosto plural   Tagalog and   Jakarta

POLISI (police) kadagiti Indonesian, polis iti Pilipino, POLIS met

plural   Indonesian   Pilipino   and

kadagiti Malaysian ken Singaporean. Dagitoy pay: university, universidad

plural   Malaysian and Singaporean these   too

ken UNIVERSITAS; Kuala Lumpur, BAS, Manila ken Jakarta, bus ken BIS

kas panagsaganadda; ken REPABLIC, REPUBLIK wenno republika.

in.sequence

Dagitoy pay dagiti balikas nga agkakaarngi idiay Jakarta, Singapore,

[these   also plural word   similar   there Jakarta Singapore

Kuala Lumpur ken Manila: BELI (gumatang), TAWAR (tawad iti

buy   ]

Tagalog), HARGA (presio wenno halaga iti Tagalog), BAYAR (bayad),

[price   pay

MURA (nalaka) ken MAHAL (nangina).

Ti sao nga UTANG agpapada daytoy iti intero nga Indonesia, East

word   be.same   this   all   Indonesia East

ken West Malaysia ken Singapore.

and West Malaysia and Singapore]

Most of the Singaporean and Malaysian's manner of speaking and
vocabulary are the same because of British influence. Whereas in Pilipino,
(these) are somewhat similar to Spanish and English. Indonesians' accents
are also similar to that of the Dutch.

Here are some of the words that are the same but only (have) a
different spelling din different countries: AGOSTO--OGOS in Singapore
and Kuala Lumpur; Agosto in Tagalog and AGUSTUS in Jakarta.

POLISI (police) for Indonesians, Polis in Pilipino, also POLIS in

Malaysian and Singaporean. More (of the words) are: university,

universidad and UNIVERSITAS; Kuala Lumpur, BAS: Manila and Jakarta,

bus and BIS in that order; and REPABLIC, REPUBLIK or republika.

These are more of the words that are similar in Jakarta, Singapore,

Kuala Lumpur and Manila: BELI (to buy), TAWAR (bargain; tawad in

Tagalog), HARGA (price or halaga in Tagalog), BAYAR (bayad pay),

MURA (cheap), and MAHAL (expensive).

The word UTANG (debt), this is the same in all of Indonesia, East

and West Malaysia and Singapore.

Reading 22g

Kas iti Filipinas,   kasta met kadagiti uppat a kameng ti ASEAN

[As   Philippines thus   also plural   four   member   ASEAN]

manaynayonan dagiti inaldaw nga ar-aramatentayo a balikas kas iti

[increase   plural daily   use.we   word like

protesta, telebision, reglamento, presidente, passport, absent ken dadduma

and other]

pay.

[too

Adu dagiti balikas a mabulbulod kadagiti nadumaduma a pagilian

many plural word   borrow   plural   different   country

nangruna iti Ingles   a mabaliwan laeng ti ispelingda.

especially   English   change   only   spelling.they

Nupay   makuna a dakkel ti naggiddiatan dagiti tradision ken

although say   big   differ   plural tradition and

pammati dagiti kameng ti ASEAN, adu met ti pagpapadisanda. Kas koma

belief   plural member ASEAN many too similarity   like maybe

iti panangrambaktayo iti Paskua, Nangina nga Aldaw Natay ken Piesta

celebrate. we   Christmas,   Holy Week,   All Soul's Day

dagiti.

plural]

Kinuna dagiti linguistic experts iti sangalubongan a mabalin nga iti

[say   plural linguistic experts   worldwide   can

asideg a masakbayan maaddaan ti ASEAN iti maymaysa a rehional a

near   future   have   ASEAN   single   regional

lengguahe para iti komperensia ken dadduman pay a napateg

language for   conference and other   too   important

a kasapulan dagiti umilina.

need   plural citizen]

As in the Philippines, so also with four members of ASEAN, the day to day words that we are using are increasing, like protesta (protest), telbision (television), reglamento (regulations), presidente (president), passport, absent, etc.

Many words are being borrowed from different countries, especially from English, where only the spelling is changed.

Although they say that there are big differences in tradition and beliefs among ASEAN members, there are also a lot of similarities. For

example, the way we celebrate Christmas, Holy Week (lit: important days),

and All Souls' Day (lit: the Festival of the Dead).

Linguistic experts from all over the world said that it is possible that

in the near future, ASEAN can have a single regional language for

conferences and other important needs of its citizens.

Appendix 2

Yogad Narrative Text

(1) <u>saw tu agáw ay abidán ku...o allún ku tu kurá danú estudyánte</u>

[here today   relate I   or tell I   to those   students

<u>ya masisím nikán yu agangé[1] mi saw tu amérika</u>

hear   me   go   we   here America]

'Today I am going to relate or tell to those students hearing me about our

coming to America'

(2) <u>nabayágga ya dagún ya kabbát nu ának mi   ya angáy kamí saw tu</u>

[long.time   year   want   children our go we   here

<u>Amérika</u>

America]

'It has been many years that our children wanted us to come here to

America.'

---

1   This is <u>agangáy</u>.

(3) také tu meta mi ammá ganí yu amérika, yu allún da ya lúta nu líbre

[so   see we   if   what   America   say they   land   free

addúnnu[2] opportunidád ánnu meta mí danú   áfu mi saw tu ya neának

and of   opportunity   and   see we   plural grandchild our   born

saw tu amérika

here   America]

'So we can see what America is, which they call the land of the free and of

opportunity, and we can see our grandchildren born here in America'

(4) kabbát mi yu angáy saw tu amérika ya madagán kúnta napanonomi[3] ya

[want we   go   here   America   soon   but   think we

ibayabayág mi ambít, také tu mabalín yu wagi rá ya mangaláp trappá tu

---

2   This is addú nu.

3   This is napanonót mi.

delay we   a while   so   finish   sister their receive still

kúrso na,   take tu mabalín na yu pakkadoktór na; také tu makálap ya

course her   to   finish-she   become.doctor she to   take

bagginá tu bordeksam annu maggíng na full-fledged doktor

she   board exam and become she full-fledged doctor]

'We wanted to come to America fast but we thought we would delay a
while so that their sister who was still taking courses could finish in order
for her to finish becoming a doctor in order for her to take the board exam
and to become a full-fledged doctor'

(5) wara ra yú walú ...o táfalu ya dagún ya dáti ya naipetubúg ni Maríssa

  [exist already eight or ten   year   earlier send   Marissa

yu anák ku ya dadakallán tu kurá atanán yu passport mi

child I   eldest   of them all   passport our]

'There were already eight or ten years since Marissa, the oldest of my

children, had sent our passports'

(6) tutá dagún nu 1980 ammá ammé ku makkamali ay 1980 yuyí ya

[in year of 1980 if not I be.mistaken   it.was

naipetubúg na yu papéles kúnta ammé mi ya inindón tu

send   she papers but not we give

aksyón

action]

'It was in 1980, if I am not mistaken, it was 1980 that she sent the papers, but we did not take action'

(7) tu ya dagún ay matuyág kamí tráppa ya magatawá

[in year strong we still couple]

'In that particular year my wife and I were still strong'

(8) saw tutá wara ra yu matagaynámi[4] tu baggibaggi mi áwstru

[here   exist   feel.we   bodies   we and

nattakít yu...si 'Mrs.' ay napanonómi [5] yu angay balálamun saw tu amérika

get.ill   think.we   go   reply here America]

'We felt something in our bodies and the Mrs. got ill so that we began

again to think of going to America'

(9) ántu tutá dagún nu dyos, dagún mil nwéybe syéntos nubénta ay

[and in   year of Lord,   year thousand nine hundred ninety

nangitubúg dammán yu anák ku tu papéles ya nagafú saw tu amérika tu

sent   again   child I   papers   from here in America

ipitisyón nakamí ya alapán dammán

petition for.us   get   again]

---

4   This is matagaynáp mi.

5   This is napanonót mi.

'So in the year of our Lord 1990, my child sent papers from America
as petition for us, to get us again'

(10) saw, napanonót mi ra ya angáy kamí balalamún

    [here think.we   again go we reply]

'Now, we thought seriously of going'

(11) tutá bulán nu húnyo ay naprepara kamí ra ya angáy tu Manila ya

    [in month of June   got.ready we again   go to Manila

mappainterbyú tu US Embassy také tu malámi[6] yu passport ya mawag tu

interview   in US Embassy so get.we   passport   need

pa...tu agangáy saw tu amerika

     go   here in America]

'In the month of June we got ready again to go to Manila to interview in
order to get the passport we need to go to America'

---

6   This is maláp mi.

(12) kúnta adáddu yu nesímmusímmu saw pa ya bulán

[but many   happenings   here   month]

'But there were many things that happened in this month'

(13) yaw ya bulán ay ántu yu nesímmu yu matuyág ya earthquake ... ya

[this   month   when   happen   strong   earthquake

nalimmunnan ku tu yógad...yu matayág ya luníg...

forget   I   Yogad   strong   earthquake

'This was the month of the strong earthquake...I forget the Yogad...the strong earthquake happened'

(14) dyaw kamí tu wará yu appointment mi tu St. Luke's Medical Center ya

[be.there we at exist   appointment our   at St. Luke's Medical Center

ántu pageksam pina...pageksamenán da ta ku danú angáy tu amérika ammá

when   examine   they   plural go to America   if

mepasa⁷ ra yu health eksaminasyon

pass   health examination]

'We were there where our appointment was, at St. Luke's Medical Center, where they examine those going to America to see whether they pass the health examination'

(15) hustúhustú tutá dyaw kamí tu 5th floor nu medical building para

[just.then   as   be.there we   5th floor of medical building for

tu health eksaminasyón ya maku ni kami ay antú akkésimmu nutá matuyág

health examination   perform.on we   when happen   strong

luníg...ya nannumeru tu maturuk tu seven point tu Richter Scale

earthquake numbered above   seven point   Richter Scale]

'It was just then as we were there on the fifth floor of the medical building for the health examination to be performed on us when the big earthquake

---

7   This is maipasa.

happened, which numbered above seven points on the Richter Scale'

(16) hustúhustú ya dyo kan tu x-ray room tuta nesímmu yaw a luníg

[just.then be.there I   x-ray room when happen this eathquake]

'It was just when I was in the x-ray room that this earthquake happened'

(17) yu luníg   sika ay   tata ya tu kura danu 'force majeur' yu

[earthquake you.know one   plural   great forces

mesimmusimmu tu nature amme   m...amme m ya tataw ya mesímmu [ya

happen   in nature negative you negative you know happen

matatom ya] tu yaw a nesímmusímmu ay káttu nakumbinsi nikan ya wará

know   this   happen   but convinced to me   exist

yu dyos

God]

'The earthquake, you know, is one of the great forces which happen in

nature in which you don't really know what is going to happen when this

occurs, but I was convinced that God exists'

(18) te tutá nesímmu yaw ay atanán yu táwlay tuyí unángngu[8] ya dyaw tu

[because when happen this all   people it.was inside.of be.there

ya building ay awán tu pinanonóda[9] ammá bakkán tu... yu dyos

building   not.exist think.they   if   not.exist   God]

'Because when this happened all the people inside that building didn't

think of any other thing but God'

(19) attanán ay naddaṣál áwstru naddasal annu namalitúd ay yu dyaw tu

[all   pray   and   pray   and   kneel   be.here

nonóda[10] ay yu dyos talagá

mind.their   God   really]

---

8   This is unág nu.

9   This is pinanonót da.

10   This is nonót da 'their minds.'

'And what was in their minds was really God'

(20) nesímmu yuyí nabalin a nesímmu yuyí nangé kami ra tu binalày

[happen it.was after happen it.was go we again home

áwstru tu méka talwágaw[11] ay natoli kami damman, tutá dyaw kami

and third.day go.back we again when be.there we

 damman tu utún wará dammán yu aftershock

again inside exist again aftershock]

'It happened...after this happened we went home again and on the third day

we went back again and it happened again while wwe were there again

inside; there was an aftershock again'

(21) di [na atana] nakkarélla dammán atanán yu táwlay awstrú kúnna tuyi

[so run.out again all people and be.how

---

11   This is talú a agáw 'third day.'

damman balat yu iku   yu nésimmu

again   whatchamacallit happen]

'So everybody ran out again and that's how things happened again'

(22) tu allángu dyos ay atanán yu physical eksaminasyón mi áddu ya

[by grace of God   all   physical examination   two

magatawá ay mapí antu ya naprobán yu passport mi ya angáy saw tu

couple   good be.how   approve   passport we go   here

amérika

America]

'By the grace of God, since both of our physical examinations were good that's how our passports to come to America were approved'

(23) tutá dia[12] nu októbre béynte mil nwébe syéntos nubénta antúra yu

[on date of October twenty thousand nine hundred ninety that's.when

---

12   The Yogad word agáw 'day' may be substituted here for día 'date.'

agangáy mi saw tu amerika

go   here   America]

'On the twentieth of October, 1990, is when we arrived in America'

(24) yu také mi ya takáy saw tu amerika ay Northwest Airlines ya

[means we   ride here to America   Northwest Airlines

naitubúg ay yu attanán yu pasáhe mi ay nagafú tu   kurá danu addu ya

send   all   fare   we   come.from them plural two

anami[13] saw ya   yu nagagán da ay si Marissa addunni Sosya

child.we here   name   they   Marissa   and   Sosya]

'We got here by means of Northwest Airlines; all of our fare was sent

to us; it came from our two children here whose names are Marissa and

Sosya'

---

13   This is anák mi.

(25) tuta yu priméru ya istopóber ya naddásagan mi ay Japan, tu Narita

[first   stop.over   get.off   we   Japan   Narita

Airport

Airport]

'The first stop over where we got off was Japan at Narita Airport'

(26) nabalín tu Narita Airport naddasag kami tu... yu port of entry tu

[after   Narita Airport get.off   we   port of entry

Chicago

Chicago]

'After Narita Airport, we got off at the port of entry, Chicago'

(27) ...tuyi tu Chicago ay nagín da kamí pa dináfung danú kapitta ni

[Chicago   go   they we   meet   plural cousin

Mommy / tu kapitta ni 'Mrs.' danu kapitta na ya dyaw tu Chicago da

Mommy   cousin   Mrs. plural cousins   be.there   Chicago

Renato awstru danu família na, ay nangáy pa sirá, nagin da kami pa ya

Renato and   plural family   he   go also they   we also

inita

see   ]

'It was in Chicago that Mommy's cousins came to meet us, the Mrs.'s

cousin, her cousins who are in Chicago, Renato and his family came to see

us too'

(28) mangá pig[14] ya óras   kami lan tu Chicago ay nangé

   [more.or.less how.much hours   we   just   Chicago   go

kami ra saw tu Houston

we   here   Houston   ]

---

14   Yogad piggí means 'how much.'

'We were in Chicago just a few hours and then we came to Houston'

(29) tutá gubín kami ra ay saw tu Houston, Texas maggafú sika tu Chicago

[when near we already here Houston, Texas coming you.see Chicago

 ay na change plane kami, tatá ya búllak da ya airplannu yu inalámi[15]

change plane we   one   small   airplane   take.we

'When we were getting close to Houston, Texas...coming from Chicago,

you see, we changed planes; we took a smaller plane'

(30) yaw yu airplane ay nagistopober tu Denver

[this   airplane   stop.over   Denver]

'This plane stopped over in Denver'

(31) áwstru tutá dyaw kami tu Denver ...maggafú tu Denver ay nangáy

[and when be.there   Denver... coming   Denver come

---

15   This is in-alap mi.

<u>kami ra tu Houston</u>

we already Houston]

'And when we were in Denver...coming from Denver we came already to
Houston'

(32) <u>tutá dyaw kami ay gubin kami ra saw tu Houston ay pakubébut da</u>

[as   here   we   near we   here Houston   ask   they

<u>amma insaw yu paddisagám mi</u>

if   where   get.off   we]

'As we approached Houston, they asked us where we were getting off'

(33) <u>yu paddisagam mi saw   sika   tu Houston ay addu yu airport</u>

[get.off   we here you.see Houston   two   airport]

'In Houston where we were to get off, you see, there are two airports'

(34) <u>yu airport ay yu Intercontinental addun nu Hobby</u>

[airport   Intercontinental and Hobby   ]

'The airports are Intercontinental and Hobby'

(35) <u>yu priméru ya nadisagán nu areplánu ay Hobby</u>

[first   get.off   airplane   Hobby]

'The first place the plane landed was Hobby'

(36)   <u>yu dyaw tu panonómi ay maddiság kami ra   tuyi</u>

[be.there   mind.we   get.off   we   already there]

'What was in our minds was getting off there'

(37) <u>ammé mi tatáw amma insáw   karíg mi ya magatawá amma antú</u>

[negative we know if   where, think we   couple   if that's.how

<u>ra[16]   yuyi paddisagám mi</u>

already it.is get.off   we]

---

16   Together, <u>antú ra</u> is 'That's when.'

'We did not know if this was the place; we thought that is the place we get

off'

(38) kunta mapi te   yu dyaw tu tabími[17]   ya pasahero

[but   good because   be.there next.we   passenger

néta na yu ticket mi ya   tu Intercontinental Airport tu paddisagán mi

see he   ticket we   Intercontinental Airport   get.off   we

'But it was good that there was next to us a passenger who saw our tickets

were for Intercontinental Airport'

(39) antu ya nangé[18] kami dammán nattakáy   kami damman tu areplánu

[and   go   we   again   ride   we   again airplane

naderétyu kami ra   tu Intercontinental Airport

arrive   we already   Intercontinental Airport]

---

17   This is tabík mi 'next to us.'

18   This is nangáy 'go.'

'And we got inside the plane again to ride the plane to get to

Intercontinental Airport'

(40) tuyi nagin na kami ra   pa   ya inita; inalap ni Syam yu

[come he we already also   see;   take   Shyam

manugáng ku ya Indian ya Bombay ya matrabahu pa tu... akáttu tatá ya

son-in-law I   Indian   Bombay   work   also   as   one

inhinyéru sawwe tu... master electronic engineer saw tu Schlumberger

engineer   now   master electronic engineer there at Schlumberger]

'He came to see us and to pick us up, my son-in-law who is an East Indian,

who works at...as an engineer now at...master electronic engineer...there at

Schlumberger'

(41) tu mangá   gabi ra   tuta dumánga kamí

[at approximately night   already then arrive   we

saw, ma'a[19]   óras sigúru manga   alasdyés alasónsi tu

there approximately time I.think approximately   at.ten   at.eleven

gabi ya niyági ra   kami tu binalé ra[20]

night   go   already we at home they]

'It was already night when we arrived home, approximately, I think at ten
or eleven in the evening when we got to their house'

(42) túyi kamí ya nagyán tu mangá   walú o siyam a bulán

[there we   stay approximately eight or nine   month

dagena nangáy kamí padamman tu tatá dammán ya anák ku

before go   we another   one other   child I

wagí   balat ni Marissa ya tan   anák

sibling also   Marissa   comparative young]

---

19   This is manga oras 'approximately at the time of.'

20   This is binaláy ra 'their house.'

'There we stayed for about eight or nine months before we went to another place, to another of my children, also a sister of Marissa, who is younger'

(43)   sawwé ya bagginá yu pagginán mi kigát sawwé, ya bulán

[now   she   stay   we   until now   month]

'Now hers is the place we stayed until this month'

(44) nalimunán ku pa ya inállu nikám ya   namégafu tutá inéru nu... tu

[forget   I also   tell   you   begin   one January

dagún nu... 1991 ay inalábbakkan[21] ya manuntúru tu Yogad

year   of   1991   bring.they.I   teach   Yogad

 saw tu Rice University

here   Rice University]

'In passing, I'll tell you [when] beginning in January...in the year 1991, they brought me to teach Yogad here at Rice University'

---

21   This is inaláp da kan.

(45) yaw ya trabáhu ay bakkán tu talagá yu trabáhu ku te yu talagá

[this work negative real work I because real

nabalín ku ay nangalákkampa[22] tu medisína sína tu Filipínas

finish I take . I . also medicine there Philipinas]

'This work is not my real work because I really finished...I also took [i.e., studied] medicine there in the Philippines'

(46) sikán ay tatá ya foreign medical graduate kónta sawwé

[I one foreign medical graduate but now

yu trabáhu ku ay manuntúru

work I teach]

'I am a foreign medical graduate but now my work is teaching'

---

22 This is nangaláp kan pa.

(47) bakkán tu línya ku yaw ya trabáhu kónta inálkku[23] lan

[not   line I   this   work   but   get.I   just

te   awan   balat tu akwan ku awstru wara pa bullák

because exist.no also   do   I and   exist also little

ay yáda ra ya kattu pa ikú tu   óras ya panuntúru ku awstru

give they   as also whatever hours   teach   I and

napanónot ku tu yaw ya trabáhu maski   bakkán tu línya ku awstru

think   I   this   work although not   line I   and

permanente ya trabahu ay makadufung kan tu pangitúllu tu abid ya yogad

permanent   job   able.to.help I   promote language Yogad]

'This is not my line of work, but I just got it because I don't have anything to do and they also give a little, whatever...for the hours I teach and I thought although this work is not my line and not a permanent job, I will be able to help promote the Yogad language'

---

23   This is inaláp ku.

(48) me____tam tataw amma tu daddánga nu dagún o daddamá

[negative we know if   coming   year   or passing

nu dagún yu tatá tukura____danu estudyente ay wara__náni

year   one of.them   student   exist time

mallawán a mangiturak tu historiya nu Rice University

future   write   history   Rice University

ya wara__pa yu nangituntúru tu ábid ya____Yogad

there.is also teach   language Yogad]

'We don't know in the coming of the passing of the years, there will be one

of the students who will turn out ot write the history of Rice University

that there was someone who taught Yogad'

(49) médya madigát ituntúru yaw a Yogad te____bakkán tu kattu danu

[little   difficult teach   this Yogad because not   as

<u>tanakwan ya ábid o dialect nu   Filipino ya wará yu ....established grammar</u>

other   language or dialect Philippines there.is   established grammar

<u>wara   ra yu   nangitunturu...nangituntutunturu tukura danaw abid</u>

there.is already teach   re-teach   them these   language]

'It's a little difficult to teach this Yogad because it's not like other

languages or dialects of the Philippines for which there are...established

grammars, there is already someone who taught, retaught these languages'

<u>(50)   ya wara yu grammar na yu ....</u>

[exist   grammar it   ]

'There are grammars of them'

<u>(51) wara ra yu   káttu náku ya outline ya pangitunturu tu saw ya ábid</u>

[exist already as   make   outline   teach   this language]

'There is already something like an outline made to teach this language'

(52) antu ya medyu kattu madigat kunta gafu tu danawdanu estudyante ku

[si little as difficult but because these   students I

ya mangalap saw a kúrsu ay ....panáy ya intellihénte awstru panáy ya

take this course all   intelligent and all

atánnang yu ginugwámba²⁴ áwstru talagá pa ya mapí tu ....mapí yu úlu ra

high   study they and really also good   good head they]

'So it's a little bit difficult, but because my students who are taking this course are all intelligent and they all study it to a high level and also have really good heads'

(53) talaga madagan nu sira ya matuntúruan

[really fast   they teach]

'You teach them easily'

---

24 This is ginugwám da.

(54) tu mamítta ma trappa imbessa sikán yu mangituntúru tu kura sikan yu

[for once   more instead   I   teach   they   I

makagugwám tu kura   te   mas   mapi yu pangi .....pagintyénde ra

learn   they   because more good   understand already]

'For once, instead of me teaching them, it is I who learns from them

because they understand better'

(55)   wará yu kursu inalába[25] ya tatóra[26] amma kassándi yu iku pagugwam

[there.is course take.they   know.they if   how   [pause] learn

tu tatá ya lenggwáhe

one   language]

'There is a subject they took to know how to learn a language'

---

25   This is inaláp da.

26   This is patáw ra.

(56) káttu saw tu ginangku departmentu ya mangtuntúru tu linguistics

    [so   here   department   teach   linguistics

panáy linguistics addanu semiotics

all   linguistics and   semiotics]

'Like here in the department where they teach linguistics, all linguistics and semiotics'

(57) yu yaw ay tata ya subject ya itutuntúru na yu amma kassandi yu

    [this   one   subject   teach   if   how

pangi pagugwám mu tu tatá ya lenggwáhe ya yúsana yu science nu symbols

    learn   you   one   language   use   science   symbols

awstru yu amma kassandi yu ákkaku na nu grammar nu tata ya language o

and   if   how   done   it   grammar   one   language

dialect

dialect

'This is a subject that teaches how you can learn any language at all, using the science of symbols and how it is done, the grammar of any language or dialect'

(58) sawwé ya kabbádakka27 ya matatáw danu estudyánte amma kassándi yu

[now   want.also   know   student   if   how

Yogad

Yogad]

'Now the students also want to know what Yogad is like'

(59) allún ku tu kura yu Yogad ay talagá ya ábid nu   tatá ya lawáng tu

[tell   I   they   Yogad   really   language one   town

Isabela

Isabela]

'I tell them Yogad is really the dialect of one language in Isabela'

---

27   This is kabbádak pa.

(60) yu ábid danu ábid nu   naturales tu Ityage   talagá yu Yogad

    [language   language natives   Echague really   Yogad]

'It is the language of...language of the natives in Echague really is Yogad'

(61) ammé ku tatáw amma annínna yu Yogad ya amma

    [not   I   know if   how   Yogad   if

sínni o amma kassándi nagafán nu[28] amma gani   nagafúgafán

who or if   how   come   if   what   origin

 nu ábid da[29]   Yogad

    language   Yogad]

'I don't know how Yogad originated, or by who or however Yogad came, or anything about the origin of the Yogad language'

---

28   This stands for nu Yogad.

29   This is the linker ya.

(62) kunta nikan pagita[30] kattu adáddu pa yu ábid o root word

[but   I   see   as   many also   word or root word

a maggafú tu Ingles adaddu pa yu naggafu tu Spanish ya

come   English many also   come   Spanish

awán   tráppa tu translation na tu Yogad

not.exist still   translation   Yogad]

'But it looks to me like there are many root words that come from English.

also many come from Spanish, that still don't have an equivalent in Yogad'

(63) antu ya siggamítta   embes puro Yogad yu metuntúru ku tu ku

[so   once.in.a.while instead.of pure Yogad teach   I

danu estudyánte saw a massisím nikán ay angkárwan wara yu ábid ya

students   here   hear   I   sometimes exist   word

---

30   Another expression of this is kúnta tu paggita ku káttu 'But the way I see it is...'

mallú ku tu English o Spanish

say   I   English   Spanish]

'So once in a while, instead of pure Yogad, I teach the students here

hearing me, there are sometimes words that I say in English or Spanish'

(64) yu Yogad ay tatá ya ábid ya bakkán tráppa tu o adáddu yu

[Yogad   one   language not   still   many

naggugwám tu kuná

study   it]

'Yogad is one language for which there are still not many studies'

(65) wará pa danú tu Peace Corps ya nangáy sína nangay tu Ityáge

[exist already   Peace Corps   go   there go   Echague

naggugwám tu Yogad kunta ammé   ku tatáw ammá wará yu inangu ra ya

learn   Yogad but   negative I know if   exist   make they

paggúgwam o studies tu grammar nu Yogad

learn   studies   grammar   Yogad]

'There are also those Peace Corps people who came there to Echague to

study Yogad, but I don't know if there is something they made, or studies,

in the grammar of Yogad'

(66) antú ya náni amma mabakasyon kan mamítta tu Ityage

[so   when if   vacation   I   once   Echague

dammán tu Filipínas ay purbáng ku ya iresearch[31]

again   Philippines try   I   research

amma sinni danu danu Peace Corps ya nakági sína take

if   who   Peace Corps   able.go there   so.that

tu nammú na ya makálap   tu kummunikasyón tu kurá

          able.to.get   communication   they

---

31   A Yogad expression for this is igugwám.

danu náku ra ya trabáhu mamégafu tu ábid ya yogad

    make they work   concerning   language Yogad]

'So later when I will take a vacation once again to Echague in the

Philippines, I'll try to research these Peace Corps who were able to go

there so that they are able to get some information about the works they

have made concerning the Yogad language'

(67) yu Yogad ay tatá ya ábid ya tatá ya lugár tatá ya ...lawáng ya yu

    [Yogad   one language one   place one   town

kaddwán nu táwlay ay yu ábid da Yogad, kunta sawwéya ay wará ra yu

majority   people   language Yogad but   now   exist already

Yogad a nangatawa tu Ilokano wará ra pa yu Ilokano nangatáwa tu Yogad

Yogad marry   Ilokano exist already Ilokano marry   Yogad

wará ra pa yu Yogad nangatáwa tu Tagalog

exist already Yogad marry   Tagalog]

'Yogad is a language in one town where there is a majority of people whose language is Yogad, but now there are already Yogads who married Ilokanos, there are also Ilokanos married to Yogads, there are Yogads married to Tagalogs'

(68) sawwéya ay mapangapanga ra yu   Yogad

[now   branch   already Yogad]

'Already, Yogad is branching off'

(69) wará ra yu   nakági tu   tanakwán ya lugár

[exist already able.to.go other   place]

'Now there are those who were able to go to other places'

(70) káttu sawwéya ay wará ra yu   Yogad tu Amerika

[so   now   exist already Yogad   America]

'So now there is already a Yogad in America'

(71) sikan yu priméru ya Yogad a dyaw saw tu Amerika

[I   first   Yogad   there   here   America]

'I am the first Yogad to be here in America'