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Navajo pronouns and obviation

Willie, MaryAnn, Ph.D.

The University of Arizona, 1991

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NAVAJO PRONOUNS AND OBVIATION

by

MaryAnn Willie

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A Dissertation Submitted to the Faculty of the

DEPARTMENT OF LINGUISTICS

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In the Graduate College

THE UNIVERSITY OF ARIZONA

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THE UNIVERSITY OF ARIZONA
GRADUATE COLLEGE

As members of the Final Examination Committee, we certify that we have read
the dissertation prepared by MaryAnn Willie
entitled Navajo Pronouns and Obviation

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Signed: Mary Ann Willie

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Picture a Navajo child of four or five years picking cotton in Southern Arizona and potatoes in Idaho; such is my beginning.

Indeed one does not reach this peak without the help of many people. I have had a number of great teachers. My grandmother and mother who taught me how to weave; my first grade teacher who taught me English; to Eloise Jelinek. But especially Eloise, without whom this body of work would have remained a mystery. Eloise chose an apt metaphor: Linguistics is like a weaving, you find one strand of color and follow it through the rug. You can't follow every strand you want. For a weaver, it was easier to investigate one strand at a time.

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I need to thank my best friend and her husband, Glory and Hector Campoy for housing and feeding me whenever I happened to come by, which was frequent. To Keiko Matsiko and Hannah: You are indeed good company! My love to my son and his father.

To my grandmother, there is more than one way to weave.

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ABSTRACT

The goal of this thesis is to identify the nature of argument structure in the Navajo sentence, with particular focus on the complex system of incorporated pronouns, and anaphora and obviation in the language. It is argued that Navajo is a pronominal argument language, where arguments are incorporated pronouns, while nominals are adjuncts. Descriptions of syntactic devices for marking co- and disjoint reference of arguments, within the simple clause, across the clauses in complex sentences, and in discourse contexts are given. These devices include: the yi-/bi- alternation, which I identify as a voice contrast confined to sentences with all third person arguments; the "fourth" person, used for obviation and for deference, and the parallel processing convention. The fact that Inverse subjects must be definite provides an account of contrasts in the permitted interpretations of yi- versus bi- sentences. The role of the yi-/bi- alternation in Datives, Benefactives, Possessor Raising and Wh- questions is identified. Identifying the pronominal inflection in the Navajo verb complex as having argumental status, and identifying the role of definiteness in these arguments, provides a unified account of Navajo syntax.

Chapter 1

Introduction

The Navajo, as a people, and their language, have been subjected to much study; in fact, there is more published research on this Native American tribe than any other. In this chapter, I will review the literature that has previously dealt with some of the questions I have been concerned with in my investigation of Navajo argument structure -- pronouns, anaphors, obviation, and the relationship between pronouns and nominals. I will provide some background on earlier discussions of the animacy hierarchy in Navajo; I will defer discussion of my own analysis until Chap. 3.

A phenomenon commonly referred to as the yi-/bi- alternation in the literature, has been the focus of much previous work on Navajo syntax. These constructions use third person pronouns and are considered transitive. A change in the verbal prefix (from yi- to bi-) signals what has been referred to as "subject/object inversion" (SOI) (Hale 1973). That is, it was claimed that this alternation produces a change in the interpretation of the sentence whereby the two direct arguments switch grammatical relations. In more recent work, it has been proposed that the arguments switch theta roles: in the

yi- construction, the subject is an Agent, and the object is a Patient; in the bi- construction, the subject is a Patient, and the other direct argument is an Agent (see Sandoval and Jelinek, 1990; Willie 1990). I will present a new and different analysis of this alternation in this thesis.

The connection between the yi-/bi- alternation and an animacy hierarchy has long been recognized. If there is a difference in the ranking of the arguments along a scale of animacy/volitionality, there are constraints upon the distribution of the alternation. For example, where the patient is higher in animacy than the agent, only the bi- form occurs; and if the agent is higher, only the yi- form is possible. The generalization that Hale (1973) proposed was that the Navajo rule of Subject-Object Inversion ensured that the higher ranked noun would appear first in linear order in the sentence.

Although these transitive constructions have been widely studied, there has been no clear consensus as to whether the exact function of the alternation should be identified as syntactic or pragmatic; most investigators

have concluded that its primary function is semantic/pragmatic (Hale et al. 1977; Witherspoon 1977; Creamer 1974). These investigators interpreted the yi-/bi- prefixes as agreement with noun arguments. The nominals, the focus of their inquiries, were tacitly assumed to be the only entities that participated in the animacy hierarchy. The linear order of the nominals reflected directly the rank that the referent held in the Navajo world view, that is, a noun referring to a human must precede one referring to an animal regardless of theta role. Without these pragmatic constraints the grammar overgenerated unacceptable sentences (Hale et al, 1977). These analyses presupposed empty categories if one or both of the nominals were "missing" (Hale et al, 1977; Platero, 1980; Woolford, 1986; Speas 1990).

Creamer (1974), herself a native speaker of Navajo, defined an elaborate hierarchy of nouns based on volition according to the Navajo world view. Eight categories of nouns are based on commonly held beliefs about the capabilities of these entities. These categories included: humans > small-sized animals > abstract nouns, and others ranged along the extremes. According to

Creamer's categories, the subject-object inversion is obligatory if the object outranks the subject, and the interpretation of the bi-form is that of an English passive, as Hale proposed in 1973.

Then Witherspoon in Language and Art in the Navajo Universe (1977) rejected Hale's analysis, claiming that the alternation does not have "anything to do with ensuring that higher status nouns come first in a sentence" (1977:72). Furthermore, Witherspoon contends that SOI is inadequate, since it does not give proper weight to the Navajo world view, nor does it explain the usage of bi. Therefore, he translates a sentence like (1) as follows:

- 1) 'ashkii $\begin{matrix} \text{ʔ} & \text{ʔ} & \text{ʔ} \\ \text{c} & \text{c} & \text{c} \end{matrix}$ ' bizta
 boy horse 3-3-kicked
 "the boy had himself kicked by means of a horse"

Witherspoon claims that in (1) the boy is the "mover and recipient of the action" because yi/bi really deals with who can control whom or who can act on whom; thus, the boy is ultimately responsible for what happened, and

effectively let the horse kick him. He points out also that bi- is not used when two inanimates interact because it assigns to them human properties -- responsibility and control -- to inanimates (1977, p.74).

An article by Frishberg (1974) agrees that an animacy hierarchy does exist but contends that Hale oversimplified the problem because he deals with constructions that could be rejected because of semantic anomaly. Therefore, in her approach she is concerned with constructions that cannot be rejected in cultural terms. Thus, constructions that she claims Hale does not have an explanation for, she explains as a consequence of the fact that yi/bi have different semantic domains: "yi- does not apply to pronominalized humans and bi- strictly applies to animate and human objects" (Frishberg, 1974:265). This generalization was intended to explain sentences like those in (2 - 3).

- 2) 'ii'ni ^ʔʔiʔi' yiyiisxí
 lightning horse 3.3.killed
 The lightning killed the horse.

3) ʔíí' 'ii'ni' biisxí
 horse lightning 3.3.killed

The horse was killed by lightning.

Both these sentences have the same meaning, despite the difference in word order. There is variation across speakers with respect to the acceptability of sentences like these. Young (1977;1991) found this to be true in an informal survey he circulated among native speakers of Navajo at the University of New Mexico, where he found only about half of the speakers obeying the animacy hierarchy. An explanation as to why this may be the case is the wide discrepancy between the participants in terms of animacy or control -- horses do not kill lightning.

There is an interesting aspect to the problem that Frishberg brings forward: this is that when a possessive pronoun is prefixed to a nominal, such as líí' "horse" below, the order of the nominals in the sentence is irrelevant. Compare (2 - 3) with (4) below.

- 4) a. shiʒíí' 'ii'ni' biisxí
 b. 'ii'ni' shiʒíí' biisxí
 The lightning killed my horse.

This freedom in word order seems to be possible only for a limited number of sentences, suggesting that the distance between the referents on the animacy scale still seems to be a factor. I explore this matter further in Chapter 3 below.

In contrast, another member of the pronominal paradigm has received little attention before. This pronoun, called the "fourth" person, will be the topic of chapters 4 and 5. The single earlier work on the use of the fourth person that I am familiar with is a paper by Akmajian and Anderson (1970), who begin to explore the use of the fourth person. They point out that the fourth person refers only to humans, and that a switch from third to fourth person can be used to mark disjoint reference. But they treat the fourth person pronouns as perfectly parallel in syntax to the third person pronouns; that is, they show nouns co-occurring with fourth person. In Chapters 4 and 5, I discuss the syntax

of the fourth person, and show that fourth person, like first and second, ordinarily excludes any adjunct that does not match it in "phi" features, and that there are a few marked construction types where fourth person occurs with nominals -- for example to place focus on a particular argument. Akmajian and Anderson are correct in pointing out that the fourth person pronouns are reserved for humans and also for personified animals.

This work will show that the fourth person has properties that are very similar to first and second pronominal. A better understanding of the syntactic functions of the fourth person can contribute materially to the debate over argument structure in Navajo. Prefixes that are obviously cognate with the Navajo fourth person forms seem to be present in most Athabaskan languages, but its function differs from language to language. In Slave, a cognate form is a third person object when the subject is third person and disjoint reference is intended (Rice, 1986). In Sarcee, Cook (1984:195) identifies an unspecified third ts'i and a yi- prefix which he considers a fourth person. This fourth

person seems to function similarly to the Slave prefix: it refers to an object when the subject is third, and also if the object NP is not overt. But Cook points out that yi- can be a subject in some cases (1984:201). And ts'i "...is chosen instead of zero or gi-, not necessarily because such an identity of the subject in question is unknown or unspecified, but because such an identity is irrelevant or redundant in a given context".

5) 'ats'inilaa "someone said"

Example (5) could be used in texts when the speaker's identity is not in question.

The Navajo fourth subject ji- is identified as a deitic pronoun by Young & Morgan (1987). They show ji- as an impersonal subject pronoun when reference to first person is intended in the optative or future modes only; and they point out that fourth is used to distinguish between two third persons.

In addition to the syntactic functions of the fourth person in marking co- and disjoint reference, I will

document other uses. These include: a) to express deference; b) impersonal constructions; c) the reportative, or use in narrative contexts, and d) the use of fourth person person to "override" the animacy hierarchy in discourse contexts where the hierarchy excludes active transitive sentences. Navajo also has indefinite pronominal arguments, and there is also a locative or pleonastic pronominal subject. There is some homophony between the fourth person object and these abstract pleonastic subjects: this homophony suggests that these forms may have derived historically from a common origin. However, their synchronic syntax is quite distinct, as I will show. I will also describe in some detail the use of the fourth person in four types of complex sentences where disjoint reference can occur. In Chapter 5, I will show third person and fourth person functioning in adjoined temporal/conditional clauses. Relative and nominalized clauses will be the subject of Chapter 6. In this chapter I examine the question of how the head of a relative clause is defined, and show the distribution of restrictive and non-restrictive relative clauses.

Chapter 7 deals with possessor raising constructions and the yi-/bi- alternations. Included is a treatment of structural ambiguity in these construction types, and how they are related to the animacy hierarchy. Chapter 8 deals with Wh- constructions and focus, and the final chapter provides concluding observations.

In sum, this thesis will investigate the functions of Navajo pronouns, particularly the syntactic functions of the third and fourth persons. It will define their morphological, syntactic, and semantic properties, and integrate these properties into a unified account of argument structure in general in Navajo. We cannot understand the structure and functions of the fourth person forms without an understanding of Navajo argument structure in general.

Failure to understand the nature of argument structure in Navajo has led to a misunderstanding of the nature of the yi/bi- alternation, as pointed out above. I hope to contribute to the resolution of this misunderstanding here. In both third and fourth person forms, the question of marking disjoint reference arises,

and I will try to sort out these questions here. There is disagreement in the current literature on the argumental status of nominals and pronouns in languages that have obligatory pronominal affixes, like Navajo; whether nouns in languages of this type function as arguments or as adjuncts to the pronominal verbal affixes. In this thesis, I will adopt Jelinek's (1984, 1990) proposal on Pronominal Argument languages; in other words, my analysis will treat nominals in Navajo as adjuncts to the sentence, occupying A' positions, while the pronominal prefixes on the verb occupy the A positions. This work will show that the interpretation of a nominal depends upon its coindexing with a pronominal argument of the verbal sentence that follows it. I will also offer support for Jelinek's analysis by showing that the fact that it is the pronominal affixes that occupy the A positions, rather than the adjoined nominals, has important consequences for other parts of the syntax. These consequences include a) the fact that nominals are not case-marked; b) that subordinate clauses (except for the complements of indirect speech verbs, which have their own syntax) are adjoined clauses, not embedded clauses; c) that there is no movement to and

from A positions, and therefore no "raising" and Wh-movement.

Chapter II

The Navajo Verb-Sentence

2.0. Introduction.

This chapter will demonstrate that the Navajo inflected verb is interpreted as a complete functional complex. That is, all the argument positions that the verb is subcategorized for are registered in a set of obligatory pronominal prefixes, and this chapter will give a full account of these argument positions. The Navajo verb cannot appear uninflected for its arguments; there are no non-finite verb forms. The verb stem is in final position, preceded by what has been traditionally called a "classifier"; this prefix is typically a valence marker that marks the verbs as transitive or intransitive. Subjects and objects appear within the array of inflectional prefixes on the verb; goal arguments are postpositional phrases, some of which also appear phonologically attached to left margin of the inflected verb, while others immediately precede the inflected verb.

As we will see in the next chapter, the verb and its associated postpositional phrases form a complex that behaves as a unified constituent under fundamental rules of the syntax. I will call this constituent the Maximal Verb-Sentence, the MVS.

In terms of the Government and Binding approach (Chomsky, 1981) the MVS includes incorporated pronouns that satisfy all the argument positions that the verb is subcategorized for. These incorporated pronouns leave a trace in argument positions. The pronouns and trace form a chain that receives the theta role and case assigned by the verb. This means that any nouns that may also appear in the sentence are not in argument positions, but are non-argumental adjuncts, that cannot receive case. These nouns must be licensed by a pronoun (chain) with which they are coindexed (see Hale, Jelinek, and Willie 1991). I will describe the process of nominal adjunction in detail in the next chapter, Chap. 3.

Previous work on the analysis of Navajo verb morphology (Young and Morgan 1987, Hale 1987, Kari 1976, McDonough 1990), has investigated the morphophonological

rules whereby the underlying forms of the pronominal prefixes and other inflectional elements can be reconstructed. In this thesis, I will not repeat this work; I will assume the analysis given in Young and Morgan. This thesis will be focussed instead on the syntactic functions of these pronominal and anaphoric prefixes, and on the coindexing rules whereby co- and disjoint reference between these pronominals, and between the pronominals and noun phrases, are marked. The fourth person forms, which have special functions in marking disjoint reference, will also be investigated. A detailed treatment of the fourth person pronouns will be provided in Chapters 4 and 5 below.

The organization of this chapter is as follows: ~~Sec~~ 2.1 will cover the pronominal prefixes that mark the definite arguments, referential subjects and objects, including the anaphors. In Sec. 2.2., I will describe the indefinite pronominals, that can also satisfy these argument positions. In Sec. 2.3. I will describe the syntax of postpositional (oblique) arguments. I will distinguish between those oblique arguments that appear in the verb-postpositional complex from those that appear

outside it. In Sec. 2.4. I will describe the pleonastic subject pronoun -ho. Finally, Sec. 2.6. states the summary and conclusions for Chap. 2.

2.1. Definite direct arguments.

Subject and object pronouns are prefixed to the Navajo verb, along with elements marking aspect, modality, certain adverbial notions, and the like. The subject is the innermost (rightmost) argument, closest to the verb stem, while the object is to the left of (external to) the subject. These pronominal prefixes are definite in reference. Young and Morgan (1987) give a complete inventory of the prefix array of the Navajo verb.

2.1.1. Subject and Object pronouns. The underlying forms of the referential pronominal prefixes as given by Young and Morgan are:

1)	Subject		Object	
	Sing.	Duoplural	Sing.	Duoplural
1.	-sh-	-ii(d)	shi-	nihi
2.	-ni-	-oh-	ni-	nihi
3.	-0-	-0-	bi/yi	bi/yi
4.	ji-	ji-	ho/ha	ho/ha

According to Line 3, third person subject pronouns are always phonologically null, while objects vary between yi-/bi- according to the animacy hierarchy. I will take a somewhat different position here. The yi- object pronoun appears only in Direct constructions, while the bi- pronoun appears only in Inverse constructions; these forms will be described in detail in Chapter 3. The Inverse bi- is clearly cognate with the third person bi- pronouns that appear as possessors and postpositional objects; in this thesis, I will be concerned only with the fact that bi- in an inflected verb marks this form as an Inverse. Line 4 in (1) shows the fourth person forms which will be treated in depth in Chaps. 4 and 5. Arguments are marked singular, dual and plural in number. If the number of the subject is three or more, the Distributive prefix da- is added to the dual number of the verb.

The complexity of Navajo morphology is such that the pronouns that are present in underlying forms often do not appear transparently in the surface forms. Compare:

2)	déyá	3)	naashnish
	1s.will go		1s.working
	I will go		I am working.

In comparing (2) and (3), the subject pronominal -sh- can be easily seen in (3), but not in (2). Thus some verbs undergo more complex morphophonological change than others. As Hale (1977) noted, the form naashnish can also mean 'he worked'; where the subject pronoun is not -sh- but -0-, and -sh marks aspect, which marks the perfective mode. Ambiguities of this kind are relatively rare in Navajo, and are resolved in context.

A Navajo inflected verb form has at a minimum a stem, a classifier, a subject pronominal and some indication of aspect. The stem may alter in shape according to mode/aspect; thus it can not be said that distinctions in these features are shouldered completely by the verbal

prefixes. For instance, in (4) the verb has been inflected for first person in different modes.

- 4) a. yi-sh-k'á
3s.1s.grind:IMPF
I am grinding it.
- b. ná-sh-k'ááh
iter.3s.1s.grind.IMPF.
I usually grind it.
- c. yík'á
3s.1s.grind.PERF.
I ground it
- d. deeshk'ááŕ
3s.1s.grind.FUT.
I will grind it.
- e. wóshk'ááŕ
3s.1s.grind.OPT.
I wish to grind it.

Notice that the stem changes from one aspect/mode to another. Thus the stem gives information about aspect in addition to aspectual prefixes.

The following examples show subject and object pronominal inflection in a transitive verb.

5) ashkii, shishgish
1s.3s.cut

The boy cut me.

6) ashkii, nishgish
boy 2s.3s.cut

The boy cut you.

7) nishédiléézh
2s.1s.painted

I painted you.

8) shédiléézh
3s.1s.painted

I painted him.

The examples show in (5) a third person subject with first person object, and in (6) a second person object. In (7), the subject pronoun is first person and the object is indicated by second person, while in (8) the object is third person. An example showing the Distributive prefix da-:

- 9) dayiiłtsá
 PL.3.3.saw
 They saw him/them.
 *He saw them.

In direct constructions, when da- appears, the subject must be plural (three or more), and the number of the object is irrelevant. Da- is not an argument, but marks a semantic feature of the subject argument.

2.1.2. Anaphoric prefixes. There are anaphoric prefixes that appear to the left of the subject pronoun in the prefix array. These anaphors mark arguments that have patient theta roles, and cannot have independent reference. These anaphoric prefixes do not vary with person or number. When an anaphor is present, it always requires a -d or -l classifier, marking the verb intransitive. No pronoun or nominal that is coreferent with the reflexive may be adjoined to the sentence.

2.1.2.1. Reflexives. The reflexive prefix 'ádi- can occur with both singular and plural subjects. The following examples show the contrast between forms with a third

person object vs. an anaphoric reflexive.

10) yiiłtsá

3.1s.saw

I saw it.

11) 'ádiistsá

REF.1s.saw

I saw myself.

12) yiich'id

1-dual-scratching

We are scratching it.

13) 'ádiich'id

REF-1-scratching

We are scratching ourselves.

Examples of reflexives with the distributive plural
subject:

14) 'ádadiidleesh
 REF.PL.1dl.painting
 We are painting ourselves.

15) 'ádađiilzhíih
 REF.PL.1dl.blackening
 We are blackening ourselves.

When the subject of a reflexive is plural, it is also possible to obtain a reciprocal reading. Thus, examples (14) and (15) can also be interpreted as:

14') We are painting each other.

15') We are blackening each other.

2.1.2.2. Reciprocals. When a reciprocal anaphor is used, the subject is necessarily two or more in number, and only one reading is possible. The next two examples have dual subjects.

16) 'ahiidleesh
 REC.1dl.painting
 We are painting each other.

- 17) 'ahiich'id
 REC.1dl.scratching
 We are scratching each other.

The following two examples have subjects that are three or more in number, since the Distributive da- is present.

- 18) da'ahiidleesh
 DIST.REC.1dl.painting
 We are painting each other.

- 19) da'ahiich'id
 DIST.REC.1dl.scratching
 We are scratching each other.

This completes the survey of the definite direct pronominals in Navajo.

2.3. Indefinite agents and patients. In this section, we will consider a group of pronominal prefixes that mark indefinite and non-referential arguments. A crucial feature of these pronominals is that, like the anaphors, they exclude adjoined coreferent nominals; this aspect of

their syntax will be explored in full in the next chapter. Like anaphors, they show a classifier that marks the construction as intransitive. Among the prefixes of this type is the prefix that appears in what Young and Morgan (1987) have called the "agentive passive". In this construction, a transitive verb is marked with an indefinite agent pronoun, along with an object pronoun, producing a passive construction. In a second construction type, a pronominal prefix marks an indefinite absolutive argument, that is either an intransitive subject or transitive object.

2.3.1. The "Agentive Passive". In these constructions, the indefinite agent must be understood as human, but no noun that describes this agent may be adjoined. A very interesting property of the Agentive Passive is that the pronominal prefix that marks the unspecified agent is identical in phonological shape to the reflexive anaphor described in Sec. 2.1.2.1. above: 'ádi-. But note that the form 'adi- in the Agentive Passive in Navajo occurs to the right of (internal to) the object pronoun, proving that it marks the unspecified agent, and is not an object. This pronoun cannot be an anaphor, since the arguments of this

clause are not coreferent. In the next examples, compare the reflexive and the agentive passive.

20) 'ádílzheéh

('ádi-ni-l-zheeh in underlying form)

REF.2s.shaving

You are shaving yourself.

21) ni'dilzheéh

(ni-'ádi-l-zheeh in underlying form)

2s.PASS.shaving

You are being shaved.

22) 'ádíshdleesh

REF.1s.painting

I am painting myself.

23) shi'didleesh

1s.PASS.painting

I am being painted.

In both these construction types, the patient precedes the agent in the prefix array. In the reflexive forms, the

anaphor is to the left of the subject, and in the agentive passive forms, the object pronoun is to the left of the unspecified agent.

2.3.2. The Impersonals.

2.3.2.1. The -'a prefix. This pronoun marks an indefinite inanimate argument. When it occurs with an intransitive verb, it marks an indefinite animate subject; when it occurs with a transitive verb, it marks an indefinite inanimate patient. It never permits an adjoined coreferent nominal.

- 24) 'íichxq'
 unspec. subj. ruined
 Ruining took place.

The sentence in (24) might be used for example when a mistake made in a ceremony required it to be terminated or corrected. Compare the following intransitive form that permits an adjoined nominal:

- 25) (hatáál) yíichxq'
 (The ceremony) it is ruined.

The next example shows a related transitive verb with a referential third person agent and an unspecified inanimate patient. The contrast between (25) and (26) is marked in the classifier -, which marks the verb transitive.

26) 'asdzáá 'íí'chxó'

The woman did the ruining (of it).

Example (24) is an intransitive construction, with an indefinite inanimate subject marker 'a-, which will not allow a nominal adjunct. In contrast, (26) is a transitive construction with an indefinite inanimate object argument, and permits an adjunct to the third person subject pronoun.

2.4. Postpositional or Oblique arguments.

Postpositions resemble verbs in Navajo in being inflected for their object arguments. The postpositional object pronouns and the possessive pronouns are identical in form. The postpositional phrase corresponds to an oblique argument of the verb. Like the oblique phrases seen in other languages, some are case-marked arguments that the verb is subcategorized for, and some are more like adjuncts. I will call the former the grammatical

postpositions, and the latter the lexical postpositions. The grammatical postpositions occur only with pronominal objects and are a component of the MVS. The lexical postpositions occur only with nominal (lexical) objects. Below is a list of the postpositional object pronouns.

27)	Sing.	Dual	Plural
1st	shi-	nihi-	da-nihi
2	ni-	nihi-	da-nihi
3	yi/bi-	yi/bi	da-bi
4	ha	ha	da-ha

Grammatical postpositions that occur with these pronominal objects include:

28)	Grammatical Postpositions		
a.	-aa	'to'	Dative
b.	-ch'í'	'to'	Goal; Allative
c.	-ts'áá'	'from'	(take away from; Malefactive)
d.	-á	'for'	Benefactive
f.	-ee	'with'	Instrumental
g.	-ł	'with, together'	Comitative
h.	-ghá	'through'	(penetrate through)
i.	-lááh	'beyond'	Comparative, Locative

Of these postpositions, (28 a,c,d,g) occur only with animates, (28 f) occurs only with inanimates, and others occur with both. Note that many of them have semantic features that are associated with such "oblique" cases as Dative, Benefactive, Comitative, etc. across languages.

- 29) shimá bil dé'áázh
 1.mother 3.with dl.walk
 I am going with my mother.

Some lexical postpositions, that occur only with nominals, are as follows:

30) Lexical Postpositions

- a. -gi 'at'
- b. -di 'at'
- c. -dóó 'from'
- d. -dēé' 'from'
- e. -góó 'to'
- f. -jì' 'to'

Note that these postpositions are all directionals. Some examples:

31) Kinlání=góó déyá
 Flagstaff=to I will go
 I will go to Flagstaff.

32) Kinlání=jì' déyá
 to
 I will go as far as Flagstaff.

The preceding examples show a contrast in the meaning of

the two lexical postpositions involved. In (31) the movement is toward a general area, while in (32) it is up to a specific point. It is not possible to use -goo, a lexical postposition, with an animate object.

33) 'awéé' bich'í' yishááʔ
 baby 3.to 1.walking
 I am walking to the baby.

34) *'awéé'-góó yishááʔ
 (I am walking to the baby.)

Lexical postpositions and their nominal objects can become lexicalized, that is, have a narrow interpretation.

35) hooghan=góó déyá
 I am going home.
 *I am going to the hoghan.

Lexical postpositions can also appear after a grammatical postpositional phrase that includes a pronominal object.

- 36) dibé baghan bits'áájji' yishááŕ
 sheep 3s.home 3s.from.at 1s.walking
 I am walking away from the corral.

The resulting complex expression is a complex Postpositional Phrase. While it is not possible to stack two grammatical or two lexical postpositions, it is possible to have the kind of combination shown in (36), which produces a complex grammatical postpositional phrase.

There are one or two postpositions that can function either as grammatical or lexical postpositions.

- 37) a. -tah 'among'
 b. -ta' 'between'

Examples:

- 38) Tsintah hodi'il.
 Among the trees/forest, it is dense.
- 39) Nihitah deeyá
 Among us he will come.

2.5. Pleonastic Subjects. It has been claimed that Navajo lacks pleonastic subjects, since Navajo has no non-referential "dummy" lexical items such as the English expletives "it" and "there" which fill subject positions that are not assigned a theta role. Navajo has no expletive nominals, but since nominals are not arguments in Navajo, there is no need for one. Instead, there is an incorporated pleonastic subject pronoun, ho-, which has the same shape as the fourth person object pronoun, to be described in Chap. 4. While the fourth person refers exclusively to human beings, pleonastic ho- refers to an abstract space, area, or entity.

2.5.1. Pleonastic subjects in locative sentences.

Consider the following set of examples.

- 40) a. ditá'
 3-is deep
 It is deep.
- b. tó ditá'
 water, 3-is deep
 The water is deep.

- 40) c. hōditá'
 ho-is deep
 It (the area) is deep.

Example (38) above also has a pleonastic "areal" subject.

- d. *tó hōditá'
 water ho-is deep

The presence of ho- in (38) and (40d) excludes an adjoined nominal; it is necessary to enclitize a postposition to the nominal, and build a locative expression, as in:

- 40) e. táyi' hōditá'
 water:in ho-is deep
 It is deep there in the water.

These examples show that the pleonastic "areal" prefix ho- can appear both with and without a locative postpositional phrase, and excludes a simple nominal.

2.5.2. Pleonastic subjects with "psych" verbs. The next set of examples are parallel but more complex in structure,

since they include a postpositional phrase whose object has an Experiencer theta role. These are examples of "psych" verbs, where the argument with an Experiencer theta role is comparable to a "Dative Subject" (see Belletti and Rizzi, 1988 on experiencers as internal arguments in "psych" verb constructions).

- 41) a. shiʒ nizhóní
 1sg.with 3.nice
 With me, it is nice
 I like it.
- b. shiʒ hózhóní
 1sg.with ho-nice
 I like it there (the area).
- c. *kintah shil nizhóní
 town 1sg.with 3.is nice
 I like the town.
- d. kintah-di shiʒ hózhóní
 town -at 1s.with ho-is nice
 I like it there in town (the area).
- e. #kintah-di shiʒ nizhóní
 town-at 1sg.with 3 .is nice
 I like him/it [when I'm] in town.

The postpositional phrase and its pronominal object, which has an Experiencer theta role, is obligatory with these "psych" verbs. We see that the pleonastic subject pronoun can occur without a locative expression but the reverse is not the case. When a bare nominal and the pleonastic subject cooccur, there must be a locative expression such as in (41d). In (41e), we have a good output but the meaning is not consistent with the construction that we are exploring --instead it means "I like him/it in town, [not here where I am now]." The generalization is that a bare nominal cannot appear in a sentence without a personal pronoun to which it is adjoined.

The pleonastic ho- and Dative experiencer can also appear with another class of "psych" verbs, those referring to knowledge. In the English gloss, the first postpositional object is the subject.

- 42) Shiř béé hózin
 1.with 3.about ho-known
 [about X, knowing is with me.]
 I know it.

This example is not a Passive; an enlightening gloss is not easy to find. These constructions permit adjoined subordinate clauses.

- 43) Kee yóó'eelwod=ígíí bił bée hózin
 3.ran away=COMP 3.with 3.about ho.known
 He/she knows that Kee ran away.

We see from the latter three examples that for verbs like 'know' the Experiencer is the object of the postpositional phrase bił "with me" and is comparable to a "Dative Subject". I analyze the adjoined subordinate clause as an adjunct to the object of the postpositional phrase bée, "about it".

In this section I have identified the locative and pleonastic uses of the 'areal' subject pronominal prefix ho- which contrasts with fourth person subject ji- and fourth person object ho- prefixes.

2.6. Summary and conclusions. In this chapter I have identified the argument structure of the verb-sentence, including its associated postpositions. The verb and these

postpositional phrases form a constituent -- the MVS (Maximal Verb-Sentence), that has the following properties:

- 44) a. it cannot be interrupted;
b. it may constitute a single phonological unit;
c. it is the domain of the expression of the
subcategorizational features of the verb, and
d. it behaves as a unit under certain syntactic
processes (to be discussed in Chap. 3).

I have also demonstrated that the relative order of the prefixes that mark the verbal arguments is consistent, with the patient always to the left of the agent, and the postpositional phrases leftwards of the direct arguments. I have distinguished between the grammatical and the lexical postpositions; the former take pronominal objects and the latter take lexical objects. This contrast has important syntactic reflexes, as we will see in the next chapter.

I have identified two major classes of inflectional arguments. First, the prefixes that mark definite referential arguments: first, second, third and fourth

person; also included here are the anaphors (reflexive and reciprocal). Second, the prefixes that mark indefinite arguments: the 'adi that appears in the "Agentive Passive", the Impersonal/indefinite -'a, and the pleonastic ho-. In the next chapter, I will present an analysis of the syntax of sentences that include nominal adjuncts, and state the conditions under which nominals are permitted or excluded. I will show that the definite pronouns permit nominal adjuncts (including free pronouns), while the indefinite pronouns exclude adjoined nominals.

Chapter Three

The Third Person and Nominal Adjunction

3.0. Introduction.

In Chap. 2, I provided a survey of the arguments that appear in the prefix array of the Navajo verb, and I identified two major classes: the definite pronominal arguments that permit adjoined nominal expressions, and the indefinite pronouns that exclude coindexed nominals. In this chapter, I will describe the process whereby nominals are adjoined to the MVS, and how they are properly coindexed with the pronominal arguments. Included here will be an account of the yi-/bi- alternation, which is a contrast between Direct and Inverse voice. I will also present a new perspective on the animacy hierarchy that is associated with the Inverse voice.

3.1. Nominal Adjunction.

The MVS is a complete functional complex, and by itself is a grammatical sentence. Nominal expressions are always added to the MVS for reasons relating to the structure of the discourse, not for reasons of grammaticality. When for discourse reasons the speaker desires to remove any potential ambiguity from the

reference of a pronominal argument, a coreferential noun may be included in the utterance, and these nominals are in adjunct positions.

I have claimed that the noun does not have grammatical relations independent of the pronominal argument, that the noun is an adjunct coindexed with the incorporated pronoun. However, this is not to say that the noun does not have a close connection with the pronoun. The noun by itself cannot be an argument -- it must be licensed by a pronoun; but it forms a complex expression with the pronoun, since it modifies the pronoun. The meaning of the noun becomes a part of the meaning of the whole sentence by adding more information about the pronoun it modifies.

3.1.1. Free Pronouns. Navajo is a verb final language, and adjoined nominals appear at the left of the MVS. Except for a few terms that refer to humans, nouns are not marked for number, and nouns and free pronouns are never marked for case, since these features are marked in the incorporated pronouns. I will begin the discussion of adjoined nominals by describing the set of free

pronouns that may appear in Navajo sentences. These free pronouns have a particular function, that of marking referential contrast or emphasis, and therefore do not appear in "unmarked" constructions. When the single verbal argument is first or second person, only a free pronoun with the same "phi"-features (person and number) may be adjoined to the sentence.

- 1) nihí yiicha
 we 2d.crying
 We (are the ones who) are crying.

The gloss for (1) is intended to show that contrastive emphasis is placed on the argument to which the free pronoun is adjoined. These free pronouns are not marked for case.

We can generalize as follows concerning adjunction to the single argument of an intransitive sentence:

- 2) A adjoined nominal must agree in semantic ("phi") features with the pronoun it is coindexed with.

As we will see, this principle is fundamental to the interpretation to all adjoined nominals in Navajo.

3.1.2. Emphatic Pronouns. There is also a set of free emphatic pronouns.

- 3) T'áábí Mary yiztaʔ
 3.EMPH Mary 3.3.kicked
 He himself kicked Mary.

These emphatic pronouns are frequently seen in reflexive constructions (identified in Chap. 2 above). Note that reflexives are marked constructions in that the agent and patient are one and the same person, contrary to expectations. In this sense, reflexives have inherent focus on these coreferent arguments.

- 4) T'áábí 'ádílcha
 3 EMPH self-3-cry
 He made himself cry.

It is the reflexive pronoun 'ádi on the verb that makes (4) a reflexive sentence, not the emphatic pronoun, which

can occur with a simple intransitive.

5) T'áábí yicha

3.EMPH 3.cries

He himself is crying. (on his own)

In (5), the use of the emphatic pronoun puts emphasis on the fact that the subject of the sentence is acting on his own, without being affected by others. Among languages of the world, we frequently see reflexive pronouns used to focus an argument in constructions that are not reflexives.

6) a. You yourself are responsible.

b. You know that yourself.

These emphatic pronouns are produced either by adding a particle t'áá, meaning "just" or by a shortened form -a.

7) t'ááshí

t'áánihi

t'ááni

t'áánihi

t'áábí

t'áábí

These pronouns can be used in either reflexive or non-reflexive constructions.

With transitives, it is possible to add a free pronoun that agrees in person and number with only one of the arguments.

- 8) shí bi-chidí yílchxq'
 I 3.car 3s.1s.ruined
I (am the one who) ruined his car.

- 9) shí shiiniltsá
 I 1s.2s.saw
 I (am the one) you saw.

Example (9) has a first person object and a second person subject. Constructions with two free pronouns are judged unacceptable, since the function of the adjoined free pronoun is contrastive reference.

- 10) *ní shí shiiniltsá

Next, I will describe the adjunction of nominals.

3.1.3. Single Nominals. I will begin with the simplest case, intransitive verbs that have only a single (direct) argument, the subject.

- 11) ('ashkii) yicha
 boy 3s.crying
 (The boy) he is crying.

Since there is only one third person argument, no possible ambiguity arises.

The single argument of an intransitive may have an agent, patient or theme theta role. There is a kind of intransitive construction in Navajo where the subject has a patient theta role.

- 12) yíchxq'
 3s.ruined
 It is ruined.

Young and Morgan (1987:120) call this the simple passive. Only one nominal, coindexed with the patient subject, is allowed in these constructions.

- 13) bi-chidí yíchxq'
 his car 3s.ruined
 His car, it is ruined.

Nominal adjuncts may be complex in internal structure.

- 14) [hastiin sání bi-chidí] yíchxq'
 man old 3POSS.car 3s.ruin PERF
 The old man's car is ruined.

The complex nominal in (14) is an adjunct to the single argument of the intransitive verb, the subject, which has a patient theta role.

3.1.4. Two adjuncts. Simple transitive sentences have two direct arguments, and the incorporated pronouns license an adjunct for each argument position. The following transitive sentences have first person subjects and third person objects, to which we may adjoin a nominal.

15) (naadáá) yík'ǎ
 corn 3.1.ground
 (The corn) I ground it.

16) (bi-chidí) yílchxq'
 (3.car) 3s.1s.ruined
 (His car) I ruined it.

The nominal in both these constructions must be coindexed with the object, since the subject is first person.

When a transitive verb has two third person arguments, and a single adjunct appears, the following principle of interpretation applies:

17) When a transitive sentence has only one adjunct, that adjunct is interpreted as coindexed with the object (patient) argument.

An example:

18) chidí yiyíílchxq'
 car 3s.3s.ruined
 He/she ruined the car.

When a transitive verb has two third person arguments, it is possible to add two nominal adjuncts. Such sentences are not common in ordinary discourse.

- 19) [hastiin sání] [bi-chidí] yiyííłchxq'
 man old 3POSS.car 3.3.ruined
 The old man ruined his car.

The word order convention is as follows:

- 20) When a transitive sentence includes two nominal adjuncts, the inner nominal is coindexed with the internal argument, and the outer nominal (by default) is coindexed with the external argument.

Compare Ex. (19) with Ex. (14), repeated here, where the same string of nominals is interpreted as a single constituent. This reading is obligatory, since the verb in Ex. (14) is intransitive.

- 14) [hastiin sání bi-chidí] yíchxq'
 man old 3POSS.car 3-3-ruined
 The old man's car is ruined.

In (14), the string of nominals in brackets is interpreted as a single constituent. In (21), where the verb is transitive, this single constituent is interpreted as an adjunct to the patient argument.

- 21) [hastiin sání bi-chidí] yiyííłchxq'
 man old 3POSS.car 3-3-ruined
 He/she ruined the old man's car.

If the transitive verb describes an action which can only be performed by an animate subject, these semantic features of the verb can "override" the expected interpretation principle stated in (20).

- 22) 'ashkii yiyííbíí'
 boy 3.3.picked round objects
 The boy picked them. (c.f. berries)

Since berries do not pick boys, this sentence poses no problems of interpretation, and the expected word order can be suspended. This applies to long complex nominals as well.

- 23) ['ashkii bimá] yiyííbíí'
 boy 3s.mother 3.3.picked round objects
 The boy's mother picked them.

In (23), the initial string cannot be interpreted as two constituents, even though the verb is transitive, because of the semantic features of the verb. Other examples of constructions where the semantic features of the verb allow the speaker to "override" the expected work order:

- 24) 'ashkii yiyííłta'
 boy 3.3.count plural objects
 The boy counted them.

- 25) 'ashkii yóldon
 boy 3.3.shooting
 The boy is shooting at it.

As can be seen, (22) through (25) have the interpretation of the single nominal being coindexed with the subject. This coreferentiality between the nominal and the pronominal follows from what we know about what humans can do, such as picking, counting, and the like.

3.2. Adjoining nominals to oblique arguments. The interpretive rule given in (17) applies also to sentences where the MVS is composed of an intransitive verb and a postpositional phrase.

- 26) 'at'ééd yich'ǰ' yáǰti'
 girl 3.to 3.speaking
 He is speaking to the girl.

That is, the single nominal is coindexed with the object of the verb if there is one, or with the postpositional object if the verb is intransitive.

If the semantic features of the noun are incompatible with its being an adjunct to the object of the postposition, by default it may be interpreted as an adjunct to the subject.

- 27) tsé yikáá' neezdá
 rock 3.on 3.sat
 He sat down on the rock.

28) 'ashkii yikáá' neezdá

boy 3.on 3.sat

The boy sat down on it./He sat on the boy.

We will now take up the question of the MVS that include transitive verbs and postpositional phrases.

Postpositional phrases, as we saw in Chap. 2, are of two kinds: grammatical and lexical. Grammatical postpositional phrases may be phonologically integrated into the MVS, or they may form the first word in the MVS as in the following Benefactive construction.

29) yá yoolóós

3.for 3.3.lead [sing. +animate]

She is leading it for him.

(Gender is not marked in Navajo pronouns; as in earlier examples, it is used in the gloss here as a device to mark disjoint reference.) There are three argument positions in this sentence; we can add a nominal to any of them. I will now identify the coindexing principles that apply.

We saw in Chapter 2 that the grammatical postpositions permit human or animate objects, while the lexical postpositions do not. Thus, the semantic features of the postposition as well as the verb need to be taken into account in the interpretation of the sentence. If the semantics of the verb permit a human goal, then the nominal that immediately precedes the MVS will be interpreted as an adjunct to the postpositional object, as seen in the following Benefactive construction.

- 30) 'ashkii 'at'ééd yá néidííłts'in
 boy girl 3s.for 3.3.fist-hit
 He hit the boy for the girl.

The following interpretive principle applies:

- 31) In an MVS with one Postpositional Phrase, the innermost nominal is coindexed with the postpositional object in the Direct Construction.

Again, we need to constrain this principle to take account of the semantic features of the constituents.

If the innermost adjoined noun has semantic features that make for its being interpreted as an adjunct to the object of the verb, then the generalization given in (31) will be overridden. We can adjoin a nominal to Ex. (29), producing the following.

- 32) ǎíí' yá yoolóós
 horse 3.for 3.3.lead [sing. +animate]
 She is leading the horse for him.

This interpretation follows from the fact that horses typically are led, and do not lead people. Note that on this interpretation, the noun preceding the inflected postposition (yá) is not coindexed with it, and cannot be governed by it.

If a noun referring to a human is added instead, the construction becomes ambiguous.

- 33) 'ashkii yá yoolóós
 boy 3.for 3.3.lead [sing. +animate]
 a. He is leading the boy for her.
 b. She is leading it for the boy.
 c. *The boy is leading it for her.

The ambiguity follows from the fact that it is possible, when there is an oblique argument, to interpret an adjoined noun as referring either to the object of the verb (33a) or to the object of the postposition (33b), if the semantic features of all the constituents do not force the single nominal to be interpreted as one or the other. On (33a), the nominal 'ashkii is interpreted as coindexed with the object of the verb, but it is not in a position to be governed by the verb. Note also that this single adjoined nominal cannot be interpreted as a subject adjunct; I will return to this point in Sec. 3.2. below.

When two nominals are adjoined to the sentence given in Ex. (29), the semantic features of the various constituents force particular coindexings.

- 34) 'azdzáá 'at'ééd yá yoolóós
 woman girl 3.for 3.3.lead [sing. +animate]
- a. He is leading the woman for the girl.
 - b. The woman is leading it for the girl.
 - c. * The woman is leading the girl for him.

In both the interpretations shown in (34), the innermost nominal is taken to be coindexed with the postpositional object, the Benefactive. In (34a), the other nominal is coindexed with the verbal object; in (34b) the other nominal is coindexed with the verbal subject. Principle (31) above accounts for the exclusion of the reading shown in (34c).

In examining the conditions under which nominals may be adjoined to simple intransitive sentences, we saw that it is necessary for the nominals and verbal arguments to match in certain semantic ("phi") features. And we saw in Ex. (27) through (30) above that the semantic features of the verb and the adjoined nouns must be taken into account for sentences with multiple arguments also, since these features can "override" the expected coindexing between a single noun and the object argument of the verb

or postposition (Ex. 33). Where there is a postpositional argument with a transitive verb, it is entirely a matter of the semantic features of the verb and the adjoined nominal whether the single argument is to be coindexed with the verbal or postpositional object, or neither. Therefore, if the nominal that immediately precedes the MVS is semantically appropriate (that is, not a nominal like líí' "horse", it is interpreted as a Benefactive adjunct.

When the single nominal cannot be coindexed with either object that it precedes, because of the semantic features of the MVS, it must be coindexed with the subject.

35) 'asdzáá yíi' yiyííłbéézh
 woman 3.in 3.3.cooked
 The woman cooked it in it.

I take these facts to be crucial evidence in support of the view that nouns in Navajo are not in argument positions, where they are directly governed and assigned case by the verb or postposition, but are linked via

predication to the incorporated pronouns, like "discontinuous" relatives. While a noun in and of itself cannot fill an argument position, it forms a complex constituent with its pronominal head at the level of the interpretation of the sentence.

In this section, Sec. 3.1., we have seen that intransitive verbs permit one nominal adjunct, and transitive verbs permit two nominal adjuncts; in addition, inflected postpositions permit adjuncts to their objects. In other words, a nominal may be adjoined for each of the pronouns in the MVS.

- 36) 'ashkii 'at'ééd xíí' yá yoolóós
 boy girl horse 3.for 3.3.lead [sing. +animate]
 The boy is leading the horse for the girl.

I turn now to an analysis of an important new set of interpretive principles, those involved in the Inverse voice, to be described in the next section.

3.3. Direct and Inverse Voice.

We saw in Chapter 2 above that there are two overt

third person pronominals, yi- and bi-. The bi- prefix is involved in a voice alternation that is a core feature of Navajo syntax. In Willie (1989) I proposed that the alternation is between Direct and Inverse voice. The Inverse voice appears only when there is more than one third person argument. The Inverse construction is comparable to a passive in that the subject has a Patient theta role, but it differs from the passive in that it is a transitive sentence that has both agent and patient arguments (Chomsky 1981).

An example illustrating this voice alternation is:

37)a. ʔíí' dzaanééz yiztaʔ
 horse mule 3.3.kicked
 The horse kicked the mule.

b. dzaanééz ʔíí' biztaʔ
 mule horse INV3.3.kicked
 The mule was kicked by the horse.

In (37a) the NP occurring immediately before the yi-form is a patient adjunct, and by default, the other NP is an adjunct to the agent argument. In (37b) the NP occurring

nearest the bi-form is the agent adjunct of that sentence, and the other nominal is a patient adjunct. Therefore, the immediately preceding NP, in both voice forms, is an adjunct to the "internal" argument, regardless of whether the theta role of that argument is agent or patient. Case is assigned to the pronouns before they are incorporated into the verb. In the Inverse, where the agent is the "internal" argument, i.e., not the subject, I assume that the agent pronoun has Ergative case, and the patient pronoun has Accusative case (Marantz 1984).

The voice alternation is optional, that is, discourse determined, if both nouns are of equal animacy, as in Ex. (37a and b) above. When they are not equal, a number of semantic features of the arguments come into play. I will take up these semantic features in the following section, which deals with the Animacy Hierarchy in Navajo. Before doing so, I want to explore the syntactic aspects of the voice alternation. In previous work, failure to separate the syntactic from the pragmatic aspects of this voice alternation has made the analysis of this problem more perplexing.

Example (37) above showed a sentence with two NP adjuncts. When only one adjunct is present, it must be coindexed with the internal argument, and there is no adjunct to the external argument.

- 38)a. dzaanééz yiztaʒ
 mule 3.3.kicked
 It kicked the mule.
- b. ʒíí' biztaʒ
 horse INV3.3.kicked
 It was kicked by the horse.

When no NPs are adjoined, the verb-sentences in the Direct and Inverse forms still differ in meaning.

- 39)a. yiztaʒ
 3.3.kicked
 It kicked it.
- b. biztaʒ
 INV3.3.kicked
 It was kicked by it.

At the beginning of this chapter, I pointed out that

adjuncts can be complex in internal structure; that is, that a string of words preceding the verb sentence can be interpreted in two ways, as either two adjuncts or one adjunct consisting of two words. This produces a structural ambiguity with Inverse forms as well as the Direct ones. However, this ambiguity is constrained by the coindexing principles.

I will use the demonstrative díí "this" to show how these ambiguities occur. The demonstratives work in Navajo most of the time like full NPs, where they are referring expressions. However, demonstratives can also modify other nouns; when they do, they form part of a complex adjunct.

- 40) Díí 'ashkii yiztaʔ
 this boy 3.3.kicked
 a. This (one) kicked the boy.
 b. He kicked this boy.
 c. * This boy kicked him.

In (40a), the interpretation is that each word is an adjunct in its own right -- one coindexed with the agent

pronoun, and one coindexed with the patient pronoun. In (40b), the interpretation is that there is only one complex adjunct, which of course is coindexed with the patient. The interpretation in (40c) is excluded since the single complex adjunct would be coindexed with the agent, leaving no adjunct for the patient -- and the semantic features of the lexical items do not make it possible to "override" the expected interpretation. The same principles of interpretation apply in the Inverse forms.

- 41) Díí 'ashkii biztaʔ
 this boy INV3.3.kicks
 a. He got kicked by this boy.
 b. This (one) got kicked by the boy.
 c. * This boy was kicked by him.

In (41) the complex adjunct cannot be construed as the patient adjunct, but it can be the agent adjunct.

3.3.1. Definiteness and the Inverse Voice. An important property of Inverse constructions in Navajo that has not been previously identified is revealed in the following

examples.

42) 'ashkii 'at'ééd yizts'qs

The boy kissed the girl

43) 'ashkii léi' 'at'ééd yizts'qs

A boy kissed the girl.

44) 'ashkii 'at'ééd léi' yizts'qs

The boy kissed a girl.

In my speech, and that of other speakers I have consulted, the preferred (but not obligatory) reading of a noun is that it is definite unless it is specifically marked indefinite with such a word as léi'. The examples in (42 - 44) show that either argument in a Direct Transitive can be either definite or indefinite. Now compare:

45) 'ashkii 'at'ééd bizts'qs

The boy was kissed by the girl.

46) 'ashkii 'at'ééd léi' bizts'qs

The boy was kissed by a girl.

47) * 'ashkii léi' 'at'ééd bizts'qs

[A boy was kissed by the girl.]

Parallel examples:

48) 'ashkii 'at'ééd ʔa' bizts'qs

The boy was kissed by some girl.

49) * 'ashkii ʔa' 'at'ééd bizts'qs

[Some boy was kissed by the girl.]

50) 'ashkii 'at'ééd ʔa' bizts'qs

The boy was kissed by some girl.

51) * 'ashkii ʔa' 'at'ééd bizts'qs

[Some boy was kissed by the girl.]

I conclude that with the Inverse, the external argument

(the patient, with Absolutive case) must be definite.

Additional support for this claim is that Inverse

constructions cannot be generics.

52) ǰééchaa'í ma'ii yiyiǰtséehgo, yikéé' nídiilwo'
 dog coyote 3.3.sees=when 3.follow 3.runs
 When a dogⁱ sees a coyote^j itⁱ chases it^j.

53) ǰééchaa'í ma'ii biiǰtsáago, bikéé' nídiilwod
 dog coyote 3.3.saw=when 3.follow 3.ran
 When the dogⁱ was seen by the coyote^j, itⁱ was chased
 by it^j.

Now let us consider plural arguments.

54) John 'at'ééké yizts'qs
 John kissed the girls.

55) John 'at'ééké bizts'qs
 John was kissed by two girls.

(With more than two, the distributive must be used.)

56) 'at'ééké John yizts'os

Two girls kissed John.

57) 'at'ééké John bizts'os

Those two girls were kissed by John.

Note that the external patient argument is interpreted as definite. The paucal plural (less than three) can appear with either argument in either the Direct or Inverse.

When the universal quantifier has scope over the external argument, the voice alternation provides different interpretations of the quantifier:

58) t'áá 'ałtso 'at'ééké 'ashkii ła' bizts'os

All the girls were kissed by a boy.

With the Direct:

59) t'áá 'ałtso 'at'ééké 'ashkii ła' yizts'os

Each of the girls kissed a boy.

60) t'áá 'ałtso 'at'ééké 'ashkii ʔa' deizts'qs

- a. Every girl kissed a boy. (one boy)
- b. Every girl kissed a boy. (many boys)

With greater plurals, the distributive da- must be used.

3.3.2. The distributive and Inverse voice. Across languages, we see that number is a universal property of pronoun systems, but only an optional feature of nouns. In languages where nouns are the "real" arguments, that is, where nouns can be arguments without there being any associated pronoun, we see number marked on the noun; this is a property of English nouns. In Navajo, we see number marked obligatorily on the verb; this is where the pronouns are. There are also a half-dozen nouns that mark number redundantly; these are all nouns that refer to humans. In addition, there is a distributive prefix da-, identified in Chapter 2.

There is an interesting constraint upon the possible interpretations in constructions where plurality is marked in both the pronouns and the adjoined NPs. Consider two nominals of equal rank in transitive

constructions; recall that when this is the case, it is possible to use either the yi- or bi- construction.

61) 'ashkii 'at'ééd yoo'ị́
 boy girl 3.3.sees
 The boy sees the girl.

62) 'at'ééd 'ashkii boo'ị́
 INV3.3.sees
 The girl is seen by the boy.

If we add the distributive plural daa/da, then certain sentence types are excluded.

We will take a plural form of the verb 'see' and observe the combinations that are possible when nominals are present.

63) a. dayiiłtsạ́
 PL.3.3.saw
 They saw them/it/him/her.

63) b. 'ashiiké 'at'ééké dayiiłtsá
 boys girls PL.3.3.saw
 The boys saw the girls.

c. 'ashiiké 'at'ééd dayiiłtsá
 boys girl PL.3.3.saw
 The boys saw the girl.

d. *'ashkii 'at'ééké dayiiłtsá
 (The boy saw the girls.)

The examples in (63) show that the distributive marking is acceptable when the noun modifying the agent pronoun is plural, but excluded when it is not, as in (63d). It appears that the agent falls under the scope of the distributive marker, and it does not seem to matter whether the internal argument, the patient in the Direct construction) is plural or singular (63b & c).

Now let's take the Inverse construction and see if plurality is associated with the agent here also. In the Inverse, the agent is the internal argument.

- 64) a. dabiiłtsá
 PL.INV3.3.saw
 They/he (was)were seen by them/*him.
- b. shizhé'é 'ashiiké dabiiłtsá
 1s.father boys PL.INV3.3.saw
 My father was seen by the boys.

With common nouns, da- plus bi- requires that both internal and external arguments be plural.

- 65) a. 'ashiiké 'at'ééké dabiiłtsá
 boys girls PL.INV3.3.saw
 The boys were seen by the girls.
- b. *'ashiiké 'at'ééd dabiiłtsá
 (The boys were seen by the girl.)
- c. *'at'ééd 'ashiiké dabiiłtsá
 (The girl was seen by the boys.)

However, if the external argument is made maximally referential with demonstratives, then the sentence becomes acceptable.

66) 'éidí 'at'ééd 'ashiiké dabiiłtsá

That girl (over there) was seen by the boys.

Recall that example (65a) above, where both arguments are plural, is also acceptable. I conclude that bi- requires the external argument to be definite, but when the Distributive da- is present, it can license a plural external argument, which can escape the requirement on definiteness. With dabi-, the internal argument must be plural, and the external argument may optionally be interpreted as plural.

Where there are no plural forms for the noun, these same constraints operate on the permitted interpretations of sentences. Compare the following:

67) a. mą'ii tǎ'ízí deishxash
 coyote goat PL-3-3-bit
 The coyotes bit the goat(s).

b. tǎ'ízí mą'ii dabishxash
 INV3-3-bit
 The goats were bitten by the coyotes.

In (67a), the agent must be interpreted as plural. In (67b), both must be interpreted as plural. If we want to produce a reading in which the agent may be singular, then the following construction is used.

- 68) ma'ii tʰ'izí yitah da'ashxash
 coyote goat 3.among PL.bit
 The coyote (went among and) bit the goats.

The following is also acceptable:

- 69) 'éidí tʰ'izí ma'ii dabishxash
 DEM. goat coyote INV3.3.bit
 That goat there was bitten by the coyotes.

We have seen that number can be associated with different arguments according to the voice alternation. This would not be possible if number were a property of the nominals, rather than the pronouns. In the Inverse voice, the external argument, the patient, must be either definite or plural if the sentence is to be acceptable. And note further that in Navajo, it is only a half-dozen nouns referring to people that are overtly marked

plural -- and human beings are more likely to be definite in discourse than are other noun classes. This leads us into the next topic, the famous Navajo Animacy Hierarchy.

3.3.3. The animacy hierarchy. The speaker's use of the Direct/Inverse voice alternation is determined by semantic factors coded in an animacy hierarchy (see Hale et al 1977, Witherspoon 1977). The generalization is:

70) If the agent is higher on the animacy scale than the patient, then the Direct voice is used: if the patient is higher on the scale, then the Inverse must be used. And if they are equal, the choice rests on discourse factors.

The voice alternation can only be used if all arguments are third person. This clearly is connected with the fact that only third person arguments can be indefinite; first and second person arguments are always definite.

It is important to recognize that even when the sentence does not contain any nominals, the sentence must be interpreted with reference to the animacy scale.

Consider the following examples:

- | | | | |
|--------|----------|----|------------|
| 71) a. | yishxash | b. | bishxash |
| | 3.3.bit | | INV3.3.bit |

The following interpretations for the above are ranked in order of preference.

- | | | |
|--------|---------------------------|-------------------|
| 72) a. | yishxash | |
| | 1) he bit him. | equal ranked |
| | 2) he bit it. | pat. lower ranked |
| | 3) it bit it. | lower equals |
| | 4) *it bit him. | agent lower |
| 72) b. | bishxash | |
| | 1) he was bitten by him. | equal ranked |
| | 2) he was bitten by it. | patient higher |
| | 3) it was bitten by it. | lower equals |
| | 4) *it was bitten by him. | higher agent |

Thus what is ruled out (72a.4) is a lower-ranked agent in the yi- verb, and what is ruled out in (72b.4) is the higher agent in the bi- verb. That is, (71a) is

interpreted as having a higher (or equal) agent and (71b) can be used only when the agent is lower (or equal). Each paradigm permits what the other excludes. As can be seen, the animacy hierarchy accounts for the use of the yi-/bi- alternation where the arguments are unequal. Discourse factors explain the use of the alternations when the arguments are equal in rank.

I use the inanimate pronoun "it" here to show that on the preferred interpretation of these sentences, for both the Direct and Inverse voices, the internal argument is taken to be a lower or indefinite being. In the Direct voice, either argument can be marked explicitly as indefinite -- but as we have seen, in the Inverse voice, the external argument, the patient, must be definite, while the internal argument may or may not be definite. This connection between animacy and definiteness is expressed in the syntax in other languages as well (Givon 1984). There are many languages that require external arguments to be definite, for example Arabic and many African languages.

This gives us an account also of the fact that bi-

is associated with empathy with the patient by the speaker. This is because with the bi-construction, the patient is the external argument, and this external argument corresponds to the discourse topic. The discourse topic is presupposed and definite. When a new discourse topic is introduced, it is typically introduced as an indefinite; afterwards, it is an external argument if it has the speaker's empathy. See also Thompson (1989) for relevant discussion of the discourse properties of yi- and bi- in Koyukon and other Athabaskan languages.

In Chap. I, I outlined the history of previous analyses of the yi-/bi- alternation, and several examples of sentences that pose problems for the proposed treatments were discussed. I want to review some of these "problem" examples here, in terms of the way I have interpreted the voice alternation and associated hierarchy.

Some speakers permit natural forces to be agents in a Direct construction, if they are sufficiently powerful.

- 73) a. 'ii'ni ʒíí' yiyiisxí
 lightning horse 3.3.killed sg.
 The lightning killed the horse.
- b. ʒíí' 'ii'ni' biisxí
 The horse was killed by lightning.

Actually I find (73a) objectionable, as an animacy violation, and (73b) more preferable. An explanation as to why it is acceptable to some speakers is the discrepancy between the two classes of participants -- horses do not kill lightning. It is interesting that you can change the order of the nounphrases in the bi- form but not with yi- form -- and not change the meaning. Compare the following.

- 74) a. ii'ni' ʒíí' biisxí
 The lightning killed the horse.
- b. líí' ii'ni' biisxí
 The lightning killed the horse.
- c. *ii'ni' ʒíí' ʒa' biisxí

Ex. (74c) is excluded, despite the word order, since the external argument in a bi- construction must be definite.

- 75) a. ʒíí' ii'ni' yiyiisxí
 The horse killed the lightning.
- b. ii'ni' ʒíí' yiyiisxí
 The lightning killed the horse.

In (74), although the order of the nominals is not in accordance with the hierarchy, there is no change in meaning, unlike the yi- construction. It appears that when the Inverse is used, the speaker presupposes that the agent is lower on the animacy scale; he expects to hear about a situation in which an inanimate being acts upon an definite animate higher one. Therefore, it is possible to put the highly salient nominal 'ii'ni' in sentence initial position, by focus movement. Whereas, when the speaker hears a Direct construction, he does not presuppose a lower ranked agent; and Ex. (75a), though extremely odd pragmatically, can have only the interpretation shown.

Evidence that the structural properties of the two example sentences in (76) are different:

76) a. *ii'ni'ish ʔíí' biisxí_ᵗ

b. ʔíí'-ish ii'ni' biisxí_ᵗ

Did the lightning kill the horse?

In a yes/no question, the clitic -ish usually follows the first word in the sentence. When there is focus movement, as in (76a), this clitic does not attach to the moved element. The question clitic cannot attach anywhere in this structure, which simply cannot be used to form a yes/no question.

An interesting aspect Frishberg (1974) brings into the discussion is that if a possessive pronoun is prefixed to a noun referring to a lower being, it is not necessary for this noun to be second in the sentence.

77) a. shilééchaa'í hastiin yiyiisxí_ᵗ

1.dog man 3.3.killed

My dog killed the man.

If the order of the nouns is reversed, the meaning changes.

77) b. hastiin shilééchaa'í yiyiisxí

The man killed my dog.

When the Inverse is used, the same situation is present.

78) a. shilééchaa'í hastiin biisxí
 1.dog man 3.3.killed

My dog was killed by the man.

78) b. hastiin shilééchaa'í biisxí

The man was killed by my dog.

When the possessive pronoun is present, the nominal is now maximally definite, and the two arguments are of equal rank.

3.3.4. Postpositional phrases and the Inverse voice. In Sec. 3.2. above I examined the adjunction of nominals to oblique arguments. The Direct/Inverse voice alternation applies to these arguments also, since they are a part of the MVS, as was noted in Chap. 2. In this section, I will provide examples of Inverse constructions with postpositional phrases, and show the associated changes

in the interpretation of sentences. Compare the following:

79) 'ashkii 'at'ééd yich'ĭ' yáłti'

boy girl 3.to 3.speaking

The boy is speaking to the girl.

80) 'ashkii 'at'ééd bich'ĭ' yáłti'

boy girl 3.to 3.speaking

The boy is being spoken to by the girl.

In (79), the external argument has an agent theta role. In (80), the external argument has a goal theta role. Thus, when the Inverse voice has scope over an argument with an "oblique" theta role, it makes that argument the external argument. The generalization is that with an Inverse construction, the agent is always an internal argument; and the external argument is always an argument that has an "internal" theta role in the corresponding Direct construction.

Another example with a grammatical postposition:

83) 'Awéé' jooř yaa ní mááz
 baby ball 3.to 3.rolled
 The baby rolled to the ball.

84) 'Awéé' jooř baa ní mááz
 baby ball 3-to 3-rolled
 The ball rolled to the baby.

Some Benefactive examples:

85) 'ashkii 'at'ééd ǰíǰ' yá yoolóós
 boy girl horse 3.for 3.3.lead [sing. +animate]
 The boy is leading the horse for the girl.

86) 'ashkii 'at'ééd ǰíǰ' bá yoolóós
 boy girl horse 3.for 3.3.lead [sing. +animate]
 The girl is leading the horse for the boy.

Here the Inverse gives the agent role to the internal argument, and the Benefactive role to the external argument. Note that the theme argument does not take part in the inversion process. When only two nominals are present, ambiguities arise, as we saw above.

- 87) 'azdzáá 'at'éeéd yá yoolóós
 woman girl 3.for 3.3.lead [sing. +animate]
 a. He is leading the woman for the girl.
 b. The woman is leading it for the girl.
 c. * The woman is leading the girl for him.

- 88) 'azdzáá 'at'éeéd bá yoolóós
 woman girl 3.for 3.3.lead [sing. +animate]
 a. The woman is leading the girl for him.
 b. The girl is leading it for the woman.
 c. *He is leading the woman for the girl.

A comparison of these two examples (87 and 88) shows that in the Direct construction, the nominal immediately preceding the PP is coreferent with the postpositional object pronoun, and in the Inverse construction, the nominal immediately preceding the PP is not coreferential with the postpositional object pronoun. Note that this same interpretative principle applies with Inverse marking on the verb; it signals that the immediately preceding noun is not the object of the verb. In this respect, the Inverse marking functions like obviative marking. However, note that the Inverse has a further

property: it always makes the argument with an agent theta role the internal argument.

The contrast between grammatical and lexical postpositional phrases, as defined in Chap. 2, provides an explanation for other constructions that have previously been problematic to characterize. In addition, native speakers do not always agree on the interpretations. In intransitive sentences, there are no Inverse forms, and no grammatical postpositional phrases, only lexical ones. The third person object pronoun of a lexical PP is bi-. Consider the examples below.

- 89) a. jooʒ chidí bii' si'á
 ball car 3.in 3.lies
 The ball is in the car.
- b. *jooʒ chidí yii' si'á
 (The ball is in the car.)

The subject in Ex. (90) is animate. Compare:

90) 'asdzáá chidí yii' sidá

3.in 3.sits

The woman is sitting in the car.

Note that the PP object pronoun here is yii; this is evidence that the Inverse alternation applies.

91) ??? 'asdzáá chidí bii' sidá

INV3.in 3.sits

[The car is sitting in the woman]

This sentence is total nonsense, of course; but it has the interpretation shown. I conclude that when the subject is animate, the postposition yii must be interpreted as a grammatical postposition, and the Inverse alternation applies.

Recall that Inverse cannot apply when there is a first or second person argument in the clause.

92) shimá biž chidí bii' séké

my mother 3.with car 3.in DUAL.sitting

I sit with my mother in the car.

When all arguments are third person, there is no problem.

- 93) bimá yiġ chidí yii' siké
 my mother 3.with car 3.in DUAL.sitting
 He sits with his mother in the car.

The following examples show an interesting contrast.

- 94) tsin baah ha'as'na'
 tree 3-on it was climbed
 The tree was climbed.

In this example, the verb is a simple passive, an Impersonal; therefore, the postpositional phrase must be lexical. We cannot say:

- 95) * tsin yaah ha'as'na'

With a corresponding transitive verb, the Inverse can apply -- producing a nonsense sentence.

- 96) tsin yaah haas'na'
 He climbed the tree.

97) ??? tsin baah haas'na'

[The tree climbed up on him.]

3.3.5. Summary on the Direct and Inverse voice. In conclusion, we have seen that the Inverse has scope over the entire MVS. The Inverse makes the agent an internal argument, with Ergative case, and places an argument with an "internal" theta role in the external argument position, with Absolutive case. With simple transitives, the Inverse subject is the patient; with constructions containing an oblique argument, the Inverse produces a goal or benefactive subject. The subject of an Inverse construction is definite, and becomes the discourse topic -- the argument that has the speaker's empathy; it has inherent focus. All of these features are associated with referents that are high on the animacy scale.

3.4. Summary and Conclusions. In this chapter, I have defined the interpretative principles that apply when nominals are adjoined to the MVS; that is, how nominals are linked to the pronominal arguments. We have seen how free pronouns and emphatic pronouns are coindexed with arguments with the same person features. Also included

were constructions with single, two and three adjoined nominals and the interpretative principles that apply. A considerable portion of this chapter dealt with the yi-/bi- alternation, which is a contrast between Direct and Inverse voice. I also presented a new perspective on the animacy hierarchy that is associated with the Inverse voice, pointing out that the external argument in an Inverse construction must be definite.

Chapter 4

The Fourth Person

4.0. Introduction. The Navajo fourth person is an important component of the system for marking disjoint reference in the language, and in order to understand its structure and function it has been necessary to begin with an overview of Navajo argument structure in general. This chapter will provide the details of single clause constructions with the fourth person, and certain other uses of the fourth person in discourse, the Quotative and Evidential uses. The following chapters, Chapter 5 and Chapter 6, will include a discussion of the fourth person in complex constructions with subordinate clauses. Before dealing deal with the specifics of the fourth person, I will provide a discussion of pleonastic subjects, in order to set them aside as distinct from the fourth person forms. This is crucial since there is some homophony between pleonastic subjects and fourth person forms. In Chapter 2 above we saw that the fourth person has both subject and object forms, ji- and ho-; in contrast, there is only one pleonastic argument, the subject pronoun ho-, which has the same shape as the

fourth person object pronoun. This by itself is evidence against treating these constructions as examples of the fourth person. Also, while the fourth person refers exclusively to human beings, pleonastic ho- refers to an abstract space, area, or entity.

4.1. Pleonastic Subjects. Pleonastic subjects, like other items that occupy argument positions in Navajo, are pronominal affixes, not nominals. It has been claimed that Navajo lacks pleonastic subjects; it is true that Navajo has no pleonastic nominals, but since nominals (by themselves) are not arguments in Navajo, there is no need for one. However, there is a verbal prefix ho- that marks a locative, or abstract pleonastic (expletive) subject.

4.1.1. Pleonastic subjects in locative sentences.

Consider the following set of examples.

- 1) a. ditá
 3-is deep
 It is deep.

- 1) b. tó ditá
 water, 3-is deep
 The water is deep.
- c. hōditá
ho-is deep
 It (the area) is deep.
- d. *tó hōditá
 water ho-is deep

The presence of ho- in (d) excludes the bare nominal; it is necessary to enclitize a postposition to the nominal, as in:

- e. táyi' hōditá
 water:in ho-is deep
 It is deep there in the water.
 The water is deep there.

Also excluded is:

- f. *táyi' ditá
 water:in 3-is deep

These examples show that while the areal prefix ho- can appear both with and without a locative postpositional phrase, a bare nominal adjunct, as in (1d), can not be adjoined when pleonastic ho- is present, and a locative postpositional phrase cannot be adjoined when ho- is not present.

4.1.2. Pleonastic subjects with "psych" verbs. The next set of examples are parallel but more complex in structure, since they include a second postpositional phrase with a first person object prefix. These are examples of "psych" verbs, where the argument with an Experiencer theta role is the object of a postposition, and is comparable to a "Dative Subject" (see Belletti and Rizzi, 1988) on experiencers as internal arguments in "psych" verb constructions).

- 2) a. shiř nizhóní
 1sg.with 3.nice
 With me, it is nice
 I like it.

- 2) b. shiř hōzhóní
 1sg.with ho.nice
 I like it (the area).
- c. *kintah shiř nizhóní
 town 1sg.with 3.is nice
 I like the town.
- d. kintah-di shiř hōzhóní
 town -at ho.is nice
 I like it in town.
- e. *Kintah-di shiř nizhóní
 town-at 1sg.with 3 .is nice
 I like it in town [being in town].

The postpositional phrase and its object, which has an Experiencer theta role, is obligatory with these "psych" verbs. Again we see that the pleonastic subject pronoun can occur without a locative expression but the reverse is not the case. When a bare nominal and the pleonastic subject cooccur, there must be a locative expression such as in (2d). In (2e), we have a good output but the meaning is not consistent with the construction that we are exploring --instead it means "I like him/it [when I'm]]in town, [not here where I am

now].” The generalization is that a bare nominal can not appear in a sentence without a personal pronoun to which it is adjoined.

The pleonastic ho- and Dative experiencer can also appear with another class of "psych" verbs, those referring to knowledge. In the English gloss, the first postpositional object is the subject.

- 3) Shiž béé hózin
 1.with 3.about ho.known
 It is known to me by means of it.)
 I know it.

This example is not a Passive; an enlightening gloss is not easy to find. These constructions permit adjoined subordinate clauses.

- 4) Kee yóó'eelwod=ígíí biž béé hózin
 3.ran away=COMP 3.with 3.means of ho.known
 He/she knows that Kee ran away.

We see from the latter three examples that for verbs like

'know' the Experiencer is the object of the postpositional phrase biɿ "with him" and is comparable to a "Dative Subject". I analyze the adjoined subordinate clause as an adjunct to the object of the postpositional phrase béé, "about it".

In this section I have identified the locative and pleonastic uses of the 'areal' subject pronominal prefix ho- which contrasts with fourth person subject ji- and fourth person object ho- prefixes.

4.2. Discourse functions of the fourth person. The fourth person is used to mark disjoint reference across clauses; I will describe this syntactic function of the fourth person in complex sentences at length in the next chapter. In this chapter, I will be concerned with uses of the fourth person other than the specifically syntactic function of marking co- and disjoint reference. In single clauses, all pronouns are referring expressions, and are disjoint in reference, as stated in Condition B of the Binding Theory (Chomsky 1981). In single clause constructions, the function of the fourth person is to add certain semantic features to the

sentence, features that are discourse controlled and have to do with certain cultural factors that I will identify below.

4.2.1. Adjunction to the fourth person. Third and fourth person pronouns do not match in phi (person) features, so coreference is blocked. Furthermore, nouns are syntactically third person, so a nominal cannot be adjoined to a fourth person pronoun. In semantic terms, the referent of the fourth person, like first and second, is so specific that it does not leave reference open to any person previously mentioned in the discourse, as the third person normally does. The use of fourth person fixes in that particular discourse context for that moment and situation, much like first and second person do.

The following examples demonstrate that phi features must match in adjoining nominals to pronouns.

- 5) a. *'at'ééd, yicha
 [I, as a girl, I cried]

- 5) b. *'at'ééd, yínícha
 [You, as a girl, you cried].
- c. *'at'ééd, jíícha.
 [That person, as a girl, cried]

In Uyechi (1990), it is claimed that nominals can be linked to both third and fourth pronominals. This does not occur in my speech, or other speakers I have consulted. These speakers explain that where there are both fourth person forms and nominals, there are now too many participants! (Uyechi observes in a footnote that some speakers find nominals and fourth person linking unacceptable (p.3, 1990). Uyechi's examples were undecipherable to me, and questioned by Robert Young (p.c.).

It is possible to adjoin an independent free pronoun that agrees in person with the pronominal argument in the verb. The present of free pronouns, as noted in Chapter 3, give a contrastive or emphatic reading.

- 6) a. Shí yícha.
 I, I cried.

- 6) b. Ní yínícha
 You, you cried.
- c. Bí, yícha.
 Him, he cried.
- d. 'ashkii yícha
 The boy, he cried.
- e. Hó, jíícha
 That certain person, he cried.
- f. *'ashkii jíícha.

In the next section, I will identify certain special contexts that are exceptions to this generalization.

4.2.2. The Polite Fourth. Two basic tenets of politeness in discourse in Navajo society are: first, never point to anyone in his presence; second, never call anyone by his name in his presence. The device that Navajo speakers employ to single out a particular third person referent in the discourse context is a discourse function of the fourth person.

In the presence of a third person referent, ji-/ho- are used to identify the subject and object respectively.

If the referent is in hearing distance, then:

7) a. Jíícha

4. cried

That certain person cried.

b. John jiztał

3.4.kicked

She kicked him, John.

c. John haztał

4.3.kicked

John kicked that certain person.

Across languages, polite forms are used in addressing the hearer, second person. This happens in Navajo society in mother- and son-in-law interactions. Historically, the fourth person was employed when the two were the only speech act participants. This allowed the two to verbally interact for needed information; yet, at the same time avoid interacting at a level that would be too direct or personal. I do not find this type of use of the fourth person in existence today. My 80 year old grandmother would refer to my father as "X's father, ..." where X stands for the child whose name she remembered at

the moment. Sometimes you can attribute the lack of a function to foreign intrusion and second language influence, such as occurs in schooling, but my grandmother and father did not attend school and speak only Navajo.

What I call polite fourth then is not in the strict sense of "polite" or "avoidance" in the anthropological literature. In my experience, fourth person is a strategy to avoid using the name of person or to point at him. In this sense, fourth person is a deictic pronominal as stated in Young & Morgan (1987).

In certain discourse contexts, where the speaker wants to express respect, it is possible to adjoin a nominal to a fourth person pronoun. One frequently hears this when the speaker is referring to his mother.

- 8) shimá 'éí Baa' joolyé
 1.mother 4.called
 My mother is called Baa'.

This usage does not seem to occur with other kin terms.

4.2.3. Fourth Person as a Quotative. In this section another use of the fourth person will be identified. It is comparable to the Quotative or Reportative construction seen in other Native American languages. I will first consider sentences with intransitive embedded clauses.

9) yicha jiní
 3s.crying 4s.said
 They said he is crying.

10) jíícha jiní
 4s.cried 4s.said
 (They) said that person cried.

In these two examples the fourth person in the main clause conveys a quotative. The speaker of these utterances is signaling that he does not have direct knowledge of the events, but is reporting on something he has heard about.

There is also another construction type where nominals occur with fourth person pronouns. Consider the

contrast shown in the following two examples. In the first of these, (11), the fourth person appears in each of the inflected verbs.

- 11) 'ashkii léi' 'at'ééd bił joo'ash=go
 boy a girl s3.with 4s.walking=when
 náhodii'nil ɬá jiní.
 4s.picked up(PL) EMP 4s.said
 (I heard) some boy was walking with a girl when they
 were picked up (presumably by the police).

In the next example, fourth person appears only on the final verb, the verb of speech.

- 12) 'ashkii 'at'ééd yił yi'ash =go
 boy girl 3s.with 3DUAL.walk=when
 nábi'dii'nil ɬá jiní
 3.picked up(PL) EMP j4s.said
 That person told me that a boy and girl were picked
 up while walking.

The difference between the two consists in the fact that the former is a Reportative, while the second is a use of

the fourth person in the verb jini to indicate politeness or respect. With the Reportative (11), the person uttering the sentence may have read of the event via the paper, heard about it on the radio, or was privy to a conversation where the incident was discussed, but does not want to take responsibility for the truth of what was said. In (12) the fourth person pronoun in the final verb is not a reportative, but refers to a specific person who is present or nearby, and is used in deference. Note that in this usage, the verbs in the preceding clauses do not show any fourth person pronouns.

Note also the use of the indefinite demonstrative léi' in (11). The indefinite is needed to give that particular interpretation and its omission would produce an ungrammatical sentence, since the referents are not presupposed in the discourse. Aside from these special contexts, the normal course of events is that only third person will permit nominal adjunction.

4.2.4. The fourth person in traditional narratives.

There are certain conventions employed in narrative texts where the fourth person permits nominal adjunction. This

is a device to signal that the speaker is telling a story. It is comparable to the Quotative use cited in the preceding section.

13) ma'ii yiildlosh jiní

coyote 3.walking 4.said

(I hear) that there is a coyote around here.

14) ma'ii jooldloosh jiní

4.walking 4.said

Once upon a time there was this coyote walking along...

While (13) is a Quotative, (14) introduces a traditional story, and again we see that the subordinate verb is inflected for fourth person as well as the verb of speech, jiní.

4.2.5. The Impersonal Fourth. Another use of the fourth person is the Impersonal construction. A much desired attribute sought in accordance with Navajo philosophy is to have control over one's own actions, and to speak only for oneself. The fourth person allows the speaker to

remain impartial and detached from the events under discussion and thus avoid any possible hint of criticism or accusation (Witherspoon, 1977:84).

Impersonal sentences are used to instruct or advise the hearer about acceptable behavior. For instance, non-Navajo teachers of Navajo children have expressed to me their belief that a hurt child needs consoling; however, Navajo teachers usually do not comfort a hurt child. Many times children get hurt because they do not heed instructions; it is for this reason that parents say, "Do so-and-so again". This tells the child that he is repeating behavior that he was instructed gently before not to perform. Thus, it is considered inappropriate in Navajo culture to reward children by comforting them, when they themselves are the cause of their misfortune.

These gentle instructions are conveyed in fourth person Impersonal sentences. The speaker has not accused the hearer of behaving wrongly, nor does he presume to tell him what to do. The speaker simply states in a rather detached way that certain behavior is inappropriate either for social or safety reasons.

15) Doo hatis njigháa da
 NEG 4.over 4.walks NEG
 One does not step over people.

16) 'abíní=go hojitaaz=go yá'át'ééh
 Morning=while 4.sings=while 3.good
 It is good for one to sing in the morning.

Since these sentences are for instruction or advising they often contain a value judgment or a negative. That is, some modal feature. (15) and (16) are "indirect speech acts" -- that is, instructions intended to benefit some hearer (as well as anyone else who may be within hearing), but without addressing a second person directly or openly criticizing anyone's behavior. For example, (16) could be used when the intended hearer was still asleep in the morning, in order to let him know what he should be doing. An important aspect of impersonal constructions is that it is not necessarily the case that the second person has committed some undesired act, just that an opportune context for issuing the instruction was present.

4.2.6. Optative Fourth. Another use of the fourth person to express politeness is the use of the fourth person in an Optative mode. Since it is not considered polite to speak openly of one's own desires or wishes, a speaker will use fourth to express that wish. For example:

- 17) a. 'ajoołháásh laanaa
 4.OPT.sleep wishfully
 Lit. That certain person wants to sleep.
 (I want to sleep.)
- b. 'ajoołháásh lágo
 4.OPT .sleep NEG
 Don't let him go to sleep.

Ex. (17.b) shows that with lágo and the verb in an optative fourth person, it gives a prohibitive reading.

- 18) Shizhé'é ʔíí' nahijólnih nizin
 1.father horse 3.4.OPT.buy 3.thinks
 Lit.: My father thinks that that person should buy a
 horse.
 My father wishes he could buy the horse.

The literal interpretation for (18) indicates that only the main verb is coreferent with 'my father' and the agent referent of the verb 'buy' is a polite fourth; that is, someone outside the sentence. But in the actual meaning the fourth person in optative mode always refers to the speaker of the clause indicating that reference outside the clause is not possible. Consider (19) with a second person pronoun in the main verb.

- 19) 'ajooʔháásh laanaa nínízin=ísh
 4.OPT.sleep wishfully 2.thinks=Q
 Do you wish to go to sleep?

Here again the person in the main verb is coreferent with the optative fourth. We see that the fourth person can be used to refer to any person: it is linked to the speaker in (17) by default because there is no subordinate clause; it is linked to third person human in (18), and in (19) linked to second person, which is marked on the main clause verb. All of these uses of the fourth person in indirect speech indicate that the fourth is used in order to avoid reference to any first, second or third person; depending on the context, it can refer

to any person.

4.2.7. The Fourth Person and Animacy Hierarchy. This section identifies contexts in which fourth person forms can be used instead of Inverse voice forms. We saw in Chapter 3 that nominals are adjoined to third person pronouns, and these complex argumental expressions must be ordered with respect to the animacy hierarchy. Therefore, when a lower-ranked agent acts upon a higher-ranked patient, and all arguments are third person, then the Inverse voice must be used.

- 20) a. 'ashkii ɬéé'chaa'í yishxash
 boy dog 3.3.bit
 The boy bit the dog.
- b. *ɬéé'chaa'í 'ashkii yishxash
 (The dog bit the boy.)
- c. 'ashkii ɬéé'chaa'í bishxash
 INV3.3.bit
 The boy was bitten by the dog

Fourth person, like first and second, is definite, human, and not involved in the animacy hierarchy.

With first, second, and fourth person patients, it is possible to have a lower-ranked agent (third person) acting upon a human patient.

- 21) ʔéé'chaa'í shishxash
 dog 1.3.bit
 The dog bit me.

When the agent is third person and the patient is human, the speaker can use a fourth person patient pronoun and avoid having to use an Inverse form.

- 22) ʔéé'chaa'í hashxash
 dog 4.3.bit
 The dog bit that person.

In (21 -22), the lower ranked third person agent is the subject, the external Nominative argument, and not an internal (Ergative) agent, as we see in the Inverse. An external agent is not as likely to be new information as an internal agent, and can be a discourse topic; it can be presuppositional.

23) a. hashxash

4.3.bit

It bit that person.

b. jishxash

3.4.bit

That person bit it.

All third person pronouns, if they do not have a nominal adjunct, must have a discourse antecedent. This is the anaphoric use of pronouns, which are not bound in their governing category but take their reference from a previous antecedent. Therefore, when it is necessary to refer to some human, who is either unknown, or someone whom the speaker does not wish to identify for avoidance reasons, he can be referred to with the fourth person. The fourth person, like first and second, does not require a discourse antecedent -- it is simply deictic. Thus, the fourth person can be used without a discourse antecedent, whereas third person can not function in this manner. If one were watching a rodeo and the rider was kicked by the horse; an appropriate conversational opener might be:

24) Yih, haztař

4.3.kicked

Oops, It kicked him [that person].

Whereas (25) would not suffice as an initial remark.

25) *Yih, biztař

It kicked him [third person].

The use of the fourth person makes (24) acceptable at the beginning of a conversation, where (25) is comparable to the use of free pronouns in discourse in English without an antecedent.

When a transitive sentence contains a first, second or fourth person argument and a third person argument, a nominal may be adjoined only to the third person argument. This means that no principles of interpretation involving word order and voice alternations are necessary when a 1, 2 or 4 person argument is present. There is no question about the theta role of the third person argument, since the theta role of the 1, 2 or 4 argument is clearly marked in the

pronoun incorporated into the verb. This means that the single nominal present in the utterance can be linked to either an external or an internal argument; this is not the case with third person constructions, where a single nominal is always linked to the internal argument.

I pointed out in Chapter 3 that the animacy hierarchy is closely tied to the fact that external arguments in Inverse constructions must be definite. This limitation does not apply to any Direct construction, including fourth person constructions. Therefore, it is possible to have an indefinite, lower ranked agent acting upon a human patient in a Direct construction by using the fourth person.

26) séígo' hashshish

scorpion 4-3-sting

A scorpion stung her.

Fourth person constructions have other interesting discourse functions. Question/response pairs are useful devices to investigate the appropriate uses of sentences in discourse. Let us consider the possible appropriate responses, in terms of voice alternations and the use of

the fourth person, to the following questions.

- 27) a. haash yít'iid
 What did he do?
 b. mósí yiztal
 He kicked the cat.

In (27b), mósí is new information, and since a human agent is presupposed on this reading, the rank of the referents makes the use of the Direct form appropriate.

- 28) a. haash yít'iid
 What did it do?
 b. haztal
 It kicked him [that person].

In (28a) where a non-human agent is presupposed, we can use (28b) if the patient is human.

- 29) a. haash yidzaa
 What happened to him?
 b. mósí bishxash
 He was bitten by the cat.

In (29) a human patient is presupposed, and the Inverse is appropriate in the reply.

- 30) a. haash yidzaa
 What happened to it?
- b. jiztał
 That person kicked it.

In (30), a non-human patient is presupposed, the fourth person can be used if the agent is human. In examples (27 - 30), the identity of one of the referents is presupposed. Now let us consider a question that does not presuppose either argument, but focuses on the event.

- 31) a. haash hóót'iid
 What happened?
- b. 'ashkii mósí yishxash
 The boy bit the cat.
- c. 'ashkii mósí bishxash
 The boy was bitten by the cat.
- d. mósí hashxash
 The cat bit that person.

31) e. mosi jishxash

That person bit the cat.

f. hojishxash

That person bit that person.

The replies to (31) show that the identity of neither referent is presupposed, and therefore the reply must include either two nominals, two fourth person pronouns, or a combination of the two.

Why are fourth person forms employed in (28b) and (30b)? Consider the following replies to (28a) and (30a), using the third person:

28) 'ashkii yishxash

The boy bit it.

30) 'ashkii yiztaʔ

The boy kicked it.

Notice that both of these sentences, on the readings given, show incorrect word order, according to the principles of the voice alternation and the animacy hierarchy. That is to say, we see the nominal 'ashkii

immediately preceding the yi-verb; this is the position where normally patient adjuncts appear. Nonetheless, this reading of these sentences is permitted in context -- since they are the only way to respond to the questions posed, if we are to use third person constructions. Use of the fourth person forms makes it possible to avoid this problem. Note also that the fact that a fourth person patient pronoun appears in a reply to the question in (28a), repeated here

28) a. haash yít'iid

What did it do?

b. haztaʔ

It kicked him [that person].

shows that the fourth person forms cannot be Inverse; this sentence cannot be interpreted as

32) It was kicked by him

which would be a suitable reply to

30) a. haash yidzaa

What happened to it?

b. jiztaʔ

That person kicked it.

4.3. Summary and Conclusions. In this chapter, I have identified and given examples of constructions with pleonastic or expletive subjects, with the prefix ho-. I have identified the fourth person subject and object forms, and shown the use of the fourth person in various discourse functions: the Quotative, the Impersonal, the narrative uses of fourth, and the use of the fourth in Optative constructions. In addition, I have shown a number of discourse uses of the fourth person to "override" the animacy hierarchy.

Chapter 5.

The Fourth Person in Complex Sentences

5.0. Introduction.

The fourth person has a very important function in Navajo syntax, that of marking disjoint reference across clauses in complex sentences. In order to identify the contexts in which this occurs, we will need to understand the process of building complex sentences in general. These complex sentences include adjoined temporal/conditional clauses, relative clauses and embedded "COMP-less" clauses in indirect discourse constructions.

5.1. Adjoined Temporal Clauses. I will begin with the most frequently used strategy for combining clauses, the temporal/conditional constructions where an initial subordinate clause is under the scope of the complementizer enclitic -go.

5.1.1. Intransitives. I will first consider complex sentences where both clauses are intransitive. Consider an English sentence of the following type:

1) When he_i came in, he_{i,j} sat down.

The pronouns in the two clauses can be taken to be coreferential or disjoint in reference in context; in isolation, there is a strong presumption of coreference. An analogous sentence in Navajo is:

2) yah 'ííyáa=go dah neezdá
 3.came in=when 3.sat down
 When he_i came in, he_{i,j} sat down.

This sentence has interpretations parallel to (1), again with a strong presumption of coreference. The temporal enclitic is interpreted as 'when' or 'if'.

3) díníyáa=go shídó' dooleeʔ
 2-go =if 1=too will
 If you go, I will go too.

When a nominal is added to the (initial) adjoined clause, the same interpretations are possible, with coreference the preferred reading.

- 3) 'ashkii yah 'ííyáa=go dah neezdá
 boy 3.came in=when 3.sat down
 When the boy_i came in, he_{i,j} sat down.

But if we place the nominal after the -go clause, then it gives a disjoint reading, as in:

- 4) yah 'ííyáa=go 'at'ééd dah neezdá
 When he came in, the girl sat down.

We have seen that Navajo uses nominals sparingly in discourse, and it is possible to signal a disjoint reading without the use of nominals. The fourth person creates precisely this disjoint reference, just as if a noun were present, as in:

- 5) yah 'ííyáa=go dashneezdá
 3-came in=when 4-sat down
 When he_i came in, he_j sat down.

Thus the fourth person pronominal has the same syntactic function as the nominal in (4).

5.1.2. Transitive Conditionals. When both clauses of a complex sentence containing a conditional clause are transitive, a principle of interpretation is employed that plays a very significant role in Navajo grammar. This principle of interpretation has been labeled "parallel processing" (Platero 1976; Speas 1990; Hale, Jelinek and Willie, 1991). Parallel processing applies to sequences of transitive clauses, as follows:

6) Parallel Processing

In a sequence of two transitive clauses with all third person arguments, the two arguments of the first and second clause are interpreted as coreferential.

The principle of parallel processing applies to complex sentences in Navajo differently across construction type. With clauses linked by the enclitic -go, coreference is obligatory unless disjoint reference is overtly marked.

- 7) yiztaʒ=go néidííłts'in
 3.3.kicked=COMP 3.3.fist-hit
 As he_i kicked him_j, he_i hit him_j.

If the Inverse is used in both clauses the same interpretive principles apply.

- 8) biztaʒ=go nábiidííʒts'in
 INV.3.3.kicked=COMP INV3.3.fist-hit
 As he_i was kicked by him_j, he_i was hit by him_j.

The yi/bi- alternation can be used to mark a change in thematic roles across clauses.

- 9) a. yiztaʒ=go nábidííʒts'in
 As he_i kicked him_j, he_i was hit by him_j.
 b. biztaʒ=go néidííʒts'in
 As he_i was kicked by him_j, he_j hit him_i (back).

5.1.3. The fourth person in conditional constructions.

It is not possible to switch from third to fourth person in transitive clauses linked by =go, contrary to what we saw in the intransitive conditionals. In transitives, with third person arguments in the first clause, each clause must have the same two referents, although their status as agent or patient may change, as we have seen in (9a,b). We have seen earlier that the person features of

third and fourth do not match, and therefore there can be no fourth person argument in the second clause.

10) *yiztaʒ=go náhodííʒts'in

But in clause sequences where there is a fourth person argument in both clauses, this fourth person may be agent in one clause and patient in the other.

11) a. jiztaʒ=go náhodííʒts'in

As that person_i kicked him_j, he_i hit that person_j.

b. haztaʒ=go nízhdííʒts'in

As he_i kicked that person_j, that person_j hit him_i.

Here fourth person marks a change in thematic roles across these clauses, but cannot introduce a new referent in the second clause, since parallel processing strictly applies.

12) *yiztaʒ=go 'at'ééd néidííʒts'in

Example (12) is like example (10), and shows that a new referent cannot be introduced in the second clause, whether by use of the fourth person or by a nominal adjunct.

I have shown that we cannot mark disjoint reference by using the fourth person or an NP in the second clause (Ex.10 and 12). However the reverse is possible for transitive agents.

13) jizloh=go 'áádóó yiztaʔ

3.4.roped=COMP CONJ then 3.3.kicked

That person_i roped him_i, and then he_k kicked him_i.

(The conjunction 'áádóó "and then" is an optional feature of conditional constructions.) Obligatory coreference of the patient arguments of the conjoined clause is shown.

Now consider:

14) *hazloh=go 'áádóó yiztaʔ

4.3.roped=COMP CONJ 3.3.kicked

Therefore a fourth person patient in the first conjunct and third person patient in the second conjunct is

excluded, since for these transitive conditional constructions the rule is:

- 15) a. If arguments are all third person, coreference of the arguments across clauses is obligatory; the yi-/bi- alternation permits a switch in thematic roles.
- b. If the arguments in the first clause are third person, fourth person cannot appear in the second clause.
- c. A fourth person argument may be used in the first clause to mark disjoint reference of the agents across the two clauses -- but not the patients.

The generalizations given in (15) explain the fact that (13) is good and (14) is not. Navajo requires that in conditional constructions, transitive clause sequences have coreferent patients.

The one exception that I have found to the generalizations given in (15) is the following: It is possible to create disjoint reference of patient

arguments across clauses in a temporal construction if the patient of the second clause is less definite than that of the first.

16) a. *yiztaʔ=go 'áádóó 'at'ééd néidííʔtsin

b. yiztaʔ=go 'áádóó 'at'ééd léi' néidííʔtsin
 indf.

He₁ kicked him₂ and then he₁ hit a girl.

The syntax of adjoined clauses in Navajo is a topic that requires lengthy treatment. My purpose is just to identify the principles of interpretation that apply in intransitive and transitive clause sequences in one of these construction types, the temporal/conditional =go sentences, to show the operation of parallel processing. Although there are coreference requirements that relate to definiteness, it is possible to mark disjoint reference of agents by using the fourth person in the first conjunct and not in the second, as shown in (13).

5.2. Event vs. Person Focus. We have seen earlier that

the fourth person is so highly referential that it excludes the adjunction of a simple nominal; like first and second person, fourth does not match in phi features with third. However, there is a complex sentence type where this generalization does not apply. This involves focus on a person rather than the event the person participates in. The next two example sentences illustrate this point. In these examples, both the temporal and main clauses are intransitive.

17) Mary yicha=go yiiłtsá

3.crying=while 3.1.saw

I saw Mary crying.

18) Mary jicha=go hoołtsá

4.crying=while 4.1.saw

I saw Mary when she was crying.

(Mary, I saw her when she was crying.)

In (17) the speaker reports on an event he saw; in (18) he reports on seeing a person in a particular situation. Fourth person pronouns cannot be modified by nominal adjuncts; this means that the nominal Mary cannot be

syntactically associated with the subject of the subordinate clause subject. But this nominal can be a topic for the whole complex sentence; this provides the contrast in readings shown.

The next example shows transitive subordinate and main clauses.

19) Bill $\chi_{\frac{1}{2}}^{\frac{1}{2}}$ ' booyeéł =go yiiłtsá
 horse 3.3.carrying=while 3.1.saw
 I saw Bill riding the horse.

20) Bill $\chi_{\frac{1}{2}}^{\frac{1}{2}}$ ' hooyeéł =go hoołtsá
 horse 4.3.carrying=while 4.1.saw
 I saw Bill when he was riding the horse.

Again, a switch from third to fourth person forces a reading on which the focus is on the person involved in the activity rather than on the activity as a whole. Note that in (20), the fourth person patient pronoun in the main verb can refer only to the person and never to an event.

5.3. The fourth person in reported speech. In this section, I will survey briefly the use of the fourth person to mark co- and disjoint reference in reported speech contexts. I introduced this topic earlier in Chapter 3, when I identified the Quotative and Narrative uses of the fourth person.

Consider a the following construction with a main clause verb of speech.

21) deeshááʔ ní

1.arrive 3.said

a. He said "I will be there".

b. He said that I would be there.

The two interpretations show quoted speech and indirect speech. Now compare:

22) doogááʔ ní

3.arrive 3.said

He_i said he_j will be there.

The subjects of the main and complement clauses must be

disjoint in reference when all third person arguments are employed.

23) deeshááʔ jíní

1.arrive 3.said

- a. That person_i said that he_i would go.
- b. *They say I will go.
- c. *That person says that I will go.

On the permitted reading of (23), the fourth person is used as a respect form. The quotative interpretation shown in (23b) is excluded since it is inappropriate to use a reportative concerning one's own actions. The reading in (23c) is excluded, since the possibility of reference to the speaker of the whole complex utterance is not present when the subject of the verb of speech is fourth person, as in (21).

24) doogááʔ jíní

3.arrive 4.said

- a. That person_i said he_i will come.
- b. It is said that he will come.

In (24), both respect and quotative readings are permitted.

25) jidoogááʒ ní

4.arrive 3.said

He said that person will come.

Only the respect reading appears when the complement verb has a fourth person pronoun.

26) jidoogááʒ jiní

4.arrive 4.said

a. He_i said that he_i would come.

b. They say that person will come.

The preferred reading for (26) is where the fourth person pronouns are coindexed, and used for respect. On the second reading, the fourth person on the main clause verb is a quotative.

To summarize:

- 27) a. First person in the complement clause and third person in the main clause can either signal coreference with the subject of the verb of speech, or reference to the speaker of the complex utterance;
- b. When both the main and complement verbs are in the third person, disjoint reference is obligatory;
- c. When both verbs are in the fourth person, coreference between the subjects of the main and complement clauses is signaled;
- d. Fourth person on the verb of speech can signal a quotative.

It is evident that conditions (27c) and (27d) overlap; this is the source of the ambiguity seen in the two readings of (26). The fact that third person and fourth person pronouns operate differently in reported speech contexts demonstrates the special syntactic functions of the fourth person in marking the quotative and co- and disjoint reference.

Now let us consider the uses of the second person in

these reported speech contexts.

28) dīínááł ní

2.arrive 3.said

He said that you should go.

29) dīínááł jíní

2.arrive 4.said

a. It is said that you should go.

b. *That person said you should go.

The use of the second person in the complement clause adds a modal feature (obligation) to the reading. The excluded reading must be expressed as follows:

30) dīínááł nijíní

2.arrive 2.4.said

That person said [of you] that you should go.

The reading given for (30) is intended to show that the hearer has not necessarily been informed, directly or recently, that he should go; but a person referred to by a respect fourth person expects the hearer to go.

I have shown that all the members of the pronominal paradigm have special uses in reported speech contexts. First person in the complement verb can be used to mark coreference with the main clause subject; second person forms carry a modal implication; third person forms in both clauses mark disjoint reference; and fourth person forms can be used for quotatives, to mark coreference across clauses, and as a respect form -- where it necessarily marks disjoint reference with all other pronouns.

5.4. Summary and Conclusions. In this chapter, I have identified a special function of the fourth person in Navajo grammar -- marking co- and disjoint reference across clauses in complex sentences. I have described the use of fourth person forms in this function in conditional sentences and in reported speech constructions. In intransitive conditional sentences, a fourth person or a nominal may be added in the consequent clause to mark disjoint reference. In transitive conditional sentences, the principle of parallel processing comes into play, and there is a presupposition that the arguments across the two clauses are coreferent,

coindexed according to theta role. Therefore, it is impossible to use a fourth person pronoun in the second clause unless there is a fourth person pronoun in the first clause to serve as its antecedent.

In Section 5.2. I showed a construction type in which the fact that nominals cannot be adjuncts to fourth person pronouns can be exploited to mark a nominal as a topic, and to change the interpretation of a sentence from event focus to person focus.

In reported speech contexts, I identified a number of special uses of the fourth person: as a quotative, as a respect form, and to mark co- and disjoint reference of arguments in the main and complement clauses. I also identified special uses of the other person pronouns in these contexts. It is often the case that across languages that verbs of speech have a special syntax. It is important to note that in Navajo these are the only subordinate clause types that do not have an enclitic that serves as determiner or nominalizer.

In this survey of the typologically interesting

properties of the fourth person in marking co- and disjoint reference, I have doubtless overlooked some other special construction types. However, I think I have identified the most common or typical syntactic functions of this crucial and little-understood aspect of Navajo grammar.

Chapter 6.

Relative and Nominalized Clauses

6.0. Introduction. A relative clause by definition requires that one of the arguments of the subordinate verb be coreferential with an argument of the main clause verb. The relative clause in Navajo is constructed by enclitizing to a main clause a relativizing determiner which means "the one...". Otherwise, the structure of the relative clause is unchanged; that is to say, there is no gapping. The two most commonly used relativizing enclitics are =íqíí and =éé; both have phonologically determined allomorphs. I will use primarily the =éé enclitic, a perfective form, in this section. Any argument type can be relativized in Navajo, as is shown below.

- 1) a. λ ichíí'=yéé
 3.red=REL
 the one that is red
 (Relativized subject of neuter verb)

- 1) b. yicha=yĕĕ
 3.crying=REL
 the one who was crying
 (Relativized subject of active intransitive)
- c. yiztaʒ=yĕĕ
 3.3.kicked=REL
 the one he kicked
 (Direct patient; internal argument)
- d. biztaʒ=yĕĕ
 INV 3.3.kicked=REL
 the one who kicked him
 (Inverse agent; internal argument)
- e. bich'ĭ' yáshti'=yĕĕ
 3.to 1.speak=REL
 the one I spoke to
 (postpositional object)
- f. bi'distaʒ=yĕĕ
 PASS 3.3.kicked
 the one who was kicked
 (subject of agentive passive)

- 1) g. shiž bée hózin=ígíí
 1.with 3.about 3.known=REL
 that which is known to me
 (oblique object with "psych" verb)

These relative clauses are of a type commonly seen in Native American languages, sometimes incorrectly termed "headless". They are not headless; the relativizing enclitic is the head (Willie, 1990). This enclitic binds a pronoun that is incorporated into the relativized verb. The relative clause is a nominalized construction, a referring expression that is coreferent with the argument that is the head of the relative. In turn, this referring expression is coindexed with a pronoun that is incorporated into the main clause verb.

- 2) yiztaž=yéę yicha
 3;.3;.kick=REL; 3;.crying
 The one he kicked is crying.

(Recall that the object pronoun precedes the subject pronoun in the Navajo verb.)

Clauses with fourth person arguments can be relativized also.

3) jiztał=yéē
 3.4.kicked=REL
 the one that person kicked

4) haztał =yéē
 4.3.kicked=REL
 the one who kicked that person

Ordinarily, the heads of relative clauses are third person. There a few fixed construction types where we see a second person subject of an intransitive relative.

5) ní nidloh=yéē k'ad nicha
 you 2.laugh=REL now 2.cry
You who were laughing are now crying.
 ("Go on, laugh some more.")

This "you who" relative is used as when teasing is being done by someone who has the last laugh. Note that with a non-restrictive relative, it is possible to adjoin both a

free pronoun and the relative to one and the same main clause pronoun. I will return to this point below.

In the next two sections, I will state the principles by which the arguments of relative and main clauses are interpreted as co- and disjoint in reference.

6.1. Coindexing with intransitive relatives. Let us look first at the simplest possible kind of coindexing situation, that is, where the main and relative clauses are both intransitive. The interpretation must be that both clauses have the same subject, since by definition they have an argument in common.

- 6) yicha=yéé yóó'eelwod
 3.crying=REL 3.ran away
 The one who was crying ran away

Now let us consider an example with a transitive main clause and an intransitive relative.

7) yidloh=yéē yidoots'qs
 3.laughing=REL 3.3.will kiss
 He will kiss the one who was laughing.

8) yidloh=yéē bidoots'qs
 3.laughing=REL INV 3.3.will kiss
 The one who was laughing will kiss him.

In (7) and (8), the Direct/Inverse voice alternation of the main clause verb affects the theta role assigned to the external argument to which the relative is adjoined.

Ex. (7) shows a relative clause which is the patient adjunct of a following main clause. This is parallel with the coreference seen when a simple noun is adjoined, as in (9), since the relative in (7) and the noun in (9) are both referring expressions.

9) 'at'ééd yidoots'qs
 girl 3.3.will kiss
 He will kiss the girl.

A relative may be adjoined to the subject of an agentive

passive.

- 10) yidloh=yéé bidi'doots'os
 3.laughing=REL PASS.3.3.will kiss
 The who was laughing will be kissed.

In the next section, I will consider the adjunction of nominals to intransitive relatives.

6.2. Nominal Adjunction to Intransitive Relatives.

The next two examples show that a nominal can be added to either a relative or main clause.

- 11) 'at'ééd yidloh=éé biztaʔ
 girl 3.laughing=REL INV3.3.kicked
 The girl who was laughing kicked him.

- 12) yidloh=éé 'at'ééd biztaʔ
 3-laugh=REL girl INV 3-3-kicked
 The girl kicked the one who was laughing.

In (11) the nominal 'at'ééd is an adjunct to the single argument of the relativized verb. In (12) 'at'ééd can

not be an adjunct to the relativized verb since it follows it. This interpretation is counter to Platero (1974) who claims that a nominal following a relativized verb can be part of the relative clause; this may be a dialect difference. Note that in (11), the relative is a single complex adjunct to the agent of the main clause verb, while in (12), there are two separate adjuncts, one for each of the arguments (agent and patient) of the main clause verb. The relative is the (external) patient adjunct and the simple nominal is the (internal) agent adjunct because the main clause verb is an Inverse form.

It is the fact that nominals are not arguments, but adjuncts in relative clauses, just as they are in main clauses that leads me to conclude that the enclitic -- a demonstrative pronoun -- is the head of the relative. Arguments for this position are given in Willie (1990).

6.3. Transitive Relatives. So far we have seen that intransitive relatives have a single argument and can have a single nominal adjunct. This single argument is necessarily the head of the relative. It was pointed out in the introduction to this section that any argument of

a relativized clause may be the head.

6.3.1. Defining the Head of the Relative. We need to clarify the binding relation between the relativizing enclitic and a particular argument of the relativized verb. In the opening section of this chapter, we saw that any argument of the Navajo verb can be relativized.

13) yidloh=éé_ṽ
 3.laugh=REL
 the one who was laughing

14) yizloh=éé_ṽ
 3.3.roped=REL
 the one that was roped

15) bizloh=éé_ṽ
 INV3.3.roped=REL
 the one who roped him

In (13) =éé_ṽ necessarily binds the subject (the only) argument. In (14) =éé_ṽ binds the object argument of the transitive relative, and finally in (15) =éé_ṽ binds the

agent, the transitive subject of the relative. The following generalization applies to the relative clauses we have seen so far:

16) The heads of relative clauses are absolutives.

That is to say, the head of the relative is either the intransitive subject or an internal argument of the transitive verb -- and recall that with the Inverse voice, the agent is the internal argument, as in (15).

6.3.2. Transitive Relatives with Adjoined Nouns. Recall that in the discussion of the yi-/bi- alternation given in Chapter 3, it was pointed out that the argument structure of the verb determines the interpretation of an adjoined nominal.

- 17) a. 'ashkii yizts'qs
 1. She kissed the boy.
 2. *The boy kissed her.
- b. 'ashkii bizts'qs
 1. She was kissed by the boy.
 2. *She kissed the boy.

Let us consider a set of examples of transitive relative clauses with an intransitive main clause.

18) yizts'qs-yéē yóó'eelwod
 3.3.kissed=REL 3.ran away
 The one he kissed ran away.

19) bizts'qs=yéē yóó'eelwod
 INV3.3.kissed=REL 3-ran away
 The one who kissed him ran away.

Note that in (18) the relative is patient-headed (it is the one who was kissed who runs away) while in (19) the relative is agent-headed (it is the one who kissed who runs away); this is because the agent is the internal argument in the Inverse construction.

When we add nominal adjuncts to each argument in the relative clause, the interpretations are as follows.

20) a. 'at'ééd 'ashkii yizts'qs=yéē yóó'eelwod
 The girl who kissed the/a boy ran away.

20) b. 'at'ééd 'ashkii bizts'qs=yéé yóó'eelwod

The girl who was kissed by the boy ran away.

We must revise the generalization given in (17) above as follows.

21) When both arguments of the relative have nominal adjuncts, the relativizing enclitic binds the external argument, which must be definite.

When both arguments have a nominal adjunct, the enclitic is forced to bind the external argument. For some speakers (see Platero 1982) Ex. (20) has two readings, where either argument may be the head; this is not true of my speech.

However, when only a single nominal is added to the transitive relative, the Direct relative apparently has two readings for most, if not all speakers.

22) 'ashkii yizts'qs=yéé yóó'eelwod

a. The one who kissed the boy ran away.

b. The boy, who was kissed by her, ran away.

I interpret this contrast as one between restrictive vs. non-restrictive relative clauses. On the first reading, the preferred one, the relative is restrictive. The head of the relative is the external argument, the agent that has no adjoined nominal and is bound by the relativizing enclitic. On the second reading, the relative is non-restrictive, and both the nominal and the non-restrictive relative are adjuncts to the subject of the main clause verb. I indicate this difference in the type of relative by placing commas around the non-restrictive relative in the English gloss; I am not suggesting that there are pauses in the Navajo sentence. Recall example (5) above, repeated here.

- 5) ní nidloh=yéé k'ad nicha
 you 2.laugh=REL now 2.cry
You who were laughing are now crying.
 ("Go on, laugh some more.")

In this example, we saw both a free pronoun and a non-restrictive relative serving as adjuncts to the main clause pronoun. This is also occurring in Ex. (22b) above, where both the nominal and the relative are

adjuncts to the main clause pronoun.

Now consider the Inverse relative:

- 24) 'ashkii bizts'qs=yéé yóó'eelwod
 a. The boy, the one who kissed her, ran away.
 b. *The one who was kissed by the boy ran away.

The Inverse relative with one nominal has only one reading, where both the initial nominal and the Inverse relative are coindexed with the subject pronoun of the main clause. In Chapter 3, we saw that Inverse clauses require definite external arguments. I conclude that the Inverse relative in (24) must be interpreted as a non-restrictive relative, since the Inverse voice requires a definite subject, which cannot be subjected to further definiteness marking by means of a restrictive relative.

6.3.3. Intransitive relatives with transitive main clauses. Now I will consider sentences with intransitive relatives and transitive main clauses.

Recall that the head of a relative must be

coreferent with one of the arguments of the main clause transitive verb. The use of the yi/bi- alternation affects how this coreference across clauses applies.

25) yidloh- $\dot{\epsilon}\epsilon$ yizts'os

3.laugh=REL 3.3.kissed

He kissed the one who was laughing.

26) yidloh- $\dot{\epsilon}\epsilon$ bizts'os

INV3.3.kissed

The one who was laughing kissed him.

Again we see that the use of the yi/bi- alternation determines the interpretation of adjoined nominals, whether they are simple nouns or nominalized relative clauses.

6.3.4. Transitive relatives with transitive main clauses. When both clauses are transitive, the Parallel Processing convention that was identified above in Chapter 5, in the discussion of temporal/conditional clauses, comes into play.

- 31) biztaʔ=yéé biiʔtsá
 INV3.3.kicked=REL INV3.3.saw
 The one that kicked him saw him.

Examples (28) and (29) have patient-headed relatives while (30) and (31) have agent-headed relatives. The yi/bi- alternation in the second (main) clause works as follows: If yi- is present, the head of the relative is an adjunct to the patient argument of the main clause verb; if bi- is present the relative is an adjunct to the agent argument.

It was noted earlier that a noun that follows the relative can not be an adjunct to the relativized verb, since the relativizing enclitic marks the rightmost boundary of the relative. Thus, a noun in this position can only be an adjunct to the main clause verb. In sentences of this kind, the generalization given in (27) above does not apply, since the noun marks disjoint reference -- by specifying another referent.

- 32) yiztaʔ=yẹ́e 'at'éeéd yiyiiltsá
 3.3.kicked=REL girl 3.3.saw
 The one he kicked saw the girl.
- 33) yiztaʔ=yẹ́e 'at'éeéd biiltsá
 3.3.kicked=REL girl INV3.3.saw
 The one he kicked was seen by the girl.
- 34) biztaʔ=yẹ́e 'at'éeéd yiyiiłtsá
 INV3.3.kicked=REL girl 3.3.saw
 The one that kicked him saw the girl.
- 35) biztaʔ=yẹ́e 'at'éeéd biiłtsá
 INV3.3.kicked=REL girl INV3.3.saw
 The girl saw the one who kicked him.

A nominal in sentence initial position, where it must be an adjunct to the relative clause, is coindexed with one of the arguments of the relativized verb.

- 36) 'at'éeéd yiztaʔ=yẹ́e 'ashkii néidíłts'in
 girl 3.3.kicked=REL boy 3.3.hit
 The one who kicked the girl hit the boy.

37) 'at'ééd biztaʔ=yéē 'ashkii léi' néidííʔts'in
 girl INV3.3.kicked=REL boy INDEF 3.3.hit
 The girl who kicked him hit some boy.

38) 'at'ééd yiztaʔ=yéē 'ashkii nábidííʔts'in
 girl 3.3.kicked=REL boy INV 3.3.hit
 The one who kicked the girl was hit by the boy.

39) * 'at'ééd biztaʔ=yéē 'ashkii nábidííʔts'in
 girl INV 3-3-kicked=REL boy INV 3-3-hit
 [the girl, the one who kicked him, was hit by the
 boy.]

When both clauses are Inverse, the sentence is excluded; I find it impossible to process. There is a sequence of three nominals, of which the first two are both linked to the external argument of the main clause verb, while the third nominal is linked to the internal argument. Furthermore, the internal arguments in the two clauses are disjoint in reference, and this is impossible unless the second of these is indefinite.

- 40) 'at'ééd biztaʔ=yée 'ashkii léi' nábidííʔts'in
 girl INV 3.3.kicked=REL boy INDF INV 3.3.hit
 The girl, the one who kicked him, was hit by
 some boy.

The use of the indefinite demonstrative léi' makes the construction acceptable.

6.4. The fourth person in complex sentences with relative clauses. The next section will show that in complex sentences of this kind the function of the fourth person in marking disjoint reference is parallel to the constructions where nominals are adjoined.

Relative clauses may have first or second person arguments that are not the head of the relative.

- 41) a. sizts'qs=yéé
 1.3.kissed=REL
 the one who kissed me
- b. séts'qs=yéé
 3.1.kissed=REL
 the one I kissed

When the head of the relative is first or second person heads, the relative must be non-restrictive, since the head is already maximally definite.

42) shí 'ayóí 'áníínísh'ní'ígíí naa'áháshyaa doo
 I 2.1.love=REL 2.1.take care of FUT
 I, who love you, will take care of you.

43) Ní, 'ayóí 'áshííní'ní'=néę shaa yisíninah
 you, 1.2.loved =REL 1.about 2.forgot
 You, who loved me, forgot about me.

Relatives with a fourth person head must also be non-restrictive.

44) joodloh=éę yóó'ajoolwod
 4.laughing=REL 4.ran away
 That one, the one who laughed, ran away.

Here both clauses are intransitive and the fourth person is used for deference. Fourth person, like first and second person, fixes reference uniquely in the discourse and the relative does not pick out a referent. Instead

the meaning is that that particular person who was laughing is also the one who ran away -- the relative is non-restrictive.

Let us turn now to a survey of the fourth person in another function: to mark disjoint reference in sentences with relative clauses. This can happen when either the relative or main clause is transitive. The possibilities are schematized in the following.

- 45) haztaʒ=yéé yiyiiłtsá
 4.3.kicked=REL 3.3.saw
 He saw the one who kicked that person.
- 46) jiztaʒ=yée yiyiiłtsá
 4.3.kicked=REL 3.3.saw
 He saw the one who that person kicked.
- 47) yiztaʒ=yéé jiiłtsá
 3.3.kicked=REL 4.3.saw
 That person saw the one who was kicked.

48) yiztaɫ=yẹ̣̣́ hooɫtsạ́

3.3.kicked=REL 4.3.saw

The one that he kicked saw that person.

49) haztaɫ=yẹ̣̣́ jiiɫtsạ́

4.3.kicked=REL 3.4.saw

That person_i saw the one who kicked him_i.

50) jiztaɫ=yẹ̣̣́ jiiɫtsạ́

3.4.kicked=REL 3.4.saw

The one_i that person_j kicked, that person_j saw him_i.

51) haztaɫ=yẹ̣̣́ hooɫtsạ́

4.3.kicked=REL 4.3.saw

That one who kicked that person saw that person.

52) jiztaɫ=yẹ̣̣́ hooɫtsạ́

3.4.kicked=REL 4.3.saw

That one that person kicked saw that person.

Where fourth person appears in just one clause, it marks disjoint reference, and where it appears in both clauses it marks coreference. This follows the fact that

anaphors must match their antecedents in phi features. Fourth person in all these examples is being used for deference.

We have seen earlier that nominal are not adjoined to fourth person arguments, since the nominal is third person syntactically, and there would be a clash in phi features.

53) *'at'ééd joodloh=yéē yóó'ajoolwod
 girl 4-laughing=REL 4-ran away

Thus, nominals and fourth person pronouns have a parallel syntactic function, that of blocking coreference.

54) *yizts'os=yéē 'at'ééd hoołtsā

The main verb has a fourth person argument and a noun, at'ééd, binding its third person argument, therefore there is no third person argument available to which the relative could be adjoined. In contrast, the following examples are fine.

- 55) a. jizts'qs=yéé 'at'ééd yiyiiłtsá
The one that person kissed saw the girl.
- b. hazts'qs=yéé 'at'ééd yiyiiłtsá
The one who kissed that person saw the girl.

The fourth person cannot be the head of a restrictive relative; the head is third person, glossed 'the one'. This relative is an adjunct to one of the third person arguments of the main verb, and the following noun is an adjunct to the other. Another example:

- 56) 'at'ééd hazts'qs=yéé yiyiiłtsá
He saw the girl who kissed that person.

Here the third person head of the relative has a noun adjunct. The complex relative is an adjunct to the patient argument to the main clause verb. Now compare:

- 57) 'at'ééd hazts'qs=yéé jiiłtsá
girl 4.3.kissed=REL 3.4.saw
That person_i saw the girl that kissed him_i.

This sentence has fourth person arguments in both clauses

and would be used for politeness. The next two examples are parallel to the preceding examples (56) and (57).

58) 'at'ééd jizts'os=yéē yiyiiłtsá
He saw the girl that person kissed.

59) 'at'ééd jizts'os=yéē jiiłtsá
That person_i saw the girl he_i kissed.

This concludes my survey of the use of fourth person to show deference and mark co- and disjoint reference in sentences with relative clauses.

6.5. Factive and Propositional Nominalized Clauses.

Recall that we saw in Chapter 5 above that subordinate clauses with the enclitic complementizer =go can refer either to an individual or to an event, if the fourth person is used to show that an initial nominal is not an argumental, but a topic-like adjunct to the sentence.

I repeat those examples here.

60) Mary yicha=go yiiłtsá
 3.crying=while 3.1.saw
 I saw Mary crying.

61) Mary jicha=go hoołtsá
 4.crying=while 4.1.saw
 I saw Mary when she was crying.

(Mary_i, I saw that person_i when she_i was crying.)

A related phenomenon occurs with relative clauses, that may in some contexts be interpreted as referring to events or propositions rather than to individuals. The nominalized propositional clauses are constructed with the enclitic -íqíí which is one of the set of determiners used to form relative clauses. These clauses differ from relative clauses in that while relative clauses have a head, nominalized propositional clauses do not. Relative clauses refer to individual persons or objects, while nominalized propositional clauses refer to propositions. The following minimal pair will show the semantic contrast involved.

62) chidí 'ínáályaa=yéé yá'át'ééh
 car 3.fixed=REL 3.good
 The car that was fixed is good.
 (that is, works nicely now)

63) chidí 'ínáályaa=ígíí yá'át'ééh
 car 3.fixed=REL 3.good
 It is good that the car is fixed.
 (that is, now one can go on a journey)

In (62) a third person pronoun in the verb 'fix' is relativized, and there is coreference between this argument and the subject of the main clause neuter verb. In (63) the entire nominalized clause is coreferent with the subject argument of the main clause verb. In the first case it is the fixed car that is good; and in the second case, it is the fact that it has been fixed that is good.

There are several verbs that refer to cognitive processes that take propositional clauses as complements. It is in these construction types that the fourth person can be used to mark disjoint reference. Let's begin by

considering a believe construction with third person arguments.

- 64) honeesná=nígíí yoodlá
 3-win-NOM 3-believes
 a. He_i believes that he_j won.
 b. He believes the winner.

This sentence can be taken to refer to the fact that the subject of the main clause believes that he himself won, or that someone else won. Now compare:

- 65) Honeesná=nígíí joodlá
 3-win-NOM 4-believes
 a. That person_i believes that he_j won.
 b. That person believes the winner.

The use of fourth person in the preceding example forces disjoint reference. If the fourth person appears in both clauses, it excludes disjoint reference, eliminates ambiguous readings and is used to show deference.

- 66) Hozhneesná=ígíí joodlá
 a. He_i believes that he_i won.
 b. *He_i believes that he_j won.

And again, example (66) can not have an adjoined nominal. Parallel examples occur with other verbs of cognition.

With perception verbs, there is an interesting contrast between the =go and =ígíí complementizers, of the type discussed in Akmajian (1977). These contexts are discussed in Schauber (1979).

- 67) Mary ʔíí' nayiisnii'=ígíí yínii'
 horse 3.3.buy=COMP 3s.1s.heard
 That Mary bought a horse, I heard about it.
 I heard that Mary bought a horse.

- 68) ?? Mary ʔíí' nayiisnii'=go yínii'
 I heard it, when Mary bought the a horse.

Ex. (68) is pragmatically odd, since it could be used only if the speaker heard some sound involved in the transaction, such as noise of the money being put down.

The complementizer =ígíí is factive, while =go occurs in temporal/conditional constructions.

6.6. Summary and conclusions. In this chapter, I have surveyed the use of fourth person to mark disjoint reference across clauses in complex sentences that contain adjoined relative clauses, and nominalized propositional clauses. We have seen that the relative clause in Navajo is constructed by enclitizing to an independent clause a relativizing determiner which binds an argument of the relativized verb. One of these determiners (=igii) can also serve to derive nominalized propositional clauses.

I identified both restrictive and non-restrictive relative clauses in Navajo, and showed that relatives headed by a first, second or fourth person pronoun must be non-restrictive. Inverse relative clauses are also non-restrictive. These constraints have important consequences for the interpretation of sentences with relative clauses.

Chapter 7

Possessor Raising

7.0. Introduction. A syntactic phenomenon that occurs in many of the languages of Native America is what is known as Possessor Raising. In these constructions, a possessor argument is "raised" or "advanced" to the status of a direct object. This realignment of theta roles and grammatical relations is very much like what is called "Dative Movement" across languages, where a goal or benefactive argument is raised to the status of a direct argument. As we have seen, Navajo has something comparable to Dative Movement in the sense that postpositional goal arguments come under the scope of the Direct/Inverse voice alternation, where they are treated like direct objects.

- 1) a. 'ashkii yich'í' yáłti'
 boy 3.to 3.speak
 He is speaking to the boy.

- 1) b. 'ashkii bich'i' yáłti'
 boy INV3.to 3.speak
 The boy is speaking to him.

Possessor raising in Navajo applies primarily to body parts, which are inalienably possessed. Before I describe Possessor Raising, I will provide a paradigm of the possessive pronouns.

7.0.1. The Possessive pronouns.

- 2) a. shi-má
 1s-mother
 b. ni-má
 2s-mother
 c. bi-má
 3s-mother
 d. nihi-má
 1-dual-mother
 e. nihi-má
 2-dual-mother
 f. da-nihi-má
 PL-1-mother

- 2) g. da-nihi-má
 PL-2-mother
- h. da-bi-má
 PL-3-mother
- i. ha-má
 4s-mother
- j. da-ha-má
 PL-4-mother

We can see that first and second dual possessive are the same: the first dual is speaker and other, not the hearer, and the second dual possessive encodes hearer + hearer. The plural marker takes scope only over the possessor.

- 3) Da-nihi-má doo kóó kééhat'íí da.
 PL-1-mother NEG here PL-3-live NEG
 Our mother does not live here.
 [*Our mothers do not live here.]

We saw in Chapter 3 that the distributive da- when it appears on the verb has scope over a verbal argument, which may of course be a complex Possessor NP.

7.1. The yi-/bi alternation in possessives. Note that the third person possessive pronoun is bi-. In Possessor Raising, we see yi- third person possessor pronouns also, and we see an alternation between these pronouns that is an extension of the yi-/bi- alternation with pronominal arguments of the verb or postposition. This alternation appears in the following example. First, consider the following complex NP:

- 4) 'at'ééd baghan
the girl's home

Now, note the form of this NP in the following sentences.

- 5) a. 'ashkii 'at'ééd yighan=góó naayá
boy girl 3POSS-home=to 3-go
The boy went to the girl's house.
- b. 'ashkii 'at'ééd baghan=góó naayá
boy girl INV 3POSS-home=to 3-go
The girl went to the boy's house.

In Ex. (5b), the bi- pronouns signals that the preceding nominal is not coindexed with it, just as a bi- pronoun

on a verb signals that the preceding nominal is not coindexed with the object of the verb. Whether alternations of this kind were extended from the nominal complex to the verbal complex or vice versa may perhaps one day be determined by historical research.

Possessor Raising is frequently seen in languages with rich pronominal inflection, such as the Muskogean languages. In these languages, as in Navajo, the verb or MVS and its incorporated pronouns constitute a complete sentence, a predicate/argument structure. In these languages as in Navajo, there is homophony between third person Possessor and object forms.

7.2. Possessor raising and inalienable possession. In Navajo, as elsewhere, Possessor raising is seen primarily with inalienably possessed items such as body parts. The possessor pronoun that is raised to direct object status is marked in an object prefix on the verb, while the element that refers to the body part is incorporated into a complex derived verb, and loses its status as the head of a noun phrase. Compare:

- 6) a. shináá'
 1.eye
 my eye
- b. náshidííłts'in
 1.2.punched
 You punched me.
- c. shinák'eedzííníłts'in
 1.2.eye-punched
 You punched me in the eye.
 (You "eye-punched" me.)

Example (6a) is a noun phrase; example (6b) shows a simple transitive construction. In (6c) the body part term has been incorporated into the verb, and the first person pronoun is not a possessor, but a direct object. The incorporated body part term is not an argument of the transitive verb, but serves to derive a complex verb, to "eye-punch"; in Baker's framework, this is 'classificatory' incorporation, of the kind seen in the Algonquian languages. The first and second person subject and object prefixes on the verb in (6) are the verbal arguments.

7.3. Possessor Raising and the animacy hierarchy. The fact that the same bi- prefix marks third person possessors (and some objects) in Navajo as well as marking a construction Inverse produces certain constructions that are ambiguous in surface structure between Possessor Raising and the Inverse. In the examples to follow, NP boundaries will be marked with brackets in the interlinear gloss. Consider the following sentence with a complex NP.

- 7) naa'ahóóhai bik'os nineez
 [chicken 3-neck] 3.long
 The chicken's neck is long.

The complex NP in Ex. (7) includes a third person Possessor prefix on the body part term. The complex NP is the subject of the neuter verb.

The examples in (8 - 9) show a transitive sentence where the body part term has been incorporated, and Possessor Raising is present. The yi-/bi- alternation produces the following interpretations.

- 8) 'asdzǎǎ naa'ahóóhai yi-k'os:k'íiniǎne'
 [woman] [chicken] 3.3.neck:sever
 The woman cut the chicken's head off.

- 9) 'asdzǎǎ naa'ahóóhai bi-k'os:k'íiniǎne'
 [woman] [chicken] 3.3.neck:sever
 The chicken cut the woman's head off.

The two third person arguments of the verb refer to the woman and the chicken; neither one refers to the body part. In (8), the Direct construction, the noun immediately preceding the complex verb is coindexed with the patient argument. In the corresponding Inverse construction, (9), 'the chicken' is interpreted as the agent. Now compare the following examples, where the lower-ranked noun, naa'ahóóhai appears first in the sentence.

- 10) naa'ahóóhai 'asdzǎǎ yi-k'os k'íiniǎne'
 The chicken cut off the woman's head.

11) naa'ahóóhai 'asdzáá bi-k'os k'íiníŕne'

- a. The woman cut the chicken's head off.
- b. The chicken cut the woman's head off.

Note that the sentences shown in (10 - 11) appear to violate the animacy hierarchy; the first noun in the sentence is lower in the animacy scale than the second. Also, while (10) has only one reading, (11) is ambiguous. We need to account for these two readings, and for the fact that (10) is not ambiguous.

I propose that the noun naa'ahóóhai 'chicken' can appear first in the sentence, although it is lower in animacy than 'asdzáá 'woman', because the third noun, -k'os 'neck' is interpreted as participating in the animacy hierarchy, and as occupying the lowest position on the animacy scale in the sentence. This makes the relative ranking of the two other nouns irrelevant, permitting naa'ahóóhai to appear first. Given this interpretation of the structure, (10) has the expected Direct reading.

- 10') naa'ahóóhai 'asdzáá yik'os:k'íiníłne'
 [chicken] [woman] 3.3.neck:sever
 The chicken cut off the woman's head. DIRECT

For the two readings of example (11), there are two corresponding structures. Reading (11.a) is simply the Inverse of (10).

- 11.a') naa'ahóóhai 'asdzáá bik'os:k'íiníłne'
 [chicken] [woman] 3.3.neck:sever
 The woman cut off the chicken's head. INVERSE

However, in (11.b.) the situation is different. The possessed noun bik'os is not incorporated, and there is no Possessor Raising; the complex NP is the transitive object.

- 11.b') naa'ahóóhai 'asdzáá bik'os k'íiníłne
 [chicken] [woman 3POSS-neck] 3.3.sever
 The chicken cut off the woman's head. DIRECT

These two constructions (11.a') and (11.b') have the same surface structure, since the incorporation produces no

phonological effects. They differ in that in (11.a') the bi- prefix marks the construction as Inverse, and in (11.b') the bi- prefix marks third person possessor in a complex NP. In the former, the body part term bik'os has been incorporated into the verb, and in the latter this noun is contained within a complex NP.

For speakers who make this distinction, the fact that the body part term is lowest on the animacy scale makes the relative order of the first two nouns less important, and there is no problem with the animacy hierarchy.

Similar alternations appear with many other complex verbs that have incorporated elements referring to body parts.

- 12) John 'at'ééd yí-la':yizts'qs
 [girl] 3.3.hand:kissed
 John kissed the girl's hand.

13) John 'at'ééd bí-la':yizts'os

[girl] INV 3.3.hand-kissed

The girl kissed John's hand.

14) hastiin tǎ'ízí yitsǎ:dzíítáál

[man] [goat] 3.3.stomach:kicked

The man kicked the goat in the stomach. DIRECT

15) hastiin tǎ'ízí bitsǎ:dzíítáál

[man] [goat] 3.3.stomach:kicked

The goat kicked the man in the stomach. INVERSE

7.4. The distribution of Possessor Raising. In my speech, this process applies primarily to body part terms, a few kin terms (bimá "mother", bimá sání "grandmother", and bighan, "home". It cannot be used for things that are alienably possessed. Thus, the following two examples are fine.

16) hastiin John bitǎ'ízí yitsǎ:dzíítáál

[man] [John 3POSS-goat] 3.3.belly:kicked

The man belly-kicked John's goat. DIRECT

- 17) hastiin John bitʔ'ízi bitsá:dziítáál
 [man] [John 3POSS-goat] INV3.3.belly:kicked
 John's goat belly-kicked the man. INVERSE

But (18) would be impossible.

- 18) *hastiin John yitʔ'ízi yitsá:dziítáál

Ex. (18) shows that the noun tʔ'ízi cannot be subjected to Possessor Raising, since it cannot be inalienably possessed.

Another example showing Possessor raising with ghan, "home", showing the close connection between this inalienably possessed item and the possessor -- almost like a body part.

- 19) shádí shimá sání ba-ghandi:níyá
 [1.sister] [1.grandmother] 3.3.home:went
 My grandmother went to my elder sister's home.
 (My grandmother visited my elder sister.)

- 20) shádí shimá sání yi-ghandi:níyá
 [1.sister] [1.grandmother] INV3.3.home:went
 My sister went to my grandmother's home.
 (My elder sister visited my grandmother.)

Examples showing Possessor Raising with kin terms that appear in Young and Morgan (1987) include:

- 21) shínaaí shí' naa'aash bi-másání:yyiiłtsá
 [my o.brother] [my cousin] INV 3.3.grandmother:saw
 My cousin saw my older brother's grandmother.
- 22) shínaaí shí' naa'aash yi-másání:yyiiłtsá
 [my brother] [my cousin] 3-3-grandmother:saw
 My brother saw my cousin's grandmother.

Some Navajo speakers do not use Possessor Raising in this way, and do not permit yi- on kin terms.

7.5. Lexical postpositional phrases. In a construction where a lexical postpositional phrase is employed as a paraphrase, the yi-/bi- alternation can extend to the lexical postposition; and when this occurs, the

alternation cannot appear on the verb itself.

- 23) hastiin ʔíí' bitsá=góne' yiztaʔ
 [man] [horse] 3.3.belly=in:kicked
 The horse kicked the man in the stomach.

- 24) ??? hastiin ʔíí' bitsá=góne' biztaʔ
 [man] [horse] [3POSS.belly=in] INV 3.3.kicked

- 25) * hastiin ʔíí' yitsá=gone' biztaʔ
 [man] [horse 3POSS.belly=in] INV3.3.kicked

In any event, there is a clear difference between the kind of "classificatory" incorporation that is seen in Possessor Raising in Navajo, and the incorporation of verbal arguments (Mithun 1986; Baker 1988). In Possessor Raising it is not the element that refers to the body that is the object; it is the Possessor that is "raised" to argumental status, as we have seen in the examples given above.

7.6. Concluding remarks. Other Athabaskan languages permit the incorporation of objects and unaccusative

subjects (Saxon 1989; Rice 1989). With true argument incorporation, the head noun is incorporated but there is no "raising" of a pronoun to argument status. Simple noun incorporation produces a derived intransitive. In contrast, Possessor Raising examples, like all classificatory incorporation structures, are necessarily transitive. The Navajo examples tell us where the person was affected by including the word for the body part in the verb itself, producing a derived transitive verb. In contrast, the incorporation of object and subject nouns does not occur in Navajo because the verbal arguments are pronominal prefixes that are bound in the discourse by nouns. The Navajo verb is always inflected for these pronominal arguments; therefore, nouns are not incorporated, only adjoined to the sentence.

It appears that Possessor Raising appears primarily with body part terms, a few kin terms (where there is considerable variation across speakers), and the word for "home". Since this alternation occurs only with the third person, first, second and fourth person forms never appear in Possessor Raising constructions.

We have seen the third person alternation occurring in three functional complexes: 1) the transitive verb and its arguments; 2) in grammatical postpositional phrases; and 3), in complex NP with possessor arguments, where Possessor Raising appears. We have seen how the argument structure of these lexical items determines the interpretation of any nominal that may be present.

Chapter 8

Questions and Focus

8.0. Introduction. In many languages, Wh- words obligatorily move to the front of the clause over which they have scope, as in the following English example, where a Wh- word is moved from an object position in the VP to a sentence initial position.

1) Who did John kiss t?

In this chapter, I will argue that Wh-words in Navajo always appear as adjuncts in A-bar positions, and thus cannot undergo Wh- movement. If there were Wh- movement in Navajo, this would be evidence against the claim that Wh- words are adjuncts. I will show that there is no Wh- movement, that the positions of Wh- words at S-structure in Navajo is the same as that of other adjoined nominals. These adjunct positions follow from the valence of the verb and the Direct/Inverse voice alternation, as argued in Willie (1989). Just as nominals in general show

no subject/object asymmetries, there are no argument asymmetries with respect to Wh- words. I assume that Wh- movement takes place at LF in Navajo.

8.1. Wh- adjunct types. I am using the term "Adjunct" here in a broad sense, to mean an expression that neither assigns case nor is assigned case by a governor, but is simply adjoined at some level of structure. Adjuncts fall into two primary classes in languages like Navajo. There are adjuncts that are predicated of a pronoun that is incorporated into the verb word, and adjuncts that are adverbial in function.

- 2) a. 'ashkii naalnish
 boy 3-working
 The boy is working.
- b. kwe'é naalnish
 here 3-working
 He is working here.

The nominal adjunct in (2a) is coindexed with and licensed by the incorporated pronoun. It combines with the pronoun

to build a complex discontinuous argumental expression. In contrast, the adverbial adjunct in (2b) is not related syntactically to a pronoun. As adjuncts, Wh- words fall into the same two classes: Nominal vs. Adverbial.

- 3) a. Nominal Wh- adjuncts: those that must be coindexed with (licensed by) a third person pronominal, and are used to question an argument.
- b. Adverbial Wh- adjuncts: Wh- words that cannot be coindexed with a pronoun, and are used to question adverbial notions such as time, place, manner, etc.

Nominal Wh- adjuncts can never be coindexed with a first, second, or fourth person pronoun, since coindexing depends upon matching phi-features. Examples of nominal and adverbial adjuncts are:

- 4) a. háísh naalnish
 who 3-working
 Who is working?

- 4) b. háadish naalnish
 where 3-working
 Where is he working?

A nominal Wh- adjunct in Navajo (háísh "who", ha'át'íísh "what") excludes a referential nominal adjunct to the argument it questions, and takes the place that such a nominal adjunct would occupy in the normal word order of the sentence.

- 5) a. *háísh shizhé'é naalnish
 who 1s-father 3-working
- b. háadish shizhé'é naalnish
 where 1s-father 3-working
 Where is my father working?

Adverbial Wh- adjuncts are conventionally termed adjuncts in the analysis of languages with lexical arguments, where nominals occupy A-positions.

8.2. Coindexing. In Direct (yi-) constructions, an NP adjunct to the patient appears immediately before the verb,

and by default an NP adjunct to the agent appears in the outermost position. The agent is the subject in the yi- form. In the Inverse (bi-) construction, this coindexing is reversed, and the patient is the subject.

6) a. Sally John yizts'qs

3.3.kiss

Sally kissed John.

b. Sally John bizts'qs

INV3.3.kiss

Sally was kissed by John.

I will use a passive gloss for the bi- forms, to emphasize that the patient is the subject. It is not a perfect gloss, since the Inverse forms are transitive, with two direct arguments.

A Wh- word questioning a pronoun binds that pronoun, and appears in the same adjunct position that a coindexed NP would occupy. That is, the coindexing of the Wh- adjunct is determined by the Direct/Inverse voice alternation.

7) a. háísh John yizts'qs
 who 3.3.kiss
 Who kissed John?

b. John háísh yizts'qs
 who 3-3-kiss
 John kissed who?

I am using "echo question" glosses for the Navajo questions, in order to show that the Wh- words appear where a corresponding non-interrogative NP would be, and to make the contrast between the Direct and Inverse forms clearer.

8) a. háísh John bizts'qs
 who INV.3.3.kiss
 Which one (of you) was kissed by John?

b. John háísh bizts'qs
 who INV.3.3.kiss
 John was kissed by who?

The Inverse construction, as I argued Chapter 3, must have a definite subject. Therefore, when the Wh- word binds the

definite pronoun, this is presuppositional, of the kind seen in Wh- phrases such as "which one". The reading of Ex. (8b) is that the subject must be one of a presupposed set, to which the addressee belongs. Where this presuppositional reading is not intended, the Direct form, as in Ex. (7) is employed.

When only the Wh- word is present, it is interpreted as asking about the agent or the patient according to the same word order conventions.

9) a. háish yizts'qs

who 3.3.kiss

He kissed who?

b. háish bizts'qs

who INV.3.3.kiss

He was kissed by who?

Since the semantic features of the verb and the Wh- word make both subject and object human in (7 - 9), either voice alternate can be employed. When the arguments are not equal in rank, certain constraints imposed by the Animacy

Hierarchy apply.

10) a. John ha'át'íísh yiyiiłtsá

what 3.3.saw

John saw what?

b. *ha'át'íísh John biiłtsá

what INV.3.3.saw

[What was seen by John?]

Ex. (10b) shows a context where the Inverse cannot be used to place a Wh- adjunct in clause initial position. The Navajo animacy hierarchy requires that nominals referring to entities higher on the animacy scale precede nominals referring to lower entities. However, the following sentence is permitted:

9) ha'át'íísh John yiviiłtsá?

what 3.3.saw

What did John see?

This sentence can only have the reading shown, where it is the inanimate object that is being questioned, even though

the word order violates the animacy hierarchy and the normal word order for Direct constructions. This is a kind of focus movement of the Wh- word, and is permitted when the semantic features of the lexical items make it impossible to mistake the agent and patient -- because they are so far apart on the animacy scale. Comparable focus movement in non-interrogative sentences is possible when the semantic features exclude unwanted interpretations.

10) 'ashkii yiyííbíí'

boy 3.3.picked [inanimate round objects]

- a. The boy picked them [i.e, berries]
- b. *They [berries] picked the boy.

An interpretation where the NP is patient is expected here. This expected interpretation can be "overridden" because of the great difference in animacy of the arguments of the verb "pick up [inanimate round objects]".

Focus movement of the Wh- adjunct is not possible when the agent and patient are of equal rank in the hierarchy, and the semantic features of the lexical items does not prevent misinterpretations. Ex. (4a), repeated here, is

not ambiguous.

4) a. háísh John yiyiiłtsá

Who saw John?

*John saw who?

In ditransitives, the Inverse switches the agent and goal theta roles assigned to pronouns in the verb-sentence.

11) a. John Mary ha'át'íish yeiní'á

what 3.3.3.gave

John gave Mary what?

b. John Mary ha'át'íish beiní'á

what INV3.3.3.gave

John was given what by Mary?

8.3. Obliques. The object of a grammatical postposition is questioned without Wh- movement. The Inverse voice alternation has scope over the verb word and any associated postpositional phrases -- oblique arguments.

12) a. John Mary yich'ᵢ' yáłti'

3.to 3.speaks

John is talking to Mary.

b. John Mary bich'ᵢ' yáłti'

who INV.3.to 3.speaks

John is being talked to by Mary.

When the postpositional object is questioned, the coindexing principles given above apply.

13) a. John háísh yich'ᵢ' yáłti'

who 3.to 3.speaks

John is talking to who?

b. John háísh bich'ᵢ' yáłti'

who INV3.to 3.speaks

John is being talked to by who?

Note that in (13b), the Wh- word intervenes between the Inverse postpositional phrase and the nominal ("John") that is associated with it, just as in (12b), where an ordinary nominal adjunct coindexed with the postpositional object

appears.

When only the Wh- word is adjoined:

14) a. háísh yich'í' yákti'
 who 3.to 3.speaks
 He is talking to who?

b. háísh bich'í' yákti'
 who INV3.to 3.speaks
 He is being talked to by whom?

8.4. The question focus clitic. The Wh-words háísh and ha'át'íísh both have the interrogative clitic =sh attached; this clitic overtly marks focus. As is often seen across languages, Wh- words and indefinite quantifiers are related in Navajo. A Wh-word without the =sh clitic, and with an attached modal clitic, can be interpreted as an indefinite in a non-interrogative sentence.

15) John háí-shíí yiztař'
 s.o.-PROB 3.3.kicked
 John (probably) kicked someone.

The =sh clitic can be moved away from the Wh- word to a position following the first word in the sentence.

- 16) Díí=sh háí yiztaʔ
 DEM=Q who 3.3.kicked
 This person kicked who?

But in Inverse constructions, it is impossible to attach the question enclitic to the first word in the sentence.

- 17) *Díí=sh háí biztaʔ
 DEM=Q who INV.3.3.kicked
 [This person was kicked by who?]

I assume this is excluded since the Inverse is already a marked construction type that places focus on the patient as subject.

8.5. Wh- phrases. Across languages, we see presuppositional Wh- phrases, that are used to ask about members of a presupposed set; these are expressions like "which boy?". In Navajo, a Wh- phrase of this kind is as follows.

- 18) 'ashkii háí-dí-lá yizts'qs
 boy which one 3.3.kissed
 She kissed which boy?
- 19) 'ashiiké díkwíí=sh yizts'qs
 boys how many=FOCUS 3.3.kissed
 She kissed how many boys?
- 20) hastiin ṣíí' háídí=ígíí=sh yizloh
 man horse which=DET=Q 3.3.roped
 The man roped which horse?

In these phrases, we see a Wh- word combined with an ordinary nominal to build a complex adjunct; extraction from these phrases is not possible.

8.6. Long distance wh-movement. We might expect that since Navajo does not require Wh-words to move to the front of the clause, that long-distance wh-movement would be excluded, and this is the case. There are no constructions of this kind. Compare:

21) háish ǰǰǰ' yidooloh nínízin

who horse 3.3.roped 2.think

Who will rope the horse, you think?

(Who do you think will rope the horse?)

22) John ǰǰǰ' yidooloh nínízin

horse 3.3.roped 2.think

John will rope the horse, you think.

Navajo verbs of speech and thought, including nizin, have a special syntax. In my dissertation I argue that propositional clauses that appear with these verbs, when they are without complementizers, are not complement clauses, but loosely adjoined as "inner speech" (see Willie, to appear). Evidence for this claim is found in the patterns of pronominal agreement across the main and adjoined inner speech clauses. This agreement is like direct quotes in English.

23) "I will rope the horse" John thinks.

In contrast, verbs of this type in English take complement clauses, and a Wh-word in a downstairs object position can

move up to the beginning of the clause.

24) Who do you think John kissed?

In Navajo, the Wh- word cannot undergo this kind of movement.

25) John háísh yizts'qs nínizin

who 3.3.kissed 2.think

John kissed who, you think?

(Who do you think John kissed?)

In Navajo, the subordinate clause must precede the main clause, and the Wh- word remains in the clause it has scope over.

There are also Adverbial Wh- phrases. Compare:

26) a. hádáa'shą' John Mary yizts'qs?

when 3.3.kissed?

When did John kiss Mary?

- 26) b. háísh baghan=di Mary yizts'qs?
 who 3POSS:home=at 3.3.kissed?
 At whose home did he kiss Mary?

The expression baghan-di in (26b) is an adverbial adjunct, a post-positional phrase in which the noun is directly governed by the postposition. There is a small class of Lexical Postpositions in Navajo that have this syntax. They are exclusively locative and directional, and are like prepositional phrases in English. I distinguish them from the class of Grammatical Post-positions, that take pronominal objects, and mark oblique relations such as Dative and Benefactive. It is these Grammatical Postpositions that fall under the scope of the Inverse voice alternation, as seen in Examples (12,13) above.

It is impossible to have both an adverbial and an argumental wh- word in the same clause.

- 27) a. * háa=di háísh Mary yizts'qs
 where=at who 3.3.kissed
 b. * háa=di Mary háísh yizts'qs
 where=at who 3.3.kissed

Note that it is possible for the string háish bighan-di to undergo the yi-/bi- alternation.

- 28) a. John háish baghan=di yizts'qs?
 who 3POSS:home=at 3.3.kissed
 Who did John kiss at his house?
- b. John háish yighan=di yizts'qs?
 who 3POSS:home=at 3.3.kissed
 Who did John kiss at her house?

This contrast in Possessor marking is not one of voice, but shows the use of this alternation to mark obviation. It is occurring with a Lexical postposition, not a Grammatical postposition. Speakers vary in the extent to which they use yi-/bi- in this way. Some use it with kin terms, others do not.

Since Navajo has fourth person forms, which are used to mark obviation, there seems to be less reliance on yi-/bi- for this purpose.

29) John háísh haghan=di yizts'qs
 who 4POSS:home=at 3.3.kissed

Who did John kiss at that other person's house?

Adverbial Wh- words and phrases can undergo long distance movement in some languages.

- 30) a. When did she say he left?
 b. Why did she say he left?

In English, these sentences are ambiguous, since the wh- word can be interpreted as having scope over either clause. Ambiguous constructions of this kind do not occur in Navajo, since there is no long-distance movement of Wh-words of this kind also.

31) hádáá'shą́ dah diiyá ní
 when-Q 3.left 3.said
 When did he leave, she said.

- 32) hádáá'shə' 'ání, dashdiiyá=hágíí 'áhóót'iid
 when-Q 3.3.said, 4.left=COMP 3.happened
 When did she say it, his leaving took place.
 When did she say that he left?

Wh-words, whether subcategorized for or not, must appear in the clause they have scope over at LF. Previous work by Schaubert (1979) and Speas (1990) suggests that there may be some variation across speakers in this respect; I report on usage known to me.

Since Wh- words must be adjuncts to the clause over which they have scope, and there are no complement clauses in Navajo, there is no long-distance Wh- movement. This applies to both Wh- words that question arguments and Wh- words that question adverbial notions. In this respect, Navajo again differs from Northern Athabaskan. Saxon (1986) has shown long distance Wh-movement of "adverbial" Wh- words in Dogrib. This is consistent with other evidence of the different status of nominals in the Northern vs. the Southern branches of the Athabaskan language family.

8.7. Conclusions. In languages where NPs are in argument positions, we see Wh- words also appearing in A-positions. In many languages, including English, Wh- words undergo movement from A-positions, just as NPs undergo NP movement. In this paper, I have shown that Wh- words in Navajo share the properties of NPs in the language: they are adjuncts that do not undergo movement from A-positions. This lends support to the claim that nominal expressions in the language are adjuncts.

Chapter 9

Summary and Conclusions

9.0. Introduction. The goal of this thesis has been to identify the nature of argument structure in the Navajo sentence, with particular focus on the complex system of pronouns, anaphora and obviation in the language. Navajo has a number of specialized syntactic devices for marking co- and disjoint reference of arguments, within the simple clause, across the clauses in complex sentences, and in discourse contexts. These devices include the yi-/bi- alternation in sentences with all third person arguments, the "fourth" person, used for obviation and for deference, and the parallel processing convention. In Chapter 1, I gave some historical notes on earlier work on these problems.

9.1. The Navajo verb sentence. Typologically, Navajo is a pronominal argument language (Jelinek 1984); that is, all the direct arguments are registered in the Navajo verb via incorporated pronouns. It is a morphological property of Navajo that all closed class, functional

elements are incorporated into the lexical items with which they are associated by government. The argumental pronouns that are incorporated into the Navajo verb leave traces in argument positions; it is the resulting chain consisting of the pronoun and its trace that for convenience in exposition I am calling a pronoun. Because it is these incorporated pronouns and their traces that are assigned theta roles and case, nominals in Navajo must occupy A-bar positions. Nominals are adjuncts related to their pronominal heads via a relation of predication, and are comparable to "discontinuous" relatives.

The Navajo verb has an extensive inventory of incorporated pronouns, as described in Chapter 2, on the Verb-Sentence. In addition to the person paradigms, there is an Expletive subject pronoun ho-; an indefinite Absolutive pronoun 'a; an indefinite Ergative pronoun -'adi- that appears in the Agentive Passive which can be used only in reference to humans; and an anaphor that is not inflected for person with the same morphological shape. The fact that these two pronouns are identical in shape is reminiscent of the Reflexive Passives seen in

other language families, for example Uto-Aztecan (Langacker 1976). There is also a Reciprocal prefix 'ahi-.

There are also paradigms of first, second, third and fourth person pronouns, which typically vary little in shape according to grammatical relation -- they vary greatly according to phonological environment. Grammatical relation is determined by the prefix order, except the fourth person forms (ji- agent; ho- patient) which differ in shape and occur in the same position with respect to the prefix array; if two fourth person arguments are present, then the patient precedes the agent, which is the canonical order for agents and patients in all persons. This position of the fourth person arguments, and the fact that not all Athabaskan languages have a fourth person, suggests a later historical origin for the fourth person forms.

Because of these incorporated pronouns, the "free" or independent pronoun series appear only in a specialized function, that of marking contrastive reference or emphasis. Including more than one free

pronoun in a sentence is questionable because of this contrastive function. Furthermore, free pronouns typically appear in sentence initial position, in accordance with their focus properties; their position is not determined by the grammatical relation of the verbal pronoun with which they are coreferent.

9.2. Third person pronouns. With third person forms, the situation is more complex than with other persons in the pronominal paradigm. The third person subject is invariably phonologically null, ZERO. It is typical of languages with very rich pronominal inflectional of this kind to economize by treating third person forms as the "elsewhere" case -- the non-speech act participant. But two third person object forms are generally recognized (Young and Morgan 1987); these are the frequently mentioned yi- and bi-, the first of which has a ZERO allomorph. These morphophonological matters have not been considered here; I refer the reader to Kari (1976) McDonough (1990), and Young and Morgan (1987).

In sentences with all third person arguments, the alternation between the yi- and bi- pronouns is

associated with a voice alternation; the bi- form is an Inverse voice. It was pointed out in Chapter 3, the subject of an Inverse construction must be definite. This is an important feature of these constructions which hitherto had gone unnoticed. The fact that the subject of an Inverse form must be definite gives us an explanation for many facts considering the possible interpretations of sentences that have long presented problems of analysis.

9.3. The Maximal Verb Sentence (MVS). Oblique arguments in Navajo are postpositional objects. In Chapter 3, I distinguished between grammatical and lexical postpositional phrases. The grammatical postpositional phrases mark Dative and Benefactive arguments. They form part of a verb-postpositional complex that I have called the MVS. Some grammatical postpositional phrases are phonologically incorporated into the verb; some are not. The grammatical postpositional phrases fall under the scope of Inverse voice alternation. Therefore, the goal argument of an Inverse construction with a postpositional phrase must also be definite.

In Dative and Benefactive constructions in Navajo, the goals arguments are raised to the subject position "external argument" in the Inverse construction. This process corresponds to what has been called Dative Movement across languages.

9.4. Nominal Adjunctions and the third person. Chapter 3 dealt with the principles where Navajo sentences containing nominals are interpreted. I surveyed the process of nominal adjunction in sentences with simple verbs, and in sentences including a postpositional phrase -- an MVS. I identified the construction types while the yi- form has more than one interpretation where the bi- form has not. I showed how these constraints on possible interpretations follow from the fact that Inverse subjects must be definite.

9.5. The fourth person. In Chapter 4, I defined a number of uses of the fourth person pronouns. After setting aside pleonastic ho-, which is not a fourth person form, I showed how fourth person are used to show deference, in quotative constructions, and in traditional narratives. I also pointed out contexts in which the

fourth person is used to signal focus on a participant rather than an event.

9.6. Adjoined Temporal/Conditional Clauses and Parallel Processing. There are a number of conjoined clause types in Navajo; in this chapter I focus on one of these, clauses with the encliticized complementizer -go. I explored the coreference possibilities of arguments across clauses in complex sentences containing -go clauses. The principle of parallel processing was introduced; this is a constraint which requires the coindexing of third person arguments in sequences of transitive clauses.

9.7. Relative and Propositional Clauses. Chapter 5 provided an analysis of relativization in Navajo and identified the many syntactic parallels between relatives and simple nouns in the language. Navajo relative clauses are "internally" headed and did not employ a gapping strategy, as argued in Willie (1990). I identified restrictive and non-restrictive relatives, and pointed out that first, second, and fourth person arguments can only have non-restrictive relatives. Third

person arguments can have either restrictive or non-restrictive relatives -- except for the subjects of Inverse constructions, which can have only non-restrictive relatives, in keeping with their definite status. In this chapter, I also identified nominalized propositional clauses which take some of the same determiners/complementizers that appear on relative clauses.

9.8. Possessor Raising. In Chapter 7, I described Possessor Raising in Navajo. This is a process whereby a possessor pronoun is "raised" to the status of a direct object, while the underlying possessed noun is incorporated into the verb. This process is confined almost exclusively to inalienably possessed items, as it is generally the case across languages. Since the third person possessive pronoun is bi-, this makes it possible to exploit the yi-/bi- alternation in these constructions. I identified structural ambiguities that produced different readings for these sentences.

9.9. Wh- questions and focus. In Chapter 8, I pointed out the absence of wh- movement in single clause

constructions in Navajo. Wh- words occupy the position in the word order that a corresponding non-interrogative adjunct would take. I identified some contexts in which focus movement of a wh- word is possible; this focus movement is always optional. I also showed constraints on the interpretation of Inverse sentences with a wh- word binding the external argument. These constraints follow again from the requirement that an Inverse subject must be definite.

9.10. Concluding Remarks. The goal of this thesis has been to explore argument structure in Navajo. I have argued that these arguments are incorporated pronouns and anaphors; some of these pronouns permit nominal adjuncts while others do not. I have identified the processes whereby co- and disjoint reference are marked. I have argued that the yi-/bi- alternation is a voice contrast, while the fourth person marks obviation. First, second, and fourth person have properties in common as opposed to third person and I have stated their distribution. I have pointed out that Inverse subjects must be definite, and showed how this constraint gives us an account of contrasts in the permitted interpretations of yi- versus

bi- sentences. I also showed the role of the yi-/bi- alternation in Datives, Benefactives and Possessor Raising constructions, as well as in wh- questions. Identifying the pronominal inflection in the Navajo MVS as having argumental status, and identifying the role of definiteness in these arguments, has provided us with a unified account of Navajo syntax.

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