NEGATIVE POLARITY EXPRESSIONS IN NAVAJO¹ Ken Hale and Paul Platero MIT

The overt expression of negative polarity is achieved in Navajo by means of two constructions. The following sentences exemplify one of these:

- (1) (a) Doo háí-da níyáa-da. NEG who-DA P.3.go-DA 'No one has arrived.'
 - (b) Shi-zhé'é doo ha'át'íí-da nayiisnii'-da. my-father NEG what-DA 3.P.3.-DA 'My father has not bought anything.'
 - (c) Shi-zhé'é doo háágóó-da deeyáa-da. my-father NEG where-AL-DA P.3.go-DA 'My father is not going anywhere.'
 - (d) Shi-zhé'é doo háágóó-da deesháᬠnízin-da. my-father NEG where-AL-DA F.1s.go P.3.want-DA 'My father does not want to go anywhere.'

The construction illustrated by the sentences of (1) involves the use of Navajo h-initial nominals, "h-words". These are indefinites which are close functional parallels of English wh-words. They are identical to the interrogative nominals used in content questions, as in (2), and in sentences containing positive indefinites, as in (3):

- (2)(a) Háí-lá níyá. who-LA P.3.go 'Who has arrived?'
 - (b) Shi-zhé'é ha'át'íí-lá nayiisnii'? my-father what-LA 3.P.3.buy 'What did my father buy?'
 - (c) Shi-zhé'é háá-góó-lá deeyá? my-father where-AL-LA P.3.go 'Where is my father going?'

¹ We are very much indebted to Linda Platero for her judgments on many of the Navajo sentences in this paper. She is not responsible for errors which undoubtedly remain.

- (d) Shi-zhe'é háá-góó-lá deesháᬠnízin. my-father where-AL-LA F.1s.go P.3.want 'Where does my father want to go.'
- (3)(a) Háí-sh²í²í níyá. who-INDEF P.3.go 'Someone arrived.'
 - (b) Shi-zhé'é ha'át'íí-sh²í²í nayiisnii'. my-father what-INDEF 3.P.3buy-DA 'My father bought something.'
 - (c) Shi-zhé'é háá-góó-sh²í²í deeyá. my-father where-AL-INDEF P.3.go 'My father is going somewhere.'
 - (d) Shi-zhé'é háá-góó-sh²í'í deesháᬠnízin. my-father where-AL-INDEF F.1s.go P.3.want-DA 'My father wants to go somewhere.'

The sentences of (1-3) represent the prevailing pattern for overt quantifier-like expressions in Navajo. The "quantifier" is in situ, i.e., in the same position where an ordinary NP or DP argument would appear, as in (4):

- (4)(a) Si-tsilí níyá. my-YBro P.3.go 'My younger brother arrived.'
 - (b) Shi-zhé'é béégashii nayiisnii'. my-father cow 3.P.3.buy 'My father bought a cow.
 - (c) Shi-zhé'é Kin-ání-góó deeyá. my-father Flagstaff-AL P.3.go 'My father is going to Flagstaff.'
 - (d) Shi-zhé'é Kin-ání-góó deesháán nízin. my-father Flagstaff-AL F.1s.go P.3.want 'My father wants to go to Flagstaff.'

The negative polarity constructions of (1) above are characterized by the use of the negative particle doo immediately before the indefinite nominal, and the latter is followed immediately by the enclitic -da (glossed DA)—the same element which appears as the "scope-marker" at the end of the clause in negatives. What is essential here is that the negative particle

doo must precede the indefinite, despite the fact that the unmarked position for this element in Navajo non-polarity constructions is just before the verb, as illustrated in (5):

- (5)(a) Si-tsilí doo níyáa-da. my-YBro NEG P.3.go-DA 'My younger brother did not arrive.'
 - (b) Shi-zhé'é béégashii doo nayiisnii'-da. my-father cow NEG 3.P.3.buy-DA 'My father did not buy a cow.'
 - (c) Shi-zhé'é Kin-ání-góó doo deeyáa-da. my-father Flagstaff-AL NEG P.3.go-DA 'My father is not going to Flagstaff.'
 - (d) Shi-zhé'é Kin-ání-góódeesháá doo nízin-da. my-father Flagstaff-AL F.1s.go NEG P.3.want-DA 'My father does not want to go to Flagstaff.'

This is not the only position in which the negative particle can appear, it is merely the position which is more or less neutral. It can also appear initially or following the subject. In the polarity construction, however, the negative particle must precede the indefinite. It is best to have the negative particle immediately before the indefinite, but a sentence like (6) is also possible:

(6)Doo shi-zhé'é háá-góó-da deeyáa-da. NEG my-father where-AL-DA P.3.go-DA 'My father is not going anywhere.'

Now let us turn to the second construction which Navajo uses to express negative polarity. This is exemplified in the sentences of (7):

- (7)(a) Doo níyá(h)í-da. NEG P.3.go-PRN-DA 'No one has arrived.'
 - (b) Shi-zhé'é doo nayiisnii'-í-da. my-father NEG 3.P.3.buy-PRN-DA 'My father did not buy anything.
 - (c) Shi-zhé'é doo deeyá(h)-í-góó-da. my-father NEG P.3.go-PRN-AL-DA 'My father is not going anywhere.'
 - (d) Shi-zhe'é doo deesháᬠnízin-í-góó-da. my-father NEG F.1s.go P.3.want-PRN-AL-DA

'My father does not want to go anywhere.'

In these versions of the Navajo polarity construction, the indefinite portion is missing from its expected post-negative position. Instead, an as yet unidentified element appears following the verb—specifically, between the verb and the enclitic -da, the negative scope marker. This new, unidentified element, having the shape -i-, is identical to the morphological base of certain pronouns, determiners, and question words, as shown in (8):

```
(8) sh-í '1st singular'
b-í '3rd'
há-í 'who'
é-í 'that'
```

These are perspicuous examples of determiners containing the element at issue, though its use is general in this class of words, if often obscured phonologically in less perspicuous cases. We will assume that the -i- of the polarity constructions is the very same element as that which functions as the morphological base of pronominals and determiners. The question we must now face is this: what is this element doing after the verb, and what is the nature of the position in which it appears? We begin with the first part of this question.

It is clear that something is missing from the preverbal part of the sentences of (7), and the position of the missing element, i.e., the "gap", is at some point following the negative particle *doo*. In fact, we can show that the gap directly follows the negative particle, since a sentence like (9) below can only have the reading according to which the missing indefinite corresponds to the subject:

```
(9)Doo béégashii yizloh-í-da.
NEG cow 3.P.3.rope-PRN-DA
'Nobody roped the cow.'
```

This cannot have the meaning according to which the cow didn't rope anything, an idea which could only be rendered as in (10):

```
(10) Béégashii doo yizloh-í-da.
cow NEG 3.P.3.rope-PRN-DA
'The cow didn't rope anything.'
```

We have reason to suppose, then, that the sentences of (7) and (9) have a gap—an empty category, possibly a trace of movement—immediately following the negative particle. Putting this observation together with that concerning the postverbal pronominal element -i-(glossed PRN), it is natural to suggest that the surface positioning of the latter is effected by rightward movement from the preverbal, and post-negative, position which we have identified with the gap. That is to say, the postverbal element -i- is a "clitic", more exactly "enclitic", variant of the indefinite item appearing in sentences of the type represented by the overt polarity constructions of (1) above. This clitic has the morphosyntactic property that it must attach to

some word and, further it must attach to a particular word in the clause—namely, the verb. We leave aside for now the question of what forces it to move to the verb rather than to some other word. At this point, we are interested in establishing that a movement process is involved in this construction.

By assuming that the sentences of (7), say, are derived by movement from structures in which the clitic PRN originates in the position following the negative particle, we give a natural account of the paraphrase relation which holds between the sentences of (1) and (7). The two sets have essentially identical d-structures, and the entities involved in the negative polarity relations are essentially identical, abstractly speaking, in the two sets. Furthermore, movement is strongly suggested not only by the displacement of the PRN enclitic itself, but also by the case-like locational and directional enclitics which are likewise displaced—pied-piped, so to speak—with the pronominal enclitic, as in (7c) and (11):

- (11) (a) Doo naashá(h)-í-d²é²é'-da. NEG I.1s.walk.around-PRN-AL-DA 'I don't come from anywhere.'
 - (a') Kin‡ní-d²é²é' naashá. Flagstaff-EL I.1s.walk.around 'I come from Flagstaff.'
 - (b) Awéé' doo si-dá(h)-í-gi-da. baby NEG P.3.sit.sg-PRN-LOC-DA 'The baby isn't sitting anywhere.'
 - (b') Awéé' ni'-gi si-dá.
 baby ground-LOC P.3.sit.sg
 'The baby is sitting on the ground.'
 - (c) Hastiin doo ni'ní¬b²áz-í-j²i'-da. man NEG P.3.drive-PRN-EPT-DA 'The man didn't drive up to anything.'
 - (c') Hastiin hooghan-j²i' ni'ní¬b²á²áz. man house-EPT P.3.drive 'The man drove up to the house.'

In each of the sentences (11a') through (11c'), a locational or directional phrase appears with a verb which "selects" it, in an intuitively clear sense. These sentences conform to the natural, or "basic" verb-final order of Navajo. Accordingly, the locational or directional phrase *precedes* the verb which selects it. The phrases at issue here consist of nominal expressions followed by one or another of the so-called "spatial enclitics" (AL 'allative', EL 'elative', EPT 'endpoint allative', LOC 'locative'). They correspond, clearly, to adpositional phrases in other languages. They belong therefore, to the category commonly represented by the phrasal abbreviation PP.

We will adopt this usage here and, furthermore, we will refer to the spatial enclitics as "(enclitic) postpositions", departing to some extent from normal Athabaskanist usage, for the sake of general cross-linguistic reference. Accordingly, we will use the abbreviation P for the spatial enclitics for present purposes (reserving RN, relational noun, for the traditional Athabaskanist "postposition").

Consider now the sentences (11a-c), that is to say, the first in each of the pairs in (11) above. In those sentences, the PP constituent is missing from its putative base position, and the enclitic postposition (P) itself appears attached to the pronominal clitic element -i- (PRN) suffixed to the verb word. Here again, the semantic relation holding between the members of each pair in (11) is accounted for very naturally under the assumption that the first member is derived by movement from an underlying representation in which the pronominal element PRN (with P, if present) appears in the basic preverbal position, as depicted in (12):

We extend this analysis to all cases of the polarity construction involving displaced PRN. We can assume that PRN, being a bound element, must attach to some head. This requirement is satisfied by movement to a position from which it can attach to the verb word, although we must suppose also that the particular target or landing site is determined by more fundamental linguistic principles. Though a number of possibilities suggest themselves, we will be concerned here primarily with limitations on the movement process, assuming it to be real for now, and we will be concerned eventually with some of the implications the process has in relation to the position of Navajo in a theory of Pronominal Argument (Jelinek, 1984; Jelinek and Demers, 1994) and Polysynthetic (Baker, 1996) languages.

The process involved in forming the polarity construction under consideration here exhibits behavior expected of an extraction operation. While "long extraction" is possible, it is not possible to extract over certain barriers or out of certain contexts. Putative long extraction is limited to movement out of direct discourse complements (cf. Kaufman 1974, Schauber 1979), as in (7d) above, repeated here as (13):

(13) Shi-zhé'é doo deesháᬠnízin-í-góó-da. my-father NEG F.1s.go P.3.want -PRN-AL-DA 'My father does not want to go anywhere.'

The clausal complement here represents a type which can be selected by the members of a small set of verbs of saying and thinking. Sentences having the essential structure of (13) are characterized not only by "direct discourse" personal deixis but also by the absence of an overt complementizer. Additional examples of extractions from direct discourse complements are given in (14) and (15):

(14) (a) Shi-zhé'é doo nahá¬nii' ní(n)-í-da. my-father NEG P.1st.buy 3.say-PRN-DA 'My father didn't say he bought anything.'
Cf.
(b) Shi-zhé'é chidí nahá¬nii' ní.
my-father car P.1st.buy 3.say
'My father said he bought a car.'

(15) (a) Shi-zhé'é doo ji-deeyá shô'ní(n)-í-góó-da my-father NEG 4.P-go 1s.P.3.regard-PRN-AL-DA 'My father doesn't think I'm going anywhere.'

(b) Shi-zhé'é Na'nízhoozhí-góó ji-deeyá shó'ní. my-father Gallup-AL 4-P.go 1sP.3.regard 'My father thinks I'm going to Gallup.'

In the (a)-sentences of (14-15), the gap which is construed with the verb-final dislocated pronominal enclitic clearly corresponds to a phrase selected by the embedded verb, not the main verb. That is to say, the gap in (14a, 15a) corresponds to the overt phrases selected by the subordinate verbs in the sentences without extraction, i.e., (14b,15b). Thus, it is reasonable to conclude that "long extraction" is involved here, as depicted in (16):

(16)
$$XP doo [S ... PRN(-P)...V] V -da$$

In this figure, we give the impression that the movement we have assumed is effected in one step, without interruption. This is not an impression we want to leave unchallenged. It could be, of course, that the extraction takes place in two stages, i.e., successive cyclically, with the PRN moving first to a final (non-overt) complementizer position associated with the embedded clause and then to its eventual surface location, also possibly a complementizer associated with the main clause. The evidence for one thing or the other is not overwhelming. In any event, we will consider next the relationship between extraction and the appearance of an overt complementizer.

By far the greatest number and variety of dependent clause constructions in Navajo involve the use of postverbal subordinating morphology which, we suppose, occupies the complementizer position in the syntactic structure projected for the relevant sentences. This morphology includes the nominalizing, referentially definite, enclitic morphology involved in the Navajo internally headed relative clause, as in (17), and Navajo expressions corresponding to factive complements in English and other familiar languages, as in (18). On relative clauses, this enclitic morphology comes in two forms, one involving reference to past events, states, or mentionings (e.g., $-2\acute{e}^2e \sim -2\acute{a}^2a$ in (17b, d) below), the other to non-past events, states, or mentionings (- $ig\acute{u}$ in (17a, c)); factives generally bear the second of these (as in (18)):

(17) (a) Shi-zhé'é b²i²ih néí¬'ah-ígíí dadiid²í²í¬. my-Fa deer I.3.butcher-REL F.1ns.eat 'We will eat the deer my father is butchering.'

- (b) Shi-zhé'é b²i²ih yiyiisxí(n)-²é²e nídeesh'ah. my-Fa deer 3.P.kill-REL F.1s.butcher 'I will butcher the deer my father killed.'
- (c) Bá'ólta'í KinÒání-d²é²é' naaghá(h)-ígíí 'ayóo sh-aa jooba'. teacher Flagstaff-EL I.3.come.from-REL very 1-to I.3.kind 'The teacher who comes from Flagstaff is very nice to me.'
- (d) Hastiin Na'nízhoozhí-góó naayá(h)-²á²a bi-¬ naashnish. man Gallup-AL P.3.go-REL 3-with I.1s.work 'I work with the man who went to Gallup (and returned).'
- (18) (a) K'ad 'ííní¬ta'-ígíí b-aa shi-¬ hózh²ó. now I.2s.sgo.school-REL 3-about 1-with I.A.good 'I'm glad that you are going to school.'
 - (b) 'Ad²á²ád²á²á' ¬²í²í' naníí¬go'-ígíí yínii'. yesterday horse 2s.P.3.throw-REL P.1s.hear 'I heared that the horse threw you yesterday.'

By contrast with direct discourse complements of the type represented by (13), relative clauses and factives are "opaque", resisting extraction from a position internal to them—thus, the following patterns are observed (illustrating first the relative clause, in (19-20)):

- (19) (a) Bee'eld²o²oh nahíní¬nii'-²é²e n-ee né'²í²í'.
 gun 3.P.2s.buy-REL 2s-post 3.P.1s.steal
 'I stole (from you) the gun you bought.'
 - (b)Doo bee'eld²o²oh nahíní¬nii'-²é²e n-ee né'²í²'-da. NEG gun 3.P.2s.buy-REL 2s-post 3.P.1s.steal-DA 'I didn't steal (from you) the gun you bought.'
 - (c) Doo ha'át'íí-da nahíní-nii'-²é²e n-ee né'²í²i'-da. NEG what-DA 3.P.2s.buy-REL 2s-post 3.P.1s.steal-DA 'I didn't steal (from you) whatever you bought.'
 - (d)*Doo _____ nahíní¬nii'-²é²e n-ee né'²í'-í-da. NEG ____ 3.P.2s.buy-REL 2s-post 3.P.1s.steal-PRN-DA
- (20) (a) Na'nízhoozhí-góó naayá(h)-²á²a yii¬ts²á.
 Gallug-AL P.s.go.sg-REL 3.P.1s.see
 'I saw the one who went to Gallup.

- (b) Doo Na'nízhoozhí-góó naayá(h)-²á²a yii¬ts²á²a -da. NEG Gallup-AL P.s.go.sg-REL 3.P.1s.see-DA 'I didn't see the one who went to Gallup.'
- (c) Doo háá-góó-da naayá(h)-²á²a yii¬ts²á²a-da. NEG where-AL-DA P.s.go.sg-REL 3.P.1s.see-DA 'I didn't see the one who went somewhere.'
- (d)*Doo _____ naayá(h)-²á²a yii¬tsá(n)-í-da. NEG ____ P.s.go.sg-REL 3.P.1s.see-PRN-DA

The relevant observation here, of course, is that the enclitic pronominal -i- (PRN) cannot be construed with the vacant position (sympolized _____) following the negative particle in the (d)-sentences of (19-20). The hypothetical "gap", theoretically the trace of the extracted enclitic, is inside a relative clause here, while its putative antecedent, the enclitic PRN itself, is outside that clause.

The same restriction is observed in relation to factive nominalizations, formally identical to internally headed relatives:

- (21) (a) Na'nízhoozhí-góó nisíníyá(h)-ígíí b-aa shi-¬ hózh²ó.

 Gallup-AL P.2s.go-REL 3-about 1s-with A.P.good
 'I'm happy about the fact that you went to gallup.'
 - (b)Doo N.-góó nisíníyá(h)-ígíí b-aa shi-¬ hózh²ó²o-da. NEG G.-AL P.2.go-REL 3-about 1s-with A.P.good.DA 'I'm not happy about the fact that you went to gallup.'
 - (c) Doo háá-góó-da nisíníyá(h)-ígíí b-aa shi-¬ hózh²ó²o-da. NEG where-AL P.2s.go-REL 3-about 1s-with A.P.good.DA 'I'm not happy about you having gone somewhere.'
 - (d)*Doo ____ nisíníyá(h)-ígíí b-aa shi-¬ hózhó(n)-í-góó-da. NEG ____ P.2s.go-REL 3-about 1s-with A.P.good-PRN-AL-DA

Here again, a gap within the nominalized clause cannot be construed with an antecedent outside that clause.

This restriction is not limited to nominalized clauses, since it is also observed with adjoined (adverbial) clauses of the type represented by (22) below. In general, in strictly observational terms, a gap cannot be construed with an antecedent "across an overt complementizer":

(22) (a) Shi-ye' hastl'ishítlizh-go hadeeshghaazh. 1s-son mud.P.3.fall-COMP P.1s.shout 'I shouted out when my son fell into the mud.'

- (b) Doo shi-ye' hashtl'ishítlizh-go hadeeshghaazh-da. NEG 1s-son mud.P.3.fall-COMP P.1s.shout-DA 'I didn't shout when my son fell into the mud.'
- (c) Doo háí-da hastl'ishítlizh-go hadeeshghaazh-da. NEG who-DA mud.P.3.fall-COMP P.1s.shout-DA 'I didn't shout out when someone fell into the mud.'
- (d)*Doo _____ hashtl'ishítlizh-go hadeeshghaazh-í-da. NEG ____ mud.P.3.fall-COMP P.1s.shout-PRN-DA

We are left now with the question of how this constraint should be explained. What is the principle which prevents an gap-antecedent relation here? And how are the (d)-sentences of (19-22) different in nature from the direct discourse complements of (13-14), where the hypothetical "long extraction" is allowed to relate a gap to an antecedent in a higher clause? There are two obvious possibilities: (i) the ill-formed sentences of (19-22) violate subjacency, the overt complementizer reflecting the presence of a barrier for extraction, absent in the complementizerless direct discourse complement; (ii) the ill-formed sentences are so because they violate the Condition on Extraction Domains (CED; Huang, 1982)—nominalized clauses, like adverbials, are adjuncts, opaque to government and hence to extraction, while direct discourse complements are truly *complements*, transparent to government (*ceteris paribus*).

We will return to this question later. For now, however, we should point out, as an aside, that the slightly degraded (c)-sentences of (19-22) suggest that the principles accounting for the ill-formedness of the (d)-sentences, with apparent overt extraction, are also implicated in the semantics of Navajo *in situ* h-words in relation to negation. These elements do not have their usual polarity function, being interpreted rather as indefinites, in structures in which an overt complementizer separates them from the negative (NEG) particle. Again, depending on the answers to certain well-known theoretical questions, this could be a subjacency effect or a CED effect.

For present purposes, we will be content to point out that the facts surrounding the relation between the enclitic PRN element and the gap with which it is associated is consistent with the syntactic movement hypothesis suggested earlier. There is a dependency between an overt element (PRN) and a gap, hypothetically a trace, which is what we will take it to be henceforth. That is to say, there is the expected "displacement". An element appears in a position which it is reasonable to assume is different from its d-structure position; thus, for example, a postposition appears in a position removed from the preverbal position in which it is "selected"; and, by extension, a "bare PRN" is likewise found in an A-bar position, removed from the argument position in which it is governed and selected by the verb. Moreover the observed gap-antecedent relation is limited by principles typically involved in blocking extraction. All of this smacks clearly of movement, and we will consider this issue essentially closed for the purposes of the present discussion (see also Kaufman 1974 and Schauber 1979,

where the same conclusion is reached in relation to the identical gap-antecedent relation observed in certain Navajo indirect question constructions).

We turn now to a brief consideration of certain technical questions raised by the movement hypothesis. What is the nature of PRN? And what is the nature of the position to which it moves? These are related questions, since if PRN is a head, its landing site is presumably likewise a head; if it is a maximal projection, then its landing site is presumably a structural position (specifier, complement) to which a maximal projection may move. We know that PRN is morphologically enclitic at surface structure; but this does not, of course, preclude the possibitity that it is a maximal projection at d- and s-structures. In favor of the idea that PRN is a maximal projection is the fact that it undergoes "long movement" leaving intermediate heads behind (e.g., V and various functional heads c-commanding V, as well as N, as we shall see presently). This, in and of itself, is enough to eliminate the alternative, since the Head Movement Constraint, precluding precisely this, is generally exceptionless in natural language (Travis, 1984). Thus, the appearance of PRN in a canonical "head position" (final in Navajo) is a purely morphological fact, essentially accidental in relation to strictly syntactic considerations. The "pied-piping" of spatial enclitics (P) is consistent with either hypothesis.

We will assume the analysis according to which PRN is a maximal (i.e., phrasal) projection and that it is motivated by the same factors that motivate overt syntactic movement of [+Wh]-phrases to the Spec position of a [+Wh] complementizer in linguistically well-known cases. We cannot explain why this movement is *non*-overt in the case of Navajo h-words (but see Schauber, 1979, for optional overt lefward movement of h-words in questions in some Navajo speech). Be this as it may, PRN movement is overt and obligatory, and it is constrained in accordance with well-known limits on extraction.

What now can be said about this polarity construction and the question of the position of Navajo in relation to the typological distinction drawn around polysynthesis and nonconfigurationality in recent work (Baker, 1996; Jelinek, 1984)?

First, it is clear that the existence of a movement rule is perfectly consistent with the Polysynthesis Parameter (of Baker, 1996) which, while precluding the appearance of an overt nominal expression in an argument position, specifically permits the appearance there of an empty category, including the trace of movement. On the other hand, we have not considered the full range of structures in which PRN-movement applies. Specifically, we have not considered one class of cases in which movement directly confronts the issue of polysynthesis and the pronominal argument parameter.

Overt nominals, in particular the "thematic arguments" of verbs and other argument-taking heads, cannot appear in core argument positions at s-structure. Instead, they must appear in adjunct (A-bar) positions. We will assume, with Baker (1996), and without further comment, that this is to be explained in relation to the "licensing" function of Case. Core argument positions are not positions to which Case can be assigned; hence, empty categories are permitted there, while overt nominals are precluded. Overt nominals are permitted in adjunct positions, on the other hand, presumably because Case is not required there, and their thematic

relations are satisfied through a "linking" relation with their associated core argument positions. Linking is accomplished in virtue of the antecedent-trace relation, in the case of movement, and in the case of basic adjuncts, through an inherent linking relation between argumental *pro* elements and base-generated adjunct nominals.

We now have a prediction. If a language is polysynthetic, then overt nominals in it are adjuncts, and extraction from a nominal expression is impossible, by the CED. If this is in fact the case in Navajo, then Navajo is possibly polysynthetic in Baker's sense. We have seen that extraction out of a nominalized clause is impossible (cf. the (d)-sentences of (19-21) above), but this is possibly due to subjacency and, hence, irrelevant to the issue at hand. Consider now the following examples:

(23) (a) Doo shi-zhé'é bi-l²í²í' yii¬ts²á²a-da. NEG 1s-father 3-horse P.1s.see-DA 'I didn't see my father's horse. (b)Doo háí-da bi-l²í²í' yii¬ts²á²a-da. NEG who-DA 3-horse P.1s.see-DA 'I didn't see anyone's horse.' (c) Doo ____ bi-l²í²í' yii¬tsá(n)-í-da. NEG 3-horse P.1s.see-PRN-DA 'I didn't see anyone's horse.' (24) (a) Doo si-tsilí bi-lééch²a²a'í shishxash-da. NEG 1s-YBro 3-dog 1s.P.3.bite-DA 'My younger brother's dog didn't bite me.' (b)Doo háí-da bi-lééch²a²a'í shishxash-da. NEG who-DA 3-dog 1s.P.3.bite-DA 'No one's dog bit me.' (c) Doo _____ bi-lééch²a²a'í shishxash-í-da. NEG _____ 3-dog 1s.P.3.bite-PRN-DA 'No one's dog bit me.' (25) (a) Doo shi-nálí bi-ye' Na'nízhoozhí-góó deeyáa-da. P.3.go-DA NEG 1s-OBro 3-son Gallup-AL 'My elder brother's son isn't going to Gallup.' (b) Doo háí-da bi-ye' Na'nízhoozhí-góó deeyáa-da. NEG 1s-OBro 3-son Gallup-AL P.3.go-DA 'No one's son is going to Gallup.' (c) Doo ____ bi-ye' Na'nízhoozhí-góó deeyá(h)-í-da.

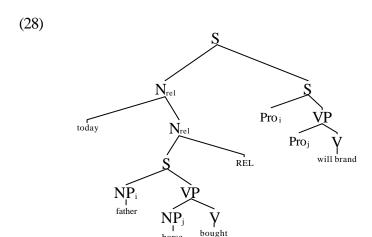
The crucial cases here are the (c)-sentences on the view that movement is involved in producing their s-structure forms. Of course, the central question is the nature, not of the landing site of PRN, unremarkable here, but of the point of origin—i.e., the position of the gap, or trace. If, as is generally assumed, the trace (corresponding to the possessor argument in the possessive constructions) is *internal* to a nominal expression, then the status of Navajo as a polysynthetic language is in question. If the s-structures corresponding to the (c)-sentences involve the profile depicted in (26), then we have extraction from a nominal constituent:

If overt nominals are adjuncts, then (26) is impossible, being a CED violation—PRN is extracted from DP, an adjunct, by hypothesis. If (26) is the correct analysis of the (c)-sentences of (23-25), which are grammatical, then Navajo is not a polysynthetic language in the sense of Baker.

This result might be seen as conflicting with evidence which has been cited from relative clause structures in Navajo. The evidence at issue includes data of the type represented in (27) below, originally pointed out by Ellavina Perkins (Hale, Tsosie-Perkins, *et al.* 1977; and cf. Platero, 1982, and Speas, 1990, for discussions of a analogous structures):

(27) [J²í²íd²á²á' shi-zhé'é ¬²í²í' nayiisnii'-²é²e] yí'didoo¬i¬. day.past 1s-father horse 3.P.3.buy-REL 3.F.3.brand. 'My father, will brand the horse he, bought (earlier) today.'

Sentences of this type are subject to a number of interpretations, but the translation given corresponds to a prominent reading—the most prominent, for some speakers. Crucially, on this interpretation, the subject of the final verb is non-overt—i.e., pro by hypothesis—and it is coreferential with the overt nominal argument shi- $zh\acute{e}$ ' \acute{e} 'my father' appearing internal to the bracketed relative clause—i.e., internal to the object of the final verb. This is theoretically possible under either of two conditions: (i) Navajo is a polysynthetic language, in which the relative clause (an overt nominal expression) is an adjunct, while the core arguments are non-overt pronominals (pro) occupying in the core subject and object position; or (ii) Navajo is a standard configurational language (cf., Speas, 1990), with the usual null-pronominal possiblities of languages with rich agreement, and in which relative clauses have the option of appearing as adjuncts, as in standard dislocation constructions. In either case, a relative clause (symbolized N_{rel} in (28) below), with overt nominals (NP_i and NP_j), will occupy a position which is, in the relevant respects, external to the main clause and therefore outside the c-command domain of any of the arguments of the main verb (i.e., Pro_i , the subject, and Pro_j , the object):



It follows, then, that there can be no Condition C violation in this situation (cf., Baker, 1996; Chomsky, 1981). On the other hand, if the relative clause of (28) occupied the object position within the main clause (i.e., if it appeared in place of Pro_j), then the main clause subject (Pro_i) would c-command an R-expression with which it is coindexed (the overt nominal NP_i)—this would be a clear Condition C violation. There is more to this than meets the eye, however.

So far as we can tell, the "problem" illustrated by (27) is specific to internally headed relative clauses, and especially sentences which, like (27), consist of main and subordinate clauses are "GF-parallel"—that is, in which the main and subordinate clauses share arguments of the same grammatical function.

Where such parallelism is not present, as in the following sentences with (bracketed) factive complements (ignoring for present purposes the problem of identifying true parallelism in the relevant sense), a *pro* subject in the main clause cannot be interepreted as coreferential with an overt nominal in the embedded factive clause, hence:

- (29) (a) [Yisk²á²ago ni-tsilí nih-aa doogá¬-ígíí] y-ee shi-¬ hoolne'. tomorrow 2s-YBr 1ns-to FUT.3.go-REL 3-of 1s-with 3.P.tell '(S)he; told me about your younger brother; coming to us tomorrow.'
 - (b) [Yisk²á²ago ni-tsilí nih-aa doogá¬-ígíí] b-aa bi-¬ hózh²ó. tomorrow 2s-YBr 1ns-to FUT.3.go-REL 3-about 3-with A.P.good '(S)he; is happy about your younger brother; coming to us tomorrow.'

The factive complements here exhibit the behavior expected of core arguments, not that of adjuncts. This is clear immediately for (29a), whose main verb takes a standard subject argument which, whether overt or non-overt, would c-command the embedded factive clause—the latter is the grammatical object of the relational noun expression y-ee 'about it'. The same c-command relation holds in (29b), though less obviously so, since this is an inverse construction—the experiencer is raised from the complement position within the relational noun expression bi- \neg 'with him/her'. Since coreference between ni-tsili 'your younger brother' and

the relevant non-overt main clause argument is not possible, we must assume that the option available for relative clauses like (27) is not available for factive clauses, despite their nominal morphology. In this respect, these factives behave like the possessive nominal constructions of (23-25) above. But this is not a property of factives, *per se*; it has to do rather with GF-parallelism. Thus, where the GF relations are parallel, as in (30) below, the relevant cross-clausal coreference is possible:

(30) [Yisk²á²ago shi-zhé'é shi-má y-íká-'adoolwo¬-ígíí] y-ee yi-¬ hoolne'. tomorrow 1s-Fa 1s-Mo 3-for-FUT.3.run-REL 3-of 3-with P.3.tell 'My father,' told my mother he,' would help (lit. about his,' helping) her tomorrow.'

As in the case of (27), so also here on the reading given, the subject of the main verb is non-overt and coreferential with the overt subject of the embedded factive clause.

Speas (1990) has argued that parallelism is the factor which is relevant in complex sentences of the type represented by (27) and (30), and in other comparable cases in which non-overt arguments are construed with heteroclausal overt arguments. She proposes the following Parallel Function Constraint on interpretation (Speas, 1990:232):

(31) In a construction in which an embedded clause is dislocated and adjoined to the matrix clause, interpret *pro* in a given clause as coreferent with the NP which bears the same GF in the other clause.

This will account for the relevant interpretation of (27), and assuming that the relative clause there is dislocated, i.e., an adjunct, there is no Condition C violation. However, GF parallelism is logically independent of dislocation or adjunction. Consider the parallelism constraint autonomously, as in (32):

(32) In a complex construction, interpret *pro* in a given clause as coreferent with the NP which bears the same GF in the other clause.²

This version will apply to give the relevant interpretation of (27) whether the relative clause is adjoined, as in (28), or in the core object position (i.e., the position occupied by Pro_j in that structure). In the second case, of course, a Condition C violation results. But the parallelism principle could, in fact, be "strong enough" or override the otherwise inviolate Binding Theory principle.

² This is sufficient for the direct construction. An adjustment will have to be made for the inverse (Subject-Object-Inversion) construction, however (cf., Platero, 1978, 1982). Consider, for example, the interpretation which results if the verb of the factive clause in (30) is changed to the bi-form (the inverse), giving b- $ik\acute{a}$ -'adoolwo 'x will help y_i , y_i will be helped by x'. In this case, the non-overt subject of the main clause is coindexed with the overt (fronted) object of the factive clause, i.e., shi- $sh\acute{e}$ ' \acute{e}_i 'my father'. Here 'my father', not 'my mother', is the person to be helped; but it is still 'my father' who communicates the content of the factive clause to 'my mother'.

In relation to our basic question—polysynthesis versus standard configurationality—we are left with the following logical possibilities:

- (33) (a) All overt nominal arguments occupy core argument positions.
 - (b) All overt nominal arguments are adjuncts (linked to *pros* in core argument positions).
 - (c) Some overt nominal arguments (e.g., certain clausal ones) are adjuncts; all others are in core argument positions.

If (33a) is correct, then (32) operates in some cases *in spite of* Condition C. If (33b) is correct, then Condition C is never obtruded by (32). If (33c) is correct, (32) may operate without violating Condition C.

If the Parallel Function Constraint is correct, and we believe it is (in some form or other; cf., Platero, 1978, 1982, for discussion of certain interpretive strategies), then, with the possible exception of the extraction of possessors (as in (23-25)), the evidence we have considered in this paper does little to decide the issue of Navajo polysynthesis and standard configurationality. It will be necessary to determine the correctness of one or another of the structural arrangements in (33); and to do that, we must look elsewhere—for example, the kinds of arguments presented by Speas (1990:237-240, and elsewhere) in favor of (33a, c), and the kinds of arguments presented by Jelinek (1984, 1995, and elsewhere) in favor of (33b) and pronominal argument grammar.

References

- Baker, Mark: (1996) The Polysynthesis Parameter. Oxford University Press.
- Chomsky, Noam: (1981) Lectures on Government and Binding. Foris.
- Hale, Kenneth, Ellavina Tsosie-Perkins, Richard Demers, and Dorothy Shank: (1977) *The Structure of Navajo (Course Notes)*. University of Arizona manuscript.
- Jelinek, Eloise: (1984) "Empty categories, case, and configurationality." *Natural Language* and Linguistic Theory 2:39-76.
- Jelinek, Eloise: (1995) "Pronoun classes and focus." University of Arizona manuscript.
- Jelinek, Eloise, and Richard Demers: (1994) "Predicates and pronominal arguments in Straits Salish." *Language* 70:697-736.
- Kaufman, Ellen. (1974) "Navajo spatial enclitics: a case for unbounded rightward movement." Linguistic Inquiry 5:507-33.
- Platero, Paul: (1978) Missing Noun Phrases in Navajo. MIT Doctoral Dissertation.
- Platero, Paul: (1982) "Missing noun phrases and grammatical relations in Navajo." *IJAL* 48:286-305.
- Schauber, Ellen. (1979) *The Syntax and Semantics of Questions in Navajo*. New York: Garland.
- Speas, Margaret J. (1990) *Phrase Structure in Natural Language*. Dordrecht/Boston/London: Kluwer Academic Publishers.
- Travis, Lisa (1984) *Parameters and Effects of Word Order Variation*. Cambridge, Massachusetts: MIT Doctoral Dissertation.