

ASPECTS OF NAVAJO VERB MORPHOLOGY AND SYNTAX:  
THE INCHOATIVE

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Navajo Language Academy Linguistics Workshop

The Navajo inchoative is a fully productive aspectual form having the semantics of inception, or starting, as reflected in the translations given to the following examples, taken from Young and Morgan (1980, 1987):

(1) (a) Ahbíní<sup>2</sup>á<sup>2</sup>á' shimá sání aghaa' -izhiní yi'niidiz. (Y&M80D:218)

'This morning my grandmother started to spin the black wool.'

(b) K<sup>2</sup>o' bi'niisol nít'éé' shimá doo da ní ... . (Y&M80D:218)

'I started to blow on the fire but my mother told me not to ... .'

(c) Kóhoot'ééd<sup>2</sup>á<sup>2</sup>á' índá gohwééh bi'niishdl<sup>22</sup>á<sup>2</sup>á'. (Y&M80D:219)

'It wasn't until last year that I started to drink coffee.'

The position of the inchoative within the Navajo aspectual system is discussed by Carlota Smith (1996); our concern in the present discussion is with its morphosyntax. The inchoative is correctly classified as an inceptive in Smith's work, though we will adhere to the terminological practice of Young and Morgan (1980, 1987), using the term "inceptive" more broadly for the full range of prefixal elements having approximately the semantics suggested by that term, including not only the inchoative, but *ha-* (Position Ia) and *d-* (Position VIa) as well.

The constant element in the morphology of the inchoative is a prefix complex of the form -'nii- (the long vowel sometimes modified through assimilation). For convenience, we can treat this as a single prefix. In actuality, however, it consists of three parts—namely, (i) the Position IV indefinite object prefix ' (glossed 3i in Young and Morgan), functioning here as a thematic element; (ii) the Position VIc prefix *n-*, glossed "inceptive" by Young and Morgan; and (iii) the Position VI d prefix -*ii-*, glossed "punctual" (Young and Morgan, 1980G:320-321). This composite prefix, like Position VI aspectual prefixes generally, belongs to the functional category E in the analysis proposed in (Hale, 1997 workshop). Except where its internal make-up is particularly relevant to the discussion, we will cite the inchoative in its composite form -'nii-, and we will gloss it INCH.

Related to its aspectual function is a dependency between the inchoative and the verb stem, which must be drawn from the momentaneous aspect set,

with its characteristic pattern of alternation for the different modes, as in the following inchoative forms of the verb *-dlʔá* 'drink', the perfective of which is exemplified in (1c)—interlinear glossing is supplied, and the corresponding non-inchoative is given to the right for comparison. The ordering of the modes is as in Young and Morgan (1980D):<sup>1</sup>

(2) (a) bi- 'nii-sh-dlʔíh [I] 3-INCH-Ø.1SG-dCL.drink.MI	(a') yish-dlʔá [CI] Ø.1SG-dCL.drink.CI
(b) bi-ná- 'nii-sh-dlʔíh [R] 3-R-INCH-Ø.1SG-dCL.drink.MU	(b') ná-sh-dlʔíh [R] R-Ø.1SG-dCL.drink.MU
(c) bi- 'nii-sh-dlʔáʔ [P] 3-INCH.PERF-1SG-dCL.drink.MP	(c') yi-sh-dlʔáʔ [P] PERF-1SG-dCL.drink.MP
(d) bi-dí- 'néé-sh-dlʔíh [F] 3-F-INCH-PROG.1SG-dCL.drink.MF	(d') dee-sh-dlʔíh [F] F.PROG-1SG-dCL.drink.MF
(e) bi- 'noo-sh-dlʔáʔ [O] 3-INCH.OPT-1SG-dCL.drink.MO	(e') wó-sh-dlʔáʔ [O] OPT-1SG-dCL.drink.MO

These morphological characteristics, and their aspectual associations, are important for a complete account of the inchoative. We mention them here not as a primary focus of our attention but simply by way of setting forth the observable formal features which identify the construction. However, there is another persistent morphological property of the inchoative which will play a central role in this discussion. We turn to this now.

The inchoative must always be preceded by overt object agreement morphology, a fact exemplified in part by the forms in (2).<sup>2</sup> The inchoatives (2a-

<sup>1</sup>The following abbreviations are used in glossing Navajo forms: 1, 2, 3 'first, second and third person'; Ø 'zero imperfective'; AGR 'agreement', AGRs, AGRo 'subject agreement, object agreement'; CI 'continuous imperfective'; CL 'classifier', dCL 'd-classifier'; D 'determiner'; E 'nucleus defining the forward *edge* of the conjunct prefix system, i.e., position VI and associated object, deictic elements prefixed to that position'; F 'future'; I, IMPERF 'imperfective'; INCH 'inchoative'; M 'mode'; MI, MP, etc. 'momentaneous imperfective, perfective, etc.'; O, OPT 'optative'; P, PERF 'perfective'; PROG 'progressive'; R 'repetitive'; SG 'singular'; U 'usitative'; V 'verb'; VP, DP, MP, EP 'the maximal projections of the categories V, D, M, E'.

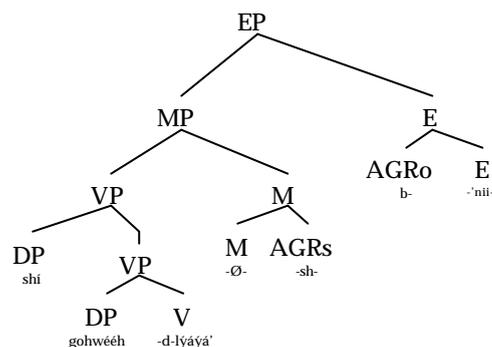
<sup>2</sup>There is an interesting quirk in the behavior of the objective agreement morphology in the inchoative (cf., Young and Morgan, 1980G:320-321). Normally, objective morphology is in Position IV. However, the first element in the inchoative complex, i.e., the indefinite (3i), occupies that position. The conflict is resolved in part by "bumping" the objective prefix (corresponding to an argument of the verb) leftward into the disjunct prefix Position I (see (2b) above). Certain Position I prefixes block this, in which case the objective prefixes appear in their standard position.

e) show overt object agreement (third person there), in contrast to the simple non-inchoatives (2a'-e') which follow the usual pattern according to which third person object agreement in Position IV is non-overt (null) when the subject is first or second person. In this respect, the inchoative prefix complex behaves like an "incorporated" postposition—by definition, a postposition requires overt agreement.<sup>3</sup>

The verbs of (1) are transitive and, other things being equal, the syntactic structure they project will include an object and, consequently, will also implicate object agreement. The following is the underlying structural configuration associated with the syntactic projection of the verb of (1c), assuming the structural projections proposed in Hale (1997 workshop):

(3) (a) *Shí gohwééh bi'niishdl<sup>2</sup>á'á'*.  
'I started to drink coffee.'

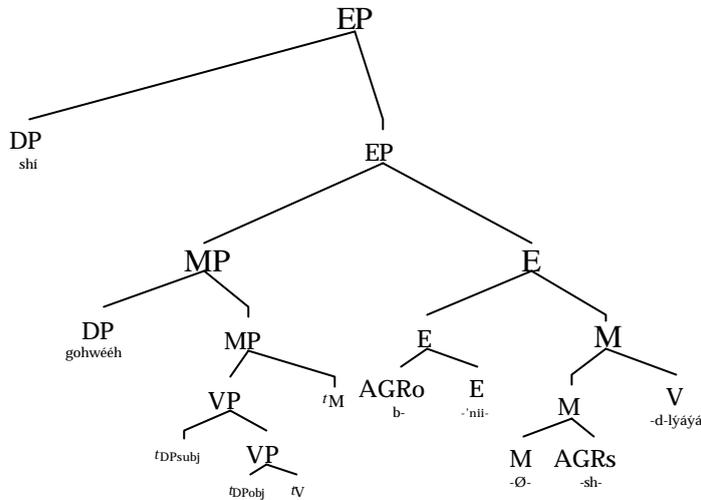
(b)



The subject DP, *shí*, being adjoined to VP, is in the position required to "check" subject agreement in M. The object DP, *gohwééh*, on the other hand, must raise and adjoin to MP, from which position it can check object agreement in E. The Extended Projection Principle is satisfied by raising the subject and adjoining it to EP. The verb word itself is assembled by means of Head-Movement, adjoining V to the right of M and the latter to the right of E. This derivation is standard, giving (4), the structure corresponding more or less directly to (3a):

<sup>3</sup>This is overstated slightly, and irrelevantly, inasmuch as some postpositions accept incorporated bare noun objects. In any event, a postposition necessarily combines with morphology representing its complement (object), be this agreement or the nominal head incorporated. See Speas (1988) for a very suggestive proposal which would unite these two means of satisfying the postpositional requirement. She argues that it is incorporation in both cases, analyzing the third person objective morphology *b-* as an incorporated pronoun.

(4)



Many so-called "unergative verbs" in Navajo are explicitly transitive, supporting an argument structure in which the inner argument is represented by the indefinite object, realized in the verb word by means of the IV object prefix '- , the now familiar IV prefix glossed 3i, but viewed as a thematic prefix in the Navajo literature in recognition of its status as an inherent component of such unergative verb themes as '- $\neg$ -h<sup>2</sup>á<sup>2</sup>á' 'snore', '-l-zhish' 'dance', '- $\neg$ -hosh' 'sleep', illustrated in (5), in their plain, non-inchoative use:

(5) (a) Shahastiin t'ée'go 'ayóo 'a-h<sup>2</sup>á<sup>2</sup>a'go biniinaa nááná-ah góne' nishtééh. (Y&M80D:126)

'I sleep in a different room because my husband snores so much'

(b) Ndáa'di Hastiin Nééz bitsi' bi- $\neg$  'eeshzhiizh. (Y&M80D:131)

'At the War Dance I danced with Mr. Long's daughter.'

(c) 'Ashhoshgo t'ízi shich'ahk'<sup>2</sup>i'<sup>2</sup>i'í y<sup>2</sup>é<sup>2</sup>e sits'<sup>2</sup>á<sup>2</sup>á' yiyí-chozh lá. (Y&M80D:126)

'While I was sleeping the goat ate my straw hat.'

Although it is an integral part of the lexical representation of these verbs, and hence cannot alternate there with other object agreement prefixes, the indefinite object morphology '- nonetheless qualifies as the object agreement required by the inchoative, just as it would in the case of an ordinary transitive verb:

(6) (a) 'I nii-h<sup>2</sup>á<sup>2</sup>á' nít'ée she'esdzáán ch'éeshinísid. (Y&M80D:470)

'My wife awakened me when I started to snore.'

(b) K'ad ndishnígo ... 'índa 'idí'níilzhish. (Y&M80D:471)

'When I say 'now' ... you'll start to dance.'

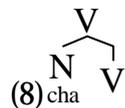
- (c) 'T'niishháásh. (Y&M80G:320)  
 'I am in the act of starting to sleep.'

There are two types of unergative verb in Navajo. The type just illustrated is explicitly transitive, as noted. The second type, by contrast, is not explicitly transitive, at least in the sense that, under ordinary conditions, no overt indefinite object morphology appears. Interestingly, however, in the inchoative of these verbs, the indefinite object morphology ' appears, thereby satisfying the object agreement requirement. One such verb is *-cha* 'cry', exemplified here, first in the simple non-inchoative form (7a), and then in the inchoative (7b):<sup>4</sup>

- (7) (a) Shimósí yázhí chidí bik'i ch'élwodgo baa yícha. (Y&M80D:779)  
 'I cried over my kitten when it was run over by a car.'

- (b) Hi-íijʔʔi'go 'awéé' 'iná'niichah. (Y&M80D:470)  
 'When it gets dark the baby starts to cry.'

In Hale and Platero (1996) it is proposed that all unergatives are fundamentally transitive, including those belonging to the type represented by *-cha* 'cry'. According to the idea developed in that paper, these verbs are denominal, arising through conflation of a bare noun (in this case, *cha* 'weeping, crying') with a phonologically null verb. Abstracting away from the conflation process itself, the basic form of the verb *-cha* is as follows:



This is precisely the lexical argument structure of a canonical transitive verb, the bare nominal being the direct object.

Our motive for making this suggestion came from the study of transitivity alternations (cf. also Hale, 1997 workshop). If transitivity is indeed a core property of these unergatives, and if, as generally assumed, conflated (or incorporated) nominals are indefinite, there is a good chance that the appearance

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<sup>4</sup>In some cases, the presence of the indefinite object morphology in the inchoative is masked by haplology. The verb theme *so=d-l-zin* 'pray, say a prayer', for example, contains the Position I disjunct prefix *so-*, having to do with prayer. This prevents the object prefix from moving from position IV into Position I, as would normally happen under "pressure" from the thematic ' inherent to the inchoative (cf. (7b)). As a result, the objective ' remains in Position IV, giving rise, hypothetically at least, to the sequence '-'- which reduces to a single glottal stop, as in *sodi'niiszin* 'I started to pray'.

of indefinite object agreement ' - in the inchoatives of verbs like *-cha* 'cry' can be explained. The explanation is not straightforward, however, and we will postpone our implementation of it to another occasion. Though we are not yet certain *how* unergatives of this type introduce the indefinite object agreement into the inchoative theme, we understand, in part at least, *why* they must do it. Unlike the unaccusatives to be discussed directly, unergative verbs do not project a specifier, and hence do not have an argument in that position. Given that their complement is conflated with the verb, there is no argument around which can enter into the agreement relation in the normal way. Use of indefinite agreement is a reasonable alternative.

We turn now to the class of Navajo verbs which can be said to be truly intransitive, in that they take just a single argument and give no indication of a second argument lurking in the verbal morphology. The following sentences exemplify this class of verbs:

(9) (a) Chizh 'ádin léi' biniinaa t'l'éeéd<sup>2</sup>á<sup>2</sup>á' yishdlóohgo yisk<sup>2</sup>á ... : (Y&M80D:781)  
 'I was freezing to death all night ... because there was no firewood.'

(b) T'áadoo 'ashání táá' nídeezidgo biniinaa ségan. (Y&M80D:781-2)  
 'I got very skinny because I didn't eat for three months.'

(c) Haid<sup>2</sup>á<sup>2</sup>á' ndeiilzheehgo k'asd<sup>2</sup>á<sup>2</sup>á' sistin. (Y&M80D:790)  
 'Last winter when we were out hunting I nearly froze.'

(d) 'Abe' nahá-nii' nít'éeé' ... sits'<sup>2</sup>á<sup>2</sup>á' yíchx<sup>2</sup>o' lá. (Y&M80D:758)  
 'I bought some milk but it went sour on me ... .'

(e) Ts<sup>2</sup>íi-go dínéeshk'ah ch'éeéh nisin. (Y&M80D:659)  
 'I'd like to put on weight quickly but I can't.'

In Hale and Platero (1996), verbs of the type exemplified in (9) are assumed to be "unaccusative" (cf., Levin and Rappaport, 1995) on the basis of their ability, semantics permitting, to participate in the simple transitivity alternation, giving pairs like *-gan/-ṽ-gan* 'dry (intransitive/transitive)', *-chx<sup>2</sup>o<sup>2</sup>oh/-ṽ-chx<sup>2</sup>o<sup>2</sup>oh* 'ruin, spoil (intransitive/transitive)', and the like. However, it is the intransitive variant, exemplified in (9), that is of interest here.

In the verbal projections seen in (9), the single argument is the s-structure subject, clearly, being represented by standard subject agreement in the mood (M) component of the verb word. In this respect, the agreement pattern observed in the inchoative of these verbs is perhaps somewhat unexpected:

(10) (a) K'ad<sup>22</sup>e<sup>2</sup>e hai-kaahgo shiná'niidlóoh, 'áko déédíshjah. (Y&M80D:217)  
 'I start to get cold about dawn, so I rekindled the fire.'

(b) Da'ahijig<sup>2</sup>á<sup>2</sup>adi 'atah shi'disnáago naaki nídeezidgo  
 shi'niigan. (Y&M80D:217)  
 'When I was taken prisoner in the war I started to become skin and  
 bones in two months.'

(c) Chidí bikee' hasht'énáshdlééh nít'ée' shíla' bi'niitin ... . (Y&M80D:220)  
 'While I was fixing a tire my hands started to get cold (lit. freeze) ... .'

(d) Díí 'ats<sup>2</sup>i' bi'niichx<sup>2</sup>o'. (Y&M80D:217)  
 'This meat has started to spoil.'

(e) Shil<sup>2</sup>í' t'áá 'ákwií j<sup>2</sup>í tí'oh bá nináshjo-go 'índa bi'niilk'aii. (Y&M80D:217)  
 'I fed my horse hay every day and he started to get fat.'

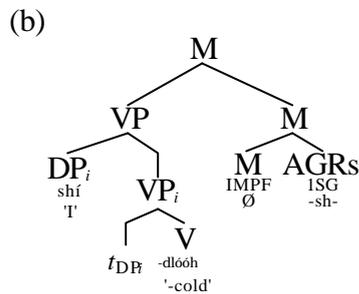
Here, the single argument of these unaccusative verbs is represented by object agreement, not subject agreement. Consequently, Position VIII, the standard locus of subject agreement, is entirely empty in the verbs of (10), as can be appreciated by observing the first person forms. Compare the following first person forms:

(11) <i>Non-Inchoative</i>	<i>Inchoative</i>	
yishdlóoh	shi'niidlóoh	'become cold'
yishgan	shi'niigan	'become dry, skinny'
nishk'ah	shi'niilk'ááh	'become fat'
haashtih	shi'niitih	'become old'
daastsaaah	shi'niitsaaah	'die, get sick'

Clearly, at the superficial level of representation, there is a shift from subject agreement to object agreement. In the inchoative, the subject is construed "eccentrically" with the morphology normally construed with an object. We maintain, however, that there is no diathesis change here—the subject does not "become" the object.

The essential features of the syntactic structure of the non-inchoative first person verb form *yishdlóoh* 'I become cold, freeze', is represented in (12b) below:

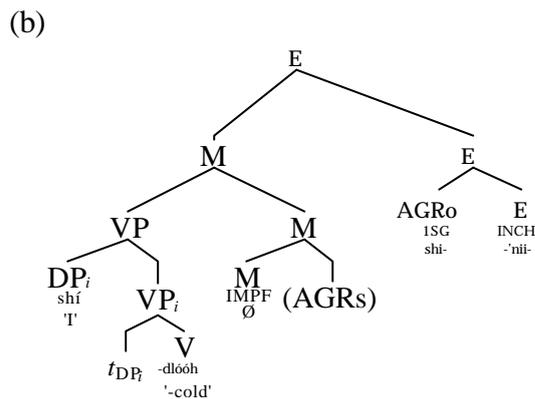
(12) (a) Shí yishdlóóh.



The subject in this form appears in its "normal" position, i.e., as an adjunct to the verb phrase (VP), in line with a common interpretation of the VP-internal Subject Hypothesis (cf. Koopman and Sportiche, 1991).<sup>5</sup>

Now consider the essential features of the corresponding inchoative:

(13) (a) Shí shi'niidlóóh.



The subject, we assume, occupies fundamentally the same position as in the non-inchoative. Normally, the subject would be construed with agreement (AGRs) in the mood complex (M). Here, however, there is a more urgent need, namely that of the inchoative complex in E. The inchoative, so to speak, demands object agreement, and this requirement is evidently paramount, forcing the subject to be construed with object agreement in E, AGRo, overriding the "normal" construal with subject agreement in M. Subject agreement can be overridden, presumably, because that position can be empty, as it is regularly in

<sup>5</sup>For reasons we will not go into here (cf. Hale and Platero, 1996; Hale, 1997 workshop), the subjects of unaccusatives are assumed to be raised from a specifier position within the VP, as indicated by the trace in (12b). The trace there is properly a specifier, not a complement, a fact which is obscured in this abbreviated representation.

persons other than first or second (i.e., in the third, fourth, spatial, and indefinite persons).

Thus, the eccentric agreement observed in the inchoative is clearly due to the morphosyntactic requirement of the inchoative complex in E—object agreement must be checked there. Unaccusatives have just one argument; consequently that unique argument must check object agreement, rather than subject agreement as would otherwise be the case. There are at least two scenarios according to which this could be accomplished. In both, subject agreement can be overridden, as suggested. What is left is the locality problem. The functional head E—the seat, or host, of object agreement—is not local in relation to the subject; there is an intervening head, M. Whether M projects a barrier to agreement in this situation is an empirical issue. If it does not, then the simplest scenario is sufficient—the subject checks object agreement *in situ*. If M projects a barrier to agreement, then the scenario is slightly more complex—the subject must raise and adjoin to MP, from which position object agreement in E can be checked.

Let us consider now the interaction of the inchoative with areal agreement morphology in E ( $h^w$ -, written *hw-*, *ho-*, *ha-*, and glossed 3a in Young and Morgan, 1980, 1987). The following sentences illustrate this element in progressive, non-inchoative, verb forms:

- (14) (a) Shidá'ák'eh bich'zi' tó bá hweeshdla- ní'ée' ... (Y&M80D:463)  
'I was in the process of cutting a furrow to my field [for water] ... '
- (b) 'Áád<sup>2</sup>é<sup>2</sup>é' hoo-t<sup>2</sup>í'í-. (Y&M80D:461)  
'Here comes the rain.'

And the following exemplify these same verbs in the inchoative:

- (15) (a) 'Ahbíníd<sup>2</sup>á<sup>2</sup>á' 'índa dá'ák'ehdi 'aho'nii-dláád. (Y&M80D:72)  
'This morning, I started plowing in the field.'
- (b) 'A-né'é'ááh dóó bik'ij<sup>2</sup>i' 'anáho'nii-t<sup>2</sup>í'íh t'áá 'ákwíj<sup>2</sup>í. (Y&M80D:72)  
'It starts to rain every afternoon.'

We are not sure of the proper analysis of these forms, the problem being that of determining precisely what element is satisfying the object agreement requirement of the inchoative. Is it the areal morphology *ho-* (<  $h^w$ -)? Or is it the initial element '*a-*' (< '-)? Young and Morgan assume that this is the Position Ia adverbial prefix '- 'away'. But we suspect that it is the indefinite object prefix, like that which appears in the unergatives of (6) and (7b) above. If this is correct,

then its rather mysterious appearance in (15) could be explained in terms of the object agreement requirement of the inchoative. In (15a) below, this element corresponds to the object and, evidently, satisfies the object agreement requirement of the inchoative. Its forward location in Position Ia would be expected, given that its normal position, IV, is occupied—this is the behavior we have already seen. If it is indeed the indefinite object agreement morphology which satisfies the object requirement of the inchoative, then these verbs fall into the same class as unergatives, like *-cha* ‘cry’, which introduce the indefinite to satisfy this requirement. The areal agreement morphology, evidently, does not itself accomplish this.<sup>6</sup>

The verb *-chíil* ‘snow’ differs the verbs *h<sup>w</sup>-tin* ‘rain’ illustrated in (14b) and (15b) in that its theme lacks the areal agreement morphology. But like the latter, and like unergatives generally, it employs the indefinite object morphology in the inchoative. The verbs of season likewise use the indefinite object in the inchoative:

(16) (a) Tl’éeéd<sup>2</sup>á<sup>2</sup>á’ neeznáágóó ’oolki-go ’i’niichíil. (Y&M80D: 469)  
 ‘Last night at ten o’clock it started to snow.’

(b) K’ad nihee ’i’niish<sup>2</sup>í. (Y&M80D: 470)  
 ‘Summer has begun with us.’

(c) T’áadoo shinaad<sup>2</sup>á<sup>2</sup>á’ ’a-tso nii’oh hishheehí ’i’niihai. (Y&M80D: 469)  
 ‘Winter started before I got all my corn put away.’

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(To be continued. Still to be done: (1) weather, year, and seasonal unaccusatives; (2) an account of the indefinite object agreement in unergatives of the type represented by *Ø-cha* ‘cry’.)

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<sup>6</sup>The alternative is that the prefix ’- is in reality the Position Ia adverbial prefix, as assumed by Young and Morgan. In that case, it would be reasonable to attribute to that element the role of satisfying the object agreement requirement of the inchoative. The appearance to the adverbial prefix would, however, be a mystery.

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