
ATHABASKAN LANGUAGE STUDIES

ESSAYS IN HONOR OF
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ON THE EXPRESSION OF MODALITY IN NAVAJO

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0. Introduction.

All languages have various means of expressing modal notions. There is a complex of related modal features having to do with knowledge, feeling, necessity, possibility, obligation and permission that are universal to human language. It has long been noted that languages differ in the lexical, morphological, and syntactic means they select for expressing modal notions. Modality can be expressed in every aspect of the grammar: in lexical items, such as verbs, nouns, and adverbs; in inflectional systems, in the verbal system, and in auxiliary verbs; and in sentence particles. However, the expression of modality is not random. Bybee (1985) noted that there are regularities to be found here. When we do comparative studies of the expression of modality, we see that some types of modality tend to be associated with certain aspects of the grammar. For example, Bybee notes that modal notions that have to do with sentence mood, with how the speaker chooses to use the proposition in the discourse, tend to be expressed in the inflectional system of the verb. As we will see, this is the case in Navajo. Navajo has an Optative mood that is used in several ways in the expression of modality.

In this paper, I will review the expression of modal notions in Navajo as I have been able to identify them. This review is organized in terms of where modality is marked in the grammar, rather than in terms of the particular kind of modality that is being expressed. This is because there is some ambiguity and 'semantic drift' present in the interpretation of the modals, as is very commonly found across languages. One point to be noted is that in Navajo, there is a very clear direction to this drift, from the semantic features of knowledge or truth, to those of obligation and necessity. It has been claimed that this direction of semantic change with modals is much less common than change in the opposite direction, from obligation to truth meanings, as we see with English modals (Shepherd 1981, Bybee & Pagliuca 1985, Traugott 1989). If so, then Navajo counts as a significant exception to this generalization.

Navajo does not have modal auxiliaries. Modality is expressed in the lexical semantic features of verbs, nouns, adverbs, and sentence particles, as well as in the Optative Mood. Navajo has no infinitives, that is, no verb

forms that are not inflected for the arguments of the clause; even nominalized forms have agreement. The Optative Mood provides a way to say a proposition without claiming that it is true. With the Optative, the truth value is suspended because the speaker is talking about something that should or should not happen. It is used in many ways in expressing modality in Navajo. We will see special uses of the Perfective aspect in modal constructions, as in the Counterfactual construction.

Bybee (1985) claims that modalities that have to do with conditions on the agent are not expressed in verbal inflection. The Navajo data bear out this claim. The notions of ability, and permission, for example, are expressed in full verbs or nouns, or in adverbial expressions.

Finally, Navajo is rich in sentence particles that have to do with evidentiality, and with the speaker's assessment of the truth, probability, or possibility of the claim s/he is making. The fourth person is also used in Navajo to mark "Reportative" constructions where the speaker indicates that what s/he is saying is not of his own knowledge. S/he is merely reporting what others say, and therefore cannot be responsible for its truth. This use of the fourth person to report what others say is marked on a verb of indirect discourse. Reported speech is a very distinctive aspect of Navajo grammar (Willie 1990,1991) and of other Athapaskan languages as well (Rice 1986).

1. Verbs of Ability, Possibility, Permission.

I turn now to a survey of the particular modal expressions I have identified in Navajo. These verbs express modal notions in their lexical meaning. The first example includes a second person subject, *nihónéedzá*, 'you are able'. It is used in this context to indicate physical ability.

- (1) *Nihónéedzá gi 'át'é. Shíká 'adiilwol.*
2.able at 3.be 1. BEN. 2.will help
'You look like you can do it. Help me.'

More commonly this verb meaning 'able' is seen in third person with an embedded clause. Here it is the 'event' that is possible.

- (2) *K'ad naasháá dooleel=hígíí bihónéedzá.*
now 1.walking FUT=COMP 3. able
'I can walk now. (after an accident)'
- (3) *Chidí nahidooni'=ígíí bihónéedzá.*
car 3.will buy=COMP 3s.able
'It is possible to buy a car.'

This same verb with a benefactive postpositional phrase can occur to mean (in a root possibility) 'it is possible' for this event to happen.

- (4) *Chidí nahidiitni'=ígíí ná bihónéedzá.*
car.. 2.3.buy=COMP 2.BEN. 3.able
'It is possible for you to buy a car.'

In a negative construction, it has a concrete meaning of physical impossibility.

- (5) *Naanish=ígíí doo há bihónéedzáa da.*
work =COMP NEG 4.BEN 3. able NEG
'It is not possible for him to work.'
- (6) *Ndeeshnish=ígíí doo shá bóhonéedzáa da.*
I.will work =COMP NEG 1.BEN 3s. able NEG
'It is not possible for me to work (even if I wanted to).'
- (7) *Mą'ii jidoolhel=ígíí doo há bóhonéedzáa da.*
coyote 3.4. will kill=COMP NEG 4.BEN 3.able NEG
'It is not possible for him to kill a coyote.'

When there is negation in both clauses, such as (8), the interpretation is that of 'must' or 'necessity'. The embedded verb must be in future tense.

- (8) *Shizhé'é doo ndoolnish da=yígíí doo bihónéedzáa da.*
1.father NEG 3.will work NEG=COMP NEG 3.able NEG
'It is not possible for my father not to work.'

There is another verb, *bee haz'á* that means literally 'making a physical roundish space for someone', that can be used to express permission.

- (9) *Naanishgóó deesháát=ígíí bee shá haz'á.*
job to 1.will go=COMP 3.with 1.BEN area.space
'I am allowed to work.'
- (10) *Deeshnish=go=hígíí bee shá haz'á.*
I.will work=COMP=NOM 3.with 1. BEN area.space
'I could go to work.'

In the next example, this same verb in a negated form has taken on the additional meaning of legal permission. On this reading, a benefactive postpositional phrase is excluded.

- (11) *Mą'ii jidoolhel=ígíí doo bee haz'áa da.*
coyote 3s.4s.will kill=COMP NEG 3.with area.space NEG
'He is not allowed to kill a coyote.'

Another verb for 'physical ability' is more readily conjugated to mark the agent's ability directly instead of using a pleonastic subject or an oblique postpositional argument. This verb can only be used to express physical ability; it is unsuited for use in speaking of mental ability (for example, being able to speak Navajo). In (12) the interpretation shouldn't be taken to be that of 'permission'.

- (12) 'Asdzáá jidoots'os=ígíí bǫiighah .
woman 3.4.will kiss=COMP 4.capable
'He can kiss the woman.'
- (13) 'Asdzáá díits'os=ígíí doo bǫinighah da.
woman 2s.will kiss=COMP NEG 2.capable NEG
'You can't kiss the woman.'
- (14) Shizhé'é ndoolnish=ígíí doo yǫighah da.
1.father 3.will work=COMP NEG 3.capable NEG
My father is unable to work.

I will mention here a type of construction that has a locative postposition -gi 'at', which appears to function as a complementizer. A clause ending in this postposition is followed by the perfective of the copula resulting in a construction that marks an inference, an evidential. The speaker conveys that certain circumstances have caused him to arrive at a judgment.

- (15) Jáan nitsaaz silǫí gi' át'é.
3.large 3.became at 3.be
It looks like John got bigger/fatter.
- (16) Jáan ǫíí'. taah yiyiilóóz gi' át'é.
horse water-to 3.3.led at 3.be
'It looks like John watered the horse(s).'
- (17) Jáan 'azhé'é silǫí' gi' át'é.
indf.father 3.became at 3.be
'It seems that John has become a father.'
- (18) Jáan deeshnishígíí bimá bił yá'át'ééh gi' át'é.
1.working-COMP 3.mother 3.with 3.good at 3.be
'It looks like John's mother likes it that he has started working.'

2. Verbs of Speaking, Reporting and Thinking.

The verbs I will discuss in this section are those that do not require a subordinating enclitic. There are other verbs of speaking, such as *yáshti* 'I

am talking' or *haasdziih* 'I spoke' in such contexts as, 'I spoke about Navajo' or 'I speak Navajo'. These two verbs require a postpositional phrase *bee* 'with it' or *baa* 'about it'; they might be glossed as 'tell'.

The verb of speaking with a fourth person subject is the most common way of expressing a reportative. This same form is used also in evidentials. Other uses of the root for speaking and thought are given below.

- (19) Shizhé'é'asdzáá léi' 'ayóó 'áyo'ní jiní.
1.father woman certain 3.3.loves 4.said
'They said my father loves a certain woman.'
- (20) 'Asdzáá léi' shizhé'é 'ayóó 'ábo'ní dishní.
woman certain 1.father 3.3.loves 1.saying
'I am saying that a certain woman loves my father.'
- (21) Jáá! Nidaané'é náhidííla ni díniid ni'.
2.toys 2.will pick up 2.1.said PAST
I thought I told you to pick up your toys!

In example (22), the phrase *bee ǫá 'áséííí'* means 'I agreed to it'.

- (22) Béégashii kingóó doogél=ígíí bee ǫá 'áséííí'
cows market-to 3.will haul=COMP 3.with one 1.be
'I agreed to have cattle hauled to the market.'

In addition to the verb of speech there is a related verb *nisin* 'to think or want'. The distinction between the two meanings can only be seen in third person: *nǫzin* 's/he thinks' and *yinǫzin* 's/he wants'.

- (23) Naanish yinǫzin 23b. ?naanish nǫzin.
work 3.wants work 3.thinks
'S/he wants work.' ?'S/he is thinking "work".'

In all other persons the forms are homophonous. A possible explanation: in Navajo, one does not say things unless he wants them to be realized. For instance, you can't say you wish someone to die; this would surely mean the demise of that person. So speech is seen as very powerful in bringing about a desired circumstance. (24) could also mean 'I believe that my father loves a certain woman'.

- (24) Shizhé'é 'asdzáá léi' 'ayóó 'áyo'ní nisin.
1.father woman certain 3.3.loves 1.think
'I think my father loves a certain woman.'

This same verb used with past tense copula *ńt'éé* can produce the past tense of 'think'.

- (25) Shizhé'é 'asdzáá léi' 'ayóó 'áyo'ní nisin ní't'ée.
 1 father woman certain 3.3.loves 1 think 3.was
 'I thought my father loved a certain woman.'

If the past tense copula is used with a future tense verb as in (26), then this past tense marker takes on another function.

- (26) Naanishgóó deesháál nisin ní't'ée.
 work.to 1. will go 1 think/want it was
 'I wanted to go to work.'

I will come back to this combination of a future tense verb and the past copula, as seen in (26), in the section on Counterfactuals

3. The Optative Mood

The Optative Mood offers a way of uttering a proposition without claiming that it is true. It occurs in contexts where the speaker is identifying the desired result of a situation, but it can never appear alone; it must co-occur with one of the particles that give it more specific meaning.

The particle *le'* is used in affirmative optative constructions. As can be seen in the following examples, the fourth person optative form with *le'* is used to convey the speaker's wishes. The speaker doesn't use first person optative forms to express her/his own wishes. This indirect way of desiring an outcome accommodates the cultural outlook that frowns upon openly wishing for something.

- (27) Kintahdi njóyá le'.
 town.at 4.OPT.walking about. PAR
 'I wish I were walking about town.'
- (28) *Kintahdi naoshá le'.
 1.OPT.walking about PAR
- (29) 'Awée' táájógis
 baby 3.4.OPT.wash
 'I wish I could wash the baby'
- (30) Diné bizaad baa 'ajólta' le'.
 diné language 3.about 4.OPT.studying PAR
 'I wish I could study Navajo.'

The next examples include *gi='át'é=go*, which is composed of *gi*, a locative particle, a copular verb *'át'é* 'it is' and a subordinating temporal enclitic *-go*. The derived form *gi='át'éo* has the meaning of 'should be

doing something but not doing it'. Notice that the *le'* is now in second position, and the embedded verb is in fourth person, with the main verb in first and third person. In wishing for desired outcomes or objects the embedded verb must be in fourth person and the person doing the wishing can be expressed by second, third, or fourth in the main verb.

- (31) Nijólnish le' gi='át'éo t'óó naashbé.
 4s.OPT.working. PAR it=3.is just 1.swimming
 'I should be working but I am just swimming.'

Nijólnish le' gi='át'éo t'óó naabé.
 4s.OPT.working. PAR at=3.is just 3.swimming
 'He should be working but he is just swimming.'

The next particle that requires the optative mood is the particle *lágo*. The combination of *lágo* and the optative give a negative reading. They can be used to give an instruction to a child, or can be interpreted by an adult hearer to mean 'I hope that X doesn't happen', since one would not give commands to another adult. Contrary to *le'* in the previous section, *lágo* can occur with any person/number of the subject in the subordinate structure; the reason for this is that *lágo* is not a particle used to express wishes.

- (33) Nahóltáá' lágo.
 area.OPT.rain PAR
 'I hope it doesn't rain'
- (34) Tí'ízí náhoo'naah lágo.
 goat 3s.OPT.again.revive PAR
 'I hope the goat doesn't come back to life'
- (35) Shimá gohwééh sits'áá' nók'e' lágo ní.
 1 .mother coffee 1s.from 3s.cool down PAR 3.said
 'My mother said "Don't let the coffee get cold on me"'
- (36) Naadáá' nikióólkaad lágo.
 corn 2s.OPT.scatter PAR
 I hope (you) don't scatter the corn about.
 'Don't scatter the corn about'
- (37) 'Awée' tááyógis lágo.
 baby 3S.3S.OPT. wash PAR
 (You don't) let her wash the baby.
 'Don't let her wash the baby'

4. Counterfactuals

The meaning of counterfactual constructions involves 'paradoxical' combination of the future tense and the perfective aspect. The use of past time reference or a perfective form in counterfactuals is not unusual across languages. Compare English sentences like, "I wish I were a millionaire," or "If I had a million..."

In the Navajo language counterfactuals the main verb must be in future tense. The particle (y)éé¹ 'past' is suffixed to the main verb; this usage conveys that the speaker wishes that things were different. The past tense particle can be suffixed to nouns also. For example, 'awéé' éé would mean 'the poor baby'; but you wouldn't say this unless something had happened to the baby. In this case, -éé refers to the past event.

- (38) t'ízi náhiidoo'naal=yéé
goat 3.again.will revive=PAR
'I wish the goat could be alive again (but he is not)'
- (39) dził bá sohodidoolziji=yéé
mountain 3.BEN 3.will.be.praying=PAR
'I wish there were prayers for the mountains'
- (40) 'Awéé' táázhdoogis =yéé
baby 3s.4s.will wash-PAR
'I wish she would wash the baby'
- (41) Jáan t'áá 'alts'óózi dooleel- yéé ch'ééh nisin.
just 3.slender-NOM 3.FUTURE-PAR in vain 1.think
'I keep wishing for John to be thinner'

Related counterfactuals are "should have" constructions that express failed obligation. The future of the main verb and the past of the copular verb "be" gives that interpretation.

- (42) t'ízi náhiideesh'naal rít'éé
goat 3s. 1 s.again.will revive 3.was
'I should have revived the goat'
- (43) dził bá sohodidoolziji rít'éé
mountain area.3.BEN 3.will pray 3.was
'There should have been prayers for the mountains'

These sentences do not have a past tense reading for the event described in the main verb; that is, (41) would not mean 'She has washed the baby.'

- (44) t'áá 'íidáá' 'awéé' táázhdoogis rít'éé
just then baby 3.4.will.wash it was
'She should have washed the baby already'

Another gloss for (44) is, 'She was to have washed the baby.'

- (45) K'ad ch'iiyáan hólqo dooleel rít'éé.
now food 3.exist 3.future 3.was
'There should have been food (here) now'

5. Particles

Like other polysynthetic languages, Navajo is rich in particles that mark various adverbial and discourse functions. This is an area of Navajo syntax that awaits detailed study. Little has been recorded about the semantic and distributional properties of these particles. Many of these particles express modal notions. Several have to do with the speaker's assessment of the truth or probability of the proposition s/he is considering. This is epistemic modality. However some of these modals show a pattern of semantic drift toward deontic modality, that is, obligation. This is a surprising finding since it is generally believed that semantic drift across language modalities goes in the opposite direction.

5.1. Single Particles. Particles may occur alone or in combinations. It is in the particle combinations that we see the shift in meaning. I will begin by a review of single particle constructions, considering *shíí*² first. This word is usually translated as 'probably, maybe'.

- (46) Shizhé'é shíí 'ákóqo deeyáago 'áadi naadooghał.
1.father POSS there 3s.going there 3.will go
'Probably when my father goes there he will visit you'

This particle appears primarily in second position, but can occur in various other positions. It can appear in final position, if there is only one inflected verb in the sentence, as shown in (47). Note that no matter what position it occupies, this particle always has clausal scope.

- (47) Shizhé'é naadooghał shíí
1.father 3.will go POSS
'My father probably will visit you'
- (48) Yiskáago shíí rídínéeshkał
tomorrow POSS 1s.will herd back.
'I will probably herd them back tomorrow'

- (49) 'Éí shíí Piido biye' jíí
that POSS Peter 3.son 4s.be
'That one is probably Peter's son.'
- (50) 'Áadi shíí naháatin
over there POSS 3.raining
'It is probably raining over there'

The next particle **daats'í** also means 'probably' but it indicates a weaker possibility than **shíí**. There is a tendency to have this particle also appear in second position, after the first constituent, and never initially.

- (51) Ch'í-díneeshkał daats'í.
out-3pl. 1 .herd POSS
'Maybe I'll herd them out. (as out of the corral)'
- (52) Naanishgóó daats'í deesháál.
job.toward POSS 1.will go
'Maybe I will go to work'

In another type of construction, we have inference from result (Willett 1988). For these clauses there is a **-go**, a subordinating enclitic, and the speaker sees the event expressed in the subordinate clause as having taken place but doesn't want to commit himself to the truth of his comments. It is like saying "I think this must have happened because of the results I am seeing."

- (53) Hastiin daats'í mə'ii yiyisxíí=go 'akágí néíłtsóós.
man POSS coyote 3.3.killed=COMP hide 3.3.carrying
'Maybe the man killed a coyote for he is carrying around a hide'
- (54) Ashkii daats'í bich'ah hodooshké=go
boy POSS 3.hat area.3.will scold=COMP
'The boy probably was scolded
yiniiná t'áadoo 'íits'a'í sídá.
because none 3.hearing-NOM 3s.sits
because he is sitting quietly'
- (55) Ałtso daats'í hojíítáál=go, 'iiyáada níjoodaál.
all POSS 4s.sung=COMP ? 4s.coming
'I guess he is through with the sing for he is coming home'

Recall that I mentioned earlier that **daats'í** is weaker in force than **shíí**. It seems contradictory to use the weaker modal in the inference from results, but one could make a case that **daats'í** needs additional information in order to give it the stronger reading.³

The next particle **sha'shin** is always sentence final. This particle seems to be composed of **shá'** + **shíí**. The first element is a question particle that can usually be suffixed to nouns, as in: **Jáanshá'**, 'Where is John?'. It can appear interchangeably with the other question particle **-ish** on wh-words. o

- (56) Dichin danilíí sha'shin
hunger PL.3.are PAR
'I think they are hungry'

In the following constructions, it may be the referent that is in question and the predicate is presupposed. In (57) the event is known to have taken place, it is only the identity of the individual that is in question. This would be expected if **sha'af sha'shin** is the same **shá'** that attaches to nouns we would also expect the use of the perfective verb form.

- (57) 'Éidí shaa- 'adííla sha'shin
that one 1.from-3.took object (rope-like) PAR
'I think it's that one that slept with my husband'
- (58) 'Éí ashkii tséso'déé' ch'ínítłizh sha'shin
that boy window.from out.3s.fell (ani. obj) PAR
'I think it's that boy who fell out of the window'
- (59) Dídíígíí shimá yizt'ó sha shin.
this-the one 1.mother 3.wove PAR
'I think it is this one that my mother wove'

If one were to speculate on a comparison of the range of probability of **sha'shin**, **shíí**, and **daats'í**, I would say **daats'í** is the weakest, and **sha'shin** and **shíí** are comparable to one another, appearing in final position and second position, respectively. Co-occurrences of these three particles are unlikely.

The particle **laanaa**, 'wishful' is constrained in its distribution. It can only occur as a partner to a verb of cognition **nízin** or another modal element, such as **ch'ééh** 'in vain'.

- (60) Jáan nineez dooleel ch'ééh laanaa nízin.
3.tall FUTURE in vain wishful 3.thinks
'She keeps hoping that John will grow taller'
('John keeps hoping that he will grow taller')
- (61) Jáan nisneez dooleel ch'ééh laanaa nízin.
1.tall FUTURE in vain wishful 3.thinks
'John is hoping he will grow taller'
'John hopes that I will grow taller'

If the speaker is the one wishing the cognitive 'think' verb is optional (compare 62 and 63).

- (62) t'ízi náhiidoo'naal laanaa nisin
goat 3.will revive wishful I think
'I wish the goat could come back to life'
- (63) Ch'iyáan hólóó dooleel=yéé laanaa.
food 3.exist FUTURE=COMP wishful
'I wish we had food'
- (64) 'Aweé' táázhdooqis laanaa ch'ééh nisin.
baby 3.3.will wash wishful in vain I think
'I wish she would wash the baby'
- (65) Ashkii 'íidoolta' ch'ééh (?laanaa) danízin.
boy 3.will school in vain PL.3.think
'They are hoping that the boy goes to school'

In (65) *laanaa* is not required; the sentence sounds a little odd when it is present. It could be odd for the same sort of cultural reason that wishes are expressed in fourth person by the speaker. Here it is the plurality in the main verb that seems to want to exclude it; maybe wishing is an individual act, not something that is expressed collectively.

5.2. Particle Combinations. All of the modal particle combinations include either *t'áá* 'just', or *aaníí* 'true'. These two particles usually cooccur, and can also occur with a third particle. Recall that it is in the particle combination construction that we will see the semantic drift. *T'áá* 'aaníí' can be in various positions, with sentence initial more likely; final position is excluded.

- (66) T'áá 'aaníí 'éí piido biye' jíí.
just true that Peter 3.son 4.be
'That is Peter's son.'
- (67) T'áá 'aanííni t'éiyá baa hane' doo.
just truth only 3.about story FUTURE
'Only the truth will be the story.'
- (68) T'áá 'aaníí dzildi nahaltin lá.
just true.? mtn.at area.raining EVID.
'It's true! It is really raining on the mountain.'
- (69) T'áá 'aaníí 'áadi 'ííníshata' nít'éé.
true over there 1.going to school 3.was
'It is true, I went to school there.'

In these examples we see variation between 'true' as an adjective (66, 69), or 'truth' as a noun (67, 68).

The next section deals with *t'áá* 'aaníí' and *shíí*. This combination can be interpreted as a very strong possibility that something will or has to happen. The positions of *shíí* can vary.

- (70) T'áá shíí 'aaníí shizhé'é naadooghał.
just POSS true 1.father 2.3. will go
'It is very possible that my father will visit you.'
- (71) 'Ashkii t'áá shíí 'aaníí shideezhí yilts'os.
boy just POSS true 1.yg.sister 3.3.kissed
'The boy must have kissed my sister.'
- (72) 'Éí 'ashkii shíí t'áá 'aaníí tséso'déé' ch'ínítłizh.
that boy POSS just true window.from out.3.fell
'It must be that that boy fell out of the window.'

We have an expression of certainty of knowledge; a conclusion that has been affirmed when we add an evidential *lá* to *t'áá* 'aaníí'. With the evidential an obligation has been realized or an assumption has proven to be false.

- (73) 'Ashkii t'áá 'aaníí líí' taah yiyiilóóz lá.
boy just true horse water-to 3.3.led EVID.
'The boy really did water the horse(s).'
- (74) Jáan t'áá 'aaníí diné nilí lá.
John just true diné 3.be EVID.
'John is really a Navajo.'

And of course, this affirmation or confirmation kind of modal cannot have a future tense in the verb.

- (75) *'Ashkii t'áá 'aaníí 'iidoolta' lá.

As mentioned earlier, *daats'í* is a weaker form of probability than *shíí*. When the truth modal appears with the weaker probability form we get an expression that means 'not certain'.

- (76) 'Ashkii daats'í t'áá 'aaníí líí' taah yiyiilóóz.
boy POSS just true horse water-to 3.3.led
'(I don't know if) The boy watered the horse(s).'
- (77) T'ízi t'áá daats'í 'aaníí t'áakal yiyiilchozh.
goat just POSS true skirt 3.3.chewed
'(I don't know if) The goat chewed up the skirt.'

The next particle combination is **t'áá 'fiyisíí'** 'just true'. This particle is used mostly in constructions with mental verbs, as in the examples below.

- (78) Éí t'áá 'fiyisíí shaa bééhózin.
that just really 1.with 3.known
'I really know that.'
- (79) T'áá 'fiyisíí kót'éego baa ntséskees
just true 3.be.COMP 3.about 1.thinking
'I am thinking about this way.'
- (80) 'Éí t'áá 'fiyisíí baa 'ádee hadeeszíí'.
that just true 3.about self-with. out.1 .spoke
'About that, I promised it.'

The particle combination **t'áá 'fiyisíí'** are less likely to appear with **shíí** and **daats'í**.

6 . Three Particle Combinations

The first of three particles is **t'áá 'áko shíí**, which literally means 'It is okay' but is interpreted as a uncertain permission by speaker. It functions just like wishing, in that no other person but the speaker may give permission.

- (81) Dííji' ndiilnish-ígíí shíí t'áá 'áko
today 2.will work-COMP POSS just 3.okay
'It is probably all right if you have to work today.'
- (82) Hastiin mə'ii yidiyoolhél-ígíí t'áá shíí 'áko
man coyote 3.3.will kill-COMP just POSS 3.okay
'It is probably okay for the man to kill the coyote.'
- (83) 'Ashkii híí' hooghangóó yidoolóósígíí shíí t'áá 'áko.
boy horse home-to 3.3.will leadCOMP POSS just 3.okay
'It is probably all right for the boy to lead the horse home.'

The next set of examples show a particle combination that includes the question particle **-ísh: dó' (V)-ísh hí**. This expression can be used in the context when the speaker strongly suspects something is true but nevertheless just hopes that it isn't. It is something like the counterfactual, where we see the past tense marker, but in these constructions we see instead the particle **dó'** which is probably related to the negation element **doo-da**.

- (84) Shik'éí dó' nílíísh hí
1.relative NEG 2.be-QUES. ?
'I hope you aren't my relative.'

- (85) Dichin dó' nílíísh hí
hunger NEG 2.be-QUES. ?
'I hope you aren't hungry (but I suspect you are).'
- (86) Deesk'aaz dó' ísh hí
3.cold NEG 2.be-QUES. ?
'I hope it isn't cold.'
- (87) Díí dó' ní'éetsohísh hí
this NEG 2.coat-QUES. ?
'I hope this isn't your coat (I just spilled wine on it).'

The next set of examples **doo t'áá k'ad ...da** include of the negation particles with 'just' and 'now' to mean 'impossible'. This construction does not express a negative obligation or prohibition; it merely states what is impossible at this time.

- (88) Doo t'áá k'ad kót'éego baa ntséskees da doo.
NEG just now 3.be.COMP 3.about 1.thinking NEG FUT.
'I will never think about it that way.'
- (89) Shi doo t'áá k'ad 'íshghe' da.
me NEG just now 1.marry NEG
'Me, I will never get married.'
- (90) Háíshə' t'áá k'ad siláo silíí'
who ? just now policeman 3.PERF.be
'Who wants to become a policeman?'

6.1. Particle Combinations that Express Obligation. In this section I discuss the particle combinations that show semantic drift from epistemic or "truth" modality to deontic or obligation modality. When the speaker combines the future tense of the verb with the particle combination of **t'áá 'aaníí** or **t'áá 'fiyisíí**, the construction is interpreted as expressing obligation. For more emphasis the speaker can add **tsídá** 'really'. This semantic drift is like that seen in the English expression 'supposed to', which is used to mean obligation rather than belief.

- (91) T'áá 'aaníí dííji' 'ashkii 'íídoolta'.
just true today boy 3.will go to school
'The boy must go to school today.'
- (92) Ts'ídá t'áá 'aanii chášhk'ehgóó doo nijigháá da.
really just true wash.toward NEG 4.will walk NEG
'You must never go to the wash.'

- (93) T'áá 'fiyisí níhaa dooghaí
just true 2d.about 3.will come
'S/he must come us.'
- (94) Ts'ídá t'áá 'fiyisí líí' taah yidoolóós
horse just true horse water-to 3.3.will lead
'He must water the horse.'
- (95) Hastiin t'áá 'fiyisí mə'ii yidiyoohéél.
man very true coyote 3.3. will kill
'The man must kill the coyote.'

We have already seen that these particles in combination with the perfective aspect mark 'certainty'. In order to show the direction of the semantic drift we need to have some evidence as to the meaning of the elements t'áá 'aaníí and t'áá 'fiyisíí in other context. The fact that the word t'áá 'aaníí means 'true' can be seen in a courtroom setting.

- (96) T'áá 'aanííngíí ndeilkah dooleel.
just true NOM PL.3.tracking FUT.
'We will be investigating what is the truth.'

7. Concluding Remarks

I have reviewed and analyzed a number of construction types where modal notions are expressed in Navajo. I have shown that these modal expressions are organized in a variety of ways in the grammar of Navajo, in terms of where modality is marked. This seems to be universally true across languages. In Navajo, an important feature of the modal system is the presence of an Optative Mood, which occurs with various sentence particles to express more explicit modal notions. I pointed out that modal notions that have to do with sentence mood, with how the speaker chooses to use the proposition in the discourse, tend to be expressed in the inflectional system of the verb in Navajo, as predicted in Bybee et al (1990).

There are some verbs in Navajo that express physical ability and possibility. We saw that modalities that have to do with conditions on the agent were not expressed in the verbal inflection. The verb that expresses possibility occurs with subordinate clauses that describe the proposition in question.

There are a number of sentence particles that express modal notions in Navajo. Some of these particles occur in combinations to express more specific modal meanings. The sentence particles express primarily evidentiality, and the speakers' assessment of the truth, probability, or possibility of the claim. There was evidence of a 'semantic drift' in Navajo,

from particle constructions expressing certainty or truth, to the modality of obligation and necessity. This finding is of interest, since this direction of semantic drift in a modal system has been claimed to be less common than the reverse, from deontic to epistemic.

NOTES

1. I am grateful to Bob Young, Ken Hale, Joan Bybee and Eloise Jelinek for their comments. I also thank the participants at the 1993 Athabaskan Conference in Santa Fe for helpful discussion.
2. There are various spellings of copular verb 'it was': ní'éé or ní'éé. I contend that the particle -éé is part of the series of past tense markers.
3. This particle can be affixed to háí 'who' (háishíí) to mean 'someone'. It also can be affixed to other wh-words.
4. I thank Ferdinand deHaan for pointing out this inconsistency to me. If we substituted shíí in the inference from results constructions, the meaning would be odd because now you know what happened so why would you be speculating.
5. This adverbial particle 'fiyisíí has an intensive meaning in non-modal contexts.

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