

Use of causatives in Navajo: Syntax and morphology.

**Grandon Goertz
Katy Lenté
Stefanie Adams
Jalon Begay
Melvatha Chee**

University of New Mexico
Department of Linguistics, MSC 03 2130
1 University of New Mexico
Albuquerque, NM 87131

1. Introduction

Any causative expression involves two situations, the cause and the result. Causative constructions across languages can vary according to the pragmatic meanings of causation and how the sequences of goal, event, and result are expressed. A study of the causative constructions therefore involves both formal syntax and semantic analysis.

This paper explores causative constructions in the Navajo language and deals with the research question: How is causation expressed in Navajo? We were also interested in the expression of meaning, depending on how causation was stated.

Navajo is an SOV polysynthetic language spoken in parts of New Mexico, Arizona and Utah. The language belongs to the Na-Dene Language Family, Athabaskan Language Branch. The Athabaskan Language Branch includes the Alaskan language group, the Western Canadian language group, the Northwestern Pacific Coast language group, and the Apachean language group

We identify three types of causatives in Navajo; 1) analytic constructions, containing three subclasses; analytic juxtaposition, temporally marked analytic constructions, and postposition analytic causative constructions, 2) a morphological or derivational causative with two subclasses; positional causative constructions and lexical causative constructions, and 3) metaphoric causatives.

The first type of causative is used when the causation is indirect. Analytic juxtaposition is used to show indirect causation when the cause is an internal force, such as sleepiness or hunger. The second, temporally-marked analytic construction is used when there is a temporal relationship between the cause and the result. The third, post-position analytic causative construction is used to express situational causation.

Morphological or derivational causatives are used when the causation is an agentive causer. Derivational morphological causative constructions are indicated by a derivational morpheme prefixed to the verb.

Additionally, a few metaphors are used in Navajo to express causation.

We compare causative patterns identified in other languages and from literature to the data we gained from our consultants.

2. Defining causatives cross-linguistically

Causation can be defined as an expression in which an event (the caused event) is depicted as taking place because someone does something or because something happens (Goddard, 2002: 260). Two events qualify as a causative situation if:

- The speaker believes that one event has happened.
- A second event has happened at some later time.
- The speaker believes that there is a relationship between the two events.
- The second event is wholly dependent on the occurrence of the first causing event.
- There is no proof that the caused event would have happened if the first event had not happened.

Causation may imply coercion or permission in some languages, or the causer may have the power to prevent an event or situation from occurring.

In our analysis we were concerned with the subject and the topic of clauses and sentences, in addition to examining speech for lexemes that could be translated 'cause' or 'because'. Clauses that were examined included those that described the causer of an event, the actor in an event, or the one person exercising volition with respect to an event.

Comrie (1985: 331) describes three general kinds of causatives: 1) lexical causatives, 2) situations in which two clauses are placed together so that one denotes an event and the other realizes the event, and, 3) instances in which the clause of cause and the clause of effect are coordinated by morphemes.

The communicative task of showing causation in a language will often have specific analytic constructions that are used solely for that purpose. These constructions include special particles, words, word order changes, affixes, intonations and phonological alternations. Lexical classifiers are altered by *l-* in which an argument is added to a verb, often creating a causative. This Koyukan example is from Axelrod (1998: 48):

estseh
se + θ + tseh
1sgS + CL + cry
'I cried'

etltseh (causative)
se + † + tseh
1sgS + CL + cry
'I made him cry'

In the second situation, listed above by Comrie, the coordinated utterance involves the placement of two clauses, in which there is zero marking of the causative coordinator. Coordinated clauses involve two clauses in which one expresses the cause and the other the effect. The order of clauses is fixed.

The following example from Bubungo (Bantu) illustrates this zero causative construction. An element (*laa*), marks the clause boundary.

vì yáá yìsə laa ɲwə gə ntó'
 They-IMPERF PST make-PERF (that) he go-PERF palace
 'They made him go to the palace.'

In Vata (Ivory Coast), the conjunction *le* coordinates NPs, PPs, or S:

ń gba le yò-ò li
 I speak CONJ child DEF eat
 'I make the child eat.'

The third situation describe by Comrie, morphological causation, is also described in chapter 11 of Haspelmath (2002) in which the use of causatives involves a valence-changing operation for the verb. In particular, he calls them “agent-adding” operations, and he gives these examples from Japanese:

Taroo ga ik-u
 Taro NOM go-PRES
 'Taro goes'

Hanako ga Taroo o ik-ase-ta
 hanako NOM Taro ACC go-CAUS-PAST
 'Hanako made Taro go'

Taroo ga hon o yom-u
 Taro NOM book ACC read-PRES
 'Taro reads a book'

Hanako ga Taroo ni hon o yom-ase-ta
 Hanako NOM Taro DAT book ACC read-CAUS-PAST
 'Hanko made Taro read a book'

For coordinated morphological constructions, causation may be indicated by adding affixes to non-causative verbs. This example from Song (1996: 88), shows in Bilaan (South Mindanao), the causative prefix f(a)- is used to causativize verbs.

fa-tam-gu dale saló
 CP-light-I them lamp
 'I have them light the lamp'

In Classical Nahuatl, a suffix is added to the verb to show causation (Comrie, 1985: 318).

Ni-mitz-tla-pāca-ltia
 I-you-something-wash-CAUSE
 'I make you wash something.'

3. Data and methodology

The data we collected was provided from interactions with Jalon Begay, a fluent, first-language Navajo speaker and graduate student studying linguistics. Jalon participated in the University of New Mexico linguistics field methods class as a language consultant for fall semester 2005. We also obtained information from Melvatha Chee, a native speaker of Navajo and linguistics graduate student, in order to expand upon our previously collected data. Roseann Willink, a native speaker and Navajo instructor at the University of New Mexico, and Jay Williams, a doctoral student specializing in Navajo grammar also provided examples and illustrations.

We asked our consultants to provide Navajo equivalents of certain English verbs such as bring about, cause, or make, and then to use them in sentences. We chose verbs that often are used to express causative relationships including make, cause, move, boil, burn, break, put to bed, die, and kill. We sought patterns in the responses, indicative of causative constructions.

In addition, we elicited responses from our consultants in an attempt to equate commonly used English constructions such as:

- I fell because of the high winds.
- I'm not going to help because I don't like you.
- The policeman killed the bank robber. (He caused him to die.)

Numbered examples that follow are those we obtained from the consultants, while lettered examples are from literary sources. Navajo words and expressions are in italics, and English equivalents of Navajo are identified by single quotes.

4. Analytic causatives in Navajo

According to Comrie (1985: 331), an analytic (syntactic) causative is "...one that uses regular syntactic devices of the language for forming complex sentences out of simplex sentences without fusing together the predicates of those simplex sentences; ...". In the examples he uses, 'Sam slid off the roof' would be the simplex sentence, while 'Mary caused Sam to slide off the roof' would be the analytic causative.

In Navajo, the causative relationship is often inferred from the ordering of the clauses, where the cause clause precedes the result clause in three different forms. We identify these three subgroups as analytic causatives: analytic juxtaposition temporally marked analytic constructions, and postpositional analytic constructions.

4.1 Analytic juxtaposition

The juxtaposed analytic causative construction is used when the cause is an internal force, such as sleepiness or hunger. In this case, two clauses are presented by the speaker with no conjunction or coordinator present. The first clause expresses an event that precludes the second event. It is understood that the second event happened as a result of the first event. Song (1996: 142) mentions that juxtaposing the two clauses alone iconically performs the function of registering the temporal sequence of the

described events in many languages. These examples from Navajo have cause clauses consisting of a noun and a verb of cognition followed by the result clause.

1. *dichin nisin bááh nahashniih*
hunger I want/I think bread I buy it
'I buy bread because I am hungry'
2. *bił nisáá iixazh*
Sleepiness I knew I went to sleep
'I went to bed because I was sleepy'
3. *dichin nizíí'ó íiyáá'*
Hunger I became aware of it I ate
'I ate because I was hungry'

4.2 Temporally marked analytic constructions

Temporally marked analytic constructions occur in Navajo when there is a temporal relationship between the cause and the result:

4. *éí biniinaa yishcha*
it because I cry
'because of it I'm crying'
5. *ayóo ahii nishnígo biniinaa akwisdzaa*
very you (INDEF DET.) I love because I did it (INDEF)
'I did it because I love you'
6. *éí baq shibéeso ádin.*
because of that my money nothing
'that's why I have no money'
7. *t'áadoo hazhó'ó iilaazh dago ch'ééh déyá.*
RELATIVIZER before many days good sleep up unsuccessful I started went
'because I didn't sleep well, I'm tired'

According to Shauber (1979: 224), the *-go* enclitic, is an adverbial subordinator. The enclitic *-go* subordinates clauses adding a sense of 'while, 'when,' or 'because'.

- A. *aho'niiltáago t'éiyá hooghan góne' yah anideesháát*
begin to rain when (because) only house inside into I will go
'When it starts to rain, I go inside'

This is also shown in an example that means that the cause of driving fast is related to the act of driving:

9. *shichidi naasbaqsgo, tsxiít nisin.*
 my car I drive when fast I want to go
 ‘When I drive my car, I want to go fast’ (It causes me to go fast)

4.3 Postpositional causative constructions

The postposition, *-niinaa* is affixed to pronouns to express ‘because of’. *Biniinaa*, ‘because of him, her, it’, is the most common construction that was encountered. The postpositional object pronominal prefix, e.g. *bi-* ‘him, her, it’, is used both by itself and also with a nominal postpositional object. The causative construction must always precede the verb. The cause clause is followed by the causative expression, and then by the resultant clause in these examples:

10. *ashkii biniinaa yáshti’*
 boy because of him I am talking
 ‘I am talking because of the boy’
11. *ashkii al’éed yinniinaa yálti’*
 boy girl OBJ because of her he is talking
 ‘he is talking because of the girl’
12. *tsxi’deezýágo biniinaa akodzaa*
 he became crazy because he did it (INDEF)
 ‘he did it because he was crazy’
13. *shibéeso ádingo biniinaa doo déyáá da*
 my money away out of sight because neg I started went PART
 ‘I’m not going because I have no money’
14. *shi’niinaa dah dee yah*
 me because up out of sight
 ‘because of me, he left’
15. *niniinaa éi doo shił akótée da*
 you because not with me that’s the way it is PART
 ‘because of you, it doesn’t suit me’

The following examples show that both *biniinaa* and *biniyé* are used to account for conduct, but *biniinaa* might tend to be used to explain personal situations, as shown in examples A and C, and *biniyé* would be used when the causation is more general, or due to circumstances, as in B.

Personal cause:

- B. *hooghandi chýáán ádingo biniinaa kingóó déyá.*
 Home at food none since because of it to store I go
 ‘I’m going to the store because there is no food in the house’

More general case:

- C. *ch'iyáán biniyé kingóó déyá.*
food for purpose to store I go
'I'm going to the store for, in order to get groceries'
- D. *ha'át'ii biniinaa kóó naniná?*
why for what reason (it because) here be your reason
'How come you're here? What is your reason (that you're not somewhere else)?'

Another postposition used in causative constructions is *háálá* shown in example D (Goossen 1995: 204).

- E. *doo kingóó déyáa da, háálá shibéeso ádin.*
NEG it broke I started to go PART how, what my money nothing
'I'm not going to the store because I'm out of money'

Goossen also provides this example with *ébiniinaa* in free variation with its reduced form *baq*.

- F. *beisénah lá. ébiniinaa/baq coo yínishta'daítéé'.*
I forgot puzzlement that because PART I to read that thing
'I forgot about it. That's why I didn't read it'

4.4 Lexical constructions

Languages that use lexical causatives use different lexical items to show causation. Comrie (1981: 161) describes the lexical causative as, "...the lexical causative, i.e. examples where the relation between the expression of effect and the expression of causative macro-situation is so unsystematic as to be handled lexically, rather than by any productive process."

Several lexical approximations to the English 'because' exist in Navajo according to Haile (1950: 101) and Young and Morgan (1972: 132, 2000: various entries). When questioned about these lexical expressions, our consultants did not recognize all the lexical words translated 'because'. Some of these words may be archaic, infrequently used, used regionally, or may have meanings that have changed over time.

- G. *bee 'at'é* 'due to it' (Haile examples)
xá'lá 'because, because...therefore' (modern spelling: *háálá*)
'éi biniyé 'because of it, account of it, purpose of it'
(modern spelling: *'éi biniyé*)
'é t'é 'because' (questioned)
'ékódigí 'because of' (questioned)
'éi baqah 'for that reason, because of that'
'éibq 'because' (modern spelling *'éibqah*)

<i>'ádik'ee</i>	‘because of self’ (questioned) (Young & Morgan examples)
<i>'éi binahjí</i>	‘on that basis, due to that, assistance is provided’
<i>bik'ee</i>	‘because of it’, also, <i>binah</i> , <i>binahjí</i> , <i>bee 'át'é</i>
<i>'alk'ee</i>	‘because of each other’

Éi baq̄h or *éi baq̄* is a synonym of *éi bininaa* and can be used interchangeably, according to Goossen (1995: 204). *Éi* is the demonstrative ‘that’. However native consultants felt that the *éi baq̄h* does not contain the same meaning, and that it is more emphatic, as in this example provided by Rosann Willink:

16. *béeso adin éi baq̄ naashnish*
 money nothing for that reason I work
 ‘I have no money therefore I must be working’

It was mentioned by consultants that *bik'ee*, (literally 'because of him/her/it'), is a lexical item, a postpositional phrase, that in general use can mean ‘because of it’ and that it is used infrequently, and often idiomatically. The postposition *-k'ee* can be used with pronominal prefixes just as with the postposition *-niinaa* (e.g. the reciprocal *alk'ee*, ‘because of one another’, and the reflexive *ádik'ee*, ‘because of myself’).

5. Morphological / Derivational causatives

A second type of causative in Navajo is indicated by the derivational morpheme *ʔ* prefixed immediately to the left of the verb stem. The Navajo verb is a composite construction consisting of a stem and prefixes that can occupy a series of 16 positional slots. The verb is expressed in seven modes. In Navajo, morphological causation is accomplished by the positioning of the causative prefix *ʔ* directly before the verb stem. According to Axelrod (1998: 48) “The classifier, or voice, prefix of . . . Athabaskan languages, occupies the position to the immediate left of the root. The prefix that occupies the classifier position in any given verb is assigned thematically (i.e., lexically). That classifier may also be altered by means of a derivational process associated with transitivity and/or voice.”

Morphological causation derives new verbs and requires an agent as a cause, as shown in the examples that display the *ʔ*. According to Comrie (1985: 323), “Here, the basic verb forms a sentence that describes some situation; the derived verb has a different subject, and the new subject brings about [... ..]the situation described by the sentence containing the basic verb.” This derived construction is the causative, and the causative uses participants and actants to describe the situation, so that and the prefix *ʔ*- added to verbs indicates the addition of a causer.

The derivational meaning of *ʔ* varies according to the verb. Axelrod (1998: 51) states the *ʔ*-classifier in the Northern Athabaskan language Koyukon, works in a similar way: “In causative derivations, in which an argument is added to a verb, there is also a change in the classifier: causatives always have an *ʔ*-classifier.” Causatives in Navajo take the form: OBJECT–y-*ʔ*-verb stem, although the verbs that perform in this way are irregular (Hale and Platero 1996: 6).

5.1 Active causatives: the *t* classifier

Causative verb constructions follow a pattern in which the causative is made by the introduction of a new argument. The subject function goes to object function in the causative situation. Young and Morgan state (1972: 118). “*t* is added to many zero class and I class verbs as a causative and transitivizing agent.” Navajo examples 16 and 17 show the positioning of *t* after the pronoun and before the intransitive verb stem. The causative verb is created from the intransitive verb in these two sets of examples.

17. a. *nezd'a*
‘she sat down’
- b. *binelt'a*
‘I made her sit down (I caused her to sit down)’
18. a. *á shá*
‘I eat’
- b. *shi'iils'*
‘She’s causing me to eat’

While a transitive clause has a subject and an object, the causative introduces a new argument in the agent, the causer. The example in F, from Reichard and Bittany (1940: 16), shows the plain transitive progressive verb in F a, the causative of the passive progressive in F b, and the causative transitive with both direct object (the causee) and postpositional object (the patient) in F c.

- H. a. *yi-dis* (modern spelling *yisdis*)
‘he is spinning it’
- b. *yo-t-dis* (modern spelling: *yootdis*)
‘he is causing twisting (of) it’
- c. *yiyo-t-dis* (modern spelling: *yiyooldis*)
‘he is causing her (it) to twist it’

The verb, *nabiishlá*, seems to be the causative form of the verb ‘walk’ and is used only in the cases in which a person is training a baby to walk, or helping a baby to walk around, and it may imply a spinning or wobbly motion. It might also be used in play, in which persons were handling small stuffed animal toys. Example 22 shows how the expression is constructed when the baby walks around on its own. Example 23 shows the causative.

19. *'awéé' naaghá*
Baby 3 p slowly walk around or in a round trip
‘The baby is walking around’

20. *'awéé' nabiishlá*
 baby 1 s to walk around as a baby or a drunk
 'I am causing the walking the baby to around'

5.2 Stative causative constructions

Two morphological causatives in Navajo are of special interest in that they do not signal causation in the usual 'making something happen' way, but rather signal intentionality, in the maintenance of a particular state. Kibrik (1993) terms this "possessivization." He explains that: "Across Athabaskan languages a typologically somewhat unusual variety of causative is spread—that is, so-called 'possessives' that are derived perhaps exclusively from states indicating motionless location or existence and designate possessing the object in a certain state...It is very likely that the possessive meaning of the forms in question is rather a side effect, typically but not obligatorily accompanying the inherent meaning that can be expressed as causing an existential/locative state to be maintained, controlling a goal in a position" (Kibrik.1993: 55-6). He cites examples G through J from Young and Morgan:

- I. *dini-O-niih*
 Aff:2sg/A-TI-hurt
 'you are in pain'
- J. *ni-O-di-t-niih*
 2/G=3/A-Aff-Ti-hurt
 'it makes you ache'
- K. *kéz-O-d—d*
 Aff:3/A-Ti-sraighten
 'It straightened up, stood erect'
- L. *shi-O-s-4-l-d—d*
 Aff-3/G-Aff-1sg/A-Ti-sraighten
 'I straightened it out'

Our consultants provided us with examples 18 and 19. Here the plain stative verb is shown in the a forms, and the derived causatives with *t-* classifier in the b forms:

21. a. *si'ka*
 'it's there'
- b. *selka*
 'I have it for a purpose'
22. a. *siá*

‘it (a solid, round object) is on the table without my doing anything’

- b. *séł’á*
‘I kept it from rolling around on the table’

The stative stems may describe a person or object being in a sitting, reclining or standing position. When a person changes position, it is the subject that performs the action involved. Causatives of these verbs express that the change in position was done to the person by a causer.

These examples come from Young (2000: 239), and were verified by our consultants:

- M. a. *neezdá* ‘he /she/ it sat down’
b. *binéldá* ‘I caused him/her/it to sit down’
- N. a. *neezhtéézh* ‘they two lay down’
b. *binéltéézh* ‘I made them two lie down’ (‘They are the possessor of my actions’, according to consultants.)
- O. a. *yiizí* ‘he/she/it stood up’
b. *biitzí* ‘I stood him/her/it up’
c. *bisésí* ‘I have or hold him/her/it standing (standing position)’

Other examples from native speakers, show that the speaker is not only stating fact, but is stating that he or she has caused and is in control of the situation:

23. *shichidí hooghan bine' jí bisésí*
‘I keep a car behind the Hogan’ (car is animate)
24. *tsésq' gi tsidiiltsooí biséldá*
‘I keep a canary in my window’ (I cause a canary to be in the window)

6. Metaphorical or idiomatic uses of causative constructions

Navajo has metaphoric or idiomatic causative expressions within both the morphological and the analytic causative constructions. Jalon Begay described an instance of the causative construction in which a person is infected by another person who has a cold. Because the infected person is said to have swallowed the cold, it then resides in them. This is shown in example 24. Example 25 shows the way to say ‘I yawned’ in Navajo, where ‘yawn’ is expressed idiomatically as opening one’s mouth because of sleepiness.

25. *sha'deezha dak'os shiidiilna*
my little sister because of her cough I swallowed it
‘I caught a cold from my little sister’

26. *bił* *bik'ee* *diishch'ééh*
 sleep because of it I opened my mouth
 'I yawned'

Example O comes from Reichard and Bittany (1940:11) and shows 'dawn' expressed metaphorically as a force causing the passing of the night:

- P. *yilka* (modern spelling: *yilká*)
 some unknown force causes the passing of night
 'the day is dawning'

Young (2000: 388) cites several examples in which causative constructions are actually extensions of metaphoric ideas. As an example of this, *zhóód*, is a heavy bulky object such as a boulder.

27. a. *shizhóód* 'a large heavy object sits'
 b. *shéshóód* 'I have or cause a large heavy object to be sitting' (not
 actually a heavy bolder, but something I claim is big and
 heavy)

Hóyéé' is a word used to express 'fear', 'terror', or fright'. With the postposition *bik'ee* (on account of, because of) it means fear, 'because of terrible condition'.

Other metaphoric constructions include these examples reported by Young and Morgan (2000: individual entries)

- Q. *bik'ee* *haa* *shij* *nishté*
 because of it how mine to be (in condition)
 'I feel "sort of funny" about it'

- R. *bikée shiyah hodeesyiz*
 because of it, things turned under me
 'it startled me'

- S. *'ádik'ee yícha*
 because of myself, I kicked it
 'I wept on account of myself'

6. Conclusion

In this paper we explored how causation is used in the Navajo (Diné) language and developed a typology based on consultation with native speakers and the scholarly literature. We identified three general types of causatives; analytic causative constructions, morphological / derivational constructions, and metaphorical phrases that have a literal meaning of causation.

Analytic causatives in Navajo use the typical analytic devices and form sentences that express causality. This type of causative has four subclasses:

- Analytic juxtaposition in which the causative relationship is inferred from the ordering of the clauses, where the cause clause precedes the result clause. In this case the clause construction expresses the idea of two events, one preceding and causing the other.
- Temporally marked analytic constructions use an enclitic to subordinate the clause and set up a condition showing causality.
- Postpositional causative constructions usually use postpositions such as *-niinaa*, with pronominal prefixes to express ‘because of P’.
- Lexical causative constructions are words that are approximations to the English ‘because’.

Morphological or derivational causatives employ derivational *ʔ*- classifier prefixed. There are two subclasses of this causative type:

- The active causative construction, *ʔ*- classifier, is added to class verbs as a causative and transitivizing agent.
- Stative causative constructions describe a person or object that is caused to be sitting, reclining or standing position.

Metaphorical or idiomatic uses of causative constructions have meaning that cannot be derived from a word-by-word translation of the utterance. Causation is expressed in Navajo, but the causative relationship has been bleached with use.

We conclude that morphological causatives (section 5) express more direct causation than analytic causatives (section 4). This is in agreement with Comrie (1985: 333-334) who says, “Where one has a causative situation, involving a causer (person, thing, force) and a situation brought about, then one relevant semantic parameter is the degree of closeness between the cause (i.e. the causer’s action) and the effect (result situation)...Although an absolute distinction between mediated and immediate causation is difficult to draw, one often finds that, when a language has both analytic and morphological or lexical constructions, the former implies less direct causation than the latter.” The morphological causatives require an agent as a cause. As an example, the *ʔ*-type morphological causatives take on a strong meaning of intentionality, as in example 17 a, in which the person was made to sit down. Compare this to examples 2 and 4, in which causation is brought about more by circumstances than forces.

The lexical constructions (section 4.4) imply a greater closeness between cause and effect, and are sometimes used when the causative is used more specifically.

The causatives using analytic juxtaposition (section 4.1) have the weakest connection between the causer and the situation. In some cases, it is implied that the cause of the events was out of control of the speaker. Causative constructions, such as example 1 show that an internal force such as hunger is the cause, and utilize analytic juxtaposition to express the cause and result relationship.

Of the analytic types, postposition causative constructions (section 4.3) displayed the strongest relationship between the referent and the event. The postposition analytic causative marks the initial cause clause by *-niinaa*, or its derivations to express ‘because’. The *-niinaa* constructions are used for a clear causal relationship, as in example 14, which shows that ‘because of me he left’ (*shi’niinaa dah dee yah*).

Stative causative constructions (section 5.2) imply that the speaker is actually in physical control of the described event, and thus there is a stronger relationship between cause and the event.

The *I*-type morphological causatives (section 5.1) also take on a strong meaning of intentionality and the subject is taken as strongly agentive, as seen in example 22b, 'I kept it from rolling around on the table', (*séł'q̣*).

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