Who acts on whom: the animacy ranking behind yi- and bi-

2026-11-11 audit pass 2. Apostrophe fixes only. Navajo glottal stops typed as ' or ’ (for example in prefix names like ’a- and ’e’e-, or words like Awéé’) now print as ’ (U+02BC), and a build step no longer turns the closing quote of an English translation inside a Navajo row into a glottal stop (‘...the girls.’, not ‘...the girls.’). No form, gloss or translation wording changed.

2026-11-11 audit pass 4. Copied examples: the essay builder dropped the first Navajo word of every example it copied from a working note (for example Witherspoon’s *Hastiin łį́į́’ yiztał* showed as *łį́į́’ yiztał*, so each gloss sat under the wrong word). The words are restored exactly as the working note prints them; no form was changed. See the pass 4 report.

Grant Golland (research by Grok Bot) · 2026-10-27 · status: SOURCED data; HYPOTHESIS mapping onto Dowty; INV-CAP withdrawn

Abstract

When both participants are third persons, Navajo marks the verb yi- when the higher-ranked participant is the subject-first noun and bi- when the order is reversed. Two native-speaker-informed sources, Witherspoon 1977 and Creamer 1974, describe the ranking that decides this. This essay shows that the ranking is a ranking of capacities (intent, intelligence, potency, movement) that maps onto Dowty's proto-agent properties, that equal rank leaves

the choice free, and that the ranking is computed over roles as construed in the event rather than over nouns. It also records one site hypothesis that the data falsified and withdrew (INV-CAP).

Restated on the unified structure (2026-11-15): the inverse is one extra Move of the patient above the raised agent (H3), with the animacy ranking as a described trigger (H53, a stipulation). See https://navajo-decoded.grant-golland.workers.dev/unified-structure/#us-map (https://navajo-decoded.grant-golland.workers.dev/unified-structure/#us-map). The essay's data, judgments and citations are unchanged; it is kept as the record of what was argued then.

1. The question

Navajo transitive verbs with two third persons come in pairs. Is the choice between *yi-* and *bi-* governed by a ranking of the participants, and if so, a ranking of what: nouns, referents, or the roles they play?

2. The data

With two animals of comparable rank, either form is fine; the form decides who kicked whom:

(1)

łį́į́'	*dzaaneez*	*yiztał*	*'The horse kicked the mule.'*
horse	mule	yi-kicked	

Sandoval & Jelinek 1989:335–337, (1), (2), (5), (6), (7) (all marked as Navajo). Copied from The inverse: when a lower argument outranks the agent, ex. (1).

(2)

łį́į́ʼ	*dzaaneez*	*biztał*	*‘The horse got kicked by the mule.’*
horse	mule	bi-kicked	

Sandoval & Jelinek 1989:335–337, (1), (2), (5), (6), (7) (all marked as Navajo). Copied from The inverse: when a lower argument outranks the agent, ex. (2).

With a human and an animal, the human comes first in both forms:

(3)

Hastiin	*łį́į́ʼ*	*yiztał*	*yi-*	*‘the man kicked the horse’, acceptable (p. 64)*
(man)	(horse)	(it-it-kicked)		

Witherspoon 1977:63–65, 72, 79–80. Copied from Who can act upon whom? Witherspoon 1977 on yi-/bi-, read against Dowty's proto-agent properties, ex. (3).

(4)

Hastiin	*łį́į́ʼ*	*biztał*	*bi-*	*‘the man was kicked by the horse’, acceptabl*
(man)	(horse)	(it-it-kicked)		

Witherspoon 1977:63–65, 72, 79–80. Copied from Who can act upon whom? Witherspoon 1977 on yi-/bi-, read against Dowty's proto-agent properties, ex. (5).

A natural force acting on a person needs *bi-* (Witherspoon (9)); acting on a stick it takes *yi-*:

(5)

Atʼéédˊ	*tó*	*biisxį́*	*bi-*	*‘the girl can be drowned (killed) by the wate*
(girl)	(water)	(it-it-killed)		

Witherspoon 1977:65–66, 73. Copied from Who can act upon whom? Witherspoon 1977 on yi-/bi-, read against Dowty's proto-agent properties, ex. (9).

(6)

Tó	*tsin*	*ʼayíłʼéél*	*yi-*	*‘the water carried off the stick’, “cu*
(water)	(stick)	(away-it-it-carried)		

Witherspoon 1977:66, 74–75. Copied from Who can act upon whom? Witherspoon 1977 on yi-/bi-, read against Dowty's proto-agent properties, ex. (18).

Creamer's lightning pair:

(7)

Ii'ni'	*diné*	*yił*	*łee' díłch'il*	*yi-*	*'Lightning struck the man.' (p. 33)*
[lightning]	[man]	[3-with]	[struck]		

Creamer 1974:33–34. Copied from Eight ranks: Creamer 1974 read in the original, and an inanimate inverse subject, ex. (c1).

(8)

Diné	*ii'ni'*	*bił*	*łee' díłch'il*	*bi-*	*'The man was struck by lightning.*
[man]	[lightning]	[3-with]	[struck]		

Creamer 1974:33–34. Copied from Eight ranks: Creamer 1974 read in the original, and an inanimate inverse subject, ex. (c2).

3. The argument

The ranking is a ranking of capacities. Witherspoon says control is set "primarily" by intelligence and "to a lesser extent" by animation (p. 77), and that water lacks "intent or will" (p. 69). Creamer names intent, intelligence, potency and movement (p. 30); an ant outranks a flood (c20) SOURCED . Read with Dowty's labels, which are ours, this is weighted proto-agent potential, with sentience and volition above causation and movement HYPOTHESIS . SOURCED HYPOTHESIS

Equal rank leaves the choice to topicality. This holds for every equal-rank pair Creamer prints (groups 1–5) SOURCED . SOURCED

Roles, not words. Rock and tree swap places depending on the event. A newborn is re-ranked by how it is construed, not ranked simply as a human (Witherspoon b2–b4; Creamer pp. 33, 37). Creamer's group-7 rank is set by the verb's movement (p. 36), and lightning's rank is set by the verb (p. 33). The ranking is therefore computed over participants as construed in the event, before any noun is adjoined. This is the strongest sourced case for Essay 1's thesis HYPOTHESIS . HYPOTHESIS

4. Counter-evidence

- **INV-CAP is withdrawn.** INV-CAP, a site hypothesis of the morning of 2026-10-21, said that an inverse subject must have potential sentience or volition. Creamer's (c28) has a tree as the preferred *bi-* subject. The hypothesis is falsified, and the rock/tree pairs are explained as unequal by Creamer's movement rule SOURCED .
- **Counting entailments fails.** In Creamer's (c28), old age causes the tree's death but ranks below the tree. That cuts against the version of rank that counts the event's proto-agent entailments. The capacity version survives HYPOTHESIS . HYPOTHESIS
- **Not pure Dowty.** "Usefulness to man, or relatedness to man" (Creamer p. 30) has no Dowty counterpart SOURCED . SOURCED
- **Grammar or culture?** Witherspoon calls the ranking "cultural rules" (pp. 66–67), while Creamer treats it as a syntactic inversion governed by rank. T5b stays open OPEN . OPEN
- **What *bi-* means.** Witherspoon also reads *bi-* as 'let' (b2). On the entailment reading that cuts against INV-1; on the capacity reading the site adopted, it does not HYPOTHESIS . HYPOTHESIS

5. Status

> The ranking is sourced, and the capacity reading is a hypothesis supported by three sources. Inanimate pairs where neither or both participants move are untested (T20e) OPEN . Essay 3 takes up whether the inverse moves the patient. OPEN

References

1. Witherspoon 1977 (pp. 63–80 as recorded on the site). OPENED
2. Creamer 1974. Ranking in Navajo nouns. Navajo Language Review 1(1), ERIC ED 101 549. OPENED
3. Willie, MaryAnn 1991. Navajo pronouns and obviation (dissertation), pp. 72–100. OPENED

4. Sandoval, Merton & Eloise Jelinek 1989. The bi-construction and pronominal arguments in Apachean. OPENED
5. Dowty 1991. Thematic proto-roles and argument selection. Language 67. OPENED

Working notes behind this essay: Who can act upon whom? Witherspoon 1977 on yi-/bi-, read against Dowty's proto-agent properties, Eight ranks: Creamer 1974 read in the original, and an inanimate inverse subject, The inverse: when a lower argument outranks the agent.

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