

Where does the word end? One ordering rule, two cycles

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: GRANT'S CONJECTURE → HYPOTHESIS (CYC); MVS-sealing revised; T44a OPEN

Abstract

Navajo puts heads first inside the verb word but last in the clause. Grant proposed that the word is the point where the ordering changes. This essay states a single ordering rule, CYC, that applies once to the word and again to the clause, with the finished word counted as one block. CYC reproduces every sourced order tested. It then uses the yes/no enclitic and the question endings to locate the sealed unit, which turns out to be the verb word W, not the larger verb-plus-postposition complex.

Restated on the unified structure (2026-11-15): the word edge and prefix order are restated as Grant's Merge-site hypothesis (GRANT'S HYPOTHESIS, fit/misfit OPEN in §3.2); question enclitics are interpreted in C^0 and pronounced on a host (H12). See https://navajo-decoded.grant-golland.workers.dev/unified-structure/#us-word (https://navajo-decoded.grant-golland.workers.dev/unified-structure/#us-word). The essay's data, judgments and citations are unchanged; it is kept as the record of what was argued then.

2026-11-11 audit pass 1

The earlier argument slid from a model reproducing word order to a demonstrated headedness changeover. That inference is withdrawn: A/B, CYC and the W cycle are hypotheses, not axioms. A sealed pronunciation unit does not uniquely identify a syntactic head or B1/B2/B3. Our primary comparator is V→v→T plus a subject first merged in left Spec,vP and separately raised to Spec,TP; PF/template rivals remain live. The current boundary and movement tests leave the unique boundary OPEN.

2026-11-13 audit pass 7

The pass-1 note above treats V→v→T and subject raising as a comparator to test against PF/template rivals. Since 2026-11-13 they are the working default in tensed clauses: VPISH frames where the arguments start so that syntax and semantics line up; it is not a word-order account. PF merger and template filling are kept only as labelled contrast, for how exponents line up inside the word, and the open question is what else has to move. The pass-1 note is kept as written. See the 2026-11-13 note and the pass 7 report.

1. The question

In the older model, conjunct prefixes are analyzed as heads ordered first (their headhood remains a hypothesis): Qualifier, then Mode/Subject, then classifier, then stem. Several clause-level items are final; whether each is a selecting head is OPEN: *ya'*, *-go* and *-ǫ́ǫ́* sit at

the right edge. Does Navajo need two rule books? Grant's conjecture is that the word is where the ordering changes GRANT'S CONJECTURE . GRANT'S CONJECTURE

2. The data

The yes/no enclitic attaches to a clause-level unit, including a postposition word in front of the verb (NLA):

(1)

Dibéésh nee hólǫ́?
`sheep-Q 2-with exist.NI`
'Do you have sheep?'

NLA Navajo Questions, yes/no page (live, 2026-10-21). Copied from Attached or separate? Procliticized vs detached postpositions, where the word ends, and which verb + postposition pairs are idioms (T43e), ex. (4).

(2)

Neésh hólǫ́?
`2-with-Q exist.NI`
'Do you have any?'

NLA Navajo Questions, yes/no page (live, 2026-10-21). Copied from Attached or separate? Procliticized vs detached postpositions, where the word ends, and which verb + postposition pairs are idioms (T43e), ex. (6).

It can sit on any constituent, which then becomes the focus:

(3)

Da' shizhé'é tł'óół yizhbizhęęsh bee dibé síníloh?
`Q 1-father rope 3-3-braid.P-past 3-with sheep 3-2-rope.SP`
same translation; focus on 'braided'

NLA Navajo Questions, yes/no page, (9)–(11b), as displayed (brackets are the NLA's). Copied from Can a noun stand between a postposition and its verb? bee dibé síníloh, Willie's uninterruptible verb complex, and where a postpositional phrase is merged (T49), ex. (10b).

(4)

Da’ [shizhé’é tł’óół yizhbizhęę] bee dibéésh síníloh?

`Q 1-father rope 3-3-braid.P-past 3-with sheep-Q 3-2-rope.SP`

same translation; focus on ‘sheep’

NLA Navajo Questions, yes/no page, (9)–(11b), as displayed (brackets are the NLA's). Copied from Can a noun stand between a postposition and its verb? bee dibé síníloh, Willie's uninterruptible verb complex, and where a postpositional phrase is merged (T49), ex. (11b).

The content-question ending is limited in the inverse:

(5)

Díí=sh hái yiztał

`DEM=Q who 3.3.kicked`

‘This person kicked who?’

Willie 1991:210–212 (page images); (16), (17), (19), (20) at 300 dpi. Copied from Two question endings compared: content-question =sh and yes/no -ísh. First word or first phrase, and what the inverse forbids (T43f), ex. (16).

(6)

**Díí=sh hái biztał*

`DEM=Q who INV.3.3.kicked`

[‘This person was kicked by who?’]

Willie 1991:210–212 (page images); (16), (17), (19), (20) at 300 dpi. Copied from Two question endings compared: content-question =sh and yes/no -ísh. First word or first phrase, and what the inverse forbids (T43f), ex. (17).

(7)

łíí’-ísh ii’ni’ biisxį́

‘Did the lightning kill the horse?’ (the only translation printed for (76); no gloss line i

Willie 1991:92 (page image), (76). Copied from Two question endings compared: content-question =sh and yes/no -ísh. First word or first phrase, and what the inverse forbids (T43f), ex. (76b).

3. The argument

CYC HYPOTHESIS . Inside a unit, the non-heads come first, ordered highest to HYPOTHESIS lowest; then the heads, also highest to lowest. Apply this once to the verb word. Then apply it again to the clause, where the finished word counts as a single non-head.

The earlier CYC comparison claimed to reproduce the following tested strings without movement; its assumptions and exception handling remain hypotheses:

- five Hale 2003 verb words;
- two NLA clause types;
- one Willie & Jelinek sentence.

It also derives Hale's split between lexical heads, which take their argument on the left, and functional heads, which take their complement on the right. That restates Grant's conjecture within CYC; it does not independently establish the cycle or the headedness changeover.

The sealed unit is W. Willie and Hale both say that whether a postposition is attached is a matter of pronunciation SOURCED . Willie (42) prints *Shił béé hózin*; the NLA SOURCED writes *shił bééhózin*. The verb-plus-postposition complex (MVS) is a phrase, not a sealed block. It "cannot be interrupted" only because nouns and particles are merged higher. The yes/no ending can still go between a postposition and the verb, as in NLA (6) HYPOTHESIS . HYPOTHESIS

The inverse limits shifting, not landing. (76b) is fine because the yes/no ending is in its plain first position. *(17) is out because the content ending has been shifted off its question word HYPOTHESIS . HYPOTHESIS

Two derived results HYPOTHESIS : HYPOTHESIS

- The reflexive is two pieces, *'á-* and *di-* (Kibrik). The outer piece sits above *da-*, which gives *'á* ⌢ *da* ⌢ *di* by CYC with no new rule.
- Ordinary subjects are pronounced on Mode/Subject by Hale's own portmanteau condition (2003 n. 11).

4. Counter-evidence

- **The cycle boundary is stipulated.** Hale says when to stop building onto the skeleton is unsolved (2003 n. 12) SOURCED . SOURCED
- **Two exceptions.** Hale flags both himself: oblique objects that jump to the far left (n. 13), and deictic subject prefixes (2001:691) SOURCED . SOURCED
- **The interrupted MVS.** NLA (9)–(11b) puts *dibé* between *bee* and the verb, which Willie's rules forbid as written. The site's reading: a PP's site depends on the verb (Essay 8) HYPOTHESIS . HYPOTHESIS
- **The polar enclitic inside the word.** Hale's *ka-[á]sh nanin[á]* splits two words, not one. The site's "[-MFS]-like" verdict on the prefix zone therefore loses its only datum and goes back to open HYPOTHESIS . HYPOTHESIS

5. Status

> Still open OPEN : OPEN

- whether the moved *=sh* lands on the first word or the first phrase (T44a);
- whether any opened form puts *-ísh* inside a verb word (none does, but that is silence);
- the structural questions inside the reflexive analysis R1′.

References

1. Hale, Ken 2003 (manuscript), pp. 10–15, 27, 43, nn. 11–13. OPENED
2. Hale, Ken 2001, p. 691. OPENED
3. Willie, MaryAnn & Eloise Jelinek 2000, pp. 266–273. OPENED
4. Willie, MaryAnn 1991, pp. 40–50, 64, 92, 210–212, 224 (page images). OPENED
5. Navajo Language Academy. Navajo Questions (yes/no page); Postposition Lexicon. OPENED
6. Kibrik 2005 (reflexive segmentation). OPENED
7. Young & Morgan 1987. NOT OPENED

Working notes behind this essay: Rule sets A and B as spell-out statements: one ordering rule, two cycles? Hale 2003's hierarchy against an antisymmetric alternative (T27j), Where the verb word, the nouns, the =go clause and topic/focus sit: a vP/TP spine for Willie & Jelinek's S-trees, and parallel processing split into grammar and parsing (T27l), Where the yes/no enclitic -ísh can go, and what it shows about where the Navajo word ends (T41f), Two question endings compared: content-question =sh and yes/no -ísh. First word or first phrase, and what the inverse forbids (T43f), Attached or separate? Procliticized vs detached postpositions, where the word ends, and which verb + postposition pairs are idioms (T43e), Can a noun stand between a postposition and its verb? bee dibé síníloh, Willie's uninterruptible verb complex, and where a postpositional phrase is merged (T49), Why the reflexive comes before plural da- and the reciprocal after it: a two-piece reflexive and a one-piece reciprocal (T35b), Why ordinary subject prefixes sit on the tense-aspect head and the fourth-person, indefinite and areal subjects do not: one feature bundle, two places to pronounce it (T35c, T36g).

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