

SPATIAL DIFFERENTIATION AS MIDDLE VOICE MOTIVATION IN DENA'INA ATHABASKAN ITERATIVE VERBS

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A study of the variable occurrence of middle voice marking in verbs containing the “iterative” morpheme *nu-*.

Dena'ina is spoken by ~50 people in the Cook Inlet region of Alaska.

Outline of presentation:

- I. Verb template
- II. Middle marking in Dena'ina
- III. *Nu-* and middle marking
- IV. Methodology
- V. Data
- VI. Discussion
- VII. Conclusion

I. VERB TEMPLATE

Table 1: Dena'ina verb template (Tenenbaum 1978:34)

Object of PP	Postposition	Adverbial	Iterative	Incorporate	Distributive	Disjunct Boundary	Object Pronoun	Deictic Pronoun	Thematic	Conative	Inceptive	Gender	Negative	Thematic	Semelfactive	Conjugation	Mode	Subject	Classifier	Stem
19	18	17	16	15	14	#	13	12	11	10	9	8	7	6	5	4	3	2	1	
Disjunct (outer) morphemes							Conjunct (inner) morphemes													

- (1) Example of template morphology:

hdghezəlchin (Tenenbaum 1978:156)

h-	d-	ghe-	z-	e-	ł-	chin
AREA-	GENDER-	THM-	MODE-	1S.SUB-	Ł.CLF-	chink
19-	8-	6-	3-	2-	1-	STEM

‘I chinked the house (stuffed holes with insulation)’

II. MIDDLE MARKING IN DENA’INA: FORM & MOTIVATION

- Classifier (position 1) of four possible forms: Ø, ł, d, l
 - can be lexically determined, or used derivationally in changes to voice/valence/transitivity
 - the *d*-classifier marks shift to lower transitivity (e.g. middles: reflexives, reciprocals, incorporated body parts, etc.).
 - Rice’s (2000) “low differentiation of arguments and events” as motivation for middle marking across Athabaskan in a variety of constructions.
 - Other suggestions: detransitivization (Kibrik 1996), agent suppression (Thompson 1996), agent affectedness (Holton 2000, 2005).
- (2) Example of *d*- in middle construction: self-benefactive
guxi shu dak’inil ‘pour coffee for me’
guxi nan dak’idnil ‘pour coffee for yourself’

III. INTRODUCTION TO *NU*- AND MIDDLE MARKING PATTERNS

- Meanings of *nu*-:
 - Iteratives: spatial (‘back’), temporal (‘again’)
 - Perambulations
 - Terms for weather/atmosphere
 - Terms for getting dressed
 - Customaries

- *Nu-* and middle voice marking (*d*-classifier):
 - Sometimes triggers middle voice marking: *the d-classifier is said to occur in intransitives, but only very rarely in transitives* (Tenenbaum 1978, Kari 1990, Rice 1989, Rice 2000, Holton 2000, Jetté & Jones 2000).
 - **In fact, for Dena'ina, occurrence of *d-* in verbs containing *nu-* is not as clear as previously thought.**
 - Large minority of examples of intransitives without *d*-classifier, and of transitives with *d-*.

(3) Intransitives:

- a. *gheyul* 's/he is walking'
- b. *nughedyul* 's/he is walking back' (expected pattern)
- c. *nugheyul* 's/he is walking around' (unexpected pattern)

(4) Transitives:

- a. *yiljeh* 's/he hit him/her (once)'
- b. *nuyiljeh* 's/he hit him/her again' (expected pattern)
- c. *qunsha nuqetdghax* 'they kept packing back ground squirrels' (unexpected pattern)

- Proposal: **Relative Spatial Differentiation Hypothesis (RSDH):**

In Dena'ina, verbs containing the morpheme *nu-* are more likely to also contain the *d*-classifier if the spatial starting and ending points of the action are identical. Conversely, the *d*-classifier is less likely to occur when the spatial starting and ending points of the action are not identical.

- Compare (3b), (3c), (4c).

IV. METHODOLOGY

- 555 *nu-* verbs collected from Tenenbaum (1976a-d): ~2800 lines of text
- Discarded forms where classifier change is not visible:

Table 2: Effects of *d-* on classifier surface forms

Superimposing <i>d-</i> onto lexical classifier...		...resulting form:	See <i>d-</i> ?
∅	→	[d]	✓
ɬ	→	[l]	✓
l	→	[l]	✗
d	→	[d]	✗

- Coded remaining 335 verbs for transitivity, meaning.

Table 3: Distribution of *d-* in eligible *nu-* verbs, by transitivity; n=335, p<0.0001.¹

	+ <i>d</i>	- <i>d</i>
Intransitive (271)	204 (75%)	67 (25%)
Transitive (64)	34 (53%)	30 (47%)

V. DATA

Spatial iteratives. 175 total forms. Usually glossed as ‘back.’

Table 4: Distribution of *d-* in *nu-* spatial iteratives. 175 total.

	+ <i>d</i>	- <i>d</i>
Intransitive (156)	147 (94%)	9 (6%)
Transitive (19)	15 (79%)	4 (21%)

(5) Spatial iteratives: intransitive, +*d*
nu'idyu ‘he is coming back’ (3:2)²
nughudnex ‘he paddled back’ (2:19)

¹ For the sake of legibility, I have used shading in this table and those that follow to differentiate the results predicted by the literature from the “surprises.” White areas represent results that are predicted, while shaded areas represent unpredicted forms.

²Citations in this format are from Tenenbaum (1976a-d). The number on the left refers to the volume; the number on the right refers to the page. (3:2) references Tenenbaum (1976c), page 2.

(6) Spatial iteratives: intransitive, *-d*
tunuqesdatl ‘they came back up’ (2:32)
nu’ihdat ‘you guys come back again’ (4:3)

(7) Spatial iteratives: transitive, *+d*
nuhyilchesh ‘they brought it back’ (1:7)
tunushiziltax ‘bring me back up!’ (1:3)

(8) Spatial iteratives: transitive, *-d*
qananlggat ‘move the boat in! (i.e., back in to the shore)’ (4:40)

Temporal iteratives. 71 total forms. Usually glossed as ‘again.’

Table 5: Distribution of *d-* in *nu-* temporal iteratives. 71 total.

	<i>+d</i>	<i>-d</i>
Intransitive (50)	46 (92%)	4 (8%)
Transitive (21)	7 (33%)	14 (67%)

(9) Temporal iteratives: intransitive, *+d*
hch’a naghadnik ‘he started off again’ (2:43)
yagheli nugheshdlahi ‘I’ll be well (again)’

(10) Temporal iteratives: intransitive, *-d*
nutashchagh ‘he started to cry again’ (1:59)
tunuhtasdatl ‘they left again for the mountain’ (3:68)

(11) Temporal iteratives: transitive, *+d*
nunhtghest’ih ‘I’ll see you guys again’ (1:51)
tlegh nuhtazdlach ‘they started cooking fat again’ (2:7)

(12) Temporal iteratives: transitive, *-d*
nuch’iltan ‘we found him (again)’ (3:53)
desnuk’ehghildatl ‘they put more wood on the fire’ (2:4)

Perambulatives. 38 total forms. Usually glossed as ‘x-ing around.’

Table 6: Distribution of *d*- in *nu*- perambulatives. 38 total.

	+ <i>d</i>	- <i>d</i>
Intransitive (36)	0	36 (100%)
Transitive (2)	0	2 (100%)

(13) Perambulatives: intransitive, -*d*

nughel’esh ‘they (animals) are walking around’ (1:21)

nughunex ‘he was boating around’ (2:18)

(14) Perambulatives: transitive, -*d*

nuyughat ‘he packed him around’ (1:74)

Weather/atmospheric terms. 25 total forms.

Table 7: Distribution of *d*- in *nu*- weather terms. 25 total.

	+ <i>d</i>	- <i>d</i>
Intransitive (25)	8* (32%)	17 (68%)
Transitive (0)	0	0

*5 glossed as ‘again.’

(15) Weather: intransitive, +*d*

dnudilzet ‘they (days) began to get longer’ (2:37)

nu’ilkun ‘it started raining again’ (3:31)

(16) Weather: intransitive: -*d*

nughilghatl’ ‘it got dark’ (2:24)

nuhghinik ‘it was foggy’ (3:23)

Getting dressed. 14 total forms.

Table 8: Distribution of *d-* in *nu-* terms for getting dressed. 14 total.

	+ <i>d</i>	- <i>d</i>
Intransitive (4)	4 (100%)	0
Transitive (10)	10 (100%)	0

(17) Dressing: intransitive, +*d*

k'nuqadghildatl' 'he put on his snowshoes' (1:40)

dinughettutl' 'he slipped on his boots' (4:2)

(18) Dressing: transitive, +*d*

k'duhel ghini yet nilnughettutl' 'he tied his war club to his waist' (4:2)

k'duhel ghini dnuydenghalyuch' 'he tied his war club to his belt' (4:13)

Customaries. 5 total forms.

Table 9: Distribution of *d-* in *nu-* customaries. 5 total.

	+ <i>d</i>	- <i>d</i>
Intransitive (2)	2 (100%)	0
Transitive (3)	1 (33%)	2 (66%)

(19) Customaries: intransitive, +*d*

ch'anadyux 'he customarily goes out' (2:3)

shtunughednex 'he goes out hunting by boat all the time' (2:18)

(20) Customaries: transitive, +*d*

nuhughelyik' '(regularly) he took a rest' (3:56)

(21) Customaries: transitive, -*d*

nuqeyltih 'they used to wash him' (4:17)

nuhk'ghelax 'they would make him a swing' (3:51)

VI. DISCUSSION

- Role of lexicalization: choice not always available
- Perambulatives vs. spatial iteratives:
 - RSDH supported.
 - Spatial iteratives entail identical starting & ending points; these forms overwhelmingly contain *d-*.
 - Perambulatives entail starting and ending points *not* be identical; these forms never contain *d-*.
 - Caveat: Historical evidence shows perambulative and iterative morphemes to be from separate PA sources. If they are separate in modern Dena'ina, we would expect *nunu-* constructions to be possible, but preliminary work shows speakers are reluctant to produce or accept these forms. Instead, periphrasis is preferred, suggesting loss of distinction between perambulative and iterative morpheme.
- Spatial vs. Temporal iteratives:
 - RSDH supported.
 - Higher occurrence of *d-* in spatial iteratives (93%) than in temporal iteratives (75%).
 - Residue: how to account for temporal iteratives with *d-*?
- Weather:
 - Most likely temporal iteratives (5 glossed with 'again'), or *nu#gh* 'down.'
 - It may be possible to see some weather events, like incoming fog or impending storms, as motion events with start/end points, but the data here suggest no correlation to RSDH.
- Dressing:
 - All forms contain *d-*.

- Supports RSDH (reflexive/referencing body parts of participant).
- Customaries:
 - Too few examples in this study.
 - However, in both Ahtna and Carrier, the cognates of *nu-* frequently occur with verbs in customary aspect. Dena'ina may have analogous uses.

Table 10: Differentiation of starting and ending points contributing to middle voice marking

	Spatial differentiation may contribute?
Spatial iteratives	yes
Temporal iteratives	yes
Perambulatatives	yes
Weather	no?
Dressing	yes
Customaries	(too few examples)

VII. CONCLUSION

- More research is necessary to find a unified motivation for middle marking in Dena'ina and Athabaskan.
- Examination of Dena'ina “iterative” verbs shows that the relative differentiation of physical starting and ending points of an action contributes to the presence or absence of the *d-* classifier.
- RSDH is a refinement of Rice’s “low differentiation of arguments and events” that can account in part for the variable middle voice marking in *nu-* verbs. Spatial differentiation can be seen as an instance of low differentiation of arguments that is grounded in physical spatial relationships.

- Looking beyond iterative constructions, spatial starting and ending points may play a role in Athabaskan middle voice marking more generally.

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