Selectional Restrictions in Northeast Dene Verbs

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Dene (Athabaskan) verbs are famous both for their highly complex morphophonemics, and for their often complex, idiosyncratic, and/or discontinuous morphological dependencies. By "morphological dependencies," one means selection and blocking restrictions: two morphemes, in different positions in the verbal template, are either forbidden from appearing together on the surface (blocking), or one morpheme requires the presence of another morpheme (selection). To date, these sorts of selectional and blocking restrictions have often been described informally in the Athabaskan literature (Ackroyd 1982; Rice 1989, Cook 2004), sometimes in great detail (Rice 2000), but have never been formulated precisely in any formal theoretical framework. This presentation will show how both positive and negative *constraining equations* (Bresnan 2001, Dalrymple 2001) within LFG may be used to capture these effects, which have resisted analysis in any formal framework thus far. This presentation will focus on one particular set of selectional restrictions, the interaction of voice/valence marking, i.e. the "classifier" (position 13), marking of perfective viewpoint aspect (position 11) and situation aspect marking, i.e. "conjugation" (position 10). There is a complex interaction between these three positions: the classifier selects the perfective marker, while the conjugation marker (generally) appears only in the perfective. These patterns are illustrated in (1) and (2), using data from the Tetsǫ́ǫt'ıné (Yellowknife) dialect of Dëne Sųłıné (Jaker & Cardinal 2012).

(1a) Perfective marker /ne/ is used with *ł*- and Ø-classifier verbs

Underlying form	Surface form	Gloss
/ghe-**ne**-tságh/	hįtságh	'he/she cried' (PERF)
10-**11**-stem		
ACT-**PERF**-cry		
/ła-ghe-**ne**-ł-thër/	łaįłthër	'he/she killed (one animal)' (PERF)
1-10-**11**-13-stem		
preverb-ACT-**PERF**-CAUS-die.PERF		

(1b) Ø-allomorph of perfective marker is used with *d*- and *l*-classifier verbs

Underlying form	Surface form	Gloss
/he-ghe-**Ø**-d-shën/	heejën	'they were singing' (PERF)
7-10-**11**-13-stem		
3plS-ACT-**PERF**-MID-sing		
/de-k'e-ná-he-ghe-**Ø**-l-tsël/	dek'enáheeltsël	'they were washing themselves' (PERF)
00-0-1-7-10-**11-**13-stem		
REFLO-upon-LOC-3plS-ACT-**PERF-**CAUS.MID-clean		

When the classifier, in position 13, is either Ø- or *ł*- (causative), the overt surface allomorph *ne*- is used in the perfective. When, on the other hand, the classifier is either *d*- (middle voice) or *l*- (causative-middle), the Ø-allomorph of the perfective is used. The reason for positing a phonologically null allomorph of the perfective, rather than simply saying this morpheme is absent in middle voice verbs (cf. Hopper & Thompson 1980), is conjugation markers (in position 10), are generally present only in the perfective, not imperfective or optative forms (Rice 2000: 251-281)—see (2) below. In a lexical-incremental theory such as Lexical Phonology (Kiparsky 1982, 2000), it is necessary that the morphosyntactic feature perfective be introduced by some morpheme. This morpheme then licenses the presence of the conjugation markers as in (2a), which are not licensed in (2b).

(2a) Conjugation markers /the/ and /ghe/ appear in perfective.

Underlying form	Surface form	Gloss
/ná-**the-Ø-**s-l-zé/	nátheszé	'I hunted' (PERF)
1-**10-11-**12-13-stem		
LOC-**ACC-PERF-**1sgS-CAUS.MID-hunt		

/shé-**ghe-Ø-**s-d-tį/	shéestį	'I ate' (PERF)
4-**10-11-**12-13-stem		
food-**ACT-PERF-**1sgS-MID-sit(human)		

(2b) Conjugation markers /the/ and /ghe/ do not appear in imperfective

Underlying form	Surface form	Gloss
/ná-s-l-zé/	nászé	'I hunt' (IMP)
1-12-13-stem		
LOC-1sgS-CAUS.MID-hunt		

/shé-s-d-tį/	shéstį	'I eat' (IMP)
4-12-13-stem		
food-1sgS-MID-sit(human)		

These selection and blocking restrictions can easily be formalized in LFG, as either positive or negative constraining equations, respectively, in the lexical entry of that morpheme which is either selected or blocked. For example, the complete lexical entry for the perfective prefix /ne/ is given in (3).

(3) Lexical Entry for /ne/.

ne: V_{Affix} – Level 2
$(\uparrow \text{Aspect}) = \downarrow$
  $(\downarrow \text{Viewpoint}) = \text{Perfective}$
  $(\downarrow \text{Situation}) =_c \neg \text{Accomplishment}$
$(\uparrow \text{Voice}) =_c \neg \text{Middle}$
$(\uparrow \text{SUBJ}) =_c \downarrow$

$$\neg \begin{pmatrix} (\downarrow \text{PERS}) = 2 \\ (\downarrow \text{NUM}) = \text{DU} \vee \text{PL} \end{pmatrix} \quad \wedge \quad \neg \begin{pmatrix} (\downarrow \text{PERS}) = 1 \\ (\downarrow \text{NUM}) = \text{DU} \vee \text{PL} \end{pmatrix}$$

The entry in (3) specifies that *ne* contributes perfective viewpoint aspect, and is blocked in verbs with accomplishment situation aspect (i.e. *the*-conjugation), middle voice verbs, and in 2nd and 3rd person dual/plural forms. This pattern of blocking differs from other types of "blocking" described in the morphological literature, which generally involve two or more morphemes competing for the same position, where a more specific affix blocks a more general, 'elsewhere' affix (e.g. Anderson 1992). My presentation will provide a descriptive overview of the kinds of selection and blocking effects involving voice/valence, viewpoint aspect, and situation aspect in Northeast Dene languages, using numerous verb paradigms as examples, as well as a formalization of these effects using constraining equations, as exemplified in (3).

References:
Ackroyd, Lynda. 1982. Dogrib Grammar. Manuscript, University of Toronto. | Anderson, Stephen. 1992. A-Morphous Morphology. Cambridge University Press. | Bresnan, Joan. 2001. Lexical Functional Syntax. Blackwell. | Cook, Eung-Do. 2004. A Grammar of Dëne Sųłıné (Chipewyan). Algonquıan & Iroquoian Linguistics, Memoir 17. | Dalrymple, Mary. 2001. Lexical Functional Grammar. Academic Press. | Hopper, Paul & Sandra Thompson. 1980. Transitivity in Grammar and Discourse. *Language* 56 (2): 251-299. | Jaker, Alessandro & Emerence Cardinal. 2012. *Taltsáo'tįné Yatıé Bet'á T'áhat'į Erehtł'ís* / Yellowknife Language Verb Dictionary. Goyatıkǫ̀ Language Society, Yellowknife, Northwest Territories. | Kiparsky, Paul. 1982. Lexical Phonology and Morphology. In I.S. Yang (ed.) *Linguistics in the Morning Calm*, Hanshin Publishers, Seoul. | Kiparsky, Paul. 2000. Opacity and Cyclicity. *The Linguistic Review* 17: 351-365. | Rice, Keren. 1989. A Grammar of Slave. Mouton de Gruyter. | Rice, Keren. 2000. Morpheme Order and Semantic Scope. Cambridge University Press.