Aspect, Mood and Tense Inflection in Dene Sųłné

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Abstract

Verbs in the Athabaskan language Dene Sųłné are obligatorily marked for aspect and mood, although aspects and some moods are never expressed independently of each other. This distribution, as well as the modal connotations of the imperfective and perfective, is best explained by positing cumulative expression of aspect and mood grammemes with some combinatorial restrictions. Tense is not obligatory, but Dene Sųłné has a quasi-inflectional tense category, whose values are expressed by postverbal particles, and which interacts differently with the respective aspect and mood categories. Tense particle sequences and verb-particle constructions further broaden the range of possible meanings in the Dene Sųłné TAM system.

Keywords
Athabaskan, Dene Sųłné, Chipewyan, Morphology, Inflection, Aspect, Mood, Tense

1 Introduction

Dene Sųłné, formerly known as Chipewyan, is an aboriginal language spoken by approximately 10,000 people in over 20 communities in the Northwest Territories, Alberta, Saskatchewan and Manitoba, in western Canada. It is one of the major extant languages of the Athabaskan family, which stretches from Alaska and the Arctic coast to the southwestern USA. While endangered, Dene Sųłné is stronger in daily use among adults than most Athabaskan languages, and remains primary language of daily communication for adults over 35 in most communities. Typologically Athabaskan languages are polysynthetic, and the verb can stand alone as a complete utterance.
1.1 Organization of the Dene S̱únné Verbal Wordform

This section describes only those categories that are obligatory for all Dene S̱únné verbforms. Other material is mentioned in passing, to give a general idea of the domains and structure of the verbal wordform.

Athabaskan languages are almost exclusively prefixing, with aspect, mood and subject agreement markers occurring immediately before the radical (symbolized by \( √ \)). In transitive verbs, object agreement is normally found at or near the left edge of the verbform. The domains of the Dene S̱únné verb are outlined in Table 1. Categories indicated in white are inflectional and obligatory, while derivational, quasi-inflectional and stem regions are shaded in grey.

<table>
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<tr>
<th>INFL</th>
<th>Q-INF, DERIV, STEM</th>
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<td>{UO}</td>
<td>{ITER}</td>
<td>{INCP}</td>
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<td>{1SG.OBJ}</td>
<td>DIST</td>
<td>DUR</td>
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<td>{2SG.OBJ}</td>
<td>INCORP</td>
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<td>etc.</td>
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| Table 1: Inflection and Noninflectional Domains of Verbform (cumulative expression of aspect, mood and subject agreement). |

The stem provides the lexical meaning of the verb and is constant across the inflectional paradigm. The simplest type of verb stem consists of a one-syllable radical with one of four classifiers (CLF), noncompositional prefixes whose oppositions sometimes correspond to differences in transitivity. Other stems are discontinuous, combining a radical-classifier pair, often abstract in meaning, with one or more prefixes to the left of the aspect, mood and subject agreement inflections. This left noninflectional column in Table 1 is in no way exhaustive, nor are its morphemes mutually exclusive. Only a few examples are included to give the reader an idea of the different kinds of material found in this rather nebulous domain. Here one may find morphologically “dead” stem elements such as fossilized verb and noun class markers and incorporated stems, as well as quasi-grammemes indicating quantification and pronominals (i.e. the distributive). Adverbial and Aktionsart derivational prefixes (for example the durative, iterative and inceptive) may also be present. Morpheme ordering and co-occurrence are complex topics (see Rice 2000), and a full presentation of quasi-inflectional, derivational and lexical morphology is far beyond the scope of this paper.

The inflectional domain consists of highly fusional cumulative morphs. Subject agreement markers are difficult to divide from aspect and optative morphs without many abstract rules and can be considered weak megamorphs with aspect and mood inflections (see McDonough, 1999, and Mel’čuk, 1993, 159). Imperfective and perfective aspects, and indicative and imperative moods are also expressed by cumulative morphs that encode values of both

\[1\] AGR=agreement ASRT=assertion particle CLF=classifier D=distal DIST=distributive DUR=durative FUT=future INCORP=incorporated stem INCP=inceptive IND=indicative IPFV=imperfective, ITER=iterative MIR=mirative NC=noun class agreement OB=object agreement OPT=optative PFV=perfective PO=possessed/possessive REL=relativizer UO=unspecified object VC=verb class marker

\[2\] To address a wider audience I am forced to avoid most Athabaskanist terminology. I use "verb stem" instead of "verb theme", and I ignore the distinction drawn in the literature between the left-edge "disjunct" prefixes and the more fusional "conjunct" morphemes such as "qualifiers".
categories. This combined expression can be captured by Deep Morphological Rules 1-12, covering the realization of aspect and the indicative and imperative moods.

DMorph Rule 1:

\[
\{1_{\text{subj}}, 'sg_{\text{subj}}', 'ipfv', 'ind' \} \iff \{1SG.SUBJ.IPFV.IND\}
\]

DMorph Rules 2-4 are similar to Rule 1, but cover second-person singular, first-person plural and second-person plural subject agreement. Third-person subject agreement does not mark number.

DMorph Rule 5:

\[
\{3_{\text{subj}}, 'ipfv', 'ind' \} \iff \{3SUBJ.IPFV.IND\}
\]

The perfective aspect and subject agreement are likewise expressed cumulatively with the indicative mood grammeme:

DMorph Rule 6:

\[
\{1_{\text{subj}}, 'sg_{\text{subj}}', 'pfv', 'ind' \} \iff \{1SG.SUBJ.PFV.IND\}
\]

DMorph Rules 6-10 are therefore like DMorph Rules 1-5, with the perfective aspect in place of the imperfective. As with the imperfective aspect, the perfective does not distinguish number for third-person subjects.

The imperative mood is expressed by intonation rather than by segmental markers. DMorph Rules 11-12 cover its combination with second-person singular and plural subjects. Unlike the indicative, the imperative can carry only imperfective aspect. A filter rule prevents the imperative from being combined with the perfective:

(1) \textit{Filter Rule 1:}

\[
\text{If mood} = 'imp', \text{THEN aspect} = 'ipfv'
\]

The optative mood does not allow aspectual distinctions, so a second filter rule prevents the expression of the category of aspect with the optative mood grammeme:

(2) \textit{Filter Rule 2:}

\[
\text{If mood} = 'opt', \text{THEN aspect} = \Lambda \quad [[= \text{empty}]]
\]

The optative grammeme is therefore expressed cumulatively only with the subject agreement markers:

DMorph Rule 13:

\[
\{1_{\text{sub}}, 'sg_{\text{sub}}, 'opt' \} \iff \{1SG.SUBJ.OPT\}
\]

Rules 14-16 are similar to Rule 13, but apply to second-person singular, first- and second-person plural subject agreement. As with the aspects, number is not distinguished for third person subjects:

\[
\text{Instead of the negative imperative, the language uses \{2SG.SUBJ.OPT\} or \{2PL.SUBJ.OPT\} followed by prohibitive particle sënà.}
\]
1.2. The Semantics of Aspect and Mood Grammemes

The grammeme known as the imperfective aspect characteristically refers to situations whose temporal endpoints are not semantically visible. Without a narrative context, the hearer would assume that an imperfective-inflected verb as in (3) would refer to a present-tense situation.

(3) jíe káidel
    berry we.go.for (IPFV)
    ‘We are going for berries’ / ‘We go for berries’

Of course, the present tense reading can be “contradicted” by a past adverbial, as in (4), or by the surrounding discourse. Typically, in narratives the imperfective describes backgrounded, ongoing situations while the perfective is used to refer to a sequence of past situations, or to foregrounded, punctual past events. In (5), the protagonist performed a series of ongoing actions, such as walking on and swimming in water, which were interrupted by a sudden event.

(4) yaníší ñchogh k’é jíe nahílye
    long.ago horse on berry we.carry.back (IPFV)
    ‘In the past, we used to transport the berries on horseback’

(5) eyí ts’ékwi yek’eni hegal ú et’axá
    that woman 3D:behind she.walks (IPFV) when suddenly

    nyńíle tálth’er la
    wolf fell.into.water (PFV) ASRT

    ‘The woman was walking behind [the wolf] when suddenly the wolf slipped into the water’

The perfective aspect alone is conventionally interpreted as referring to a past-tense situation, but this is not an obligatory part of the perfective meaning. Examples (19)-(20) below will show examples of nonpast perfectives.

(6) selá k’enághitsil
    1PO:hand I.washed (PFV)
    ‘I washed my hands’

The optative has a strongly modal meaning in Dene Súhné, referring to a range of irrealis attitudes including volition and possibility, as in (7)-(9) or (26b) below. It has no aspectual meaning and can refer to future (7), present (8) or past (9) situations.
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In summary, the perfective often refers to past events and the imperfective to present or ongoing situations, but adverbs and other material can cause either aspect to refer to a past or future situation. The optative does not appear to carry any aspectual or tense interpretation. To unambiguously mark time reference, however, Dene Ŝûnè possesses a quasi-inflectional tense category, realized by postverbal particles.

2 Tense Particles

One consequence of the understandable focus on the rich verbal morphology of Athabaskan languages has been a certain neglect of closed syntactic classes such as particles. In Dene Ŝûnè, these differ from adverbs in their semantic and syntactic features. Adverbs tend to be clause-initial and are always autonomous words, but particles are post-verbal, usually monosyllabic and show characteristics of weak autonomy (Mel'čuk, 1993, 170-172), i.e. they cannot stand alone as utterances, although a few closely resemble inflected verbs which do show strong autonomy. The 20+ particles and particle sequences found in the corpus convey deictic and irrealis concepts ranging from deontic and epistemic modalities to tense and aspect to evidentiality strategies. For discussion of particles in related languages, see (Rice, 1989, 403-424) and (Cook, 2004, 106-108). Only tense markers are considered here, specifically the past tense nj and future tense ha.

Athabaskan languages have not usually been analyzed as having complete tense systems. Dene Ŝûnè, however, has the quasi-inflectional category of tense, marked by postverbal particles nj for past⁴ and ha for future. These quasi-grammemes unambiguously locate an event in time as before the utterance (10) or after it (12).

(10)  shësti  nj
     1SG.IPV.IND:eat   PAST
     ‘I was eating’, 'I ate’

(11)  sgk’îe  nj
     1PO:maternal.aunt   PAST

⁴ Interestingly, there is also a construction in which a human noun is modified by nj to indicate a deceased person, as in (11), which means 'my late aunt', a use not found with other particles.
2.1 Verb - Particle Constructions

Tense markers can appear with verbs in either aspect. In contrast with the temporal connotations of the aspects as seen in (3)-(6), this allows events in any tense to be viewed as unitary or unbounded. The minimal pair in (13)-(14) shows the aspectual contrast between the imperfective-past construction and the bare perfective, which refers to a punctual (and, in context, past) situation.

(13) káfí ʈa hesdâ ȵy
   coffee abundant I.drink (IPFV) PAST
   ‘I used to drink / was drinking a lot of coffee’

(14) káfí ʈa ghesdâ
   coffee abundant I.drank (PFV)
   ‘I drank a lot of coffee (all at once)’

In texts, the imperfective aspect and the past tense are frequently combined to refer to a range of past situations which are viewed imperfectively, such as past imperfectives as in (15) or past progressives like (16).

(15) hebá si ȵuk’é ȵya ʈ’aghe ʈët’is nählîye ȵy k’é
   father I land:on I.arrived (PFV) after letter he.carries (IPFV) PAST MIR
   ‘Even after I was born, my father kept delivering the mail’

(16) thiŋ ȵy Ɔ sets’ënî sekavaghîlîn
   I.sleep (IPFV) PAST when my.friend he.called.me (PFV)
   ‘My friend called me while I was sleeping’

A past tense marker can appear after a perfective verb to refer to a remote past situation, as in (17), or to describe the anteriority of one past event with respect to another, as in (18). The latter use is often translated into English as a past perfect.

(17) elk’etàghe-ch’adhél seghayé ʈ  school tînya ȵy
   sixteen my.age when I.went.out (PFV) PAST
   ‘I left school back when I was sixteen’

(18) Tedhé et’axa nîts’ëdél ethën ʈegháldê ȵy ʐa
   night suddenly they.arrived (PFV) caribou they.killed (PFV) PAST because
   ‘They suddenly set up camp one night because they had killed caribou’

The semantic extension from past to anterior is not surprisingly typologically given the considerable "overlap in their conceptual domains" (Bybee, 1985, 162).
The future grammeme is usually placed after an imperfective verb as in (12), but it is possible for the future to appear with the perfective. This construction, although quite rare in the corpus, is perfectly acceptable to refer to events which will be completed after the time of utterance, as in (19)-(20) below.

(19) Dene Sỳlméné ts'één nasda ts'één tthú k'aldgñé ert'lís thltsi ha
D.S. lands to I.return before already paper I.made (PFV) FUT
‘Before I return to the Dene Sỳlméné lands, I will have already made the book’

(20) November dé, taghe néné jã naghudher ha
when three year here I.lived (PFV) FUT
‘When November comes, I will have lived here for three years’

In contrast, the optative mood which is not expressed cumulatively with any aspect, cannot appear with tense markers.

(21) * nets'éwasmi nį / ha
I.would.help.you (OPT) PAST FUT
*I wanted to help you / will want to help you’

This incompatibility can be described by another filter rule:

(22)  
\[
\text{Filter Rule 3:} \quad \text{If mood = ‘opt’, THEN tense = Λ}
\]

The future grammeme marks time reference, unlike the optative mood, which is only modal, as in examples (7)-(9) and (26b) below. The same contrast has been observed between cognate morphemes in the closely related Slavey languages as well (Rice, 2000, 330).

2.2 Relative Tense

Unlike aspect and mood values, tense markers can be concatenated to form compositional sequences denoting relative tense. For example, the future-past sequence ha nį denotes past intention or past future prediction, and is often translated into English as “was supposed to” or “was going to”, as in (23)-(24).

(23) Sekwi tsqbaé eyi nughq náltsi ha nį
child money:PO that us:from they.take FUT PAST
‘They were going to take the family loans away from us’

(24) Eyi kwá’t’lë dé ḋyũ ḋzíné Wítígú nühs’tį ha nį sqá ḡũ
that it.is.so:NEG if now day us:to FUT PAST ASRT still
‘Otherwise Wítigú was going to be / would have been with us to this day’
For (Cook, 2004, 108) this sequence would be nonsensical if both particles marked tense, but in fact the construction is fully compositional according to the schema in (25), in which the inner particle ha marks the relative tense, future-in-the-past, of the clause S. The outer particle nî has semantic scope over all the preceding material and locates the clause + ha with respect to the speech act.

(25)  S ] ha ] nî

According to this schema, the past-future sequence nî ha, if it were observed, would indicate past-in-the-future or a future perfect meaning. This sequence, however, is to my knowledge unattested.

2.3 Aspect, Mood, Tense and Stem Semantics

While mood and tense grammemes appear to be applied freely to any stem, some lexemes do not allow for an aspectual distinction. Some stative or durative verbs such as the one in (26), which refers to a general character trait, are incompatible with the punctual nature of the perfective, as shown in (26a). If describing this situation in the past, speakers prefer to add the past tense particle after the imperfective verb. On the other hand, speakers readily accept the same stem in the optative (26b).

(26a)  *tíháreghîdy / *tíháreghy’dhen
       2SG.PFV.IND:take.care.of.appearance
       *‘You took care of your appearance (in one instance)’

(26b)  tíhárû’dhî
       2SG.OPT:take.care.of.appearance
       ‘You should take care of your appearance’

It is not surprising that mood should be combinable with a wider range of stems, since "mood does not affect the meaning of a verb" and is "less relevant to the verb than either aspect and tense are" (Bybee, 1985, 22).

The idea that the categories of mood and aspect interact differently with the verb’s inherent aspect is supported by phonological evidence as well. Even between verbs that accept both aspect and optative grammemes, aspect markers show extensive allomorphy. Perfective allomorphs in particular, referred to as "conjugations" in Athabaskan studies, loosely correspond to the event type and derivational potential of the stem (Rice, 2000, 256; Cook, 2004, 136). The optative, on the other hand, is phonologically much more regular and its allomorphs do not appear to correspond to the stem's event structure.

Conclusions

The expression of both aspect and mood categories can be obscured at first glance by combinatorial restrictions between grammemes and the absence of a surface segmental border.
between aspect and mood markers. Except for the optative, mood is always expressed cumulatively with aspect, and aspect is never realized alone. Following (Bybee, 1985, 32), the marking of indicative and imperative moods can be inferred from their logical contrast with other overtly expressed and more marked moods like the optative. The distinction between aspect and mood resurfaces when the expression of one of the categories is blocked, or when mood and aspect interact differently with tense categories or with the inherent aspectual properties of the stem.

At a pragmatic level, too, the separate meanings of aspect, mood and tense can be difficult to disentangle, even in a sentence-level analysis of single grammemes, although the differences emerge upon wider examination. To follow the speaker’s meaning, the hearer must discern whether a narrated event happened in the real world, whether it was ongoing or part of a sequence of events, and when it took place. The Dene data show how important the functions of foregrounding, backgrounding and sequencing are to aspect, which has been defined as delimiting a “completed event in the discourse” (Hopper, 1982). Both the time structure and the realis/irrealis distinction are critical to avoid vagueness and misunderstanding. Indeed, researchers studying other Athabaskan languages have noted a pragmatic link between aspect and mood that parallel the idea of combined morphological expression (see Rice 2000, 246-7 and Cook, 2004, 124-5). For example, (Axelrod, 1993, 19) notes that Koyukon aspects "have modal value" or that the realis mood in that language "further expresses the aspectual distinction between imperfective and perfective". While mood deals with “events and worlds” and while tense and aspect with "events and time" (Chung & Timberlake, 1985), languages tend to make fewer aspectual and tense distinctions in nonindicative moods (Bybee, 1985, 22), which links nonfuture time reference and boundedness with realis mood (Chung & Timberlake, 1985). These connotations and incompatibilities offer an explanation of why there should be combinatorial restrictions and cumulative expression of certain aspect and mood grammemes. The distributional facts and the functional overlap between categories in Athabaskan languages have led some researchers to posit a single category conflating aspect, mood and tense, variously called "aspect", "mode", "aspect-mood" or "TAM" in the literature. But for communication to be possible, the speaker must have access to both the aspectual and modal components. This paper claims that positing a structural difference between aspect and mood categories with cumulative expression would best account for the contrasting semantic content and combinatorial potential of these grammemes in Dene S̥ tłumé.

Tense is also pragmatically linked to aspect in Dene S̥ tłumé. This is not surprising, since aspects often have temporal connotations and uses in languages that do not obligatorily mark tense (see prototypical “tenseless languages” in Comrie, 1976, 82 and Dahl, 1985). However, the Dene S̥ tłumé system also features a fully developed array of tense categories which complement the aspects to express a wide range of subtle meanings. Tense is expressed optionally by particles, and not marked at all in some other Athabaskan languages. The emergence of a tense system is probably innovative in, and overlayed on, an older prototypical tenseless system. (Even so, tense grammemes and relative tense are frequent in the earliest recorded Dene S̥ tłumé data from the 19th century.) Also striking is the presence of sequences of tense markers which allow the language to describe the relative ordering of events within a tense. The appearance of simple and relative tense categories with the aspects highlights the fullness and subtlety of this language’s tense-aspect system, which cannot be reduced to the perfective-imperfective distinction, and which is not limited to verbal inflection and prefixal morphology.
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Bibliography


