ATHAPASKAN CLASSIFICATORY VERBS

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0. The Athapaskan languages are well known for the complexity of verb morphology, particularly for the alternation of verb stem sets, each of which marks highly complicated grammatical and semantic categories, including (i) aspect, (ii) number, (iii) manner (control), and (iv) what has been construed as a system of noun classification. Especially worthy of note is the fourth type of alternating stems, the so-called 'classifying' or 'classificatory' verbs, which have been considered more or less a unique characteristic of the Athapaskan languages. The aim of this study is to examine syntactic and semantic characteristics of the classificatory verbs in contradiction of the other three types of stem alternation and to determine if there is indeed a system of noun classification governed by the classificatory verbs, i.e. if there are restrictions of co-occurrence between the subject or object noun and the verb as it has been implied (e.g. DAVIDSON et al., 1963; KRAUSS, 1968), or explicitly claimed (CARTER, 1976). The phenomena dealt with in this paper should be interesting not only to the students of Athapaskan studies, but also to linguists in general, because of the intricacies of interplay between syntax, semantics, and pragmatics.

1. In Athapaskan, there are two types of aspects: (a) the lexical (i.e. inherent) aspect and (b) the inflectional (i.e. paradigmatic) aspect. These two have been

erroneously called 'aspect' and 'mode' respectively (see COOK, 1984). The lexical aspects are determined by the particular characteristics inherent in lexical items, so that there are verbs that may have a set of stems that are marked for 'durative' and 'momentaneous', and others for 'semelfactive' and 'seriative' and so forth. Each of these and other stem sets that constitute an aspectual paradigm further inflect regularly for 'imperfective', 'perfective', and 'optative' in most Athapaskan languages. Two types of these aspect categories are illustrated by the following Sarcee verb 'to cry':

(1)   Aspect

Lexical ⟍ Inflectional	Imp.	Perf.
Durative	**-tsíy**	**-tsày**
Momentaneous	**-tsáh**	**-tsày**

e.g. Durative: **īstsíy**   'I'm crying'   **yīstsày**   'I was crying'
      Momentaneous: **dīstsáh**   'I'm going to cry' **dīsīstsày**   'I started to cry'

While these two sets of verb stems are marked for aspect, they are not marked for number (of the subject or object). There are other verbs for which number is marked by alternating stems as illustrated by the following examples from Chipewyan. The forms cited in (2) constitute part of the neuter (lexical) paradigm inflected for the imperfective (inflectional):

(2)   Number
      a. sg. **-da**   **θida**   'I'm sitting'   **θĩda**   'you are sitting'
      b. dl. **-ke**   **θíke**   'we (2) are sitting' **θuhke**   'you (2) are sitting'
      c. pl. **-tθ'i** **déθíltθ'i** 'we (pl.) are sitting' **dułtθ'i**   'you (pl.) are sitting'

Each of the above examples represents a sentence where there is no overt subject noun; and the subject is marked by a pronominal prefix, e.g. **i-** '1 sg.', **ĩ-** '2 sg.', **í(d)-** '2 dl/pl', etc. Problems arise, however, where an overt subject noun or object noun occurs. The fact that number is not a grammatical category for nouns is obvious from the following Chipewyan examples:

(3)   a. **dǝne θeda**   'a man is sitting'
         man
      b. **dǝne heke**   'men (two) are sitting'
      c. **dǝne déltθ'i**   'men (three or more) are sitting'

Since the noun **dǝne** is not marked for number either grammatically or lexically, it may co-occur with any of the three verbs as shown above. But how should a

grammar handle the apparent co-occurrence restriction between the verb and the subject noun when the noun is modified by a quantifier? Consider the following examples:

(4) a. **ĩɬáɤĩ   dəne   θeda**   'one person is sitting'
         one   person he-is-sitting

         *nádəne (← náke dəne) θeda
         two persons   he-is-sitting

     b. **nádəne   heke**   'two persons are sitting'
         two persons they-are-sitting

         *ĩɬáɤĩ   heke
         one person

         *dĩɤĩ dəne   heke
         four persons

     c. **dəne   ɬã   déɬtθ'i**   'many people are sitting'
         person many they-are-sitting

         *ĩɬáɤĩ   dəne déɬtθ'i
         one   person

         *nádəne déɬtθ'i
         two people

The forms marked by * have been rejected by the native speaker that I worked with and it is not conceivable that such forms would be elicited under normal circumstances. Since each verb stem is marked for number, i.e. **-da** (singular), **-ke** (dual), and **-tθ'i** (plural), it is not difficult to determine semantic congruency between a noun phrase which is modified by a quantifier and a verb phrase in which number is specified.

From a strictly morphological point of view, each of the three alternating verbs presented in (3) constitute a 'defective' paradigm, since the singular verb (3a) inflects for the singular subject only (marked by prefixes) and the dual and plural forms (3b, 3c) inflect for plural subjects only. In other words, there are two sets of subject prefixes, one of which co-occurs with the singular stem and the other with either the dual or plural stem. For this reason, the verb stems like those in (3) are treated as suppletive or as classificatory along with category (iv) stems (see below).

The third type of alternating stems include those that are known to mark such semantic features as manner, e.g. polite vs. impolite, slow vs. quick (see YOUNG and MORGAN, 1980), purpose (see CARTER, 1976), or control (RICE, 1983). The stem alternation for controls[1] is best developed in-Slave as reported by RICE (1983), e.g.

(5)   Manner/Control (Slave, RICE, 1983)

a. **tu   seɣánĭ-<u>káh</u>**   'give me a glass of water (politely)'
     water

   tu seɣánĭh-<u>ge</u>   'give me a glass of water (quickly)'

b. **ts'eyéhĭh-<u>tĭ</u>**   'he woke him (gently)'

   ts'eyéẽ-<u>tšu</u>   'he woke him (roughly)'

c. **ts'éré ʔónédé-<u>la</u>**   'he gave away the blanket'
     blanket

   ts'éré ʔónédé-<u>wa</u>   'he threw away the blanket'

d. **godáʔedĭ-<u>tíh</u>**   'close the door (quietly)'

   godáʔeyedĭ-<u>tšu</u>   'close the door (in any manner)'

In each of these active (motion) themes, one of the alternating verb stems is marked for polite manner or controlled action. These alternating stems, although treated as classificatory verbs in some analysis, have nothing to do with the subcategories of nouns. CARTER (1976) also treated the Chipewyan stem **-tšu** as classificatory since it marks, in his view, a certain purpose as indicated by the following examples (CARTER, 1976: 29)[2]:

(6)   a. **tɬ'uli seɣáĭle**   'give me a rope (for me to keep)'
         rope

      b. **tɬ'uli seɣáĭɬ<u>tšu</u>**   'give me a rope (for me to use)'

This Chipewyan stem has nothing to do with the noun classification as the co-occurring object noun is not restricted to a particular subcategory. One of the semantic characteristics of this verb stem is that it specifies the intention or purpose (of the speaker? or the agent?), the exact nature of which may be determined by the rule of semantics or pragmatics. In short, the alternating stems

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[1] Salish is well known for this phenomena (marked by prefixes); see THOMPSON (1976).
[2] These forms are re-elicited and corrected ones.

of categories (ii) and (iii) presented above are different from what may be called 'classificatory verbs proper', which is the concern of the following paragraphs.

The fourth type of alternating stems, i.e. the classificatory verbs proper, occurs in four types of themes (see YOUNG & MORGAN, 1980; DAVIDSON et al., 1963) : one set of neuter (stative) themes and three sets of motion (active) themes; and the number of alternating stems for each theme type is more or less a dozen. The two sets of Chipewyan classificatory verbs which occur in two of the three motion theme types exhibit nine alternating stems[3].

(7) Classification Verb

  a. Round/solid   **niyerí-ʔá ha** 's/he will pick it up' (e.g. a rock)

  b. Animate   **niyeríɫ-tí ha** 's/he will pick it up' (e.g. a dog)

  c. Stick-like   **niyerí-tí̃ ha** 's/he will pick it up' (e.g. a stick)

  d. Fabric-like   **niyeríɫ-tšuθ ha** 's/he will pick it up' (e.g. a shirt)

  e. Contained in a cup **niyerí-ká ha** 's/he will pick it up' (e.g. a plate)

  f. Contained in a pail **niyeríɫ-tí̃ ha** 's/he will pick it up' (e.g. a water pail)

  g. Loose textured **niyerí-dzah ha** 's/he will pick it up' (e.g. grass)

  h. Mushy   **niyerí-tɫé ha** 's/he will pick it up' (e.g. clay)

  i. Plural/rope-like **niyerí-le ha** { 's/he will pick it up' (e.g. any objects)
                   { 's/he will pick a rope up'

(8) Classification Verb

  a. Round/solid   **tθe he-šuɫ ha** 's/he will throw the stone'
            rock

  b. Animate   **ɫue he-ne ha** 's/he will throw the fish'
            fish

  c. Stick-like   **detšən teɫ-xáɫ ha** 's/he will throw the stick'
            stick

  d. Fabric-like   **yú he-ʔər ha** 's/he will throw the cloth'
            cloth

  e. Contained in a cup **lídí he-niɫ ha** 's/he will throw the tea' (in a cup)
            tea

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3 The number of stems is actually eight instead of nine; see (7) and (8).

f. Contained in a pail   **naɬtšə̄θ e heɬ-<u>xes</u> ha** 's/he will throw the bag' (ful)
       bag

g. Loose textured   **tɬ'oɣ te-<u>tšə̄r</u> ha** 's/he will throw the grass' (ful)
       grass

h. Mushy   **hotɬ'ə̄s te-<u>tɬe</u> ha** 's/he will throw the lard'
       lard

i. Plural/rope-like   **t'así i ɬã teɬ-<u>déɬ</u> ha** 's/he will throw lots of things'
                 something many

                      tɬ'uli teɬ-<u>déɬ</u> ha 's/he will throw a rope'
                 rope

In both (7) and (8), eight alternating stems represent one and the same type of theme. It should be noted, however, that (8c) and (8f) show the same stem where the difference is marked by the classifiers: ø for (7c) and ɬ- for (7f)[4]. In (7), there is no overt noun representing either the subject (agent) or the object (goal), but the characteristics of each underlying object noun are implied by the stem. In (8), however, each sentence has an overt object noun, e.g. **tθe** 'rock', **ɬue** 'fish', etc. In either type of these themes, the subject (agent) noun is not restricted by the putative classificatory function of the verb.

Based on data such as these, it has been assumed or claimed that the alternating stems have the function of classifying nouns or that there exists co-occurrence restrictions between the subcategories of nouns and the alternating stems, hence, the classifying stems. In one of the most comprehensive studies of this phenomenon, DAVIDSON et al. (1963) state that:

These Athapaskan stems signify the state of being or action of more or less *delimited categories of objet* [emphasis added].

It should be made clear here that 'delimited categories of object' refers to referents rather than to nouns, i.e. linguistic forms. Therefore, the classificatory verb does not classify the nouns, if they classify anything at all. Consider the Navajo examples (neuter themes) given by DAVIDSON et al.:

(9) a. **béésò sì?ā́**
    béésò sì<u>nìl</u>   'money lies there'
    béésò sì<u>ɬtsòòz</u>

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[4] The other two classifiers are **d** and **l** which occur immediately preceding the verb stem. See section 3 for some details on the classifiers.

Notice that the same noun **béésò** (< Spanish *peso*) may co-occur with three different classificatory verbs because **béésò** may refer to three different objects. It is apparent that the choice of a particular verb stem is not governed by the class of noun but rather by what a noun stands for or how the referent of a noun is viewed by the speaker. If the noun **béésò** refers to one coin (a solid object), the verb stem to be chosen is -**ʔá̃**; if it refers to several discrete objects, -**nìl** is taken to be an appropriate verb stem; and if it refers to a piece of paper money, -**tsòòz** is preferred since it is viewed as a fabric-like object. It may appear that the classification implied by the alternating stems is based on some intrinsic qualities of the things that nouns stand for, as it has been assumed in various definitions of the classificatory verbs. But neither is there a classification of nouns based on such qualities, nor is there a system of agreement or concord between nouns and verbs. In other words, the proms em revealed by the data is not a syntactic one but a semantic and/or pragmatic one. As shown in (9), three different classificatory verbs are chosen for the same noun, **béésò** 'money', as the noun may refer to three different objects. However, it is quite conceivable that other classificatory verbs may be chosen depending on the apparent shape of the money that **béésò** may refer to. For example, if a dollar bill is rolled up like a cigarette another likely verb to be chosen for the neuter theme would be -**tá̃** (implying a slender solid object) as in **sìtá̃** (see YOUNG and MORGAN 1980).

CARTER (1976) was the first to make an explicit claim about a syntactic rule of co-occurrence restriction between noun categories and classificatory verbs when he said:

> [...] the proper verb stem may be chosen according to a conventional application of the rule of Chipewyan noun-verb concordance.

As demonstrated with examples from Navajo, what is involved in the *apparent* concordance is not the morpho-syntactic category 'noun', but rather what the noun may refer to in appropriate contexts. As will be shown below, what appears to be a violation of concordance is a case of most imaginative and creative use of the language, which is after all the most important property of human language. Compare now the following Chipewyan examples with those of Navajo given in (9).

(10) a. **tɬ'uli**   **θe-<u>la</u>**   'a rope (uncoiled) is there'
　　　 rope   it-is-lying

　　 b. **tɬ'uli**   **θe-<u>ʔã</u>**   'a rope (coiled) is there'

Unlike **béésò** of Navajo, **tɬ'uli** of Chipewyan does not stand for different things; rather it refers to two different 'shapes' or 'states' in which the same object is at rest. In (10a), 'rope' is viewed as a piece of flexible slender material, whereas in (l0b), it is seen as a solid (round) object. Although only two classificatory verbs are attested in the neuter theme where the subject noun is **tɬ'uli**, it would not be difficult to imagine what other classificatory verbs might be used depending on how **tɬ'uli** is viewed in appropriate contexts. **tu** 'water' is another Chipewyan noun which is predicated by more than one classificatory verb:

(11) a. **tu θe-ʔã**   'water (uncontained) is there/a lake is there

     b. **tu θe-kã**   'water (in a small container) is there/there is a glass of water'

     c. **tu θeɬ-tã**   'water (in a large container) is there/there is a pail of water'

It might be argued that the problems revealed by the above data can be resolved by assigning **tu** to three different subcategories of nouns as far as the putative 'concordance' is concerned. But are these three verbs the only classificatory verbs that may predicate **tu** in the neuter theme? The most telling evidence against any sort of concordance is available from the Koyukon data that HENRY (1965) recorded.

(12) a. **nitɬ'oɣiɬ-<u>ton</u>**   'he gave you a fish (frozen)'

     b. **nitɬ'oɣiɬ-<u>tan</u>**   'he gave you a fish (fresh)'

     c. **naɣədi-<u>tɬaq</u>**   'a fish (soft, sticky, boiled) fell down'

     d. **nitɬ'oɣil-<u>kut</u>**   'he gave you fish (as a meal)'

     e. **nitɬ'oɣil-<u>lo</u>**   'he gave you fish (plural)'

Although no overt object noun is present in the above Koyukon sentences, it is obvious that the underlying object noun, .i.e. 'fish' must be classified into five different categories if there exists a rule of concordance. I do not believe that 'fish' is one of a few exceptions that requires special treatment, nor do I think that the five categories would exhaust the possible 'shapes', 'textures', and so forth in which fish may be viewed. It is not difficult to imagine how such Chipewyan nouns as **dəne** 'person', **ts'ãkue** 'old woman', **ts'ékue** 'woman', etc. may be treated by the Chipewyan speaker in the same way **ɬue** 'fish' is in appropriate contexts, in which human bodies are treated like fish. The most versatile aspect of Sarcee classificatory verbs is revealed by the following verb paradigm that SAPIR (1922) recorded:

(13) Sarcee (SAPIR, 1922)

    a. **yīs-ˀòn**   'I was lying (bundled up like bulk)'

    b. **yí-ˀòn**   'you ...'

    c. **yī -ˀòn**   { 's/he ...'
                          { 'it (a solid object) ...'

    d. **ts'īyí-ˀòn**   'someone ...'

    e. **ɣàá-ˀòn**   'we ...'

    f. **giyí-ˀòn**   'they ...'

This verb paradigm violates the rule of concordance in that the verb ordinarily refers to a solid/round object rather than a human being. The third form of the paradigm is ambiguous with two possible semantic interpretations, but this semantic ambiguity (or the creative use of the verb) cannot be accounted for (or should not be constrained by) a syntactic rule of concordance. The Sarcee paradigm and the Koyukon data suggest that the semantic or paradigmatic rule is much more complex where a classifying verb is involved. Needless to say, it is this aspect of the native speaker's competence which is most productive and creative, adapting to the needs of ever changing socio-cultural environments.

2. In a comparative study of noun classification systems in Athapaskan, Eyak, Tlingit and Haida verbs, KRAUSS (1968) recognized a tandem system of noun classification, one by stem alternation (i.e. classificatory stems) and another by prefixes. From what has been discussed in the previous sections, it should be clear that the alternating stems do not have the syntactic function of classifying nouns parallel to the gender prefixes that do indeed mark the noun category. According to KRAUSS, the system of noun classification by prefixes has flourished in Eyak but is vestigial in Athapaskan (200). The following examples taken from KRAUSS (1968: 195) show how verb prefixes mark noun classes in Eyak.

(14) a. ø (unmarked)   **(dǝkīh) sič ɢǝtaˀ**
                                 stick me-to give-it
                                 'Give me it (a stick).'

    b. **dǝ-**   **(ciλ) sič d̲ǝ̲ɢetaˀ**
                                 board
                                 'Give me it (a board).'

    c. **xǝdǝ-**   **(ɬe·sk') sič x̲ǝ̲d̲ǝ̲ɢǝtaˀ**
                                 a log
                                 'Give me it (a log).'

    d. **ti'ɬə‑**   **(k'uɬt'ahɬ) sič <u>ti·ɬəɢəta</u>ʔ**
                                      a feather/leaf
                                        'Give me it (a feather/leaf).'

Although not as systematic as in Eyak, in most Athapaskan, particularly those in Alaska, there are certain verb prefixes that mark noun categories as illustrated by the examples from Ahtna (KARI, 1979: 22-23).

(15) a. **ø** (unmarked)   **k'entserɣ'a·n**
                                     meat   he is eating
                                     'he's eating meat'

      b. **ne‑**   **gigikeʔe <u>ne</u>-ya·**
                                     fruit
                                     'he's eating fruit'

      c. **de‑**   **k'eɣe·zeʔ deya·n**
                                     egg
                                     'he's eating an egg'

      d. **qo‑**   **<u>qo</u>ya·n**
                                     'it is grazing (an area)'

The gender prefixes do not appear in all verb themes in Athapaskan, but where they do, there is always a systematic correspondence between the noun category and the gender prefix in the verb. In other words, neither is there apparent violation of concordance as observed between noun classes and classificatory verbs, nor is there an alternate semantic interpretation where the 'wrong' gender prefix is chosen. In short, a gender system does exist, albeit marginal, in the Athapaskan languages, but is marked by verb prefixes, not by stems.

        Another generally overlooked aspect of the classificatory stems is the treatment of one and the same stem as though it represents two different stems where the putative 'classificatory' function is marked by the **-ɬ** classifier rather than the alternating stem. For example, (7c) and (7f) show the same stem where the classifiers are different: **ɬ-** for the latter and zero for the other. The cognates of these two verb stems in other languages are treated the same way as those Chipewyan ones. Consider the additional examples from Chipewyan.

(16) a. **θe‑ø‑tĩ**   'it (alive) is lying there'

        θe‑ɬ‑tĩ   'it (dead) is lying there'

      b. **θe‑ø‑tã**   'it (empty container) is lying there'

        θe‑ɬ‑tã   'it (container full) is lying there'

c. **náhé-ø-keθ**   'it (a long object) is dropping'

  ná-ɣí-ɬ-keθ   'I (in a sack) have dropped'

  náhé-ɬ-keθ   'sach (full) dropped'

In Chipewyan there are four classifiers **ɬ-**, **l-**, **d-**, and zero. These four morphemes constitute a prefix category that occurs immediately preceding the verb stem. Although the exact nature of grammatical or lexical functions of this category of prefixes is elusive, it has to do in general with transitivity, reciprocity, voice, and reflexivity. Notice, however, that the classifier **ø** and **ɬ-** in the above examples have nothing to do with these contrasts, nor do they have any function of classifying nouns, although it is the classifier, not the stem, that marks the semantic difference between the two verbs in each pair. In short, the stems in (16) have little to do with noun classification.

3. Summary. The so-called classificatory verbs of Athapaskan are known to have the function of subcategorizing nouns of either the subject (theme) in neuter themes or object (goal) in active themes, which has lead to the claim that there exists 'noun-verb concordance', i.e. a syntactic rule of co-occurrence restriction. As demonstrated in this paper, such a rule does not exist, however. On the contrary, what appear to violate such a putative rule reveals the most versatile and creative nature of the classificatory verbs, which cannot be described by a syntactic rule, but rather by a semantic and/or pragmatic rule.

The set of alternating stems that I called 'classificatory verbs proper' should be distinguished from those that are marked for number (2-4) and these that are marked for control (5) as well as from that are marked for aspect (1). If there exists a rule of concordance, it is between the subject noun phrase and the stems that are marked for number, but there is no evidence that any other type of stem alternation is governed by a syntactic rule of concordance.

REFERENCES

CARTER, R.M. (1976) 'Chipewyan classificatory verbs' *IJAL* 42, 24-30.

COOK, E.-D. (1984) *A Sarcee Grammar,* Vancouver, University of British Columbia Press.

DAVIDSON, W. et al. (1963) 'Athapaskan classificatory verbs' in *Studies in the Athapaskan Languages* by H. Hoijer et al., University of California Publications in Linguistics Volume 29, 30-41.

HENRY, D. and K. (1965) 'Koyukon classificatory verbs' *AnL* 7, 110-142.

KARI, J. (1979) *Athapaskan Verb Theme Categories,* Alaska Native Language Research Center Research Papers Number 2, Fairbanks, University of Alaska.

KRAUSS, M.E. (1968) 'Noun-classification systems in Athapaskan, Eyak, Tlingit and Haida verbs' *IJAL* 34, 194-203.

RICE, K. (1983) *A Grammar of Slave,* University of Toronto (unpublished).

SAPIR, E. (1922) Field notes (unpublished).

THOMPSON, C. (1976) 'The control system: a major category in the grammar of Salish languages' in *The Victoria Conference ou North-western Languages* ed. by B.S. Efrat, British Columbia Provincial Museum Heritage Records, N° 4, 154-176.

YOUNG, W. and W. MORGAN (1980) *The Navajo Language: A Grammar and Colloquial Dictionary,* Albuquerque, University of New Mexico Press.