

Athapaskan eating and drinking verbs and constructions

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Athapaskan languages comprise one of the largest, most geographically distributed, and most culturally diverse families in North America. Nevertheless, each daughter language features a set of classificatory verb stems which, semantically, focus less on signaling a relational predication than on some physical attribute of a prominent relational participant. Consequently, most consumption expressions focus on the marking of the theme; that is, on the type of object consumed, the manner in which the consumption happens, or the extent of the dissipation of the object through a combination of classificatory verb stems and adverbial prefixes. Unlike what is found in many languages, there is no appreciable focus on the agent/consumer or on the benefits or detriments associated with the acts of eating or drinking.

1. A focus on themes in the Dene languages¹

Athapaskan languages have enjoyed a century-long history of unbroken linguistic attention, no less than by Edward Sapir himself and by several generations of his students and academic successors. The family is one of the largest, most geographically distributed, and most culturally diverse in North America. It also subsumes Navajo, a language of the American Southwest with well over 100,000 speakers and one which has received the most extensive documentation of any indigenous

1. Throughout this chapter, I will use *Athapaskan* and *Dene* interchangeably to designate the entire family. Not only is Athapaskan only one of four alternate spellings which leads to some bibliographical confusion (viz. *Athabaskan*, *Athabaskan*, and *Athapaskan*), it is an Algonquian-based ethnonym designating a specific area – around Lake Athabasca straddling the Provinces of Alberta and Saskatchewan in Canada – in which Dene speakers did and do live. Thus, the term greatly misrepresents the geographical extent of speakers as well as obscures what is generally presumed to be the Dene homeland (southern Alaska/Yukon). Increasingly, speakers are reclaiming traditional ethnonyms and variations of *Dene*, meaning ‘people’ or ‘person’, are preferred. I provide traditional and contemporary (reclaimed) terms for the daughter languages in footnote 3.

language in the Americas.² Even a passing acquaintance with Athapaskan leaves one struck by the same set of typological features found in each daughter language in the family, such as an extensive phonetic inventory, a morphologically polysynthetic and partly fusional verb consisting of a final stem and a large array of prefixes, and a set of classificatory verb stems which, semantically, focus less on signaling a relational predication (for example, in the context of the present volume, on eating or drinking) than on some physical attribute of a prominent relational participant (e.g., the entity consuming or being consumed). The classificatory verb system in Athapaskan is generally associated with expressions of location/existence, independent motion, and controlled or uncontrolled handling of entities which are solid and compact, sticklike, heaplike, flat and flexible, and so on. However, a vestige of what may have once been a robust classificatory verb stem system across the family for verbs of eating and drinking still persists in a couple of the daughter languages, especially in Navajo and some other Apachean languages as well as in Koyukon and Ahtna, spoken in central Alaska.

In this overview of eating and drinking expressions in Athapaskan, I survey this remnant classificatory verb system affecting eating and drinking predications, but also discuss eating and drinking expressions more broadly across the languages, especially expressions which conflate either consumption and the object consumed or consumption and manner. In addition, I will provide examples of figurative extensions of such expressions. Across the board, we will see a recurring pattern: a widespread focus on the marking of the theme. This focus involves the type of object consumed, the manner in which the consumption happens, or the extent of dissipation of the consumed object. Unlike what is found in other languages, there is no appreciable focus on the agent/consumer in Athapaskan languages or on the primary (i.e., slaking) or secondary (i.e., nourishing) benefits or detriments associated with acts of eating or drinking, except in a few metaphorical extensions. In short, there is no real “affected agent” construal in Dene languages for eating and drinking predications as seems to be the default case in most other languages (cf. Næss, this volume). Finally, I briefly touch on how the exploration of the syntax and semantics of basic events such as eating and drinking can enhance ethnographic research on a set of speakers and even provide evidence of migration patterns in cases of a large-scale diaspora, as has happened among the Dene peoples.

2. Undeniably, Young & Morgan's *The Navajo Language: A Grammar and Colloquial Dictionary* (1987) is a linguistic masterpiece, likened by some to the Oxford English Dictionary in scope and detail.

The examples used here come from published accounts as well as from my own field notes, based on consultation with speakers of a variety of Canadian Athapaskan languages. I have tried to represent the five major geographical areas associated with Dene speakers at the time of European contact and list these areas and the daughter languages from which examples in this chapter are drawn in (1):³

- | | | |
|-----|-----------------|--|
| (1) | APACHEAN | Navajo, Western Apache, Jicarilla Apache |
| | PACIFIC COASTAL | Hupa, Galice |
| | ALASKAN | Koyukon, Ahtna |
| | INTERIOR | Witsuwit'en, Carrier, Tsuu T'ina |
| | MACKENZIE BASIN | Dene Sųliné, South Slavey, Slave |

2. A brief overview of Dene clause structure and the Dene verb

Transitive constructions in Dene languages (which are consistently head-final in both lexical and phrasal constituents) exhibit SOV word order, as shown in the Western Apache example in (2a) below.⁴ Most clauses, however, are largely nominal and agreement with both S and O is marked on the verb, typically the last (or only) constituent in a contextualized proposition, as shown in (2b–c).

- | | | | |
|-----|----|-------------------------------|---|
| (2) | a. | <i>isdzán ápos y-í-yāq̄</i> | Western Apache [de Reuse & Goode 2006: 201] |
| | | woman apple 3O-PERF.3SGS-eat | |
| | | 'The woman ate an/the apple.' | |
| | b. | <i>y-í-yāq̄</i> | |
| | | 3O-PERF.3SGS-eat | |
| | | 'S/he ate it.' | |
| | c. | <i>í-yāq̄</i> | |
| | | PERF.3SGS-eat | |
| | | 'S/he ate.' | |

3. Contemporary, indigenous ethnonyms for some of the Athapaskan languages represented in this paper are given in parentheses after the term likely to be more common in the traditional linguistic and anthropological literature: Babine (Witsuwit'en), Chipewyan (Dene Sųliné), Navajo (Diné), Sarcee/Sarsi (Tsuu T'ina) South Slavey (Dehcho or Dene Tha), North Slave (Sahtu).

4. I have retained the original orthography in all quoted examples. Where possible, I have attempted crude interlinearizations as an aid to the reader. Unfamiliar abbreviations include: CL (the pre-stem valency classifier), ERR (errative prefix), MOM (momentaneous aspect), OPT (optative). Conventionalized abbreviations for the Athapaskan classificatory verb stem categories are given in footnote 6.

Even in these simple but very representative examples, one notes that this Western Apache eating verb is ambitransitive, capable of signaling both a transitive or intransitive reading. However, with the intransitive reading, as shown in (2c), the verb simply lacks a pronominal object agreement prefix, represented by the prefix *y-* in (2a–b) – a morpheme which is otherwise obligatory and even redundant in the presence of an overt object nominal, as shown in (2a).

The Athapaskan linguistics literature famously abounds with analyses, not of ambitransitivity and diathesis alternations, but with interpretations of and explanations about a different kind of pronominal contrast and its effect on event structure, the so-called *yi-/bi-* alternation, exemplified in (3) and (4), again, for Western Apache:

- (3) a. *łóg-í isdzán y-í-yāq* W. Apache [de Reuse & Goode 2006: 201]
 fish-DEM woman 3O.direct-PERF.3SGS-eat
 ‘The fish ate a/the woman.’
- b. *isdzán-hí łóg b-í-yāq*
 woman-DEM fish 3O.indirect/obviative-PERF.3SGS-eat
 ‘The woman was eaten by a/the fish.’
- (4) a. *dóʔ ʔīī yi-sh-hash*
 fly horse 3O.direct-PERF.3SGS-bite
 ‘The fly bit a/the horse.’
- b. *ʔīī dóʔ bi-sh-hash*
 horse fly 3O.indirect/obviative-PERF.3SGS-bite
 ‘The horse was bitten by a/the fly.’

Whether this alternation is a true syntactic or simply pragmatic phenomenon, whether it is sensitive to animacy hierarchies, or whether it signals a change in voice or merely one of attention flow based on discourse accessibility, these matters need not concern us here. The fact remains that eating and drinking predications in the Dene languages are not singled out as especially vulnerable to the effects of ambitransitivity, and the family would therefore be exceptional from Næss’s (this volume) perspective. Athapaskan eating and drinking verbs pattern the same way that the majority of transitive verbs do syntactically, and furthermore, do not felicitously invite an “affected agent” construal.

There is, however, an interesting valency alternation triggered by the presence of a postposition found in some of the northern Athapaskan languages with respect to the argument structure and meaning of the generic vs. more specific eating verbs. This alternation has received little attention in the literature, but it provides some insight into how eating events are construed in these languages. The Dene Sūliné examples in (5) for “controlled” or generic eating and (6) for

“uncontrolled” or ravenous eating demonstrate the alternation. The stem *-dak/-dagh* is normally only used for animals eating, but it can refer to a bad-mannered human (eating voraciously as animals do) or any human eating a small animal or fish in its entirety.

- (5) a. *shésti* Dene Sųliné (author’s fieldnotes)
 ‘I’m eating (a meal).’
 b. **tué shésti*⁵
 ‘I’m eating a fish.’
 c. *tué gha shésti*
 ‘I’m eating a/the fish.’ [lit. I’m eating at fish.]
- (6) a. *hesdak*
 ‘I’m devouring it.’
 b. *tué hesdak*
 ‘I’m devouring the whole fish.’
 c. *tué gha hesdak*
 ‘I’m devouring only part of the fish.’

The postposition *gha* seems to have a transitivity-reversing function in these two contexts. With the less telic Dene verb, *shésti* ‘I’m eating’, *gha* functions like a straightforward applicative, adding a complement to the main verb. With the more telic and dynamic, *hesdak* ‘I’m eating.whole/devouring it’, *gha* lends a partitive reading to the implied direct object/patient. This use of the postposition *gha* is reminiscent of the valency increasing and decreasing effects of English *at*, discussed at length in S. Rice 1987. With certain intransitive verbs, the preposition *at* functions like an applicative, allowing for a lexicalized transitive counterpart, as in *She yelled* vs. *She yelled at him* (*He got yelled at by her*). With certain transitive verbs, on the other hand, *at* seems to function like a conative, decreasing the overall transitivity profile of the event by mitigating the nature or extent of the interaction between agent and patient, as in *She grabbed him* vs. *She grabbed at him* (**He got grabbed at by her*). Postpositional complements, whether free-standing or incorporated, play a major role in signaling differences in lexical meaning inside the typical Athapaskan lexicon (cf. S. Rice & Wood 1996). In these cases, the postposition is indicating the degree to which the patient has been affected by the act

5. The standard syntactic argument for the unacceptability of this form is based on some version of a Theta-Criterion violation; that is, the incorporated stem *shé-* ‘food’ is the de facto direct object and, thus, the stem *-ti* ‘eat’ cannot support a second nominal or pronominal direct object – hence, the need for the applicative in (5c). An account compatible with this view is given in K. Rice (1989: 661).

of consumption. Such variations in manner and extent of consumption are very important across the family within the eating and drinking lexicons. However, the morphosyntactic means by which individual languages convey these differences are not uniform, as we'll see in §§3–5.

Turning to the typical Dene verb word – a highly synthetic marvel of a head-final stem preceded by a large array of derivational and inflectional prefixes – the identity and order of prefixes and how they interact with the verb stem has predominated Athapaskan linguistics for a nearly a century. For discussion about template and root morphology vs. prefix zones, ordering and scope relations, as well as an alternate account of the composition of the Dene verb see, respectively, Kari 1989; K. Rice 1989, 2000; McDonough 2000. Of primary concern here is the semantic interpretation of the stem morphemes for the many particularized verbs of consumption. In addition, the juxtaposition – with different verb stems – of specific postpositions or specific adverbial, errative, or gender prefixes, or the incorporation of a generic (and archaic) 'food' prefix or a 'mouth' or 'into the mouth' prefix in some of the languages will be discussed.

One general note about variation in the shape of the verb stem is relevant here, especially since we are comparing forms across a number of different languages. The pre-stem syllable is a portmanteau of the highest order, fusing tense/aspect/mode, subject agreement and sometimes certain "peg" and "thematic" prefixes, as they are known in the Athapaskan literature. For analyses of Dene verbs which posit extensive conjugation sets, this pre-stem TAM+AGR syllable is the locus of the conjugation, which collocates very specifically with certain forms of the stem syllable itself. To that end, there is considerable stem allomorphy within nearly every Athapaskan verb paradigm. In the most limiting case, different aspect/modes may cause the verb-final stem syllable to be open or closed or the stem vowel may change its tone, length, or nasality. Note the considerable aspect-induced stem variation in the following triplet for a rather specialized Koyukon eating verb:

- 7) a. *yegheetłggotł* Koyukon (Axelrod 1993: 68)
ye- ghe- ł- ggotł
 3sg.o PERF CL crunch.DURATIVE
 'S/he was crunching it, chewing it with a crunching noise.'
- b. *yeetłggutł*
ye- le- ł- ggutł
 3SG.O PERF CL crunch.SEMELFACTIVE
 'S/he crunched it once, bit it with a crunch once.'
- b. *yełggutł*
ye- ø- ł- ggutł
 3SG.O IMPF CL crunch.CONSECUTIVE
 'S/he crunches on it again and again.'

In addition to any stem allomorphy induced by the TAM+AGR syllable, a pre-stem voice/valence “classifier” (CL) may also alter the consonantal onset to the stem syllable (as in *a/y*/changing to *d/l*).⁶ More confusingly, many paradigms are highly suppletive and a verb may feature a different stem depending on the number or person of the subject participant(s). This fact will be especially relevant below as the most generic eating verb in many Dene languages may only hold for persons eating singular objects. Multiple persons eating or an individual eating a plurality of objects give rise to a lot of semantic neutralization. Such multiplex eating scenarios are typically coded with a generic plural motion/action stem, whose reflexes are some variant of $-\{t/d\}V\{l/\}t\}$, usually something like *-teel*, *-dil*, or *-deł*. Typical paradigms for the most generic verbs of eating and drinking are illustrated by the Navajo (Young & Morgan 1987: 775, 779, 781) and Dene Sùliné paradigms (author’s field notes) in (8) and (9).

(8) a. Navajo ‘eat it’

IMPF	SG	PL
1	yishá	yiiyá
2	niyá	wohsá
3	iyá	yidá
PERF	SG	PL
1	yíyáá’	yiidáá’
2	yíníyáá’	wooyáá’
3	yiyíyáá’	yidaá’

6. The grossly misnamed pre-stem “classifiers” are traditionally listed as $\{\emptyset-/d-$ and $\}l/-\}$. Loosely speaking and when used productively, the members of the two sets alternate with each other, signaling – in the most general semantic terms – a decrease in force-dynamics (i.e., transitivity, agency, telicity, or more effortful or unexpected outcome) as one moves from the first to the second member of the pair. Increasingly (and appropriately) in the contemporary literature, they are being re-christened as voice/valence prefixes, to capture the effects of their productive function (they also have a “thematic” or wholly lexicalized distribution in which case their semantic or syntactic contribution remains opaque). Representative of this more contemporary view is Hargus (2007: 341), who states, “there are three such prefixes: the valence prefix $\}l-$ and (mostly) voice prefixes $d-$ [traditionally symbolized as $D-$] and $l-$ ” [brackets mine]. Generally speaking and when productive, $\}l-$ is associated with a causative reading, and $l-$ and $D-$ with a passive, mediopassive, or reflexive reading. The voice prefix $D-$ is widely known for its phonological interactions (the so-called D -effect) with certain stem-initial consonants which directly follow it. For example, it fuses with $\}t\}$ to create $\}dl\}$, with $\}s\}$ to create $\}dz\}$, with $\}ʔ\}$ to create $\}tʔ\}$, and with $\}y\}$ to create $\}d\}$. Compare this Witsuwit’en active/passive eating pair, as signaled by the effect of the D voice prefix: $cəʔat$ ‘s/he’s eating something’ and $catat$ ‘something’s being eaten’ (Hargus 2007: 711). The most functionally oriented (and coherent) analysis of the voice/valency markers in Athapaskan that I know of is by Kibrik (1996), where he calls them “transitivity indicators”. He also provides a well-researched history of their mislabeling as “classifiers”.

b. Navajo ‘drink it’

IMPF	SG	PL
1	yishdlá	yiidlá
2	nidlá	wohdlá
3	yidlá	daadlá
PERF	SG	PL
1	yídlááʔ	yiidlááʔ
2	yínidlááʔ	woodlááʔ
3	yiídlááʔ	yidlááʔ

(9) a. Dene Sų́liné ‘eat’

IMPF	SG	DU	PL
1	shéstı̄	shéhı̄tı̄	shéhı̄lyı̄
2	shénetı̄	shúhtı̄	shúhtı̄yı̄
3	shétı̄	shéhetı̄	shéhelyı̄
PERF	SG	DU	PL
1	shéghestı̄	shéghı̄tı̄	shéghı̄lyı̄
2	shéghı̄tı̄	shéghutı̄	shéghutı̄yı̄
3	shéghetı̄	shéheghetı̄	shéheghelyı̄

b. Dene Sų́liné ‘drink’

IMPF	SG	DU	PL
1	hesdą	hı́dą	dáhı́dą
2	nedą	huhdą	dóhdą
3	yedą	heyedą	dáyedą
PERF	SG	DU	PL
1	ghesdą	ghı́dą	dághı́dą
2	ghı́dą	ghuhdą	dághuhdą
3	ghedą	heghedą	dághedą

I present these paradigms without further discussion only to prepare the reader to expect rather less than regular or transparent verb morphology in the subsequent examples. The generic EAT and DRINK paradigms in (8) and (9) convey little of the lexical richness found in the typical Dene verb stem inventory or the set of prefix-stem combinations for signaling exactly what is getting consumed and how. The most obvious expression of this richness can be found in those languages which still retain a set of classificatory stems for eating and drinking, as discussed in the next section.

3. “Specialized” classificatory consumption verb stems in some Dene languages

The classificatory verb stem (CVS) system is regarded as a hallmark of the Athapaskan family. All daughter languages make some degree of distinction about the

physical nature of a prominent relational participant, usually the theme or figure (indicated as X below) in predications involving those loosely described and schematically glossed in (10):

- | | | | |
|-----|----|----------------------------------|--|
| 10) | a. | LOCATION/EXISTENCE/POSITION OF X | e.g., 'There is/lies X' |
| | b. | INDEPENDENT MOTION OF X | e.g., 'X moves/drifts/falls' |
| | c. | CONTROLLED HANDLING OF X | e.g., 'Y handles/takes/gives/carries/
picks up X' |
| | | BY ANOTHER PARTICIPANT, Y | |
| | d. | UNCONTROLLED HANDLING OF X | e.g., 'Y grabs/throws/steals X' |
| | | BY ANOTHER PARTICIPANT, Y | |

In most Dene languages, the verb stem is the locus of difference among the various relational predications shown in (10) as well as the distinguishing properties best characterizing the X entity. The inventory of lexicalized property types for X differs across individual languages, but the most salient are those that distinguish among entities which are solid – often round – and compact, animate, sticklike, heaplike, mushy, or flat and flexible.⁷ Detailed studies about the classificatory verb system across the family and in individual languages abound,⁸ although I do not regard the system as particularly unique to Athapaskan or particularly limited to the “classic” predication types listed in (10) or to the usual suspects among property types (viz. SRO, FF, MM, AO, etc.).⁹ Indeed, the system is far more heterogeneously organized across the daughter languages than often supposed. Moreover, as discussed in §4, the entire system leaks massively, and classificatory verb stems turn up in predication types far removed semantically from those schematized in (10).

A case in point with regard to the idiosyncrasy of Dene CVS systems is found in Koyukon, a northern Athapaskan language spoken in central Alaska. Koyukon features a 12-way distinction in its classificatory verb system and has stems for, most unusually, burning things as well as eatables. In an appendix to Jetté & Jones (2000: 763), Jules Jetté writes that this latter category, represented by the stem *-koot*, refers to “all eatables, considered as about to be eaten, but not when stored as supplies for future use. Thus, a piece of bread, but not the whole loaf, unless it

7. These are among the more frequent property types distinguished in the typical Dene classificatory verb system inventory along with some commonly used acronyms (see Abbreviations).

8. To cite just a few Athapaskan CVS studies, cf. Basso 1968; Carter 1976; Davidson, Elford, & Hoijer 1963; Haas 1968; Landar 1967; and Rushforth 1999.

9. Haas 1948 describes a similar CVS system for Muskogee and Cherokee as does Berlin 1967 for Tzeltal. Mithun 1999 gives examples of classificatory verb systems in other Iroquoian languages such as Mohawk, as well as in languages from the Siouan, Wakashan, and Muskogean families.

be for the meal of the entire family, a piece of fish, but not a whole fish, etc., come in this group.” This description gives considerable insight into how other Dene languages lacking a dedicated classificatory verb stem category for food substances regard acts of eating and drinking in general, as well as how the entities being consumed are typed. That is, there are no absolute qualities ascribable to a consumable object as reflected by the choice of verb stem or construction, only contingent qualities relevant to the focused-upon act of ingestion. Thus, the manner in which or the degree to which something is consumed matter most across the majority of the Dene languages described here. This topic forms the basis of the discussion in §§4–5.

Returning to the general notion of a classificatory verb system in Athapaskan languages, Koyukon is unusual in that it has a general BE LOCATED/SPONTANEOUS DISLOCATION/CONTROLLED and UNCONTROLLED HANDLING classificatory stem, *-koot*, for “EOs” – eatable objects. Some examples are given in (11):

- (11) a. *etlkoot* ‘It (food) is there, stored away.’ Koyukon
(Jetté & Jones 2000: 303–4)
- b. *yeneekoot* ‘S/he arrived with it (food).’
- c. *kédaadlekoot* ‘S/he is saving something (food) for herself/himself.’
- d. *yetlokéghekoot* ‘S/he gave him/her something (food).’ [lit. ‘S/he fooded into his/her palm.’]

Ahtna, another Alaskan Athapaskan language, retains a similar classificatory stem, *-cuut*, for locating or handling food substances, but there does not seem to be any restriction on its use for items of imminent consumption. (12) presents a few examples:

- (12) a. *detcuut* ‘It (food) is up there (stored on shelf).’ Ahtna (Kari 1990: 118–19)
- b. *cétsen’cuut* ‘Meat is there.’
- c. *yiccuut* ‘S/he is keeping/storing/saving it (food).’
- d. *xanay’ dilcuut* ‘S/he feeds himself, s/he is stingy.’ (lit. ‘S/he handles food excessively for self.’)

Other languages, notably the Apachean languages, preserve a vestige of what may have once been a robust classificatory verb stem system across the family specifically for predications of eating and drinking rather than just for those event schemas listed in (10). Thus, instead of being used for any relational templates having to do with location, movement, or handling, these consumption stems show up in a schema such as Y CONSUMES X, where ‘consumes X’ makes up the purported semantic content of the CV-based stem and resulting verb. Herbert Landar described what he called a “pseudo-classificatory” verb system for consumption verbs in two Apachean languages, but did so from more of an ethnographic than

linguistic perspective, as he was intent on establishing what kind of referent, X, could be associated with each stem in the series. More than anything, he was trying to determine the range of “genders” for noun classes in Apachean and focused more on referential than wholistic or experiential aspects of the stems. Table 1 compares the sets he elicited from speakers of Navajo and Jicarilla Apache. Note the close similarity between the languages in stem form and food-class designation.

According to Landar (1976: 265), class (vii) verbs in Table 1 may suggest hand-to-mouth motion rather than the separability of the consumed object. These stems strike me as suspiciously cognate with the pan-Athapaskan plural motion/action stem, e.g., *-dil/-deł*, briefly mentioned in §2 above. In any case, we have a set of stems that, as a cohort, are supposed to differentiate among various types of objects eaten. It takes little effort to reach an alternative interpretation of the set. Beyond generic eating (i), the remaining forms in (ii-vii) in Table 1 invoke highly individuated and kinesthetically or sensorily distinct eating scenarios. The eating of a hard or chewy object (ii) may involve loud crunching. A long, stringy object like dried meat (iii) may involve lengthy mastication. The meat stem in (iv) may have been associated with a full meal rather than the literal eating of meat. A single object (v) is salient because it is wholly consumed, not nibbled at. Mushy matter (vi) would have been eaten with spooned fingers or other implement as it would require containment up to the mouth. Finally, a multiplicity of similar objects (vii) would involve a lot of repetitive hand-to-mouth action. I submit that each of these foodstuffs is as salient in terms of the manner of eating as it is in terms of its substance, either in absolute terms or relative to the contingencies of immediate eating act. Moreover, I believe that this inherent ambiguity between comestible object and manner of consumption has helped foster burgeoning (and heterogeneous) EAT and DRINK vocabularies across the Athapaskan family.

Table 1. Apachean “pseudo-classificatory” consumption verbs and the foods of eating they designate, taken from Landar 1964: 94 and 1976: 264; all verbs can be glossed *I ate it* (or *them*).

	<i>Navajo</i>	<i>Jicarilla</i>	<i>food being consumed</i>
i.	<i>yiyááʼ</i>	<i>yíyá</i>	eating in general that requires chewing & swallowing (includes everything but stew, which is drunk)
ii.	<i>yíʼaal</i>	<i>yí ǎáʼ</i>	hard or chewy object (ice)
iii.	<i>yíʼtšož</i>	<i>yíʼtšoš</i>	long, stringy object (jerky, sinewy meat)
iv.	<i>yíʼšyal</i>	<i>yíʼtʼyaʼ</i>	meat [ceremonial use only for JA]
v.	<i>yíʼskhit</i>	-----	one round object
vi.	<i>yíʼtsʼeeʼ</i>	<i>yíʼts ǎʼ</i>	mushy matter (corn mush, apple sauce)
vii.	<i>yíʼtéél</i>	<i>yíʼteel</i>	separable objects (corn kernels, grapes, berries)

Young & Morgan (1987) expanded the set of classificatory verb stems of consumption for Navajo well beyond Landar's original set of seven. They cite no fewer than fifteen verb stems based on properties of the object consumed or the manner of consuming. I list these in Table 2.

Table 2. 15 Navajo verb stems of consumption, taken from Young & Morgan (1987: 251–263; 875); distinguishing features are specified in small caps.

	<i>stem</i>	<i>manner/food of consumption</i>	<i>example edibles</i>
i.	-yííh	consume/chew UNSPECIFIED	Anything
ii.	-'aał	consume/chew HARD, COMPACT	corn, peyote, candy
iii.	-chozh	consume/chew LEAFY	lettuce, hay
iv.	-ghał	consume/chew MEAT	meat
v.	-keed	consume/chew ROUND	bun, melon
vi.	-ts'éeéh	consume/chew MUSHY MATTER	mush, jello
vii.	-deeł	consume/chew PLURAL OBJECT	berries, eggs
viii.	-wol	consume/chew MARROW	marrow
ix.	-jooł	consume NON-COMPACT MATTER	cotton candy
x.	-t'eeh	consume MUSHY MATTER	ice cream
xi.	-mááł	consume/devour by GULPING/BOLTING	single piece of food
xii.	-'aah	consume SOLID, ROUND OBJECT dunked in liquid	moistened bread, cake
xiii.	-dlá	consume/drink UNSPECIFIED	soup, thin gruel
xiv.	-kaah	consume/drink from OPEN CONTAINER	milk from glass
xv.	-t'aah	consume/drink from CLOSED CONTAINER	milk from bottle

Pace Young and Morgan's and Landar's interpretation of Navajo and Jicarilla, it is possible to posit an equally robust list of classificatory verb stems for English, as shown in Table 3. No one considers the English set a system, mainly because the verbs delimit a lexical field unified under the guise of consumption, but differentiated largely on the basis of manner in which the consumption is taking place. A subtle shift in construal from type of object consumed to the manner in which such a type of object is consumed is not difficult to fathom and I would argue that both languages, Navajo and English, are covering roughly the same semantic territory with their verb stems. Nevertheless, the rest of the English verbal lexicon mitigates against a CVS interpretation, while the CVS system is an iconic part of Navajo and Dene languages in general.

Table 3. 15 English verb stems of consumption; distinguishing features specified in small caps.

<i>stem</i>	<i>manner/food of consumption</i>	<i>canonical edible : canonical consumer</i>
i. <i>eat</i>	consume/chew UNSPECIFIED	solid/liquid food : any animate (plus fish, insects)
ii. <i>devour</i>	consume/chew UNCONTROLLED	solid food : wild animals, hungry humans
iii. <i>wolf down</i>	consume WHOLE, UNCONTROLLED	solid food, full meal : teenagers, people in a hurry
iv. <i>nibble at</i>	consume PARTIALLY	solid food, full meal : reluctant eaters
v. <i>snack on</i>	CONSUME INTERMITTENTLY	solid food: human
vi. <i>dine</i>	CONSUME MEAL	solid food, full meal : human (formal register)
vii. <i>bite</i>	START TO CONSUME/chew	solid food : any animate
viii. <i>chew</i>	CONTINUE TO CONSUME/chew	solid, gummy food : any mammal
ix. <i>crunch</i>	chew BRITTLE	nuts, hard candy, bone : any mammal
x. <i>drink</i>	consume LIQUID	any liquid : any animate
xi. <i>gulp</i>	drink WHOLE, UNCONTROLLED	any liquid : any mammal
xii. <i>sip</i>	drink LIQUID, CONTROLLED	any liquid : any mammal
xiii. <i>lap</i>	drink INTERMITTENTLY with tongue	water, milk : any feline or small canine
xiv. <i>slurp</i>	drink NOISILY from OPEN CONTAINER	any liquid, soup, stew : any mammal
xv. <i>suck</i>	drink from CLOSED CONTAINER	liquid from straw, bottle, breast : baby

Table 3. is meant to show just how readily classifying inferences can be drawn in English about the event participants from the use of one of these manner-of-consumption conflating stems. Indeed, the same could be said of Navajo or Jicarilla Apache. Consider the examples in (13) and (14):

(13) Navajo (Landar 1964: 96)

- a. *pilasáana yiyáá'* 'I ate an apple.'
- b. *pilasáana yishkhit* 'I ate a roundish apple.'
- c. *pilasáana yishtééł* 'I ate apples one after another.'

(14) Jicarilla Apache (Phone et al. 2007: 143, 329)

- a. *-ch'it* 'eat (nuts); crack (nuts); lightning crackles'
- b. *medishch'ił* 'I'm eating (nuts).'
- c. *medisht'aa* 'I'm eating (scraping meat off bone).' [e.g., eating ribs]

In (13), we see three different Navajo classificatory verb stems being used with the same referent, *pilasáana* ‘apple’. Thus, the three stems differentially focus on the act of eating something, the roundness of the thing being eaten, or serial eating. In (14), the underlined stems in (b) and (c) are not on Landar’s (1967) original list for Jicarilla. The (b) form is clearly related to that in (a), the stem associated with the noise made by lightning. When used in an eating context, it has fixed the inference to mean the eating of nuts even in the absence of a specified object. Although I was unable to verify the meaning of the (c) stem, *-t’aa*, in isolation, it seems to have likewise conventionalized to mean a particular type of eating associated with a cutting or gnawing action, as happens when one tries to remove flesh from a bone with the teeth. Here are two sets of examples which demonstrate how the entire construction – in this case, a fully inflected verb – can induce (or did so historically) an eating construal and a specific type of eating at that, despite the absence of one of the cardinal eating verb stems in the construction per se. I suspect that, across the family, a particularly salient aspect of an act of eating (the sound, any prolonged chewing, or the conspicuous motion of a hand or container moving up to the mouth) may have provided a metonymical source for new eating stems.

As a case in point, Ahtna also has a verb stem of crunching or noisy eating, *-gguuts’*, much like its Koyukon counterpart given above in (7). This stem, shown in (15), is regarded as onomatopoeic, deriving from *gguus* ‘wild celery’, a rhubarb-like plant that is crisp and crunchy when eaten. The verb generalizes to any eating that involves a crunching noise (except, perhaps for the eating of bones – see below):

- (15) *itne^lgguuts’* Ahtna (Kari 1990: 201)
 ‘S/he’s crunching on it (crackers, celery).’

Ahtna has a different stem meaning ‘crunch, gnaw, or eat (bone) with a crunching noise’, *-k’òn*. The sound associated with this kind of eating must be especially salient, as shown in the related ideophone (many Athapaskan languages feature huge inventories of stative verbs like that shown in (16b) depicting highly particularized sounds):

- (16) a. *ts’èn ghi^lk’òn* Ahtna (Kari 1990: 259)
 ‘S/he crunched on a bone.’
 b. *i’del^lk’òn*
 ‘There is a crunching sound.’

The bulk of the eating and drinking stem lexicons in many Athapaskan languages seem to reflect the still externalized, pre-ingestion stages of consumption, or more accurately, the way in which particular objects get transported to the mouth or how they get masticated.

Another example of a “coerced” eating verb comes from Navajo – in particular, the stem listed as (viii) in Table 2, ‘to eat marrow’. This highly specialized eating stem is not widely found across the family. Indeed, it is not really even based on a verb. Most of the fully inflected forms for the consumption stems in Table 2 for first person singular imperfective (‘I’m eating X’) would be something like, *yishá*, *yisháaʔ*, *yishchozh*, *yishaghaʔ*, and so forth. The counterpart for ‘I’m eating marrow’ has a different structure, as shown in (17):

- (17) *ndishwol* Navajo (Young & Morgan 1987: 615)
ndi- *sh-* *wol* [*ʔawol* ‘marrow’ (n); *-lwol* ‘to eat marrow’ (v)]
 mouth.circa 1SG marrow
 it. ‘I marrow about the mouth.’?

This innovative yet non-standard eating verb paints a vivid picture of the prolonged gnawing action involved in extracting marrow from a bone. “Marrowing about the mouth” certainly leads one to draw an inference of eating, just as the more generically classifying “handling X about the mouth” does. It should come as no surprise, therefore, that many ersatz eating and drinking stems in Dene languages are actually part of conventionalized consumption expressions which themselves are built up from classifying or even denominal stems. In short, many of the component eating and drinking stems in isolation have little to do with eating or drinking per se, but a lot to do with handling different kinds of objects. Inside the larger construction, especially in the presence of incorporated stems for ‘mouth’ or ‘into the mouth’, an inference is made and an association set. We turn to the more “classic” CVS items next and see how they have been deployed across the family for fine-grained distinctions in their eating and drinking predications.

4. “Co-opted” classificatory consumption verb stems in other Dene languages

The Apachean classificatory stem sets illustrated in Tables 1 and 2 are not all that unique and actually have correlates, if not out and out cognates, in other Dene languages. Many of these stems are identical in form and meaning with the more “classic” CVS systems for expressions of location, movement, and handling – the predication types outlined in (10). Moreover, quite a number of these expressions involve an incorporated stem for mouth or mouth area. Thus, across the family, eating predications in particular seem to be constructed as “variations” on a hand-to-mouth “theme”, a notion quite compatible with Wierzbicka’s claim (this volume) about the semantic primes associated with the (otherwise non-primitive) notions of eating and drinking. The examples and discussion in this section illustrate (a)

the lexico-semantic richness in many Dene languages for expressions about eating and drinking, as well as (b) the considerable overlap between stems doing “classic” CVS predication and those signaling acts of consumption.

Let’s begin with Hupa, a Pacific Coastal language for which the available data suggest a somewhat limited and therefore tractable system. Nevertheless, it mirrors what we find elsewhere, albeit in less robust fashion. The generic verb stem for eating is *-(y)a: n*, as shown by the examples in (18):

- (18) a. *k’iwha:n* ‘I am eating.’ Hupa (Golla et al. 1996: 30)
 b. *ky’a:n* ‘S/he is eating.’
 c. *yiky’a:n* ‘It (animal) is eating it.’
 d. *ch’ineh̄ya:n* ‘S/he ate it up, devoured it.’
 e. *xola: n-ky’a: n* ‘He helps him to eat; he feeds him.’ (lit. ‘helping 3sgo-3sgs eats’)

The examples in (19) below give a flavor of the range of stem shapes for related consumption expressions in Hupa:

- (19) a. *diwhxuts’* ‘I’m biting something.’ Hupa (Golla et al. 1996: 30)
 b. *diwhqos* ‘I’m biting something crunchy/brittle.’
 c. *iwh’ul* ‘I’m chewing something.’
 d. *ch’iwilxii’* ‘S/he swallowed it.’
 e. *tawhdina: n* ‘I’m drinking.’
 f. *ta’dina: n* ‘S/he is drinking.’
 g. *taydina: n* ‘Animal is drinking.’

There are still other eating stems found in Hupa. The examples in (20) feature the common neutralization that we find across the family in the use of the all-purpose *-dil/-dił* when it comes to plural action, in this case, an individual person eating multiple objects. Other stems, as shown in (21), blatantly build on garden-variety CVS forms.

- (20) a. *iwhdił* Hupa (Golla et al. 1996: 30)
 ‘I’m eating small objects (berries) one-by-one (as I pick them).’
 b. *ch’ildil*
 ‘S/he is eating small objects one-by-one.’
- (21) a. *sa-wh-jich*
 into.mouth-1sgs-handle.particles
 lit. ‘I’m putting particles into my mouth.’
 ‘I’m eating (seeds) by the handful.’
 b. *sa’-wing-xa: n*
 into.mouth-PERF.3sgs.handle.filled.container
 ‘S/he ate from a bowl/spoon.’ (lit. ‘s/he puts filled container into mouth.’)

For comparison purposes, a full set of the Hupa classificatory “handling” verbs are exemplified with the prefix *ya-* ‘up (in the air)’ to yield the composite meaning ‘s/he picked up X’ in (22):

- 22) a. *ya'-win-jich* Hupa (Golla et al. 1996: v)
 up-PERF.3SG-handle.granular.mass
- b. *ya'-wing-xa: n*
 up-PERF.3SG-handle.filled.container
- c. *ya'-wing-á: n*
 up-PERF.3SG-handle.round.object
- d. *ya'-win-ta: n*
 up-PERF.3SG-handle.stick-like.object
- e. *ya'-wit-te: n*
 up-PERF.3SG-handle.living.being
- f. *ya'-wit-ig'*
 up-PERF.3SG-handle.dough-like.substance
- g. *ya'-wi-lay*
 up-PERF.3SG-handle.several.objects/rope
- h. *ya'-wit-kyo: s*
 up-PERF.3SG-handle.cloth-like.object

The Hupa examples in (21), which derive from two of the more commonplace classificatory “handling” verbs, shown in (22a-b), do so in conjunction with the incorporated stem, *sa-*, ‘into the mouth’. Most Athapaskan languages have at least a few eating verb themes that feature an incorporated nominal or postpositional stem, similar to the examples in (21). Mackenzie Basin languages have an incorporated “mouth” morpheme, *dhá-*, considered to be cognate with Hupa *sa-*.¹⁰ Moreover, they typically have a generic eating verb that is suspiciously similar to these Hupa forms in that they feature a requisite (and identically positioned) incorporated stem, *shé-*, usually glossed as an archaic word meaning ‘food’ rather than ‘mouth’,¹¹ along with the verb stem *-tí*(SG/du), which just happens to be identical

10. Sapir (1931) reports the following reflexes of proto-Athapaskan *z: Hupa/s/, Chipewyan (Dene Sų́liné)/δ/, Navajo/z/, and Sarsi/z/. Hupa *sa-* and Dene Sų́liné *dhá-* are likely to be true cognates for ‘mouth’.

11. Li (1946), in his grammatical sketch of Chipewyan (Dene Sų́liné), lists *shé-* as an incorporated and archaic stem form for ‘food’. K. Rice (1989: 652) also identifies *shé-* in the Slave

in form with the standard classificatory verb stem for ‘handle sticklike/animate object’. Etymologically speaking, I wonder whether the Dene Sųliné generic verb word, *shé-s-ti* < food-1SGS-eat ‘I’m eating’, as first presented in (5a), would be more accurately glossed linguistically as: food-1SGS-handle.SO/AO? Whether this is the correct etymology of *shésti* or not, the fact remains that in many Athapaskan languages, eating is not really predicated outright, but rather is inferred from the entire verbal construction, which, in the two Hupa examples in (21) and possibly the entire Dene Sųliné paradigm in (9a), are based on bonafide classificatory handling stems.¹² Because of the similarity between the generic Hupa eating verb stem, -a: n, as exemplified in (18) and the stems for handling round object in (22c) – the stem which often stands in for ‘handling generic or unspecified object’ across the family, this may constitute additional evidence for a handling basis for eating predications in Athapaskan.

A different type of argument for the robustness of a hand-to-mouth event frame or image-schema in Athapaskan eating and drinking predications comes from a blatantly literal verbal construction in Dene Sųliné for the causatively framed event, FEED. Dene languages vary in terms of the prevalence and deployment of an inflectional, periphrastic, or lexical causative. An inflectional causative in Athapaskan is formed via the presence of the erstwhile causative voice/valence prefix or *ł*- classifier before the stem syllable. A periphrastic causative involves a higher-order, all-purpose MAKE OR HELP predicate (see the Hupa example in [18h]), but otherwise no special complementizer or subordinating morphology is needed. Dene languages do not seem to share the same strategies for marking causatives

languages as a non-independent, always incorporated stem meaning ‘food’ and notes that it surfaces not just with *-ti* ‘eat’, but also in the postpositional phrase *shéakè* ‘lacking food’ [lit. food-without’]. Hoijer & Joël (1963), in their write-up of Sapir’s field notes from the early 1920s, list the absolute and combined forms for ‘food’ in Tsuu T’ina (Sarsi) as *ših* and *-šihá*², but they also cite the alternate independent forms *dání* ‘food’ and *-níyá*² ‘food’, as well as *-zá* ‘mouth’).

12. Hoijer’s (1966) sketch of Galice, a now-extinct Coastal Athapaskan language spoken by speakers in Oregon at the time he recorded his data, lists imperfective stem forms that resemble those in Hupa for drinking (*-naa*), swallowing (*-kad*), and chewing (*-?ał*), the only consumption predicates listed in the sketch. The CHEW stem in Galice, in particular, happens to look identical to its handle.RO stem, the same kind of overlap noted elsewhere here between a generic EAT predicate and a cardinal CV stem. Of course, this CHEW stem is also likely to be cognate with Koyukon ‘chew’ in (42b), Dene Sųliné ‘chew.meat’ in (46d), Witsuwit’én ‘eat’ in (52), Carrier ‘eat’ in (69), not to mention the apparently non handling-based ‘chew’ in Hupa in (19c). Clearly, more etymological and comparative work needs to be done on these stem correspondences and these languages generally.

even within the same narrow lexical field.¹³ Nevertheless, FEED in Dene Sų́liné is neither a morphological nor a periphrastic variant of EAT, but it is based on an entirely different (and non-classificatory) handling verb stem, *-ni*, in conjunction with the just-mentioned incorporated noun stem *dhá-* ‘mouth’. Thus, in (23) we have a richly imaged path of transfer for FEED spelled out in the verb itself:

- (23) a. *be-dhá-re-s-ni* Dene Sų́liné (author’s fieldnotes)
 3SG-mouth-IMPF-1SGS-move.hand
 ‘I am feeding him/her.’ [lit. ‘I put it (hand) into his/her mouth.’]
- b. *ye-dhá-re-ni*
 3SG.OBV-mouth-IMPF.(3SGS)-move.hand
 ‘S/he is feeding him/her.’ [lit. ‘S/he_i put it (hand) into his/her_j mouth.’]

If we return for a moment to Navajo, Table 2 suggests that these eating and drinking stems have sort of an equipotentiality when it comes to inflection or distribution or even interpretation, for that matter. The discussion around the ‘eat marrow’ example in (17) may have dispelled any such expectations. Quite a few of the stems in Table 2 are also classically classificatory and one in particular, (ix) *-jooł* ‘consume NONCOMPACT MATTER’ (e.g., cotton candy), does not readily signal consumption. Instead, it requires extra morphology to get an EAT reading, as the examples in (24) demonstrate. Compare *yish’aał* ‘I’m chewing it (gum, corn, hard candy),’ which is a dedicated EAT verb, with the similarly spare, but infelicitous (24a):

- (24) a. *#yi-sh-jooł* Navajo (Young & Morgan 1987: 64, 140, 783, 875)
 IMPF-1SG-handle.noncompact.matter
 ? ‘I’m placing it/them.’ (sounds incomplete; needs locative complement)
- b. *kíłh yishjooł*
 town IMPF-1SG-handle.noncompact.matter
 ‘I’m taking it/them to town.’
- c. *’ahi- sh-jooł*
 out.of.sight IMPF-1SG-handle.noncompact.matter
 ‘I’m carrying it/them away out of sight’
 ‘I’m eating it (cotton candy).’
- d. *’ázaa- sh-jooł*
 REFL.mouth IMPF-1SG-handle.noncompact.matter
 ‘I’m putting it/them into my own mouth.’

13. Cf. S. Rice 2002 for a discussion about how SIT and LIE stems but not STAND can take an inflectional causative in Dene Sų́liné.

The locus of the lexical meaning resides in the incorporated locative prefix in the examples in (24). Moving something out of sight and, especially, into one's mouth certainly can imply eating. Although an eating interpretation can be coerced out of (24c-d), other non-eating interpretations are also possible. Over time, particular readings likely conventionalize in a language. The point to bear in mind is that handling something into the mouth remains the dominant organizing schema for a majority of Dene eating predications. The fact that these languages already have a proliferation of handling verbs guarantees, at minimum, an equivalently sized consumption lexicon.

Ahtna draws widely and deeply from its CVS inventory when it comes to eating and drinking predications. In addition to the “dedicated” or generic EAT stem, *-(y)aan*, shown in (25) and the DEVOUR stem shown in (26), a number of other stems in Ahtna based on classificatory verbs enter into eating constructions as shown in (27)–(34). Many of these are formed with the incorporated stem prefix, *sa-* ‘mouth’, thus completing the hand-to-mouth circuit implied in many of these expressions.

- (25) a. *iyaan* Ahtna (Kari 1990: 429)
 ‘S/he is eating it.’
 b. *c'eyaan*
 ‘S/he is eating something.’
 c. *koyaan*
 ‘It is grazing (over an area).’
 d. *ic'e'tyaan*
 ‘S/he is feeding something to him/her.’ [*< i-c'e-t-yaan* 3O-INDEF-CAUS-eat]
- (26) a. *tikaandi yatnaek* Ahtna (ibid.: 297)
 ‘The wolf devoured it.’ [*< -naek* ‘eat/devour o greedily’]
 b. *kuggaedi setnax*
 ‘Mosquitos are devouring me.’
- (27) *kuggaedi sastelt'ak* Ahtna (ibid.: 343)
 ‘Mosquitos are starting to eat me.’ [*< -t'ak* ‘move AO/so quickly’;
 compare (39) below]
- (28) *sayalghel* Ahtna (ibid.: 218)
 ‘S/he devoured it.’ [*< -ghel* ‘AO/so moves quickly’]
- (29) *ighitsaet* Ahtna (ibid.: 375–77)
 ‘S/he ate/gulped it whole (liver, fish head, biscuit).’ [*< -tsaet* ‘handle SRO
 quickly/uncontrolled’]
- (30) *sayatlae'* Ahtna (ibid.: 354)
 ‘S/he ate it (mush, mushy object).’ [*< -tlaek'* ‘handle MM’]

- (31) *saydalnen* Ahtna (ibid.: 299–300)
 ‘S/he ate it up.’ [< *-nen/-ziic* ‘handle compact object quickly’
 (a highly suppletive verb)]
- (32) a. *yeldaeł* Ahtna (ibid.: 146)
 ‘S/he is eating them.’ [< *-daetł* ‘handle PO quickly/uncontrolled’]
- b. *iy’ghitdaetł*
 ‘S/he was feeding them to him/her.’ [< *i-ghi-t-daetł* 3O-PERF-CAUS-eat.PO]
- (33) *iday’delkay* Ahtna (ibid.: 237)
 ‘S/he is eating it slowly.’ [< *-kay* ‘strike o with elongated object’]
- (34) *c’edełtuut* Ahtna (ibid.: 283)
 ‘S/he is eating something stringy.’

The same overall pattern holds for DRINK predications in Ahtna – there are a few dedicated DRINK stems (35–37) and a few others lexicalized through inference from CV stems (38–39):

- (35) a. *itnaan* Ahtna (ibid.: 290)
 ‘S/he is drinking it.’
- b. *c’etnaan*
 ‘S/he is drinking something.’
- c. *iyghitnaan’*
 ‘S/he gave him/her something to drink.’
 [< *i-ghi-t-naan* 3O-PERF-CAUS-drink]
- (36) a. *c’ezes* Ahtna (ibid.: 459)
 ‘S/he is sipping something (hot), i.e., soup, tea.’
- b. *tsaey ughases*
 ‘I made him/her sip tea.’
- (37) a. *ighit’sae’* Ahtna (ibid.: 403)
 ‘S/he licked it.’
- b. *sayaltsae’*
 ‘S/he lapped it up.’
- (38) *day’ditset* Ahtna (ibid.: 137, 383)
 ‘S/he drank something quickly.’ [< *da-* ‘down/descending’ + *-tset* ‘move hand quickly/uncontrolled’]
- (39) *kayghit’ak* Ahtna (ibid.: 343)
 ‘S/he drank it up (glass of water).’
 ‘S/he threw him/her out.’ [< *-t’ak* ‘move AO/SO quickly’; compare (27) above]

A few additional examples can only reinforce the larger point: ingestion in Dene languages is not so much about eating and drinking (and all the nourishing benefits to the agent or destructive effects on the patient) as it is on intake of an object through the mouth. The following examples illustrate the same classificatory stem, *-ggots* ‘drink liquid quickly’ being used both for rapid ingestion and rapid elimination of effluvia– the by-product of consumption!

- (40) a. *ide^lggots* Ahtna (ibid.: 199)
 ‘S/he chugged something.’ (drink/gulp.MOMENTANEOUS)
- b. *lets te^lggos*
 ‘S/he’s peeing urine in squirts.’ (drink/gulp.CUSTOMARY)

The stem, *-ggots*, is clearly related to an identical stem (which takes different classificatory prefixes) glossed as ‘mass moves quickly’. A similar bi-directional pair based on the stem, *-taac* ‘move plural objects quickly’, is exemplified in (41). Note the incorporated nominal stem *sa-* ‘mouth’ in (41a):

- (41) a. *saydaltaay* Ahtna (ibid.: 318–19)
 ‘S/he ate them all up.’ (move.PO.quickly.MOMENTANEOUS)
- b. *bac’itaay*
 ‘S/he got diarrhea.’ (move.PO.quickly.CUSTOMARY)

Koyukon, like Ahtna, is a language that preserves a dedicated classificatory verb stem for eatable objects. There is likewise a very extensive set of eating and drinking expressions built on a wide range of stems, most of which are classificatory in the standard sense, and behave much like the just-discussed Ahtna expressions do. A few non-classificatory stems (in the CVS sense) still manage to intrigue by showing the conflation of manner of eating and object of eating. Compare the two CHEW stems in (42):

- (42) a. *dzaah ghee-kk²usk* Koyukon (Axelrod 1993: 69)
 gum PERF-CHEW.REPETITIVE [(ID-LTHAN) -kkòs ‘chew o
 (hard or resistant substance)]
 ‘S/he was chewing gum.’
- b. *nelaan ghee-²utl*
 meat PERF-CHEW.CONSECUTIVE [(ID-LTHAN) -òtl ‘chew o (e.g., meat)’]
 ‘S/he bit the meat repeatedly.’

Eating does entail swallowing and Koyukon features a semi-(pseudo)-classificatory system for SWALLOW or CHOKE (the latter is formed through the use of an errative prefix, discussed in §5.2 below). That is, there are 4 different verbs of swallowing/choking depending on the constituency of the substance caught in the throat (43a-c) or the path taken (43d):

- (43) a. *k'ènaadlènèkk* Koyukon (Jetté & Jones 2000: 464)
 'S/he choked on something whole (bone, pill, berry).'
 [-*nèkk* 'swallow whole']
- b. *k'ènaadlekkòs* (ibid.: 366)
 'S/he choked on something stiff (meat or gristle).' [-*kkòs* 'stiff']
- c. *k'ènaadletuts* (ibid.: 535)
 'S/he choked on something soft (bread, fermented meat).' [-*tuts* 'handled stuffed/inflated o']
- d. *too ek'ènaadleyeets* (ibid.: 684)
 'S/he swallowed water the wrong way.' [-*yeets* 'breathe']

5. Manner and extent of consumption coding

As described in §§3–4, there are two avenues to expressive specificity in Dene eating and drinking predications: (a) lexical selection of a particular classificatory verb stem to indicate a particular type of eaten or drunken object and (b) modulations on the manner of eating, regardless of the particular foodstuff getting consumed. In this section, I explore some of those manner-modulating constructions in greater detail, starting with stems that conflate consumption and manner and then moving on to manner-modifying prefixes.

5.1 Non-classificatory stem sources for manner-conflating consumption verbs

In §3, in the discussion around the examples in (13), I mentioned that despite the presence of a CVS system in many Apachean languages for acts of consumption, the classificatory stems tend not to invoke qualities associated absolutely to a particular class of consumable objects, but rather suggest contingent qualities relevant to the particular act of consumption being described. That is, the shape, constituency, or configuration of the consumable at the moment of ingestion is what matters, not any permanent characteristic(s) of the eaten object. We see a similar set of examples below from Dene Sùliné (incidentally, also involving the eating of apples):

- (44) a. *jíechok ghà she-s-tì* Dene Sùliné (author's field notes)
 apple at food-IMPF.1SGS-eat
 'I'm eating an apple (bit by bit).'
- b. *jíechok he-s-tthik*
 apple IMPF-1SGS-eat
 'I'm eating an apple (whole).'

- c. *nake jíechok he-s-déł*
two apple IMPF-1SGS-handle.PO
'I'm eating two apples.'
- (45) a. *jíechok da-he-tthik*
apple PL-IMPF.3S-eat
'They are each eating an apple.'
- b. *jíechok dá-l-déł*
apple PL-MIDDLE-handle.PO
'They are eating many apples.'

In addition to predicating the extent of consumption, Dene Sųliné has eating and drinking verb stems which blend manner and theme.

- 46) a. *łúe hesdak* Dene Sųliné (author's field notes)
'I'm eating the (whole) fish.'
- b. *łúe hestthik*
'I'm eating (snacking on/licking at) a whole piece of fish.'
(can also be used with fried chicken)
- c. *sas hetthik*
'The bear is licking it up (honey).'
- d. *ber he'áł*
'S/he's chewing meat.' (also used with gum, ice)
- e. *hes'eł*
'I'm biting something.'
- f. *hesttha*
'I'm biting into a chunk of something (meat, bannock).'
- g. *hesxáth*
'I'm gnawing on it (a bone).'
- h. *kafi thizes*
'I'm sipping/slurping coffee.' (can also be used with soup, stew, or juicy tomatoes)
- i. *kafi hesda*
'I'm drinking coffee.'

Slave is a dialect complex in the watershed of the Mackenzie River encompassing languages such as South Slavy (Dehcho) and the three languages often subsumed under the name North Slavy: Bear Lake (Sahtu), Hare, and Mountain. These languages have received comprehensive treatment in K. Rice 1989. Very rightly, she observes, "[t]here are many verb themes that can be used to describe eating. They differ in

terms of the type of object eaten or manner in which objects are eaten” (p. 789). So far, we have seen a lot of EAT and DRINK stems that vary in shape and construction of the resulting predication based on the nature of the consumed object. Eating and drinking in Slave are also subject to a very particular type of lexical distinction found in many Athapaskan languages, between “controlled” and “uncontrolled” manners of action. This distinction loosely links pairs of lexical stems. Across the family, the classic CVS system is especially sensitive to this distinction, as indicated in the difference between the handling schemas described in (10c) and (10d). In Slave, there are two principal and fairly generic stems associated with eating, (*shé*)-*t̥i* and -ʔ*áh*, both of which can be used with overt or omitted objects and both of which suggest controlled eating.

- (47) a. *shéht̥i* Slave (K. Rice 1989: 448–9)
 ‘I ate (meal).’
 b. *ehkàh*
 ‘I ate one (one object).’

Hare appears to have a controlled/uncontrolled stem difference with incremental eating, as shown in (48).

- (48) a. *xayedéhd̥e* Slave (ibid.: 786)
 ‘S/he ate it up piece-by-piece.’ (controlled)
 b. *xayedéhd̥ze*
 ‘S/he ate it up piece-by-piece, quickly.’ (uncontrolled)

Slave also features two fairly generic stems associated with drinking, -*d̥o* and -*ts̥é*, of which the former is the “controlled” variant, while the latter is the “uncontrolled”, roughly meaning ‘gulp’. The latter is clearly cognate with a previously exemplified Athapaskan DRINK stem based on uncontrolled handling, that exemplified in (38) for Ahtna.

- (49) a. *yad̥o* Slave (ibid.: 786)
 ‘S/he drank it.’ (controlled)
 b. *yats̥é*
 ‘S/he drank (it) quickly.’ (uncontrolled)

K. Rice also lists the following imperfective stems along with their respective (and lexicalized) voice/valency classificatory prefix for Slave. Some of these seem to have contradictory glosses when compared to some of the perfective forms given above, but all of which reinforce the fact that multiple stems are available in the typical Athapaskan language for signaling different kinds of consumption:

- (50) a. *Ø -ʔáh* Slave (ibid.: 789)
 ‘chew’ (generalized to ‘eat a small meal/snack’ in northern dialects)

- b. *d -déh*
'eat PO (berries, popcorn, raisins) one-by-one'
- c. *Ø -k'a*
'chew'
- d. *d -dzee*
'eat one at a time'
- e. *Ø -xa*
'eat meat, gnaw'
- f. *d -dɔ*
'eat soup/porridge', 'drink' (controlled)
- g. *Ø -tsě*
'drink/gulp' (uncontrolled)

5.2 Prefix modulations affecting eating and drinking verbs

In §§3–4, I gave examples of classificatory verbs of handling and other denominal stems being coerced into a consumption reading in the presence of an incorporated nominal or postpositional prefix having to do with 'mouth' or 'oral area'. A number of other lexical (or "disjunctive" to use the common term in the Athapaskan literature) prefixes are available across the family to elaborate the eating or drinking verb or to further specify the act of eating or drinking.

Thompson 1996 surveys a number of Athapaskan languages in terms of how the presence or absence of the D-voice/valence prefix or "D-classifier" (cf. footnote 6) can alter the overall semantics and not just the voice of the predication. For example, in Koyukon, the basic intransitive EAT stem can yield a neutral reading when no voice/valence prefix is present (the so-called zero-classifier), but an unintentional or excessive outcome, or a sense of suppressed agency is achieved when the D-voice/valence prefix is present in conjunction with the *ne-* errative prefix. Compare the two examples in (51):

- 51) a. *k'égheehonh* Koyukon (Axelrod 1993: 108–09)
k'è- ghe- ø- honh
 INDEF.O PERF CL eat.DURATIVE
 'S/he ate something.'
- b. *k'ënaaɫdon'*
k'è- ne- le- de- on'
 INDEF.O ERR PERF CL eat.ERRATIVE
 'S/he overate.'

Witsuwitèn erratives work exactly the same way:

- (52) a. *c'ε-s-ʔal* Witsuwit'en (Hargus 2007: 388)
 INDEF-1SGS-eat.PERF
 'I ate.'
- b. *c'ə-n-izə-s-t'al*
 INDEF.O-err-CONJ-1SGS-D.eat.PERF
 'I overate/I got sick from eating.'
- (53) a. *yitneʔ*
 3O-3SGS-D.drink.PERF
 'S/he drank it.'
- b. *ta-n-izə-s-tneʔ*
 water-ERR-CONJ-1SGS-D.drink.PERF
 'I'm drunk.'

In Navajo, these same notions are conveyed through a compound (and rather all-purpose) excessive prefix, *ndi'ni-* 'PROLONGATIVE' (Young & Morgan 1987: 606):

- (54) a. *ndi'ni-sh-dijh* Navajo (Young & Morgan 1987: 605)
 too.much-1SGS-eat
 'I'm overeating.'
- b. *ndi'ni-sh-ghááł*
 too.much-1SGS-eat.meat
 'I'm eating too much meat.'
- c. *ndi'ni-sh-dlį́h*
 too.much-1SGS-drink
 'I'm drinking too much.'

The preceding Koyukon, Witsuwit'en, and Navajo examples with the manner-changing prefixes may be related to the following lexical pair I once unintentionally elicited in Tsuu T'ina, but was unable to analyze at the time. Compare (55b) with the corresponding Witsuwit'en version containing the errative prefix in (56b):

- (55) a. *de-sisnek'* Tsuu T'ina (author's field notes)
 'I swallowed (it).' [old form]
- b. *'ini-sisnek'*
 'I'm choking.'
- (56) a. *tezəchnəy* Witsuwit'en (Hargus 2007: 399)
 'I swallowed it.'
- b. *ntezəgəlnəy*
 'I accidentally swallowed it.'

In Dene Sų́liné, excessive consumption is handled periphrastically with an adverbial:

- (57) a. *de'ázi shéghesti* Dene Sų́liné (Cook 2004: 103)
 'I ate too much, I overate.'
- b. *'íghá shéghesti*
 'I ate too quickly.'

A completely different kind of thematic prefix-stem interaction occurs in Witsuwi'ten, a language of the British Columbia interior formerly known as Babine and closely related to Carrier. Witsuwi'ten, like many of the Alaskan and Apachean languages, still has a somewhat transparent and productive set of gender prefixes (also called "qualifier" prefixes). These have atrophied or completely lexicalized in Dene Sų́liné, showing up only in a small set of stative verbs (e.g., 'be red', 'taste good'). The first two Witsuwi'ten eating stems given in (58)–(60) will look familiar from examples seen earlier in other languages. Both are associated with fairly generic eating, one having to do with eating a singular object and the other featuring the widely deployed "plural action" stem. Nevertheless, the language still has a way of signaling something particular about the object being eaten. The *n*-qualifier prefix (glossed as Q_{RO}) in the (b) examples suggests agreement with a solid round object and thus contrasts with the (a) examples.

- (58) a. *y-ə-ʔat* Witsuwi'ten (Hargus 2007: 263)
 3O-IMPF.3SGS-eat
 'S/he's eating it.'
- b. *lemadec yə-n-ə-ʔat*
 potato 3O-Q_{RO}-IMPF.3SGS-eat
 'S/he's eating the potato.'
- (59) a. *lasuc hə-l-dił*
 sugar IMPF.3SGS-CV-eat.PO
 'S/he's eating sugar.'
- b. *c'əyiz n-ə-l-dił*
 eggs Q_{RO}-IMPF.3SGS-CV-eat.PO
 'S/he's eating eggs.'
- (60) a. *y-ə-yuc*
 3O-IMPF.3SGS-gnaw
 'S/he's gnawing on it.'
- b. *lasucam yə-n-ə-yuc*
 turnip 3O-Q_{RO}-IMPF.3SGS-gnaw
 'S/he's gnawing on the turnip.'

A more striking (that is to say, lexical) effect can be seen in an alternation between two different pronominal prefixes in Witsuwit'en. By substituting the third person personal pronoun *y-* (which also has an obviative function in combination with a third person subject) with the more abstract, impersonal areal pronoun *w-* (which is supposed to be related to land, digging, farming, etc.) not only is a change in the animacy ranking of the agent-eater produced, but in the manner and object of eating as well:

- (61) a. *yəʔaʔ* Witsuwit'en (Hargus 2007: 390)
 'S/he's eating it.'
- b. *wəʔaʔ*
 'It's grazing.'

All in all, as we have seen, Athapaskan languages have an impressive inventory of eating and drinking stems and a wide array of morphosyntactic options for fine-tuning these already fairly specific predications. We now turn from literal eating and drinking to more figurative extensions of these stems and expressions.

6. Figurative eating and drinking in Dene languages

The fact that EAT and DRINK verbs constitute part of the basic vocabulary of all human languages, coupled with the highly specific nature of eating and drinking predications in Athapaskan languages, has meant that these eating and drinking stems and constructions are aggressively deployed as sources for other lexical items and expressions. Eating and drinking vocabulary items prove to be an especially rich and useful source of imagery across the family and readily enter into figurative extensions.¹⁴ A sample of some of the more common or imaginative metonymies and metaphors found in these languages follows. The metonymies tend to involve deverbal or otherwise relativized forms and largely have a referential function, while the metaphors tend to be more propositional and are used for more abstract reference or predication (see S. Rice 1998b and 1999 for a more detailed discussion and illustration of Athapaskan metaphors and metonymies).

6.1 Metonymies

The most common metonymies based on EAT or DRINK verbs in Dene languages relate to generic words for food or to specific kinds of culturally significant foods.

14. A favorite non-Athapaskan EAT-based figurative expression of mine is the Haida *los taas*, 'wave eater' for war canoe or long boat.

Nearly all of the examples in (62)–(70) are based on the most prevalent stem whose modern reflex is a (usually relativized or nominalized) variant of *-(d/y)an* ‘eat’, a stem which Krauss & Leer (1981: 201) have reconstructed as **-ha·ŋ* in Proto-Athapaskan.

FOOD IN GENERAL AND PARTICULAR FOODS

- (62) *daan, dann, dán, dán'í'* Jicarilla Apache (Phone et al. 2007: 158, 176)
- (63) *ch'iyán, idán* W. Apache (de Reuse & Goode 2006: 507)
- (64) a. *ch'iyá* Navajo (Young & Morgan 1987: 30, 280, 295)
‘food’ (customary diet of an animal)
- b. *ch'iyáán*
‘food, groceries’
- c. *ch'iyáán doo bidi'ndzinígíí*
‘garbage’ [lit. ‘food which is not wanted’]
- d. *ch'éé jiyáán*
‘watermelon’ [lit. ‘food which is eaten in vain’]
- e. *dáá'*
‘food, corn, provender’ (< perfective stem form *-yáá'í/-dáá'* ‘to eat’)
- (65) a. *edonee* Koyukon (Jetté & Jones 2000: 287)
‘edibles’ [lit. ‘that which is eaten’]
- b. *tsèłonyee*
‘inedibles’ [lit. ‘that which we do not eat’]
- (66) a. *daan* Ahtna (Kari 1990: 429)
‘food’
- b. *-daane'*
‘food (of an animal)’ [cf. *udzihdaane'* ‘lichen’, lit. ‘caribou’s food’]
- c. *c'aan*
‘food, flour’
- (67) *dóní* Tsuu T'ina (Cook 1984: 78)
‘food’
- (68) *-ni* Dene Sųliné (author’s field notes)
‘food’
- (69) *hąyu'ał* Witsuwit'en (Hargus 2007: 358)
lit. ‘what they might eat’
- (70) *et'ał* Carrier (Morice 1932j: 358)
lit. ‘what gets eaten’

- (71) a. *k'iwiyul* Hupa (Golla et al. 1996: 37; 1–2)
 'food in general' [lit. 'what one keeps eating']
- b. *k'iwinyan*
 'acorn' (a dietary staple of the Hupa) [lit. 'what someone eats']
- c. *sa'-xa: wh*
 'acorn soup/mush' [lit. 'what someone handles.container into.mouth']

Less common are analogous metonymies for 'things which are drunk', which might signify either water or alcoholic beverages. The few examples available are presented in (72)–(73).

BEVERAGE, DRINK, WATER

- (72) *ta'na: n < ta'dina: n* Hupa (Golla et al. 1996: 105)
 'water' [lit. 'what one drinks']
- (73) *daadlan-igii* Navajo (Young & Morgan 1987: 306)
 'beverages' [lit. 'those things that are drunk']

Quite a number of terms of acculturation have developed in Dene languages out of EAT-based metonymies. These typically have to do with items found about the hearth and home or implements used for eating or drinking.

TABLE

- (74) *mi-k'á'-chi-da'²-chi-ya²-i* Jicarilla Apache (Phone et al. 2007: 332)
 it-on-food-4.eat [lit. 'one eats food on it']
- (75) *bi-káá'-adáni* Navajo (Young & Morgan 1987: 1034)
 it-on-4.eat [lit. 'one eats food on it']
- (76) *bi-ká'-idáne* W. Apache (de Reuse & Goode 2006: 555)
 it-on-4.eat [lit. 'on it (there is) eating']
- (77) *ukè'scèyaani* Ahtna (Kari 1990: 429)
 lit. 'that on which we eat'
- (78) *be-tlee-kkè kèdone* Koyukon (Jetté & Jones 2000: 287)
 lit. 'that which people eat on it'
- (79) *be-kè-shi-chèlyi* Dene Sùliné (author's
 field notes)
 lit. 'that which people eat on it'
- (80) *miq'it-dahkyá: n* Hupa (Golla et al. 1996: 94)
 [lit. 'on it-one eats atop']

UTENSILS

- (81) *me'-kyá: n* Hupa (Golla et al. 1996: 26)
 'plates, cups, things one eats from' [lit. 'in it-one eats']

- (82) *tó-zis bee ʔádlání* Navajo (Young & Morgan 1987: 708)
 water-bag with.it something.is.drunk
 ‘drinking glass’ [lit. ‘the bottle with which something is drunk’]
- (83) *dacən bi c’áʔáʔ* Witsuwit’ən (Hargus 2007: 271)
 ‘chopsticks’ [lit. ‘with wood one eats’]

Places where food and drink are prepared, consumed, or purchased also have developed metonymically from EAT and DRINK stems. This type of metonymy is especially prevalent in Apachean languages:

FOOD/DRINK-RELATED LOCATIONS

- (84) a. *ch’iyáán ʔl’ini góne’* Navajo (Young & Morgan 1987: 295, 301, 304)
food it.is.made.PLACE inside
 ‘kitchen’ [lit. ‘inside the place where food is prepared’]
- b. *da’a-dāq góne’*
 people-eat inside
 ‘dining room’ [lit. ‘inside the place where people eat’]
- c. *ch’iyáán bá hooghan*
 ‘grocery store’ [lit. ‘food-for-building’]
- d. *da’ji-yán-i*
 ‘restaurant, café’ [lit. ‘people-eat-place’]
- e. *da’ji-dlán-i*
 ‘barroom, tavern’ [lit. ‘people-drink-place’]
- (85) a. *da-ch’iyāq-yú* W. Apache (de Reuse & Goode 2006: 70, 72)
 PL-eating-NMLZ
 ‘restaurant, cafeteria’ [lit. ‘the place where people eat’]
- b. *ch’iyán baa gowaqh*
food concerning house
 ‘food store, grocery store [lit. ‘house about food’]
- (86) *c’etnaande* Ahtna (Kari 1990: 289–90)
 ‘tavern, bar’ [lit. ‘the place where one drinks something’]

EAT and DRINK stems also participate in the metonymic (and sometimes metaphoric) lexicalization of particularly salient agents of eating and drinking. Specific animal names and cannibals (salient “eaters” par excellence!) derive from expressions with EAT or related stems, as shown in (87)–(89). Parts of the body specifically associated with eating are named in (90). And particularly salient drinkers – alcoholics – are named with DRINK stems in (91)–(92):

ANIMAL AND CANNIBAL NAMES

- (87) a. *dekenh ehone* Koyukon (Jetté & Jones 2000: 287)
 ‘porcupine’ [lit. ‘that which eats sticks’]

- b. *ketleḥone*
 ‘small fish, minnows’ [lit. ‘that which eats meat’]
 (said of certain small fish found in abundance
 around salmon-preparation areas)

(88) *tšabaayo yaḥs’oqsa* Galice (Hojjer 1966: 322)
 ‘hummingbird’ [lit. ‘flowers, the one that sucks them’]

(89) a. *’eł dyanni* Ahtna (Kari 1990: 429; 146)
 ‘spruce grouse, spruce hen’ [lit. ‘that which eats spruce boughs’]

- b. *tneldaetḥe*
 ‘cannibals’ [lit. ‘those that eat.PO people’]

CONSUMPTION-RELATED BODY PARTS

(90) a. *miḥ-kyā: n* Hupa (Golla et al. 1996: 95, 91)
 ‘set of teeth’ [lit. ‘with it-one eats’]

- b. *whik’iwiyul-me’-nolxit’*
 ‘stomach’ [lit. ‘my food-into it-is swallowed up’]

EATERS AND DRINKERS

(91) *’adláan-í* Navajo (Young & Morgan 1987: 871)
 drinker, drunkard’ [lit. ‘the one that drinks’]

(92) *ta: ’awhdina’n* Hupa (Golla et al. 1996: 29)
 ‘I’m a drinker.’ [lit. ‘I drink habitually.’]

Finally, physiological states associated with too much or not enough food and drink also form the basis of metonymies built on stems for EAT, DRINK, FOOD, and WATER in Dene languages.

HAVE A PARTY

(93) *bá ’ajiyá* Navajo (Young & Morgan 1987: 124)
 3SG-for people.eat
 ‘They’re having a party.’ [lit. ‘People eat for him/her.’]

GET DRUNK

(94) *’áde ’esh-dláá’* Navajo (Young & Morgan 1987: 125)
 bove.self PERF.1SG-drink
 ‘I overdrank.’ [lit. ‘I drank above myself.’]

BE HUNGRY

(95) *dák’azhá ’iyāā* W. Apache (de Reuse & Goode 2006: 407)
 ate IMPF.3SGS.eat
 ‘S/he is hungry.’ [lit. ‘S/he is eating late.’]

STARVATION

(96) a. *’a: k’ine’* Hupa (Golla et al. 1996: 37, 47)
 ‘There is no more food (archaic term).’

- b. *ʔa: dixin/ʔa: dixing*
 ‘be hungry/starving’ [lit. ‘eating off oneself’ or ‘subsisting on oneself’]
- (97) *ho-dichin* Navajo (Young & Morgan 1987: 450)
 ‘starvation, famine’ [lit. AREAL-hunger]
- (98) *shéaké* Slave (K. Rice 1989: 652)
 ‘lacking food (archaic term)’
- (99) *shiná* W. Apache (de Reuse & Goode 2006: 520)
 ‘hunger’ [lit. ‘food ???’]

6.2 Metaphors

The high degree of figurativity in Athapaskan languages has not received much sustained attention. A few dictionary compilers, notably Young & Morgan (1987), Kari (1990), and Golla (1996), have been consistent in listing literal and free glosses side-by-side. With respect to Athapaskan figurativity, I have speculated elsewhere about a possible correlation between small, esoteric societies (as is common with hunter-gatherers) and an over-reliance on the endolexicon for purposes of deriving new expressions (cf. S. Rice 1998b, 1999). Any reliance on a core, indigenous lexicon means that the same set of old forms must be deployed for new and different purposes, thus hastening semantic extension and its inevitable by-product, figurativity. The Dene languages provide a rich source of metaphors, from the more to the less conventional. Orientational and ontological metaphors are quite common, as well as those based on form/shape similarity across distinct conceptual domains (cf. Lakoff & Johnson 1979, 1999; Brown 1999). Let us begin with a few, simple referential metaphors in which FOOD stems (which typically derive from EAT) form the basis of terms that designate particular plants as food sources.

PLANT NAMES

- (100) a. *dah yíitʔhídáá* Navajo (Young & Morgan 1987: 301, 302)
 ‘Indian Paintbrush (flower)’ [lit. ‘hummingbird food’]
 (hummingbird = ‘that which hangs suspended)
- b. *dáá-kéh*
 ‘cornpatch, farm, field’ [lit. ‘food/corn-place’]
 (dáá- is combing form of *dáá* ‘food, corn’)

INDIGENOUS AND ACCULTURATED FOODS

- (101) a. *dlúne ní* Dene Słliné (author’s field notes)
 ‘seneca root’ [lit. ‘rat food’]
- b. *dlie ní*
 ‘peanut butter’ [lit. ‘squirrel food’]

- c. *ḥchogh ni*
‘oats’ [lit. ‘horse (big-dog) food’]
- d. *eni*
‘bait’ [lit. ‘UNSPEC/animal food’]

Analogous to metaphorical EAT, one finds the following example of metaphorical BITE in Ahtna (102b and c):

- (102) a. *ḥi yizàḥ* Ahtna (Kari 1990: 79)
dog 3O.PERF.bite
‘A dog bit him (once).’
- b. *uc’iisàḥ*
3INDEF.PERF.1SGS.bite
‘I trapped it.’
- c. *te`àḥi*
‘steel trap’ [lit. ‘that which bites’]

Moving from the referential to the more relational, the following examples based on EAT and DRINK stems or constructions generally describe a process or a state.

TO POISON (FEED)

- (103) a. *miḥ-xosa: -y`an* Hupa (Golla et al. 1996: 73)
with it-into.mouth-put.round.object
‘I poisoned him/her.’ [lit. ‘I placed it into her/his mouth.’]
- b. *miḥ-xosa`awh*
with it-someone puts round object into his mouth
‘Someone poisons him/her; poisoning is happening.’

TO BE SICK

- (104) *ha-sê•-deaḥ* Carrier (Morice 1932: 242)
‘I have cancer.’ [lit. ‘it is eating off of me’]
- (105) a. *gu se-dak* Dene Słı́né (author’s field notes)
bug 1SGO-devour
‘I have cancer.’ [lit. ‘Bugs/worms are devouring me.’]
- b. *ya se-dak*
lice 1SGO-devour
‘I’m infested with lice.’ [lit. ‘Lice are devouring me.’]
- c. *dekoth se-dak*
phlegm/cough 1SGO-devour
‘I have a cold.’ [lit. ‘Phlegm is devouring me.’]
- d. *shirat`hen se-dak*
heartburn 1SGO-devour
‘I have heartburn.’ [lit. ‘heartburn is devouring me.’]

- (106) a. *benozehtl te k'udeh~~on~~h* Koyukon (Jetté & Jones 2000: 285–7)
 ‘S/he has arthritis.’ [lit. ‘Something is eating his/her limbs.’]
 b. *baanh koolkkoy ts’eege yets’e gheeh~~onee~~*
 ‘S/he (that child) has a chronically runny nose.’ [lit. ‘His/her mother ate
 pike entrails towards him (while she was pregnant).’]

TO BE ANGRY

- (107) *k’edoh~~udeehon~~* Koyukon (Jetté & Jones 2000: 285)
 ‘S/he scolded everybody.’ [lit. ‘S/he chewed everybody out/
 verbally ate everybody.’]

Finally, I present a few examples based on DRINK verbs, which prove to be a fertile source of metaphors to express drowning and getting drunk in Dene Słliné. In both cases and only in these examples, can we say that an “affected agent” construal is present. That is, the act of consumption highlights a detrimental effect on the consumer. Moreover, these examples mark an affected agent in the absence of an errative or excessive marker.

TO DROWN

- (108) *tu-ne-s-dí* *ha* Dene Słliné (author’s field notes)
 water-MOM-1SGS-drink FUT
 ‘I’m going to drown.’ [lit. ‘I will drink water.’]

TO BE/GET INTOXICATED

- (109) *kón-tué ne-s-dí* *ha* Dene Słliné (author’s field notes)
 fire-water MOM-1SGS-drink FUT
 ‘I’m going to get drunk.’ [lit. ‘I will drink (drown in) alcohol.’]

The only other instance I could find of a similar “affected agent” expression involving a verb of ingestion comes from Witsuwit’èn, for a verb meaning ‘taste’ rather than ‘eat’ or ‘drink’, as shown in (110). The third person object pronoun *y-* has been replaced by the abstract, impersonal or areal object pronoun, *w-*. This pair mirrors the alternation described in (61).

TO EXPERIENCE MISFORTUNE

- (110) a. *yə~~tnic~~* Witsuwit’èn (Hargus 2007: 288)
 ‘S/he tasted it.’
 b. *wə~~tnic~~*
 ‘S/he knows how it feels.’ [lit. ‘S/he tasted something (i.e., misfortune).’]

7. Hunger and thirst in Athapaskan

Thus far, we have seen that the Dene languages surveyed opt for the more specific over the more generic when it comes to rendering eat and drink events into

linguistic predications. Indeed, this attraction towards the hyponymic cuts across Dixon's (1999) and Aikhenvald's (this volume) semantic typology of verb meanings. In their terms, there is a continuum between languages in which the verbs expend semantic energy in expressing the nature of the event participants over the nature of the event per se (their A type language) and languages in which the nature of the action is more likely to be specified at the expense of the event participants (their B type language). It is fair to say that Athapaskan languages appear to be uncontroversially A and B type languages at the same time, depending on the class of predications being scrutinized. They have an abundance of participant-referring stems which grossly underspecify the event type (the classic CVS system), as well as a number of incorporated stems, postpositions, gender prefixes, and other devices which fine-tune the nature of the action or the manner in which the action is performed, but which give short shrift to the nature of the foodstuff being consumed. A sharp, blinkered focus on only the verb stem in Dene languages is just about meaningless since the propositional verb word as a whole, along with its immediate syntactic frame, conveys meaning in an often non-compositional but highly conventionalized fashion. Thus, the Dene verb must be regarded as a construction in its own right (cf. Croft 2001; S. Rice 2006), and items in the Dene verbal lexicon must be respected in all of their wholistic heterogeneity.

That said, we do find one domain relevant to the semantic fields of eating and drinking in which Dene languages opt for the more generic over the more specific and look like B type languages in the process.¹⁵ The expression of physical desire, especially of hunger and thirst, but also craving for tobacco or sexual release, is often made with the same verb. The examples from Dene Słı́nı́ in (111), built on a 'crave' (or possibly 'think') verb, seem especially generic in their extensiveness.

- (111) a. *bér-ba hédher* Dene Słı́nı́ (author's field notes)
 meat-for IMPF.3SGS.crave
 'S/he is hungry.' [lit. 'S/he hungers for meat.']
- b. *tu-ba hédher*
 water-for IMPF.3SGS.crave
 'S/he is thirsty.' [lit. 'S/he hungers for water.']
- c. *'e-ba hédher*
 UNSPEC-for IMPF.3SGS.crave
 'S/he is horny.' [lit. 'S/he hungers for someone.']

15. A striking example of underspecification and ingestion comes from Slave (Bearlake), where *'nehtlah* can mean 'I swallowed', 'I choked', or 'I coughed up' (K. Rice 1989: 532). Norwegian & Howard (2004: 504) gloss the very same cognate stem in South Slavey, *-tla*, as 'throat action', where it subsumes all of the above, but also the notion of having hiccups.

- d. *kafi-ba hédher*
 coffee-for IMPF.3SGS.crave
 ‘S/he wants some coffee.’ [lit. ‘S/he hungers for coffee.’]
- e. *tsělt’ui-ba hédher*
 tobacco-for IMPF.3SGS.crave
 ‘S/he craves a cigarette.’ [lit. ‘S/he hungers for tobacco.’]
- f. **tsąba-ba hédher*
 money-for IMPF.3SGS.crave
 [lit. ‘S/he hungers for money.’]
- g. **hédher*
 IMPF.3SGS.crave
 [lit. ‘S/he craves.’]

In Navajo and Western Apache, an equative or similitude verb is generically used for both hunger and thirst. This is based on a metaphor of the strongest order: I am thirsty < I am/have become thirst, as shown in (112) and (113):

- (112) a. *dichin nishłi* Navajo (Young & Morgan 1987: 661)
 hunger IMPF.1SGS.be
 ‘I’m hungry.’ [lit. ‘I am hunger.’]
- b. *dibáá nishłi*
 thirst IMPF.1SGS.be
 ‘I’m thirsty.’ [lit. ‘I am thirst.’]
- (113) a. *shiná’ siłłi’* W. Apache (de Reuse & Goode 2006: 520; 559)
 hunger PERF.3SGS.be
 ‘S/he got hungry.’ [lit. ‘S/he became hunger.’]
- b. *tábá’ siłłi’*
 thirst PERF.3SGS.be
 ‘S/he got hungry.’ [lit. ‘S/he became hunger.’]

8. The lexical semantics of basic verbs and coming to terms with Athapaskan prehistory

As I indicated in my two previous chapters in this series on the syntax and semantics of basic verbs (on GIVE verbs in S. Rice 1998a and SIT/STAND/LIE verbs in S. Rice 2002), Athapaskan verbs tend to be more specific than generic.¹⁶ Here, too,

16. In those earlier studies, I attributed a reluctance of basic verbs to grammaticalize in Dene Słı́né to this familial tendency towards the particular.

in the case of Athapaskan EAT and DRINK verbs, we find a large number of lexical variations on the general theme of consumption. In all of the daughter languages surveyed, a number of lexicosyntactic reflexes were shown to manifest a great deal of theme-oriented specificity, focusing attention on the manner of consumption and the nature of the object consumed. Sometimes these two semantic properties are independently marked and dissociable; sometimes they are intertwined, either logically or inferentially. The main point is that acts of consumption in Athapaskan are highly specific across the family and are rather literally tied to the situation at hand. To whitt, handling into the mouth or handling variously shaped or constituted objects about the mouth is a dominant organizing schema and has proven to be a fertile source of EAT predications, in particular.

Notwithstanding the relatively high level of specificity in the semantic typing of events in Dene languages, they manage this against the backdrop of a somewhat impoverished stem lexicon (albeit not so radically limited as the Papuan languages, Kalam or Manambu (cf. Aikhenvald, this volume). On average, Athapaskan languages have around 1300 stems (Jim Kari and Victor Golla, p.c.), of which the vast majority are used to form verbs. A massive amount of recycling and recombination transpires within the typical Dene lexicon, giving rise not surprisingly, to much figurativity, but also to much ambiguity and vagueness. To be sure, the result is quite a lot of phonological and semantic shift and “slippage” across the daughter languages, a state of affairs that hampers cross-language comparison and proto-language reconstruction. The sheer number of alternative forms and meanings across the family is daunting, especially given the paucity of monosyllabic stems (and non-derived nouns, generally), considerable fusion and stem suppletion, the clear tendency towards semantic specificity amongst derived verbs, and the likelihood that neighboring Dene languages will form dialectal continua rather than mutually unintelligible languages (not to mention the frequency of ideolectal variation within single communities).

Studies of the lexical semantics of basic verbs and expressions can provide a coherent background both for language-internal analysis, but also for deeper cross-linguistic – in the case of reflexes of a single family--and typological--in the case of unrelated languages – research in areas beyond those already heavily mined on largely structural grounds alone. The classic domains of the formal syntactician and the typologist alike (viz. word order patterns, agreement, case systems, head/dependency marking, extraction, etc.) do not tell us very much about being human, about how different cultures relate to the world, and how different languages foster the categorization of experience. By focusing on a smallish corner of the lexicon and a circumscribed semantic field, fine-grained patterns and correspondences can emerge for both the linguist and the native speaker, patterns which might otherwise be overlooked because they are not readily obvious or they are not part of a major morphosyntactic system or a universal vocabulary

set. Furthermore, a relational predication, such as a basic verb, although seemingly more intractable than a referential term, can reveal much about the degree of differentiation amongst areally or genetically related languages, as well as yield insights into what might have been the prehistorical cultural relationships among contemporary groups. The direction, pace, and motivation behind language change or lexical innovation is too large to track wholesale or across the board. However, experientially basic event frames, as afforded by concentrated attention to the linguistics of eating and drinking, for example, can offer some measure of focus whereby new cognates, loan translations, and other similar patterns and meanings can be identified and compared.

It is just this kind of semantically motivated focus that can allow us to make progress in our understanding of Athapaskan prehistory and migration patterns (cf. Ives & Rice, under review). Despite the startling linguistic similarities among Athapaskan languages, their speakers are distinguished by a huge geographical dispersal and deep cultural diversity. The motivations, means, paths, and time-courses of Dene peoples' great journeys across the western half of the North American continent remain a mystery. The physical record that archaeologists have at their disposal is quite fragmentary and ambiguous and offers little in the way of conclusive evidence in response to this mystery. Moreover, the precise daughter language relationships have yet to be worked out, especially when it comes to determining who are today's descendants of the most immediate northern ancestors to the Apacheans. In addition, only a few comprehensive proto-Athapaskan (PA) reconstructions have been attempted and they have been conducted on a modest and fairly recycled inventory of somewhat skewed (in terms of representativeness and extent of the languages sampled) and disjoint (in terms of content) language data (cf. Krauss 1969 and Krauss & Leer 1981; the latter of which helpfully includes comparisons and reconstructed PA forms for 'eat' (*-*ha·ŋ*), 'drink' (*-*na·ŋ*), 'lick' (*-*na·t*'), and 'swallow/choke' (*-*ne·x*'), but not 'chew'; unfortunately, among body parts, 'wart' and 'nostril' are reconstructed, but not the more critical 'hand' and 'mouth').

A comprehensive pan-Athapaskan study of the linguistic and cultural usage facts of a targeted domain, such as expressions of eating and drinking, may yield a new wave of experientially grounded (and dare I say more relevant) language data which can make both scientific and practical contributions. By tracking degree of cognation and calquing from contact languages versus spontaneous innovation for experientially relevant domains (e.g., for flora and fauna, hunting and tracking techniques, kinship, moccasin manufacture, and basic verbs), language evidence can be brought to bear on this major question about North American prehistory and allow us to test certain models of Athapaskan ancestry and migration. However such an enterprise can also be brought to bear on helping a community which

has lost some of its vocabulary to reconstruct a form or an expression in ways consistent with patterns found elsewhere in the family or to even borrow a form outright from a sister language. Athapaskan languages have traditionally eschewed borrowing from unrelated contact languages as a means of expanding the lexicon. However, in an age in which indigenous language loss and death puts all of the extant daughter languages (even Navajo) on a vulnerable footing, knowledge about sister languages and communities within the larger Dene Nation of North America is usually the preferred means of restoring lost language.

That giant of 20th century anthropology and linguistics, Edward Sapir, made intriguing observations about the migration of the Apachean Athapaskans into the American Southwest that deserve to be revisited (1936). He thought that the Athapaskan route southward involved four probable strata or stages of migration out of the Subarctic: a fundamental northern layer (related to the Mackenzie Basin), an early upper Plains adaptation, a first contact with non-Puebloan peoples in the Southwest, and a second distinctly Puebloan influence later on. Although Sapir anticipated that archaeological evidence would be forthcoming, he was only able to offer linguistic cues for these four stages, specifically, in Apachean words for 'ladle', 'corn', 'sown seed lies', and 'gliding/paddling', which either preserved northern terms and meanings or involved innovations based on northern items or concepts. It is no surprise that three of these concepts are intimately linked with the notion of eating or cultivation, those most basic of human experiential domains. In the 21st century, a return to semantically and conceptually driven comparison, as attempted here, may help us better connect the dots between the daughter languages, for, as Sapir himself writes (1936: 225), "there is undoubtedly a large amount of relevant cultural experience packed away in the vocabularies of [these languages]."

Abbreviations

1 = 1st person; 2 = 2nd person; 3 = 3rd person; CAUS = causative; CL = pre-stem valency classifier; CONJ = conjunct prefix; CV = classificatory verb; DEM = demonstrative; ERR = errative; IMPF = imperfective; INDEF = indefinite; MOM = momentaneous aspect; NMLZ = nominalizer; O = object; OBV = obviative; PERF = perfective; PL = plural; Q_{RO} = qualifier prefix; REFL = reflexive; S = subject; SG = singular; UNSPEC = unspecified.

Abbreviations relating to the Dene classificatory verb system: AO = animate object; CC = closed container and its contents; FF = flat, flexible; GO = granular, powdery, or heaplike mass; MM = mushy matter; OC = open container; PO = plural objects; SO = sticklike object; SRO = solid, round, compact object.

Notes

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