

(2) Upper Kuskokwim

srito-di-hw-(s-)t- 'anh

'I am hunting'

in.concealment-Phylogenetic-Areal-1Sg.Nom-Trans-act:Impf

Lit. 'I act intensely on an area (=animals) with a wooden object (=weapons) in concealment (=in the woods)'

Construction of lexical meaning:

English: 1 indivisible morpheme *hunt*

Upper Kuskokwim: configuration of 5 individual lexical morphemes, each of which has a synchronically identifiable function

2. The need for lexical typology

Modern linguistics — theory and typology:

- a huge conceptual apparatus to deal with the inflectional and derivational devices
- know very little about the entity that all these devices modify, namely lexical meaning, esp. verbal lexical meaning (cf. articles in Haspelmath et al. eds. 2001)

However:

- the verb is in the core of the clause and in the core of grammar
- the verbal lexical meaning is necessarily among the central forces that shape language
- one needs a way of characterizing a language's verbal lexico-semantic system in an integral way

Research questions:

- i Can one provide an integral characterization, or **profile**, of a language's verbal lexico-semantic system?
- ii Can it be done in such format that it is comparable to other languages and we thus progress towards a **typology of lexical systems**?
- iii Can one trace, or at least connect, the noted grammatical peculiarities and anomalies of a certain language to this language's lexico-semantic characteristics and patterns of conceptualization?

Goals of this talk:

- Contribution to questions (i) and (ii)
- Some hints regarding question (iii)

3. Integral characterization (profile) of a language's verbal lexicon: A design

First step:

- what kinds of verbal meanings are expressed in a simple, basic, non-derived way?
- which are expressed with the help of derivational mechanisms?

Markedness and diagrammatic iconicity. Morphological simplicity matters.

Analogies:

- Color term studies (see MacLaury 2001)
 - when identifying basic color terms in language L, one of the criteria normally used is morphological simplicity
 - if in one language the term for ‘brown’ is non-derived, as in English, and in another it is etymologically derived from the word for cinnamon, as in Russian, this **is relevant** for characterizing these languages’ basic color terms systems.
- Typology of transitivity
 - Nichols (1982) proposed to distinguish between primarily transitivity increasing and primarily transitivity decreasing languages.
 - Haspelmath (1993) showed semantic profiles of 21 languages in their relative preference to express pairs such as ‘melt (tr.)’/ ‘melt (intr.)’ as either “basic intransitive verb – causative” or “basic transitive verb – anticausative”.

Typologically oriented study of the whole verbal lexicon of a language:

- identify types of meanings that are rendered in a non-derived way, that is, by bare verb roots without derivational affixes
- then the basic system of conceptualization reified in verbal roots can be studied
- individual derivation processes leading to formation of new verbal lexemes can be explored thus demonstrating the processes of meaning construction

Lexico-semantic profiles of as many individual languages as possible



Lexical typology

Difficulties:

- no ready inventory of (presumably) language-independent units, such as color chips (shown to language speakers) or simple plus or minus agent semantic feature.
- vastness of verbal lexicon

Possible solutions:

- using some kind of semantic atoms, in the spirit of Wierzbicka
- using elements of schematic representation such as Talmy’s motion/figure/path/manner/ground
- compile a list of universally applicable verbal meanings that would allow to profile a language’s verbal system

Where can one get such a list?

- the list of verbs from Michael Tomasello’s book “First verbs”
- Appendix lists all verbs that his daughter uttered between the ages 1 and 2
- Nearly all of them are basic, non-derived English verbs
- An approximation to the inventory of universal verbal meanings that can be expected to exist in a random language

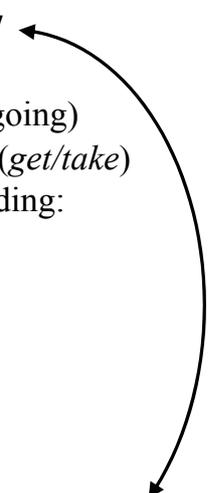
Reservation

- English is not a typological average; to the contrary, it is a very exotic language
- It still can be used as a point of departure

4. The general profile of the Athabaskan verbal semantics

Athabaskan part: Jules Jetté and Eliza Jones. Ed. by James Kari. *Koyukon Athabaskan Dictionary*. [henceforth: KAD] Fairbanks: ANLC, 2001. 1118 pp.

Counts from the database:

- English verbs on Tomasello's list: 125
 - Verbs with no verbal equivalent in Koyukon: 18, due to:
 - apparent omission in KAD: 4 (*get out*)
 - absence of a lexical item at this level of abstraction: 3 (*feel*)
 - absence for cultural reasons: 2 (*turn off*)
 - usage of a more abstract verb instead: 1 (*brush [hair]*)
 - usage of a different part of speech or morpheme instead: 8 (*want, give, finish, etc.*)
 - English verbs with a verbal equivalent in Koyukon: $125 - 18 = 107$
 - English verbs, out of 107, with some derivational affixes (*sit down*): 6 (6%)
 - Derivational morphemes per 107 English verbs: 8
 - Average number of lexical morphemes per an English verb – 1.07
 - Adjustment of the number of Koyukon items in the database, due to:
 - Two or three equivalents to one English verb (*swim*; 47 kinds of going)
 - One Koyukon verb corresponding to more than one English verb (*get/take*)
 - Ultimate number of different Koyukon items in the data base: 113, including:
 - Non-derived verbs: 49 (43%)
 - Derived verbs: 68 (57%), including:
 - Verbs with 1 derivational morpheme: 35
 - Verbs with 2 derivational morphemes: 26
 - Verbs with 3 derivational morphemes: 6
 - Verbs with 4 derivational morphemes: 1
 - Derivational morphemes per 113 Koyukon verbs: 112
 - Average number of lexical morphemes per a Koyukon verb – 1.99, almost 2
- 

Conclusion:

- In general, in Koyukon the meaning of the root is much less specified than in English. On the average, one needs one extra lexical morpheme to produce a verbal lexeme, comparable in terms of specificity to an English verb.

Further questions:

- what kinds of meanings are reified in Koyukon roots?
- what kinds of meanings are expressed in Koyukon by derivational prefixes?

5. Classificatory verb roots

About a dozen of verbal roots, for each of the following meanings:

- 'be in a position'
- 'move' (intr.)

Classificatory verbs are based on class membership of the Absolutive. All of the following Upper Kuskokwim sentences mean ‘*mega* lies, is in a position’; *mega* ‘bread, flour, dough’ < Rus. *muka* ‘flour’:

		<i>class of Absolutive</i>	<i>approximate meaning</i>
1. mega	’ilchut	food	a slice of bread
2. mega	’isditlak’	wet stuff	dough
3. mega	’isdinił	tiny objects	flour or bread crumbs
4. mega	zidlo	set of objects	several slices of bread
5. mega	’iltonh	object in an enclosed container	flour or dough in a sack
6. mega	zikonh	object in an open container	bread on a plate
7. mega	zi’onh	roundish object	a loaf of bread

Classificatory verbs in the Koyukon database:

- Among the 113 Koyukon items ‘be [in position]/move’ verb series: 41 (36%)
 - Most of them are derived: 36
 - In other words, out of 68 derived verbs 36 are classificatory (53%)
- Among the 41 classificatory roots, the most productive is *-neek* ‘move hand’ (originally ‘fabric-like object moves’): 14

Two situations:

- a whole series of Koyukon classificatory verbs corresponds to a single English verb: *put*
- a single Koyukon verb, based on a classificatory root, corresponds to an English verb (if the verbal meaning suggests a specified Absolutive): *sweep*

(3) Koyukon, as well as all further examples

he-k’e-de-laah ‘s/he is sweeping it’ (KAD: 412)

Ar.Dat-Indf.Acc-Sprouting-Pl.be:Impf

Lit. ‘s/he is holding a bunch of indefinite sprouting objects (=twigs or feathers) towards the area’

In addition, there is a range of other semantic elements often included in the meaning of Koyukon verbal root that are absent from English

- Cf. the verb root meaning ‘Plural agents quickly swim underwater’
- Here in addition to the number of the agent manner and ground (in Talmy’s terms) are also contained in the verb root’s meaning

Conclusion:

- The lexical meaning of Athabaskan verb root is more specified than in English: characteristics of participants such as number, animacy, shape, consistency, and also other features such as manner and ground are more frequently included in the root lexical meaning

6. The structure of verbal lexeme and lexico-semantic classes: a profile

All 113 Koyukon verbs in database have been characterized and quantified along the lines of a (presumably universal) semantic classification of verbal meanings

	MISSING (percentage of the "Total" figure)		PRESENT	Have no derivational affixes (percentage of the "Present" figure)		Have 1 or more derivational affixes (percentage of the "Present" figure)		TOTAL (Koy. verbs plus Eng. verbs with no counterpart)
Phasal	1	50%	1	0	1		2	
Existence	1	20%	5	2	3		6	
Location	0	0%	4	2	2		4	
Possession	3	50%	3	1	2		6	
Physical condition	0		1	0	1		1	
Physical impact	0	0%	16	10	6	37%	16	
Manipulation	4	14%	25	9	16	64%	29	
Motion	2	12%	15	10	5	33%	17	
Physiology	0	0%	7	3	4	57%	7	
Perception	1		5	1	4	80%	6	
Emotion	2		5	1	4	80%	7	
Speech/sound	0	0%	7	2	5	71%	7	
Intell. activity	1		5	0	5	100%	6	
Labor	1	9%	10	2	8	80%	11	
Other	2		4	1	3		6	
TOTAL	18	14%	113	44	69	61%	131	

Results:

- Average distribution:
 - 14% missing
 - Among the present verbs:
 - 39% basic verbs with no derivational prefixes
 - 61% derived verbs, with some derivational prefixes
- **Manipulation** verbs (*hold, open, spill...*) are the most numerous group, and they are distributed very closely to the average
- Only one half of **possession** verbs (*have, keep, buy...*) is represented in Koyukon; others (*share, use, leave*) are not. Also note the near-absence of phasal verbs
- **Motion** (*move, sit down, climb...*) and **physical impact** (*break, rub, kill...*) verbs are the two second most numerous groups and they include a very large proportion (about 2/3) of non-derived verbs
- **Location** (*be, stand*), **physical impact** (*break, rub, kill...*), **physiology** (*eat, swallow, sleep...*), and **speech/sound** (*talk, sing, call...*) verbs are all represented in Koyukon
- **Labor** (*work, wash, hammer...*), **perception** (*see, listen, smell...*), and **emotion** (*like, be scared, cry...*) verbs have a very high proportion (80%) of derived verbs
- **Intellectual activity** verbs (*read, play, remember...*) are exclusively derived
- **Modal** verbs are entirely missing. **Shape** meanings are conveyed by classificatory roots. **Color** meanings were absent from the original list

7. Derivational processes and the construction of verbal meaning

Functions and frequencies of derivational prefixes in database

	Examples	Disjunct	Conjunct	TOTAL
Characteristics of participants	Causative, 'hand', 'phytogenic/sprouting'	4	29	33
Aspectual	Inceptive, Semelfactive, Iterative, Terminative	4	8	12
Direction/location	'away', 'ascending', 'in mouth'	8	12	20
Manner (specific)	'intensely', 'nicely', 'in sleep', 'verbally'	7	10	14
Obscure		2	28	30
TOTAL		25	86	112

Levels of semantic complexity in verbal lexemes

a. Non-derived verb

- (4) *ye-ghee-t'otl* 's/he cut it' (KAD: 553)
3Acc-Dur.Pf:3.Nom-cut:Pf

b. Root + 1 derivational prefix

- (5) *kk'o-'ee-de-neeeyh* 's/he is working' (KAD: 444)
around-Peg-Detrans-move.Fabriclike:Impf
Lit. 's/he is moving his/her fabric-like objects (=hands) around'

- (6) *ye-taa-dle-gguts* 's/he gulped it down' (KAD: 222)
3.Acc-Thrusting-Res.Pf:Trans.Detrans-soak
Lit. 's/he caused it soak into him/herself by thrusting'

c. Root + 2 derivational prefixes

- (7) *no-ye-tl-zoo'* 's/he cleaned it' (KAD: 743)
backwards-3.Acc-Res.Pf:Trans-be.nice:Pf
Lit. 's/he made it nice again', 's/he re-tidied it'

- (8) *se-d-ee-ghee-neeek* 's/he hurt me' (KAD: 452)
1Sg-Phytogenic-once-Dur.Pf:3-move.Fabriclike:Pf
Lit. 'she moved a fabric-like object (=hand) with smth. wooden (=weapons) one time towards me'

d. Root + 4 derivational prefixes

- (9) *ye-ghaa-ghe-d-ee-yo* 's/he climbed up it (tree, pole)' (KAD: 229)
3.Obl-climbing-At.distance-Phytogenic-Ascending-Sg.go:Pf
Lit. 's/he went, ascending a wooden object with target at a distance climbing it'

8. Conclusions on the typological profile of Northern Athabaskan verbal lexicon

- Koyukon has a very high average number of morphemes per verbal lexeme: almost 2. There are numerous verbs, of supposedly quite basic meaning, with 2 or 3 derivational affixes
- Given the high number of derivational morphemes, Koyukon verbal roots are about twice as abstract, or less specific, or semantically simple, as English verbal roots. They contain fewer semantic elements in them.
- At the same time, the Koyukon verbal roots contain many semantic elements that are not typical of English verbal lexicon, especially characteristics of participants and manner
- Koyukon emphasizes in its inventory of verbal roots those related to motion and physical impact: verbs of these categories are most often non-derived. Manipulation verbs are mostly derived. Labor, perception, and emotion verbs are almost all derived. Intellectual activity verbs are all derived. Possession and phasal verbs are strongly suppressed.
- The most frequent semantic type of derivational affixes are those that characterize the participants of the event; the second most frequent — the direction/location of the event

9. Prospects for connecting lexico-semantic profile with grammatical characteristics

Morphological complexity of Athabaskan and lexico-semantic profile

- Many Athabaskan roots are very simple and non-specific, compared to English counterparts
- In line with this, many semantic elements contained in English verbal roots, in Athabaskan are represented not in roots but in derivational affixes
- Example: ‘wash X’ = ‘hold plural objects towards X in water’
 - Typical instrument and location are coded in English roots (semantic incorporation) and by affixes in Athabaskan
- This explains outstanding morphological complexity of Athabaskan

Syntactic simplicity of Athabaskan and lexico-semantic profile

- At the same time, in other respects Athabaskan root meanings are more specific than in English counterparts
- Many semantic elements contained in Athabaskan verbal roots (number, other characteristics of participants, manner, ground) , in English are represented by separate words
- Example: single Athabaskan root means ‘plural quickly swim underwater’
 - Number of participants, manner, and ground are coded in root meaning
- This explains syntactic simplicity of Athabaskan

➔ Verbal lexical semantics goes in line with morphosyntactic type

Athabaskan anomalies such as exclusive prefixation, violations of the ordering universals, and violations of the scope principle still await their explanation