



# SYNCHRONY AND DIACHRONY IN KET INCORPORATION



# BACKGROUND

- Verbal morphology is the most striking feature in Ket
  - Has been studied extensively (e. g. Georg 2007; Vajda 2003, 2004, 2015, 2017a, 2017b, 2020a; Werner 1997)
  - Previous studies have focused on morphosyntax and on semantics of single bases
- Aims of this study
  - Study of the semantic roles of incorporates in Ket
    - What semantic roles do the incorporates express in general/with certain verbs
  - Reconstruction of meanings of semantically general Ket verb bases
    - Is it possible to assess the original meaning of semantically general Ket verb bases by using the knowledge of semantics of incorporates?



# KET LANGUAGE

- The last Yeniseian language
  - Other known Yeniseian languages are Yugh, Kott, Arin, Assan, and Pumpokol
- Spoken by few dozen elderly speakers (Vajda 2015)
- Traditionally spoken on the middle reaches of Yenisei River and its tributaries in Central Siberia
- Typologically distinct from the neighboring languages
  - Tones, templatic verbal morphology, case and possessive clitics
  - Yeniseian languages have undergone typological accommodation to the neighboring languages (Vajda 2020b)



# VERBAL MORPHOLOGY IN KET

| P8                   | P7          | P6                | P5                       | P4  | P3            | P2  | P1  | P0   | P-1                |
|----------------------|-------------|-------------------|--------------------------|---|---------------|-----|---|------|--------------------|
| sbj<br>person<br>agr | incorporate | obj or sbj<br>agr | thematic<br>consonant(s) | 3 anim agr +<br>tense/mood<br>portmanteau | 3 inan<br>agr | TAM | 1, 2 sbj or<br>obj agr or<br>stat/res<br>prefix | base | anim pl sbj<br>agr |

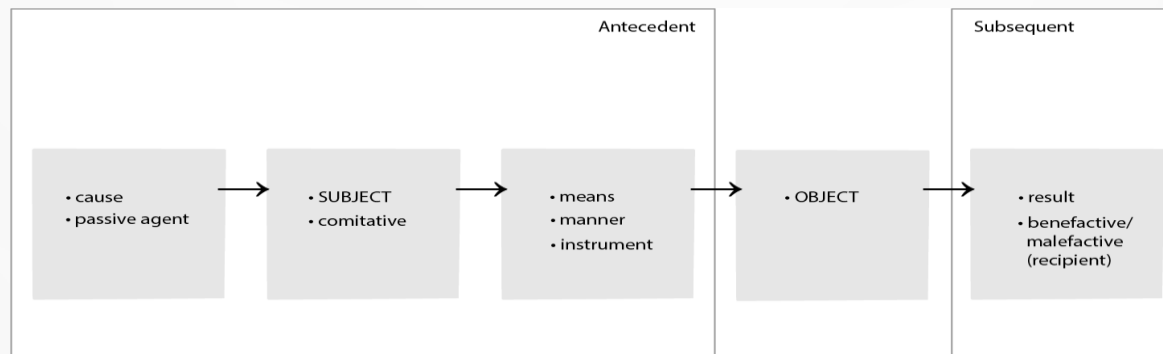
Ket verbal template following Vajda (2020b). The slots are conventionally called P8–P-1.

- Ket has templatic verb morphology
  - The template is a lexical property of the verb → different verbs use different positions
  - The same base can appear in different templates
  - Not all positions are used in a single verb
- P0, P5, and P7 host lexical material



# THEORETICAL BACKGROUND

- (Semantic) frame
  - Knowledge associated to a linguistic element by speakers
  - General information about an element (e. g. prototypical participant roles, information of aspectual properties etc. for a verb)
  - Information about typical usage contexts, as well as more speaker-specific associations
- Causal chain model
  - Describes the participants of an event and their interaction





# DATA

- 500 first verbs exhibiting non-productive incorporation in Kotorova & Nefedov (2015b)
- Meanings of bases and incorporates have been checked from Kotorova & Nefedov (2015a), Vajda & Zinn (2004), and Werner (2002)
  - Some elements did not have meaning in sources → meaning deduced from other elements
- Incorporates were classified according to which semantic role they exhibit
  - Definitions from Croft (1991)

| Role           | Patient | Result | State | Instrument<br>(+ manner) | Stimulus | Direction | Other | Total |
|----------------|---------|--------|-------|--------------------------|----------|-----------|-------|-------|
| All instances  | 38      | 238    | 8     | 47                       | 30       | 136       | 3     | 500   |
| Action nominal | 1       | 195    | 3     | 3                        | 28       | 2         | 0     | 232   |



# SEMANTIC ROLES (SEMANTICALLY SPECIFIC BASES)

(1) DIRECTION

hel<sup>7</sup>-t<sup>5</sup>-a<sup>4</sup>-b<sup>3</sup>-[n<sup>2</sup>]-daq<sup>0</sup>

down-THE-TAM-PRS-TAM-go.once

‘smn slips, slides down’

(2) DIRECTION (semantic extension)

e<sup>7</sup>-k<sup>5</sup>-[s<sup>4</sup>]-[n<sup>2</sup>]-daq<sup>0</sup>

up-THE-TAM-TAM-let.go

‘smn gets sober’

(3) PATIENT

haja<sup>7</sup>-t<sup>5</sup>-a<sup>4</sup>-[n<sup>2</sup>]-do<sup>0</sup>

aspen.trunk-THE-TAM-TAM-scrape

‘smn hollows out an aspen trunk (to make a single-seater boat)’

(4) RESULT

ha(d)<sup>7</sup>-[s<sup>4</sup>]-[n<sup>2</sup>]-do<sup>0</sup>

cut[ANM]-TAM-TAM-cut

‘smn cuts smn/smth; smn mows smth’

(5) INSTRUMENT

don(aŋ)<sup>7</sup>-t<sup>5</sup>-a<sup>4</sup>-[l<sup>2</sup>]-do<sup>0</sup>

knife+PL-THE-TAM-TAM-stab

‘smn stabs smth with a knife’

(6) DIRECTION

al<sup>7</sup>-d<sup>5</sup>-a<sup>4</sup>-[n<sup>2</sup>]-do<sup>0</sup>

in.woods-THE-TAM-TAM-cut

‘smn hits, beats smn; smn cuts down, fells smth (trees)’



# SEMANTIC ROLES (SEMANTICALLY GENERAL BASES)

(7) PATIENT

al/dal<sup>7</sup>-t<sup>5</sup>-a<sup>4</sup>-[l<sup>2</sup>]-[d]aq<sup>0</sup>

tendon-THE-TAM-TAM-single.action

'smn undoes smth (a seam)'

(8) RESULT

eq<sup>7</sup>-[s<sup>4</sup>]-[l<sup>2</sup>]-aq<sup>0</sup>

hear[ANM]-TAM-TAM-single.action

'smn listens to smth'

(9) INSTRUMENT

ek<sup>7</sup>-[s<sup>4</sup>]-[n<sup>2</sup>]-aq<sup>0</sup>

iron-TAM-TAM-single.action

'smn strips smth off (the skin)'

(10) DIRECTION

at<sup>7</sup>-t<sup>5</sup>-[s<sup>4</sup>]-[l<sup>2</sup>]-aq<sup>0</sup>

up-THE-TAM-TAM-go.once

'smn walks uphill'





# RECONSTRUCTING THE ORIGINAL MEANING OF BASES

- Three meanings
  - *aq* I 'marker of single active action in some verbs', *aq* II 'go (once)', (*aq* III 'rot, decay')
- Frame of *aq* I includes a volitional AGENT, a PATIENT, and an action with a RESULT and possibly a DIRECTION
- Frame of *aq* II includes a volitional AGENT, and a DIRECTION
- The semantic chain of both include a volitional AGENT and a RESULT
  - DIRECTION equals RESULT in a coerced causal chain (Croft 1991)
- The extension of meaning can be described as '(volitionally) go to one direction' > 'volitionally do an action with a direction-component' > 'do a single active action'



# CONCLUSIONS

- Incorporates in unproductive incorporation in Ket express inanimate semantic roles
  - Middle and end sections of causal chain
  - Most typical roles are result and direction, instrument, stimulus, and patient are less frequent
- What semantic roles the incorporate exhibit can be inferred from the meaning of the base
  - Property of the frame of each verb
- By comparing present-day meanings of verbs and semantic roles of their incorporates it is possible to reconstruct a frame and a putative meaning for an older form of the verb



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