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Between noun incorporation and lexical affixation in Abaza

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Mithun (1984: 847-848):

- "In [Noun Incorporation], a N stem is compounded with a V stem to yield a larger, derived V stem."
- "Interestingly, all languages which exhibit such morphological structures also have syntactic paraphrases."

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Chukchi (Chukotkan, Russia; Muravjeva 2004: 115):
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- (1) a. gəm-nan tekicgə-n tə-pela-gʔan 1SG-ERG meat-ABS.SG 1SG.S-leave-PST.3SG.O
 - b. gəm tə-takecgə—pela-g?ak 1SG.ABS 1SG.S-meat—leave-PST.1SG.S 'a=b. I left the / some meat.'

Southern Tiwa (Kiowa-Tanoan, USA; Allen et al. 1984: 295):

- (2) a. *yede seuan-ide a-mũ-ban* that man-SUF 2SG-see-PST
 - b. yede a-seuan—mũ-ban that 2SG-man—see-PST 'a=b. You saw that man.'

Baker (1988: 80) and later generative work (see an overview in Johns 2017):

"The productivity and the referential transparency of NI suggest that it is a syntactic process, rather than a lexical one <...> the verb <...> and the noun root <...> combine into a single word <...> by Move-Alpha, which moves the structurally lower lexical item (the noun) to adjoin to the higher lexical item [the verb] in the syntax"

Not only generative linguists, cf. Olthof (2020: 16) in the framework of Functional Discourse Grammar:

• "In this study, we restrict the term noun incorporation to productive, semantically transparent processes in which a nominal and a verbal unit at R[eferential]L[evel] together form a single verbal Word at M[orphosyntactic]L[evel]. <...> More specifically, we define noun incorporation constructions as cases in which a nominal and a verbal unit that are in a dependency relation of the form head-modifier or predicate-argument at RL form a single verbal Morphosyntactic Word."

Not all definitions are so restrictive, though.

De Reuse (1994: 2842):

 "Noun incorporation refers to the morphological construction where a nominal lexical element is added to a verbal lexical element; the resulting construction being a verb and a single word. The definition cannot be made more precise than that, because there is widespread disagreement <...>"

Not all definitions are so restrictive, though.

Massam (2009: 1078):

 "[W]e adopt the broad working definition of NI as a grammatical construction where a nominal that would canonically (either in the given language, or in languages in general) be expressed as an independent argument or adjunct is instead in some way incorporated into the verbal element of the sentence, forming part of the predicate."

"Non-prototypical" (or "non-canonical"?) noun incorporation (cf. Mithun 2000):

- not necessarily highly productive:
 - only a subset of verbs are incorporating (Olthof et al. 2021);
 - only a subset of nouns can be incorporated
- the semantic role of the nominal root is not necessarily patient/theme:
 - incorporation of instruments;
 - incorporation of spatial modifiers.

In this talk

- The Northwest Caucasian (Abkhaz-Adyghean) languages are not mentioned in the literature on noun incorporation.
- This is not accidenal: indeed, examples like (1) and (2) do not occur in NWC.
- Nevertheless, focusing on Abaza, I shall argue that NWV languages not only show clear traces of historical noun incorporation, but also possess phenomena that can be analysed as incorporation even synchronically.
- These phenomena, which form a cline from nounincorporation to lexical affixation (Mithun 1997), are fairly non-trivial from a typological perspective.

- abáza bəzŝá (абаза бызшва), ISO 639-3 abq
- Ca. 38 000 speakers in Russia (Karachay-Cherkess Republic), ca. 10 000 in Turkey



- Northwest Caucasian (Abkhaz-Adyghe)
 - Circassian: West Circassian (Adyghe), Kabardian (East Circassian)
 - † Ubykh
 - Abkhaz-Abaza: Abaza, Abkhaz

- Northwest Caucasian (Abkhaz-Adyghe)
 - Circassian: West Circassian (Adyghe), Kabardian (East Circassian)
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- The least-described language of the Northwest Caucasian family
- Descriptive works exist (e.g. Genko 1955, Tabulova 1976, Lomtatidze et al. 1989, O'Herin 2002), but are insufficient

- rich consonantism and empoverished vocalism
- polysynthesis and consistent head-marking
- ergativity
- no core case marking
- weak distinction between parts of speech
- rich system of valency-increasing derivations, especially applicatives
- a complex system of marking spatial information in the verb

Hewitt 2005; Arkadiev & Lander 2021 on NWC in general

The Abaza verbal template:

	ļ.	"preverbs" (∏)							<i>i</i>	"stem" (Σ)					"endings"				
-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7
absolutive	subordinators, negation	repetitive	potential,	applicatives	directional preverbs	locative preverbs	indirect object	ergative	negation	causative	sociative	root	directional suffixes	event operators	plural	aspect, tense	negation	past tense, modality	subordinators, force, emphasis

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locative preverbs

- Are found in all NWC languages:
 - ca. 30 in Circassian;
 - ca. 50 in Ubykh;
 - more than 100 in Abkhaz and Abaza (Avidzba 2017, Spruit 1986: 22-31)
- Express a variety a spatial and metaphorical meanings ranging from very abstract to very concrete.
- Often serve as applicatives introducing the landmark as an indirect object argument that can be cross-referenced in the verb.
- Can be simplex or complex.
- Differ in productivity.
- Obligatory in some cases, and often lexicalised.

- (3) a-wasa a-š'acara jə-la-wə-m-sa-n
 DEF-sheep DEF-lawn 3SG.N.ABS-LOC:mass-2SG.M.ERG-NEG-shear-IMP
 'Do not shear the sheep on the lawn.' (Klychev 1995: 145)
- (5) a-çəjs a-qəŝ j-**kə-la**-psssa-ṭ
 DEF-bird DEF-window 3SG.N.ABS-LOC:narrow-LOC:mass-fly(AOR)-DCL
 'The bird flew through the window.' (Klychev 1995: 131)

Simplex preverbs

- (3) a-wasa a-š'acara jə-la-wə-m-sa-h

 DEF-sheep DEF-lawn 3SG.N.ABS LOC:mass-2SG.M.ERG-NEG-shear IMP

 'Do not shear the sheep on the lawn.' (Klychev 1995: 145)
- (4) α-ʒə ςα-sə-kw-χwxwa-ṭ
 DEF-water CISL-1SG.IO-LOC:top-sprinkle(AOR)-DCL
 'Water sprinkled on me.' (Klychev 1995: 117)
- (5) a-çəjs a-qəŝ j-**kə-la**-pssʕa-ṭ
 DEF-bird DEF-window 3SG.N.ABS-LOC:narrow-LOC:massfly(AOR)-DCL

'The bird flew through the window.' (Klychev 1995: 131)

Simplex preverbs

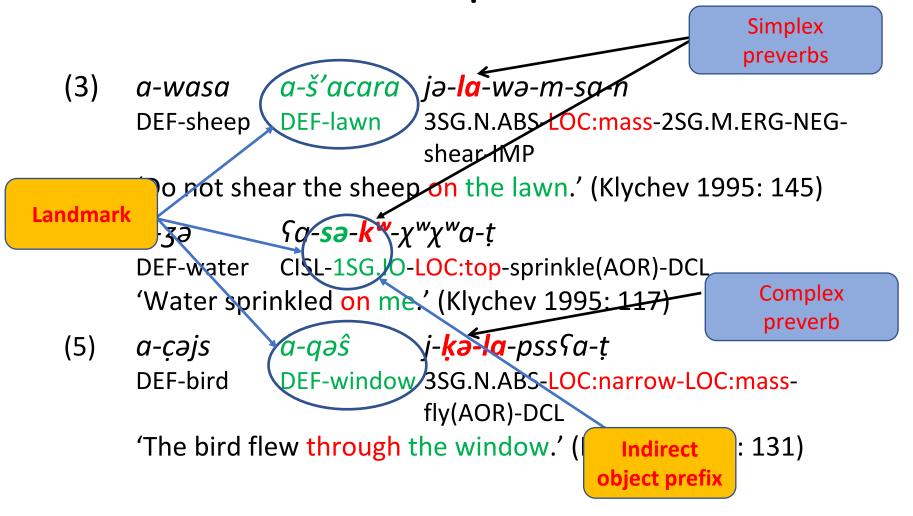
- (3) a-wasa a-š'acara jə-la-wə-m-sa-h DEF-sheep DEF-lawn 3SG.N.ABS LOC:mass-2SG.M.ERG-NEGshear IMP
- 'Do not shear the sheep on the lawn.' (Klychev 1995: 145)
- (4) $a-3\partial$ $a-8\partial k^w \chi^w \chi^w a t$ DEF-water CISL-1SG.IO-LOC:top-sprinkle(AOR)-DCL
 'Water sprinkled on me.' (Klychev 1995: 117)

Complex preverb

(5) α-çəjs α-qəŝ j-kə-lα-pssʕα-ṭ
DEF-bird DEF-window 3SG.N.ABS-LOC:narrow-LOC:mass-fly(AOR)-DCL

'The bird flew through the window.' (Klychev 1995: 131)

Simplex preverbs a-š'acara jə-<mark>la</mark>-wə-m-sa-(3)a-wasa **DEF-lawn** 3SG.N.ABS CC:mass-2SG.M.ERG-NEG-DEF-sheep shear MP o not shear the sheep on the lawn.' (Klychev 1995: 145) Landmark $a-sa-k^w-\chi^w\chi^wa-t$ CISL-1SG.IO-LOC:top-sprinkle(AOR)-DCI DEF-water Complex 'Water sprinkled on me.' (Klychev 1995: 117) preverb i-<mark>kə-la</mark>-psssa-ţ a-qəŝ (5) a-çəjs DEF-window/3SG.N.ABS-LOC:narrow-LOC:mass-**DEF-bird** fly(AOR)-DCL 'The bird flew through the window.' (Klychev 1995: 131)



- NWC locative preverbs fall into the broad class of so-called "lexical affixes", i.e. morphologically bound elements that modify roots but themselves have very concrete semantics resembling that of roots.
- Cross-linguistically, lexical affixes express
 - body-parts (e.g. as instruments);
 - salient artifcats or natural objects;
 - locations;
 - various other adverbial notions.

Mithun 1997; Mattissen 2004: 190-194; 2006: 297-333

- Diachronically, most locative preverbs in NWC go back to incorporated nouns, mainly denoting parts of body or other objects (Kumakhov 1964: 164-182, 1989: 200-228; Lomtatidze 1983; Avidzba 2017; Arkadiev & Maisak 2018: 121-125).
- A cross-linguistically common historical path for lexical affixes (Mithun 1984: 885–887; Mithun 1997: 365-366; Kinkade 1998; Mattissen 2006).
- NWC are in many cases much more transparently related to the corresponding nouns than e.g. the body-part prefixes in the Panoan languages (Fleck 2006, Zariquiey & Fleck 2012).

Locative preverbs related to nouns:

West Circassian (Kumakhov 1964: 177-179):

(6) $k^{w}eca$ 'intestines': $k^{w}eca-\lambda he-n$ 'put inside smth'

kweçə-rə-čə-n 'run through smth'

(7) \nearrow^{w} 'mouth': \nearrow^{w} - $c^{w}e$ -n 'stand near smth'

?"a-š'a-n 'lead away from smth'

 Some preverbs can be treated as incorporated nouns even synchronically.

Kabardian (Kumakhov 1964: 181-182)

(8) *she* 'head': *she-ra-xa-n* 'take from one's head'

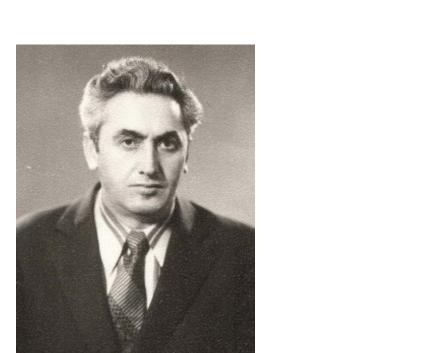
(9) $\frac{7e}{h}$ 'hand': $\frac{7e}{s}$ - $\frac{s}{e}$ -x-n 'take from one's hands'

Why Abaza?

- Abaza (and, mutatis mutandis, Abkhaz) offers much richer and varied material on noun incorporation that the rest of the family.
- Abaza locative preverbs happen to be amply documented.

Why Abaza?

- Prof. Dr. Rauf Klychev (Кълыч Рауф, 1934-1993)
- A Dictionary of Collocations of Locative Preverbs with Suffixoids and Verbs in Abaza (in Russian, Cherkessk, 1995).
- Ca. 4300 verbs with 150 preverbs.



Р. Н. КЛЫЧЕВ

СЛОВАРЬ СОЧЕТАЕМОСТИ
ЛОКАЛЬНЫХ ПРЕВЕРБОВ
С СУФФИКСОИДАМИ
И ГЛАГОЛЬНЫМИ КОРНЯМИ
В АБАЗИНСКОМ ЯЗЫКЕ

Утверждено Министерством образования Карачаево-Чернесской республики

> КАРАЧАЕВО-ЧЕРКЕССКОЕ КНИЖНОЕ ИЗДАТЕЛЬСТВО ЧЕРКЕССК 1995

- More than a dozen preverbs are related to body-part nouns.
- Some of them are clearly highly grammaticalised and desemanticised.

 Body-part preverbs widely differ in their productivity (data from Klychev 1995, including complex preverbs):

qa- 'head, above'	> 200 verbs
çα- 'face, vertical surface'	> 200 verbs
<i>š'ta</i> - 'trace, after'	175 verbs
waça- 'intestines, container'	137 verbs
napə-ça- 'in the hand'	59 verbs
g ^w a- 'heart'	53 verbs
<i>ĉa</i> - 'skin, surface'	48 verbs
lakta- 'face'	17 verbs
<i>g^wda</i> - 'neck'	15 verbs
kwa- 'bosom'	6 verbs
<i>š</i> ′g ^w a- 'heel'	2 verbs

- Body-part preverbs function as applicatives and introduce the landmark as an indirect object cross-referenced by a personal prefix immediately preceding the preverb:
- *qa* 'head' > 'above':
- (10) a. α-č'kwən α-ʒəχ' d-α-qα-ĉ-ţ DEF-youth DEF-spring 3SG.H.ABS-3SG.N.IO-LOC:above-sleep(AOR)-DCL 'The guy fell asleep over the spring of water.' (K: 258)
 - b. anəj a-mašak^w wə-qa-sə-r.pa-p MED DEF-sack 2SG.M.IO-LOC:above-1SG.ERG-pull-NPST.DCL 'I'll pull this sack on you.' (K: 255)

- In some cases the same preverb retains its body-part meaning.
- Then the personal prefix refers to the possessor of the bodypart.

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• qa 'head' > 'above':
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(11) j-qəlpa j-qa-ŝ-əw-n

3SG.M.IO-hat 3SG.M.IO-LOC:head-fall-IPF-PST

'The hat fit his head well (lit. fell on his head).' (K: 260)
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- Some body-part preverbs retain their lexical meaning, reference and anchoring to a possessor in almost all cases:
- (13) arqan-g'əj ς-a-q^wdə-j-χ-χə-n rope-ADD CSL-3SG.N.IO-LOC:neck-3SG.M.ERG-take-RE-PST 'He took the rope off its (the stallion's) neck' (AbTa: 142)
- (14) a-ʒə jə-kwa-ç-əw-n
 DEF-water 3SG.M.IO-LOC:bosom-pour.liquid-IPF-PST
 'Water was pouring into his bosom.' (K: 138)

- Other body part preverbs are used both in the original and in the spatial meaning:
- ča- 'mouth, face' > 'vertical surface'

```
(15) a. a-č'kwən a-narzan j-ça-žž-wa-n

DEF-youth DEF-mineral.water 3SG.M.IO-LOC:mouth-flow-IPF-PST

'Mineral water was flowing into the guy's mouth.' (K: 313)
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b. a-wasa-k<sup>w</sup>a a-kaza

DEF-sheep-PL DEF-slope

j-a-ča-r-pχ'az-əw-n

3PL.ABS-3SG.N.IO-LOC:mouth-3PL.ERG-считать-IPF-PST

'They were counting sheep on the mountain slope.' (K: 316)
```

- Other body part preverbs are used both in the original and in the spatial meaning:
- 3a- 'cheek' > 'lateral surface'
- (16) a. $d alpha ext{-} ext{-} alpha ext{-} a$
 - b. a-kdə <u>3a-r-bəl-wa-n</u>
 DEF-stump <u>LOC:cheek-3PL.ERG-burn-IPF-PST</u>
 'They were burning the stump on one side.' (K: 99)

 Some of the body-part preverbs are lexicalised rather than grammaticalised and are used in metaphorical meanings:

```
(17) j-r-a-s-h<sup>w</sup>-wa-š

REL.ABS-3PL.IO-DAT-1SG.ERG-say-IPF-FUT

\( \sigma - s - g^w a - q^w \text{a} c - \frac{t}{t} \)

CSL-1SG.IO-LOC:heart-think(AOR)-DCL

'I decided what I shall tell them (lit. it thought in my heart).' (K: 72)
```

(18) j-ſa-s-g^wa-la-ŝa-χ-ṭ 3PL.ABS-CSL-1SG.IO-LOC:heart-LOC:mass-fall-RE(AOR)-DCL 'I recalled them (lit. they fell back into my heart).' (K: 76)

Incorporation in Abaza (I): body-part nouns

- A special case: napa 'hand'
 - is only used in combination with the preverb ca- 'under'
 - has both the literal and metaphorical meanings
- (19) a. $a-k^w$ țas' s-napə-ça-p.č-ţ

 DEF-egg 1SG.IO-LOC:hand-LOC:under-break(AOR)-DCL

 'The egg broke in my hands.' (K: 170)
 - b. də-r-napə-ça-ŝa-ṭ 3SG.H.ABS-3PL.IO-LOC:hand-LOC:under-fall(AOR)-DCL a-haǯ'rat-kwa DEF-robber-PL '[A man] was attacked by (lit. fell under the hands of) robbers' (AbLu 10:30)

Incorporation in Abaza (I): body-part nouns

 Other body-part preverbs can also serve as the first part of a complex preverb:

```
    (20) a. a-č'ķ<sup>w</sup>ən ajnə²
DEF-youth DEF+giant
də-j-ça-ta-kša-ţ
3SG.H.ABS-3SG.M.IO-LOC:mouth-LOC:in-hit(AOR)-DCL
'The guy hit the giant in the face.' (K: 328)
    b. a-qaça j-γa-j-qa-ta-ça-ţ
```

DEF-man

sit(AOR)-DCL 'The man got angry (lit. it sat down into his head).' (K: 269-270)

3SG.N.ABS-CSL-3SG.M.IO-LOC:head-LOC:in-

- Ca. dozen preverbs correspond to non-relational nouns denoting salient artefacts or locations.
- Most of them retain their lexical meaning.

<i>čķara</i> 'courtyard'	180 verbs
<i>ና^wna</i> 'house, room'	150 verbs
čς̃ ^w a 'oven'	125 verbs
gwara 'fence, enclosure'	55 verbs
<i>pšça</i> 'courtyard'	40 verbs
q ^w a 'ashes'	11 verbs
gara 'craddle'	8 verbs
čə 'horse'	6 verbs

- Such incorporated nouns can express a referential spatial landmark involved in the event.
- (21) a-sabəj d-gara-l-g^wa-n
 DEF-child 3SG.H.ABS-LOC:craddle-3SG.ERG-lay-PST
 'She laid the child into the craddle.' (K: 67)
- (22) w-g^wara-pš-ta w-ʕa.j.χ 2SG.M.ABS-LOC:fence-look-ADV 2SG.M.ABS-return(IMP) 'Look in the courtyard (lit. inside the fence) and come back.' (K: 69)

- Being referentially autonomous, most such preverbs occur without a pronominal prefix.
- Still, some can take prefixes cross-referencing the possessor and develop more abstract spatial meanings.
- š'kla 'stirrup' > 'following'

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(23) d-rə-š'kla-ŝŝ-ṭ
3SG.H.ABS-3PL.IO-LOC:stirrup-whistle (AOR)-DCL
'He whistled after them.' (K: 332)
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- Some occur only as part of complex preverbs:
- (24) d-q^wa-la-j-g^wa-t3SG.H.ABS-LOC:ashes-LOC:mass-3SG.M.ERG-lay(AOR)-DCL 'He knocked him (the giant) down into ashes.' (K: 273)
- (25) sawsrəq^wa d-čə-ẑ-pa-ṭ Sosruko 3SG.H.ABS-LOC:horse-LOC-jump(AOR)-DCL 'Sosruko jumped off his horse.' (K: 237)

- Non-relational preverbs can be used as verbal classifiers lacking independent reference and corresponding to a landmark expressed as a full nominal.
- Such a landmark can have the same root as the preverb, or be synonymous or hyponymous to it.

```
    (26) ra-čςwa d-čςwa-pχα-ṭ
    3PL.IO-oven 3SG.H.ABS-LOC:oven-warm_up(AOR)-DCL
    'He warmed himself up near their oven.' (K: 213)
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```
(27) a-k'adəg wə-ckara-l-p

DEF-courtyard 2SG.M.ABS-LOC:yard-enter-NPST

'You will enter the courtyard.' (AbTa: 85)
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(28) α-klub jə-ςwnα-n.χ-əj-ṭ
DEF-club 3PL.ABS-LOC:house-work-PRS-DCL
'They work in the club.' (Κ: 88)
```

Abaza locative preverbs form a continuum:

	have related nouns	retain lexical meaning	example
type I	yes	always	<i>lakta-</i> 'face' <i>gara-</i> 'craddle'
type II	yes	sometimes	
type III	yes	no	qa- 'head' > 'above' š'ķla 'stirrup' > 'behind'
type IV	no	no	ta- 'inside', ça- 'below'

grammaticalisation

From incorporated nouns to affixes

Abaza locative preverbs form a continuum:

	have related nouns	retain lexical meaning	example
type I	yes	always	lakta- 'face' gara- 'craddle'
type II	yes	sometimes	ča- 'face, vertical surface'ς^wna 'house, room'
type III	yes	no	qa- 'head' > 'above' š'ķla 'stirrup' > 'behind'
type IV	no	no	ta- 'inside', ça- 'below'

grammaticalisation

From incorporated nouns to affixes

Abaza locative preverbs form a continuum:

	h	nave related nouns	retain lexical meaning	exar	nple
type I		yes	incop promation	lakta- gara- 'c	
type II		yes	sometimes	$ \dot{\xi}a $ - 'face, vertical surface' $ \zeta^w na$ 'house, room'	
type III		yes	no	<i>qa-</i> 'head' > 'above' <i>š'k̞la</i> 'stirrup' > 'behind'	
type IV		no le	exical affixatio	n ta- 'inside',	<i>ça</i> - 'below'

 Grammaticalisation and affixalisation of incorporated nouns in Abaza is evidenced by their acquiring morphosemantic properties absent with nouns and characteristic of the indisputable lexical affixes.

 Many preverbs in Abaza and Abkhaz distinguish introvert (essive-locative, with final -α) and extravert (elative, with apocope, final -a or metathesis) forms (Spruit 1986: 16-17, Avidzba 2017).

• Many preverbs in Abaza and Abkhaz distinguish introvert (essive-locative, with final -α) and extravert (elative, with apocope, final -α or metathesis) forms (Spruit 1986: 16-17, Avidzba 2017).

```
(29) a. a-\dot{q}an \check{g}'a a-\varsigma^w ara j-ta-pss \varsigma a-\chi-\dot{t}
DEF-crow 3SG.N.IO-nest 3SG.N.ABS-LOC:in-fly-RE(AOR)-DCL

'The crow flew back into its nest.' (K: 197) introvert
b. a-warba a-\varsigma^w ara j-ta-pss \varsigma a-\dot{t}
DEF-eagle 3SG.N.IO-nest 3SG.N.ABS-LOC:in.ELAT-fly(AOR)-DCL

'The eagle flew out of its nest.' (K: 205) extravert
```

- The same distinction is attested with preverbs I have classified as incorporated nouns.
- No evidence of a similar distinction outside the verb.
- A clear sign of affixalisation of the incorporated nouns.
- Notably, can precede semantic change.

With incorporated body-part nouns:

```
    (30) a. α-ʒə jə-q<sup>w</sup>da-žž-wa-n
        DEF-water 3SG.M.IO-LOC:neck-pour:liquid-IPF-PST
        'Water was pouring on his neck.' (Κ: 274)
    b. α-mχ<sup>w</sup>-k<sup>w</sup>a lə-q<sup>w</sup>də-l-ẑa-ţ extravert
```

DEF-beads-PL 3SG.F.IO-LOC:neck.ELAT-3SG.F.ERGtear_off(AOR)-DCL 'She tore the beads off her neck.' (K: 275)

With incorporated non-relational nouns:

- (31) a. $a ext{S}^w a l ga t$ introvert DEF+trough LOC:oven-3SG.F.ERG-carry(AOR)-DCL 'She brought the trough to the oven.' (K: 211)
 - b. $d-\check{c} \hat{\Gamma}^w \partial -r ga \chi \dot{t}$ extravert 3SG.H.ABS-LOC:oven.ELAT-3PL.ERG-carry-RE(AOR)-DCL 'They carried him out of the oven.' (K: 218)

- Body-part nouns are frequent targets of incorporation in the languages of the world (Mattissen 2006: 310–315; Massam 2009: 1090; Lehmann 2016: 43-47; Zariquiey 2018; Vinyar 2021; Olthof et al. 2021: 228).
- The path from body-part incorporation to applicatives is documented outside of NWC as well (Fleck 2006; Nordlinger 2019), pace Peterson (2007: 141).
- However, the semantic roles of incorporated body-part nouns are usually patient / theme or instrument, rather than spatial landmark.

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Mohawk (Iroquoian, Canada, USA, Mithun 1996: 643)
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(32) wa-hi-kųhs-ohare-? patient PST-1SG>3SG.M-face-мыть-PUNC 'I washed his face.'

Bininj Gun-wok (Gunwinyguan, Australia, Evans 1996: 84)

(33) ga-bid-wayda-n 3-hand-wave-NPST 'He is waving his hand.'

instrument

• Incorporation of body-parts as locations is, however, also attested, even if rarely.

Warray (Gunwinyguan, Australia, Harvey 1996: 144)

(34) ngirri wang ban-nabat-nawa-m an-nebe-yang dog meat 1SG.O-hand-take-PFV.PST CL-hand-ABL 'The dog took the meat out of my hand.'

Oluta Popoluca (Mixe-Zoque, Mexico, Zavala 2000: 591)

(35) sa:rakü ta=küx-tu:t-a?x-ü-w=a? min=?una?k
Sara 1.ABS=back-put-APPL-INV-CMPL-3 2.PR=son
'Sara put your son on my back.'

Mithun (1984: 874):

 Type IV noun incorporation, where "a generic N is incorporated to qualify the V, while a more specific external NP identifies the implied referent"

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Caddo (Caddoan, USA; ibid.: 865): 'eye' > 'round object'
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- (36) a. kassi' háh-'ič'á-sswí'-sa' bead PROG-eye-string-PROG 'She is stringing beads.'
 - b. ka'ás háh-'ič'áh-'í'-sa'
 plum PROG-eye-grow-PROG
 'Plums are growing.'

Verbal classifiers (Aikhenvald 2000: 149):

- "Verbal classifiers appear on the verb, categorizing the referent of its argument in terms of its shape, consistency, size, structure, position, and animacy."
- "Verbal classifiers always refer to a predicate argument (usually S in an intransitive or O in a transitive clause) and can co-occur with it."
- "In a few languages, verbal classifiers can also refer to peripheral arguments." (ibid. 162)

Purepecha (Tarascan, Mexico, Chamoreau 2017: 683)

- Several dozen "locative suffixes" most of which relate to parts of objects (including the body) and work as "locative verbal classifiers".
- Some of the suffixes "indicate a specific physical area":
- (37) a. waxa-nu-x-ti 'He sat on the patio.'
 - b. waxa-ru-x-ti 'He sat in the street.'
 - c. waxa-k'ara-x-ti 'He sat inside the house.'

 Incorporation of spatial modifiers is uncommon in the languages of the world (Vinyar 2021).

Warray (Gunwinyguan, Australia, Harvey 1996: 144)

(38) an-mewel at-windi at-mirral-lagi-yn CL-clothes 1SG.S-hang_out 1SG.S-sun-put-PST.PFV 'I hung the clothes out in the sun.'

Chukchi (Vinyar & Gerasimenko 2018: 97)

(39) ramaj-pa+qəntat-y?-e village-returnTH-2/3SG.S 'S/he returned from the village.'

- No languages have been reported so far that would only allow noun incorporation to target locative participants.
- Cf. Mithun (1984: 875)'s claim that all languages with noun incorporation minimally incorporate patients of transitive verbs.
- However, this can be due to fact that the definitions of noun incorporation are centered around the incorporation of the patient into a transitive verb in the first place.

Conclusions

- There is noun incorporation in the Northwest Caucasian languages.
- It is most robustly attested in Abaza and Abkhaz.
- It is typologically non-trivial:
 - only Mithun (1984)'s types I (V+N compound) and type IV (classifers) without the intermediate types;
 - the class of nouns subject to incorporation is closed and the very process is no longer productive;
 - incorporated nouns invariably function as spatial modifiers, not as patiens or absolutives.

Conclusions

- There is noun incorporation in the Northwest Caucasian languages.
- It is most robustly attested in Abaza and Abkhaz.
- It is typologically non-trivial:
 - even those incorporated nouns that retain their semantics and referentiality fall into one distrubutional class with unequivocal locative prefixes;
 - continuum from incorporated nouns to lexical affixes;
 - evidence of several successive layers of incorporation and ensuing affixalisation.



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- AbLu 2013: АжвабыжьбзихІвагІв ЛукІа йшгІайхІвауа [Gospel of Luke translated into Abaza]. Cherkessk.
- Abaza Tales 2015: Абаза турыхква [Abaza Tales]. Mineral'nye vody: Alashara.
- Aikhenvald A.Yu. 2000. Classifiers. Oxford: Oxford University Press.
- Allen B.J., D.B. Gardiner & D.G. Franz. 1984. Noun incorporation in Southern Tiwa. *International Journal of American Linguistics* 50(3), 292–311.
- Arkadiev P.M. & T.A. Maisak. 2018. Grammaticalization in the North Caucasian languages. In: H. Narrog & B. Heine (eds.), *Grammaticalization from a Typological Perspective*. Oxford: Oxford University Press, 116–145.
- Arkadiev P.M. & Yu.A. Lander. 2021. The Northwest Caucasian languages. In: M. Polinsky (ed.), *The Oxford Handbook of the Languages of the Caucasus*. Oxford: Oxford University Press, 369–446.
- Avidzba, Asmat V. 2017. Lokal'nye preverby v abxazskom i abazinskom jazykax [Local preverbs in Abkhaz and Abaza]. Ph.D. Dissertation, Sukhum.
- Baker M.C. 1988. *Incorporation. A Theory of Grammatical Function Changing*. Chicago, London: The University of Chicago Press.

- Chamoreau Cl. 2017. Purepecha, a polysynthetic but predominantly dependent-marking language. In: M. Fortescue, M. Mithun, N. Evans (eds), *The Oxford Handbook of Polysynthesis*. Oxford: Oxford University Press, 667–695.
- de Reuse W. 1994. Noun incorporation. In: R. Asher (ed.), *The Encyclopedia of Language and Linguistics*. *Vol. 5*. Oxford: Pergamon Press, 2842–2847.
- Evans N. 1996. The syntax and semantics of body part incorporation in Mayali. In: H. Chappell & W. McGregor (eds.), *The Grammar of Inalienability. A Typological Perspective on Body Part Terms and the Part-Whole Relation*. Berlin, New York: Mouton de Gruyter, 65–109.
- Fleck, David W. 2006. Body-part prefixes in Matses: Derivation or noun-incorporation. *International Journal of American Linguistics* 72(1), 59–96.
- Fortescue M. 2017. What are the limits of polysynthesis? In: M. Fortescue, M. Mithun & N. Evans (eds), *The Oxford Handbook of Polysynthesis*. Oxford: Oxford University Press, 115–134.
- Genko, Anatolij N. 1955. Abazinskij jazyk. Grammatičeskij očerk narečija tapanta [The Abaza Language. A Grammatical Sketch of the Tapanta Dialect]. Moscow: Izdatel'stvo Akademii Nauk SSSR.

- Harvey M. 1996. Body parts in Warray. In: H. Chappell & W. McGregor (eds.), *The Grammar of Inalienability. A Typological Perspective on Body Part Terms and the Part-Whole Relation*. Berlin, New York: Mouton de Gruyter, 111–153.
- Hewitt B.G. 2005. North West Caucasian. Lingua 119, 91–145.
- Johns A. 2017. Noun incorporation. In: M. Everaert & H. van Riemsdijk (eds.), *The Wiley Blackwell Companion to Syntax*, 2nd ed. Hoboken, NJ: Wiley.
- Kinkade, M. Dale. 1998. Origins of Salishan lexical suffixes. In: *Papers for the 33rd International Conference on Salish and Neighboring Languages*. Seattle: University of Washington, 266–295.
- Klychev, Rauf N. 1995. Slovar' sočetaemosti lokal'nyx preverbov s suffiksoidami i glagol'nymi kornjami v abazinskom jazyke [The collocational dictionary of locative preverbs with suffixoids and verbal roots in Abaza]. Cherkessk: Karačaevo-čerkesskoe knižnoe izdatel'stvo.

- Kumakhov, Mukhadin A. 1964. *Morfologija adygskix jazykov. Sinxronno-diaxronnaja xarakteristika. I. Vvedenie, struktura slova, slovoobrazovanie častej reči* [Morphology of Circassian languages. A synchronic and diachronic characteristic. I. Introduction, word structure, derivation of parts of speech.]. Nal'čik: Kabardino-balkarskoe knižnoe izdatel'stvo.
- Kumakhov, Mukhadin A. 1989. *Sravnitel'no-istoričeskaja grammatika adygskix* (*čerkesskix*) *jazykov* [Historical-comparative grammar of the Circassian languages]. Moscow: Nauka.
- Lehmann Chr. 2016. Foundations of body-part grammar. Paper presented at *II International Workshop on the Typology of Amerindian Languages: The grammar of body-part expressions*. Lima, 27 29 October, 2016.
- Lomtatidze, Ketevan V. 1983. Osnovnye tipy lokal'nyx preverbov v abxazskom i abazinskom jazykax [Main types of local preverbs in Abkhaz and Abaza]. In Nurja T. Tabulova & Raisa X. Temirova (eds.), Sistema preverbov i poslelogov v iberijsko-kavkazskix jazykax [System of preverbs and postpositions in Ibero-Caucasian languages], 10–13. Cherkessk.

- Lomtatidze, Ketevan, Rauf N. Klychev & B. George Hewitt. 1989. Abaza. In: B. George Hewitt (ed.), *The Indigenous Languages of the Caucasus. Vol. 2. The North West Caucasian Languages*. Delmar, N.Y.: Caravan, 91–154.
- Massam D. 2009. Noun incorporation: Essentials and extensions. *Language and Linguistics Compass* 3 (4), 1076–1096.
- Mattissen, Johanna. 2004. A structural typology of polysynthesis. *Word* 55(2), 189–216.
- Mattissen J. 2006. The ontology and diachrony of polysynthesis. In: D. Wunderlich (ed.), *Advances in the Theory of the Lexicon*. Berlin, New York: Mouton de Gruyter, 287–353.
- Mithun M. 1984. The evolution of noun incorporation. *Language* 60(4), 847–894.
- Mithun M. 1996. Multiple reflections on inalienability in Mohawk. In H. Chappell & W. McGregor (eds.), *The Grammar of Inalienability. A Typological Perspective on Body Part Terms and the Part-Whole Relation*. Berlin, New York: Mouton de Gruyter, 633–649.

- Mithun M. 1997. Lexical affixes and morphological typology. In: J. Haiman, J. Bybee & S. Thompson (eds.), *Essays on Language Function and Language Type*. Amsterdam: John Benjamins, 357–372.
- Mithun M. 2000. Incorporation. In: G. Booij, Chr. Lehmann & J. Mudgan (eds.), *Morphology: A Handbook on Inflection and Word Formation*, Vol. 1. Berlin: Walter de Gruyter, 916–928.
- Muravjeva, Irina A. 2004. *Tipologija inkorporacii* [A typology of incorporation]. Habilitation, Russian State University for the Humanities.
- Nordlinger, Rachel. 2019. From body part to applicative: Encoding 'source' in Murrinhpatha. *Linguistic Typology* 23(3), 401–433.
- O'Herin, Brian. 2002. Case and Agreement in Abaza. Arlington: SIL International.
- Olthof M. 2020. *Incorporation: Constraints on Variation*. Amsterdam: LOT Publications.
- Olthof M. et al. 2021. Verb-based restrictions on noun incorporation across languages. *Linguistic Typology* 25(1), 211–256.

- Peterson, David A. 2007. *Applicative Constructions*. Oxford: Oxford University Press.
- Spruit, Arie. 1986. Abkhaz Studies. Doctoral dissertation, University of Leiden.
- Tabulova, Nurya T. 1976. *Grammatika abazinskogo jazyka. Fonetika i morfologija* [A Grammar of Abaza: Phonetics and Morphology]. Čerkessk: Karačaevo-Čerkesskoe otdelenie Stavropol'skogo knižnogo izdatel'stva.
- Vinyar, Alexey. 2021. Noun Incorporation in Chukchi and Beyond: A Force-Dynamic Constructionist Approach. MA Thesis, Higher School of Economics.
- Vinyar, Alexey & Ekaterina Gerasimenko. 2018. Nesintaksičeskie ograničenija na inkorporaciju v čukotskom [Nonsyntactic constraints on incorporation in Chukchi]. *Acta Linguistica Petropolitana* 14(2), 78–110.
- Zariquiey, Roberto. 2018. Diachronic stories of body-part nouns in some language families of South America. In: H. Narrog & B. Heine (eds.), *Grammaticalization from a Typological Perspective*. Oxford: Oxford University Press, 350–371.

Zariquiey, Roberto & David A. Fleck. 2012. Body-part prefixation in Kashibo-Kakataibo: Synchronic or diachronic derivation? *International Journal of American Linguistics* 78(3), 385–409.

Zavala, Roberto. *Inversion and Other Topics in the Grammar of Olutec (Mixean)*. PhD Dissertation, University of Oregon.