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Between noun incorporation and lexical affixation in Northwest Caucasian (with focus on 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."

Cf. also Vinyar's (2021: 23) comparative concept (in the sense of Haspelmath 2010) of NI:

"N(oun) I(ncorporation) C(onstruction) is an optional construction used to express discoursively low-prominent participant of an event coded by a noun. The noun is adjacent to a verb, cannot be inflected and is not phrasal. NIC's primary function is to deprofile a participant whose causal chain's segment would otherwise be a part of the verbal profile." (author's emphasis)

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 accidental: indeed, examples like (1) and (2) do not occur in NWC.

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- The Northwest Caucasian (Abkhaz-Adyghean) languages are not mentioned in the literature on noun incorporation.
- This is not accidental: indeed, examples like (1) and (2) do not occur in NWC.
- Nevertheless, focusing on Abaza, I shall argue that NWC 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.

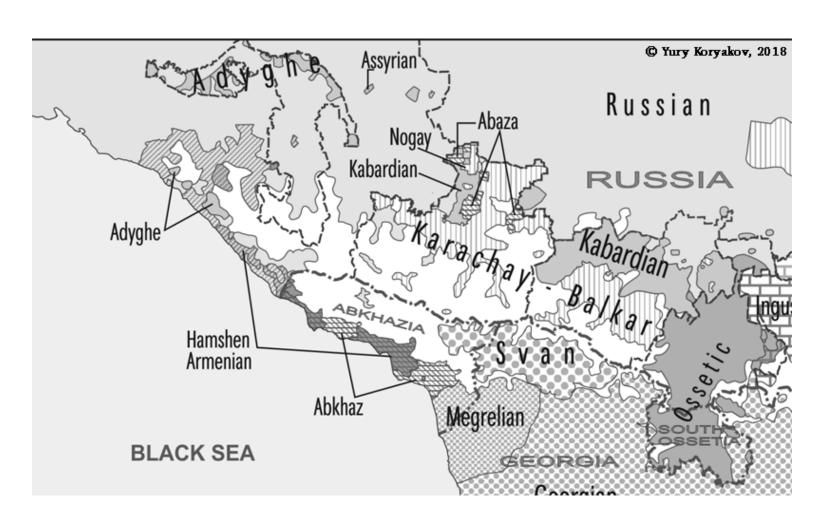
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 - Abkhaz-Abaza: Abkhaz, Abaza
 - Ubykh (extinct since 1992)

- One of the three indigenous language families of the Caucasus alongside Nakh-Daghestanian and Kartvelian.
- Northwest Caucasian:
 - Circassian: West Circassian (Adyghe), Kabardian
 - Abkhaz-Abaza: Abkhaz, Abaza
 - Ubykh (extinct since 1992)
- Arguably distantly related to the Nakh-Daghestanian (East Caucasian) family (Nikolaev & Starostin 1994).

- West Caucasian peoples and languages have severely suffered during the Caucasian war (1763-1864) and the ensuing expulsions and resettlements.
- A number of varieties have become extinct, and the whole linguistic landscape has been disrupted.

- West Caucasian peoples and languages have severely suffered during the Caucasian war (1763-1864) and the ensuing expulsions and resettlements.
- A number of varieties have become extinct, and the whole linguistic landscape has been disrupted.
- Currently spoken by ca. 700-800 thousand people in Abkhasia and the Russian republics of Adygeya, Karachaevo-Cherkessia and Kabardino-Balkaria, as well as neighbouring regions.
- A large Northwest Caucasian diaspora in Turkey and other countries of the Middle East, exact number of speakers unknown.



- Major typological traits (Hewitt 2005, Arkadiev & Lander 2020):
 - rich consonantism and empoverished vocalism;
 - weak distinction between major lexical classes;
 - head-marking and polysynthesis;
 - little (Circassian, Ubykh) or no (Abkhaz-Abaza) core case marking;
 - ergativity;
 - rich system of valency-increasing derivations, especially applicatives;
 - rich system of spatial marking in the verb;
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- abáza bəzŝá (абаза бызшва), ISO 639-3 abq
- Ca. 38 000 speakers in Russia (Karachaevo-Cherkessia), ca. 10 000 in Turkey



- 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

The Abaza verbal template:

		"preverbs" (П)								"stem" (Σ)					"endings"					
-12	2 -11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7	
absolutive	subordinators, negation	repetitive	potential, involuntative	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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- 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.

Abaza

- a-wasa a-š'acara jə-la-wə-m-sa-n (3)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) *Sa-sə-<mark>k™</mark>-χ™χ™α-ţ* a-32 DEF-water CSL-1SG.IO-LOC:top-sprinkle(AOR)-DCL 'Water sprinkled on me.' (Klychev 1995: 117)
- a-çəjs a-qəŝ j-**kə-la**-pssʕa-ṭ (5) DEF-bird DEF-window 3SG.N.ABS-LOC:narrow-LOC:massfly(AOR)-DCL

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

Abaza

Simplex preverbs

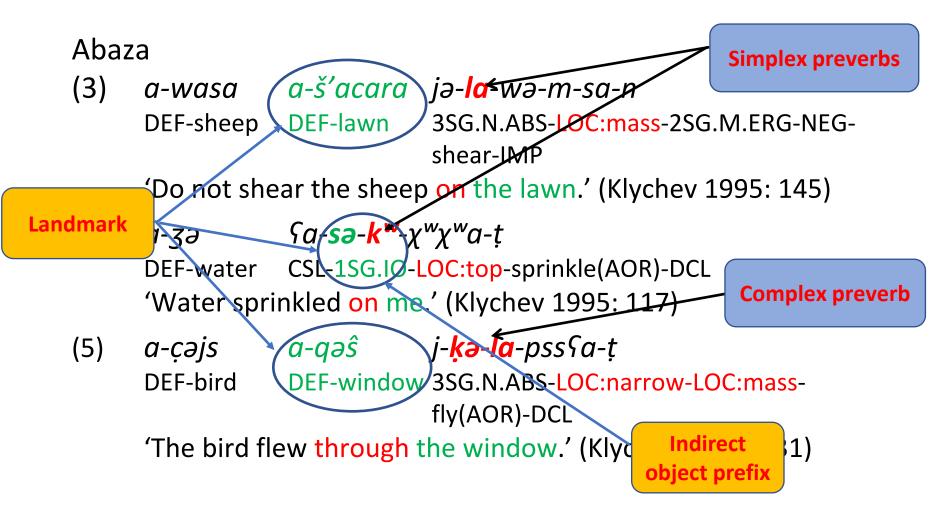
- (3) a-wasa a-š'acara jə-la-wə-m-sa-n

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

 'Do not shear the sheep on the lawn.' (Klychev 1995: 145)
- (4) a-3a $a-3a-k^w-\chi^w\chi^wa-t$ DEF-water CSL-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:mass-fly(AOR)-DCL
 'The bird flew through the window.' (Klychev 1995: 131)

```
Abaza
                                                         Simplex preverbs
(3)
                  a-š'acara jə-<mark>la≤</mark>wə-m-sa-n
      a-wasa
                               3SG.N.ABS-LOC:mass-2SG.M.ERG-NEG-
      DEF-sheep
                  DEF-lawn
                               shear-JMP
      'Do not shear the sheep on the lawn.' (Klychev 1995: 145)
                  \int a-s - k^{w} - \chi^{w} \chi^{w} a - t
(4)
      a-32
      DEF-water CSL-1SG.IO-LOC:top-sprinkle(AOR)-DCL
                                                          Complex preverb
      'Water sprinkled on me.' (Klychev 1995: 117)
                              j-kə-la-pssfa-ţ
                a-qəŝ
(5)
      a-çəjs
      DEF-bird
                  DEF-window 3SG.N.ABS-LOC:narrow-LOC:mass-
                               fly(AOR)-DCL
      'The bird flew through the window.' (Klychev 1995: 131)
```

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Abaza
                                                               Simplex preverbs
                       a-š'acara\jə-<mark>la</mark>-wə-m-sa-n
    (3)
          a-wasa
                                    3SG.N.ABS-LOC:mass-2SG.M.ERG-NEG-
                       DEF-lawn
          DEF-sheep
                                    shear-LMP
          'Do not shear the sheep on the lawn.' (Klychev 1995: 145)
Landmark
                       \int a-sa-k^{w}-\chi^{w}\chi^{w}a-t
          DEF-water
                       CSL-1SG.IO-LOC:top-sprinkle(AOR)-DCL
                                                                Complex preverb
          'Water sprinkled on me.' (Klychev 1995: 117)
                                    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 concrete semantics resembling that of roots.
- Cross-linguistically, lexical affixes express
 - body-parts (e.g. as instruments);
 - salient artifacts or natural objects;
 - locations;
 - various other adverbial and predicative 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 preverbs 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.

West Circassian (Rogava & Kerasheva 1966: 131):

- (8) a. ∂ - $\check{z}e$ d- $j\partial$ - λ ha- ε 3SG-mouth LOC:in-3SG.ERG-put-PST
 - b. <u>že-d-ja-λha-ʁ</u>
 mouth-LOC:in-3SG.ERG-put-PST
 a=b 'S/he put it in his/her mouth.'

• Alternations of free vs. incorporated nouns like in (8) are rare.

Kabardian (Kumakhov 1964: 181-182)

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

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

Many noun+verb combinations are lexicalised:

West Circassian (Rogava & Kerasheva 1966: 131):

```
(11) g^w \partial \hat{s}^w e - k^w \partial w e - maqe - r q \partial - \check{z}e - de - z \partial - \varkappa joy-cry-voice-ABS CSL-mouth-LOC:in-exit-PST Lit. 'A joyful scream went out of his mouth.'
```

CSL - cislocative

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?

- Dr. Rauf Klychev (Кълыч Рауф, 1934-1993)
- The Locative Preverbial Derivation of Verbs in Abaza (in Russian, Cherkessk, 1994).
- A Dictionary of Collocations of Locative Preverbs with Suffixoids and Verbs in Abaza (in Russian, Cherkessk, 1995). = K
- Ca. 4300 verbs with 150 preverbs.



СЛОВАРЬ СОЧЕТАЕМОСТИ
ЛОКАЛЬНЫХ ПРЕВЕРБОВ
С СУФФИКСОИДАМИ
И ГЛАГОЛЬНЫМИ КОРНЯМИ

В АБАЗИНСКОМ ЯЗЫКЕ

Р. Н. КЛЫЧЕВ

Утверждено Министерством образования Карачаево-Чернесской республики

> КАРАЧАЕВО-ЧЕРКЕССКОЕ КНИЖНОЕ ИЗДАТЕЛЬСТВО ЧЕРКЕССК 1995

- Many preverbs are related to body-part nouns (Klychev 1994: 34-59).
- Some of them are clearly highly grammaticalised and desemanticised.

```
    bsa 'back, waist' > 'down' (bsa-pš-ra 'look down', K: 53)
    waça 'intestines' > 'inside a container' (waça-ẑ-ra 'to boil inside smth', K: 239)
    mg<sup>w</sup>a 'belly' > 'wrapped up' (mg<sup>w</sup>a-ŝ-ra 'to freeze being dressed up', K: 161)
```

qa 'head' > 'above', see (12) below

 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
\hat{c} a- 'skin, surface'	48 verbs
lakta- 'face'	17 verbs
<i>q^wda</i> - 'neck'	15 verbs
k ^w a- 'bosom'	6 verbs
š'q ^w a- 'heel'	2 verbs
š'aĉə- 'toe'	1 verb

- 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':
- (12) a. $a-\check{c}'\dot{k}^w \partial n$ $a-3\partial\chi'$ $d-a-qa-\hat{c}-\dot{t}$ 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)

AOR – aorist, DCL – declarative, H – human, MED – medial demonstrative

- 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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(13) 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)
```

IPF – imperfective, M – masculine

- Some body-part preverbs retain their lexical meaning, reference and anchoring to a possessor in almost all cases:
- (15) arġan-g'əj Υ-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)
- (16) 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)

ADD – additive, RE – refactive

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

```
(17) 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)

```
b. a-wasa-k<sup>w</sup>a a-kaza

DEF-sheep-PL DEF-slope

j-α-ζα-r-ρχ'αz-əw-n

3PL.ABS-3SG.N.IO-LOC:mouth-3PL.ERG-count-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 meanings:
- 3a- 'cheek' > 'lateral surface'
- (18) 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)

 At least one body-part preverb occurs without the possessor prefix:

```
\hat{c}a 'skin' > \hat{c}a- 'skin; surface' (19) a-qaca ja-mac\hat{c}a-j-q'a-t

DEF-man 3SG.M.IO-finger LOC:skin-3SG.M.ERG-hit(AOR)-DCL 'The man scratched his finger.' (K: 309)
```

- Additional examples from Abkhaz (Spruit 1986: 28-29):
- (20) α-maĉwaz la-mua-s-χa-jṭ
 DEF-ring 3SG.F.IO-LOC:finger-1SG.ERG-take(AOR)-DCL
 'I took the ring from her finger.'
- (21) α-ķ^wṭə χ^wələ-s-χə-jṭ

 DEF-hen LOC:feather-1SG.ERG-take(AOR)-DCL

 'I plucked the hen.' (lit. "took it out of its feather")

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

```
(22) j-r-a-s-h<sup>w</sup>-wa-š
REL.ABS-3PL.IO-DAT-1SG.ERG-say-IPF-FUT
Γα-s-g<sup>w</sup>a-q<sup>w</sup>ac-ţ
CSL-1SG.IO-LOC:heart-think(AOR)-DCL
'I decided what I shall tell them (lit. "it thought in my heart").' (K: 72)
```

```
(23) j-sa-s-g<sup>w</sup>a-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)
```

DAT – "dative" marker

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

 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)

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

(25) a. $a-\check{c}'k^w \partial n$ ajn $\partial \hat{z}$

DEF-youth DEF+giant

```
da-j-ča-ta-kša-ṭ
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-ṭ
DEF-man 3SG.N.ABS-CSL-3SG.M.IO-LOC:head-LOC:in-sit(AOR)-DCL
'The man got angry (lit. it sat down into his head).' (K: 269-270)
```

Cross-linguistic perspective (I)

- 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.

Cross-linguistic perspective (I)

```
Mohawk (Iroquoian, Canada, USA, Mithun 1996: 643)
```

(26) wa-hi-kyhs-ohare-? patient PST-1SG>3SG.M-face-wash-PUNC 'I washed his face.'

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

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

PUNC – punctual

instrument

Cross-linguistic perspective (I)

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

Warray (Gunwinyguan, Australia, Harvey 1996: 144)

(28) 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)

(29) 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.'

ABL – ablative, APPL – applicative, CL – class marker, CMPL – completive INV – inverse, PR - possessor

- 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
<i>č</i> Υ ^w a 'hearth'	125 verbs
gwara 'fence, enclosure'	55 verbs
<i>pšça</i> 'courtyard'	40 verbs
q ^w a 'ashes'	11 verbs
gara 'cradle'	8 verbs
<i>čə</i> 'horse'	6 verbs
cla 'tree'	1 verb

- Such incorporated nouns can express a referential spatial landmark involved in the event.
- (30) a-sabəj d-gara-l-g^wa-n
 DEF-child 3SG.H.ABS-LOC:cradle-3SG.ERG-lay-PST
 'She laid the child into the cradle.' (K: 67)
- (31) 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)

ADV – adverbial marker, IMP – imperative

Additional examples from Abkhaz:

- (32) α-rαχ^w κ∂-çα-h-gα-rα.w-pׄ
 DEF-cattle LOC:winter-LOC:under-1PL.ERG-carry-DEB-NPST.DCL
 'We have to keep the cattle during the winter.' (Avidzba 2017: 99)

DEB – debitive

- Being referentially autonomous, most such preverbs occur without a pronominal prefix.
- Still, some can take prefixes cross-referencing the possessor.
 Cf. Abkhaz:

```
(34) a-qama jə-qwnə-z-b.aa.la-jṭ
DEF-dagger 3SG.M.IO-LOC:belt-1SG.ERG-descry(AOR)-DCL
'I descried a dagger on him (lit. "behind his belt").'
(Spruit 1986: 28)
```

- Some develop more abstract spatial meanings.
- *š'kla* 'stirrup' > 'behind, following'
- (35) a. $d-ra-\check{s}'kla-\hat{s}\hat{s}-\dot{t}$ 3SG.H.ABS-3PL.IO-LOC:stirrup-whistled(AOR)-DCL 'He whistled after them.' (K: 332)

```
b. a-h^w as ja-\check{s}'kla

DEF-calf 3SG.M.IO-stirrup

j-a-\check{s}'kla-j-h^wa-\dot{t}

3SG.N.ABS-3SG.N.IO-LOC:stirrup-3SG.M.ERG-tie(AOR)-DCL

'He tied the calf to his stirrup.' (ibid.)
```

N – non-human

- Some develop more abstract spatial meanings.
- š'kla 'stirrup' > 'behind, following'
- (35) a. $d-r\partial -\check{s}'kl\partial -\hat{s}\hat{s}-\dot{t}$ 3SG.H.ABS-3PL.IO-LOC:stirrup-whistle (AO 'He whistled after them.' (K: 332)
 - b. $a-h^w \partial s$ $j\partial -\check{s}'kla$ DEF-calf 3SG surrup $j-a-\check{s}'kla-j-h^wa-t$ 3SG N ABS 3SG N 10 LOCustimum 3SG M

on the cognate preverb

Here the possessor is

encoded on the

independent noun, which

is in turn cross-referenced

by the pronominal prefix

3SG.N.ABS-3SG.N.IO-LOC:stirrup-3SG.M.ERG-tie(AOR)-DCL 'He tied the calf to his stirrup.' (ibid.)

N – non-human

- Some occur only as part of complex preverbs:
- (36) 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)
- (37) sawsrəq^wa d-čə-2-pa-ţ 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.

```
    (38) rə-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)
```

- (39) a-k'adəg wə-ckara-l-p DEF-courtyard 2SG.M.ABS-LOC:yard-enter-NPST 'You will enter the courtyard.' (AbTa: 85)
- (40) a-klub j ∂ -f^wna-n. χ - ∂j -tDEF-club 3PL.ABS-LOC:house-work-PRS-DCL 'They work in the club.' (K: 88)

 Such constructions are also attested with some body-part preverbs:

```
(41) naṗa-ṣ-g'aj j-g'-a-naṗa-ṣa-ṭ
hand-INDF-ADD 3SG.N.ABS-NEG-3SG.N.IO-LOC:hand-LOC:under-
NEG-fall(AOR)-DCL
'It (your ring) did not fall into anybody's hands.' (AbAl: 139)
```

 Such constructions are also attested with some body-part preverbs:

```
(41) naṗa-ṣ-g'aj j-g'-a-naṗa-ça-m-ŝa-ṭ
hand-INDF-ADD 3SG.N.ABS-NEG-3SG.N.IO-LOC:hand-LOC:under-
NEG-fall(AOR)-DCL
'It (your ring) did not fall into anybody's ...nds.' (AbAl: 139)
```

The non-human possessor prefix obviously refers to the external noun "hand", not to any human possessor

Cross-linguistic perspective (II)

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"

```
Caddo (Caddoan, USA; ibid.: 865): 'eye' > 'round object'
```

- (42) 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.'

Cross-linguistic perspective (II)

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)

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

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Abaza locative preverbs form a continuum:

	h	ave related nouns	retain lexical meaning	exan	nple
type I		yes	incop promation	lakta- gara- 'c	
type II		yes	sometimes	ča- 'face, vertical surface'ςwna 'house, room'	
type III		yes	no	<i>qa</i> - 'head' <i>š'ķla</i> 'stirruţ	
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, Klychev 1994: 8-9, Avidzba 2017).

```
    (43) a. a-qanǯ'a a-ςwara j-ta-pssςa-χ-ṭ
        DEF-crow 3SG.N.IO-nest 3SG.N.ABS-LOC:in-fly-RE(AOR)-DCL
        'The crow flew back into its nest.' (K: 197)
        b. a-warba a-ςwara j-ta-pssςa-ṭ
            DEF-eagle 3SG.N.IO-nest 3SG.N.ABS-LOC:in.ELAT-fly(AOR)-DCL
        'The eagle flew out of its nest.' (K: 205)
```

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```
(43) a. a-\dot{q}an\check{g}'a a-\varsigma^wara j-ta-pss\varsigma a-\chi-\dot{\tau}
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^wara j-ta-pss\varsigma a-\dot{\tau}
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 in the corresponding nouns when used independently.
- A clear sign of affixalisation of the incorporated nouns.
- Notably, can precede semantic change.

From incorporated nouns to affixes

With incorporated body-part nouns:

```
(44) a. a-3a ja-q^wda-ž\check{z}-wa-n introvert DEF-water 3SG.M.IO-LOC:neck-pour:liquid-IPF-PST 'Water was pouring on his neck.' (K: 274) b. a-m\chi^w-k^wa la-q^wda-l-\hat{z}a-\dot{z} 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)

From incorporated nouns to affixes

- With incorporated non-relational nouns:
- - b. $d-\check{c}S^w r-ga \chi \dot{t}$ extravert 3SG.H.ABS-LOC:hearth.ELAT-3PL.ERG-carry-RE(AOR)-DCL 'They carried him out of the hearth.' (K: 218)

Cross-linguistic perspective (III)

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":
- (46) 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.'

Cross-linguistic perspective (III)

Nuuchahnulth (Wakashan, Britich Columbia; Davidson 2002: 196-204):

- a number of directional and "well over 100" locative suffixes with very concrete meanings:
- (47) hič-k^wi[s]-sanap='aλ̄ illuminate-move.away.PFV-on.beach.CAUS.PFV=TEMP 'They startled them (the birds) off the beach with light.' (Davidson 2002: 197)
- (48) mat-?a-?a=ma=?a-ta
 cold-on.rocks=IND=HAB
 'It is always cold on the rocks.' (Davidson 2002: 202)

IND – indicative, HAB – habitual, TEMP – temporal specifier

Cross-linguistic perspective (IV)

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

Warray (Gunwinyguan, Australia, Harvey 1996: 144)

(49) 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)

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

TH – thematic suffix

Cross-linguistic perspective (IV)

- 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.

Cross-linguistic perspective (V)

- Mattissen's (2004, 2017) typology of polysynthesis:
 - "compositional" / "compounding" vs. "affixal";
 - depends on whether the polysynthetic verbal complex can contain more than one lexical root;
 - according to Mattissen (2004: 202), Abkhaz (and, mutatis mutandis, Abaza) belongs to the "affixal" type.

Cross-linguistic perspective (V)

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 - depends on whether the polysynthetic verbal complex can contain more than one lexical root;
 - according to Mattissen (2004: 202), Abkhaz (and, mutatis mutandis, Abaza) belongs to the "affixal" type.
- An obvious simplification:
 - while there is no "ad hoc" noun incorporation in NWC languages, neither is it the case that for all their affixes "lexical source[s] cannot be reconstructed" (ibid.);
 - NWC languages present a clear example of a "transitional" structural type, both from synchronic and historical perspectives.

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 (classifiers)
 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 patients or absolutives;
 - the predominantly "spatial" profile of "lexical" affixation in NWC is an areal feature shared with other languages of the Caucasus (and beyond);

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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