Problems of polysynthesis, with special reference to the Northwest Caucasian languages
Lecture 3: Polysynthetic morphology in Northwest Caucasian languages

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Recapitulation from Seminar 2

- Polysynthesis shows considerable internal variation:
  - Types of incorporation and verb-root serialisation
  - Types and productivity of lexical affixes
  - Scope-ordered vs. templatic organisation
  - Extent of head-marking (from polypersonal to apersonal)
  - Degrees of morpho(phono)logical apacity
  - etc.

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- Cf. manifestations of "new" vs. "old" polysynthesis according to Fortescue (2007).

Recapitulation from Seminar 2

- Today we shall have a closer look at the manifestations of polysynthesis in the Northwest Caucasian language family.

Roadmap

- Overview of the NWC family
- Polysynthesis NWC-style
- Polypersonalism and head-marking
- Lexical affixation and incorporation
- Morphological organisation
- Interim summary

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- Northwest Caucasian:
  - Circassian: West Circassian (Adyghe), Kabardian
  - Abkhaz-Abaza: Abkhaz, Abaza
  - Ubykh (extinct since 1992)
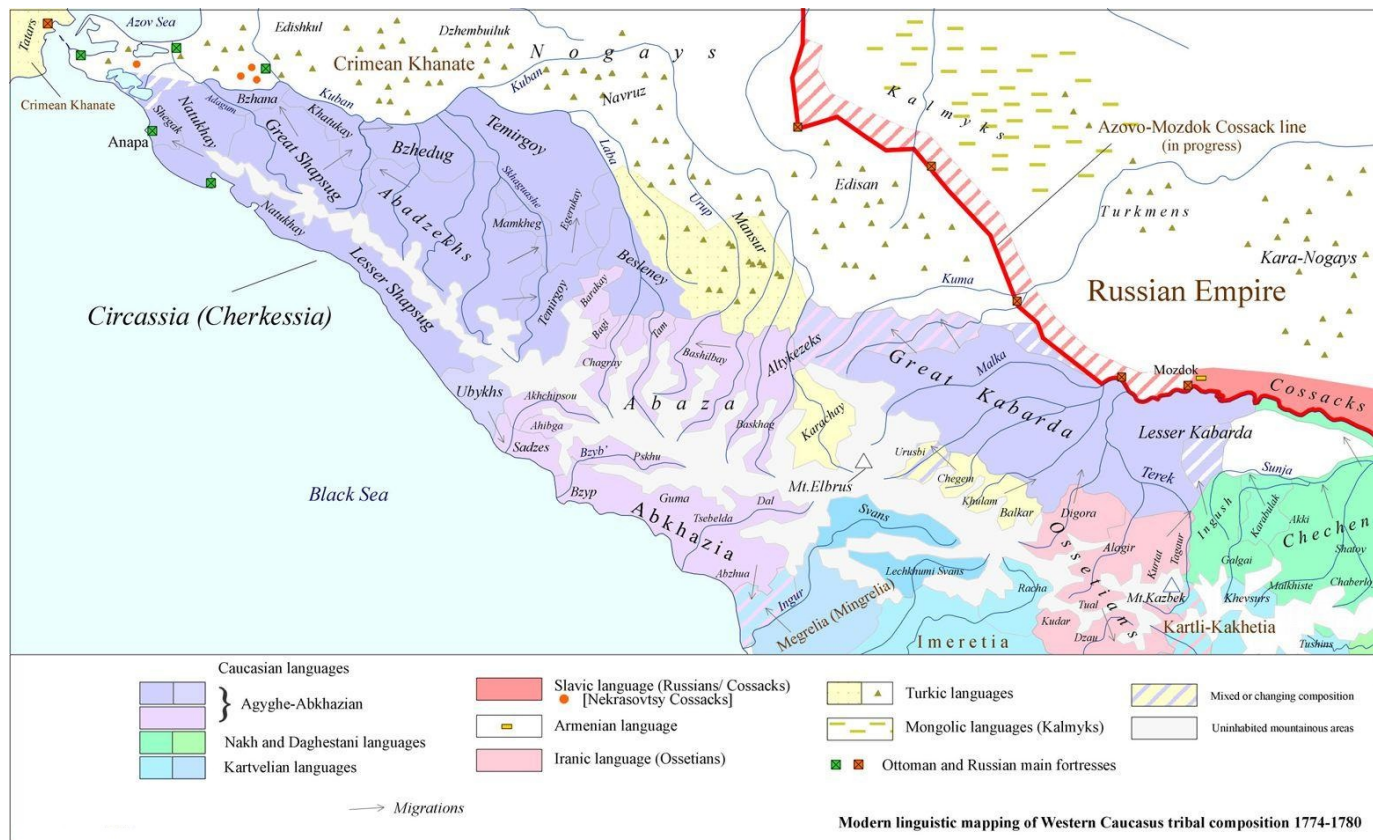
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- Northwest Caucasian:
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  - Abkhaz-Abaza: Abkhaz, Abaza
  - Ubykh (extinct since 1992)
- Arguably distantly related to the Nakh-Daghestanian family (Nikolaev & Starostin 1994).

Northwest Caucasian languages

- West Caucasian peoples and languages have severely suffered during the Caucasian war led by the Russian Empire (1763-1864) and the ensuing expulsions and resettlements.

- A number of varieties have become extinct, and the whole linguistic landscape has been disrupted.

Northwest Caucasian languages

The geographical distribution in the end of the 18th cent.:

Modern linguistic mapping of Western Caucasus tribal composition 1774-1780

© Artur Tsutsiev
https://abkhazworld.com/aw/publications/e-library/1783-studies-in-west-circassian-phonology-and-morphology-by-rieks-smeets
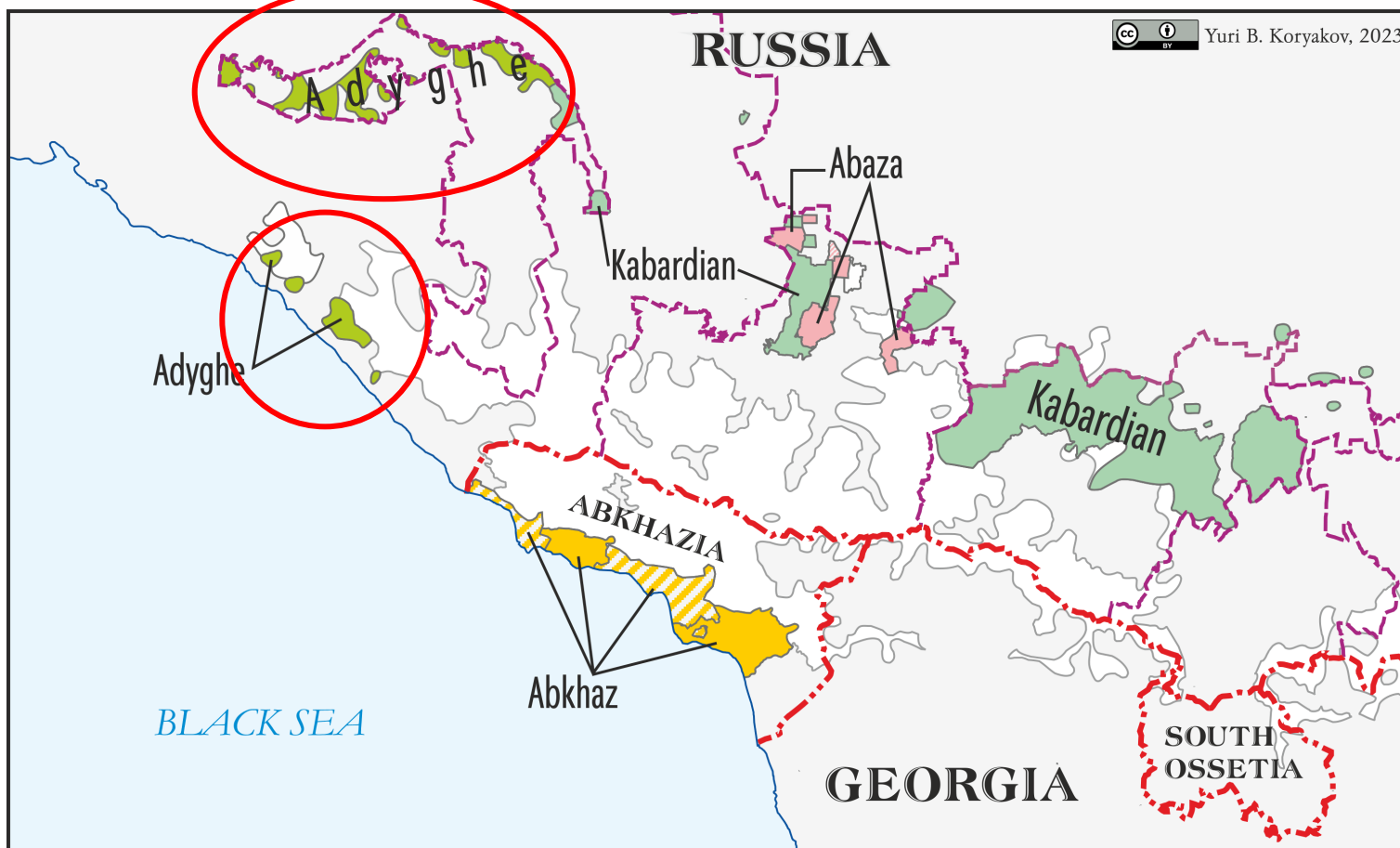
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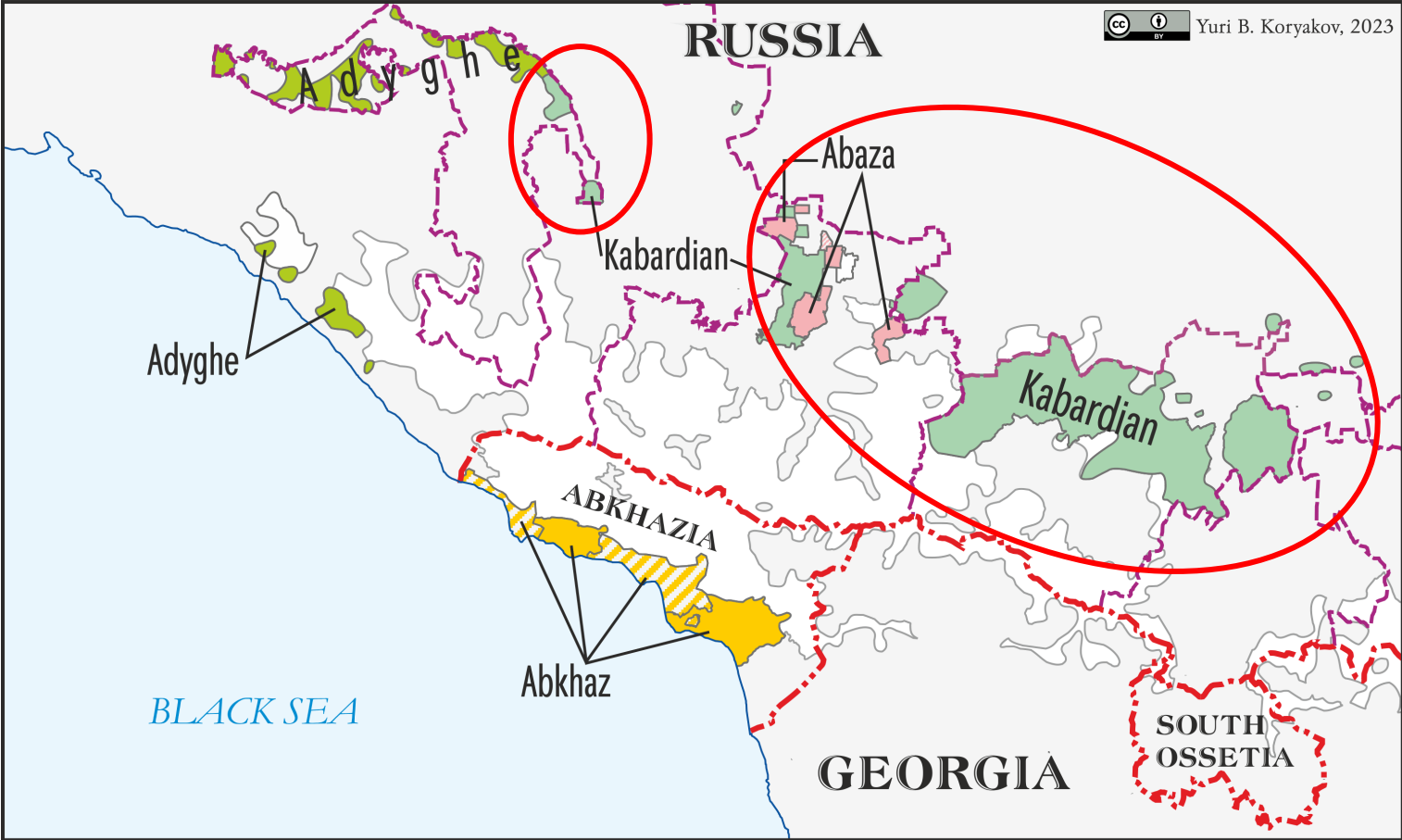

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Northwest Caucasian languages

West Circassian (Adyghe):

Northwest Caucasian languages

Kabardian:

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Northwest Caucasian languages

Abkhaz:

Northwest Caucasian languages

Abaza:

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Northwest Caucasian languages

- 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.

Northwest Caucasian languages

- Major typological traits (Hewitt 2005, Arkadiev & Lander 2020):
  - rich consonantism and empoverished vocalism;
  - head-marking and polysynthesis;
  - weak distinction between major lexical classes;
  - ergativity;
  - rich system of spatial marking in the verb;
  - complex system of clause-combining.

Northwest Caucasian languages

- Sources of data apart from grammars and other publications:
    - fieldwork in Adygeya on the Temirgoy dialect of West Circassian (2004-2006, 2008, 2010), on the Bzhedugh dialect of West Circassian (2014), on the Besleney dialect of Kabardian (2011-2013), on the Kuban dialect of Kabardian (2015-2016);
    - fieldwork in Karachaevo-Cherkessia on the Tapanta dialect of Abaza (2017-2019, 2021).
    - Elicited as well as corpus examples.

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Besleney Kabardian polysynthetic predicate (own fieldwork, v. Ulyap, 2011-2013)

(1)   *sə-ǵə-zer-a-xʷə-čʼerə-mə-ṭetə-čʼə-žʼ-a-r*
       1SG.ABS-CSL-REL.FCT-3PL.IO-BEN-LOC-NEG-tie-ELAT-RE-PST-ABS
       'that they could not untie me from there'

ABS – absolutive   IO – indirect object
BEN – benefactive   LOC – locative preverb
CSL – cislocative   RE – refactive
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Besleney Kabardian polysynthetic nominal (Yury Lander's fieldwork data, 2011-2012)

(2)   *d-jə-[ʁʷəneʁʷ-bzəλxʷəʁe-daxe-dede]-m*
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       'our very beautiful lady-neighbour'

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- Extensive and highly productive compounding in nominals.

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- Polypersonalism and complex, often lexicalised, affixation patterns in verbs.

- Extensive and highly productive compounding in nominals.

- Still, the borderline between verbs and nominals is vague.

Polysynthesis in Northwest Caucasian

- On the so-called nominal complex in Circassian, see Lander 2017.
- On different morphosyntactic mechanisms beyond verbal and nominal polysynthesis in Circassian, see Ershova 2020.

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- Further, the focus will be on verbs.

Polysynthesis in Northwest Caucasian

- Polysynthetic features of NWC verbs (cf. Lander & Testelets 2017 on West Circassian):
  - exuberant polypersonalism;
  - a rich system of locative affixes;
  - other types of affixes with different degrees of "lexicality" and productivity;
  - an intricate mixture of templatic and layered organisation;
  - a complex system of morphological expression of syntactic information.

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- Polypersonalism in Abaza (Inzhich-Chukun, 2017, textual example):

(3) *j-ŝə-z-j-á-s-hʷ-p̣*
3SG.N.ABS-2PL.IO-BEN-3SG.M.IO-DAT-1SG.ERG-say-NPST.DCL
'I will tell this to him about you.'

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- Polypersonalism in Northwest Caucasian:
  - three-participant forms common;
  - four-participant forms uncommon, but attested in texts;
  - five-participant forms can be constructed and parsed by speakers, and are reported in grammars of Circassian languages written by native speakers.
    - Apparently impossible in Abkhaz-Abaza (cf. Chirikba 2003: 39 on Abkhaz).

Polypersonalism and head-marking

- Polypersonalism in Northwest Caucasian:
  - *prima facie* counterexample to the frequent claims that predicates in natural languages cannot take more than three arguments (e.g. Babby 2009).

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Polypersonalism and head-marking

- Polypersonalism and applicatives:
  - NWC polypersonalism is facilitated by a rich system of semantically specialized applicatives introducing indirect objects ("open head-marking", Nichols 2017).

Polypersonalism and head-marking

- NWC applicatives:
  - are very numerous (up to several dozen in Abaza and Abkhaz);
  - do not normally affect core arguments (S, A, P);
  - combine will all types of verbs (transitive and intransitive);

Polypersonalism and head-marking

- NWC applicatives:
  - semantically, range from underspecified to highly specialised;
  - are in many cases obligatory and often lexicalised;
  - allow stacking and limited recursion.

Fell 2012, O'Herin 2001, Letuchiy 2009, Lander & Letuchiy 2017, Arkadiev et al. 2023+

Polypersonalism and head-marking

- Applicative stacking in West Circassian (Lander & Letuchiy 2010: 266; elicited)

(4) *sə-qə-t-de-p-fə-Ø-r-a-ʁa-že-š'tə-ʁ*
1SG.ABS-CSL-1PL.IO-COM-2SG.IO-BEN-3SG.IO-DAT-3PL.ERG-
CAUS-read-IPF-PST
'They were making me read it for you together with us.'

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(5) *s-a-fə-Ø-f-e-txe*
     1SG.ABS-3PL.IO-BEN-3SG.IO-BEN-DYN-write
     'I write to him for their benefit.'

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Polypersonalism and head-marking

- Locative applicatives in Abaza (textual examples):

(6) *phʷəs-ḳ   d-ʕa-rə-l-s-χə-n*
wife-INDF 3SG.H.ABS-CSL-3PL.IO-LOC:among-1SG.ERG-
take-PST

'I chose a wife among them.'

(7) *d-na-sá-š'ta-lə-n*
3SG.H.ABS-TRL-1SG.IO-LOC:behind-go-PST
'He followed (lit. went behind) me.'

CSL – cislocative   TRL – translocative

Polypersonalism and head-marking

- Head-marking in NWC is a pervasive phenomenon of the syntax-morphology interface.

- Polypersonalism interacts with other components of grammar, i.e. valency-changing operations, and the lexicon.

- More in lecture 4.

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Lexical affixation and incorporation

- "Lexical affixes" in Northwest Caucasian and the ontology from Mattissen (2006: 297):
  - direction and position (prefixes and suffixes);
  - body parts (prefixes);
  - degree (suffixes);
  - reversative and repetitive (prefixes and suffixes);
  - 'just' and 'only' (suffixes);
  - phasal: inchoative, continuative (prefixes and suffixes);
  - modality: possibility, necessity (prefixes and suffixes);
  - + similitude (suffixes);
  - + subjective evaluation (suffixes).

Lexical affixation and incorporation

- "Lexical suffixes" in Ubykh (Fenwick 2011: 127, transcription and glosses adapted):

(8)   *já-∅-s-tʷ-aj-le-f-ew<mə>t*
        3SG.ABS-3SG.IO-1SG.ERG-give-RE-CMPL-HBL-FUT<NEG>
        'I won't be able to give it back to him completely.'

CMPL – completive
HBL – habilitive
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- "Lexical" suffixes and prefixes in Abaza (elicited, Inzhich-Chukun, 2019):

(9)   *a-ž'ə́*   *ata-s-rə́-ʒ-ĉa-χ-məʕʷa-ʕʷaca-ṭ*

       DEF-meat   REP-1SG.ERG-CAUS-fry-EXC-RE-DPR-RSTR-DCL

'Unfortunately, I have just fried the meat excessively again.'

DPR – depreciative   REP – repetitive
EXC – excessive   RSTR – restrictive

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Lexical affixation and incorporation

- Affixes like those shown in (4)-(5) and (8)-(9) do not fit well into the classification of morphological phenomena into derivation vs. inflection (cf. critique by Spencer 2013 and Haspelmath 2023).

Lexical affixation and incorporation

- Derivation-like:
  - optional;
  - express rather concrete semantic content.
- Inflection-like:
  - (at least in principle) highly productive;
  - fully compositional;
  - able to create clearly ad-hoc forms.
- Recall "productive non-inflectional concatenation" (de Reuse 2009).

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Lexical affixation and incorporation

- The largest set of "lexical" affixes in NWC express spatial meanings:
    - simplex and complex locative prefixes or "preverbs", from ca. 30 in Circassian to ca. 150 in Abkhaz and Abaza;
    - directional suffixes (most prominent in Circassian);
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Lexical affixation and incorporation

Locative prefixes in Standard Kabardian (Kumakhov 1964: 165):

(10) a.   *tjepŝeč'ə-m*   *jə-ƛə-n*
plate-OBL   LOC:container-lie-MSD
'to be on a plate'

    b.   *škamṗə-m*   *de-ƛə-n*
cupboard-OBL   LOC:enclosure-lie-MSD
'to be in a cupboard'

    c.   *daʁe-m*   *xe-ƛə-n*
oil-OBL   LOC:mass-lie-MSD
'to be in oil'

Lexical affixation and incorporation

- Directional suffixes and "circumfixes" in Besleney Kabardian (textual examples):

(11) *ž'emehat-xe-r*   *q̇-a-ḳʷə-h-xe*

      part.of.village-PL-ABS   CLS-3PL.ERG-pass-CIRCUM-PL

      'They go around all parts of the village.'

(12) *pŝeχʷə-r*   *d-a-hə-je-ž'-a*

      chain-ABS   LOC:enclosure-3PL.ERG-carry-UP-RE-PST

      'They carried the chain up.'

Lexical affixation and incorporation

- Diachronically, most locative preverbs go back to incorporated nouns, mainly denoting parts of the body or of other objects.

- Directional suffixes go back to verbs of displacement.

Kumakhov (1964: 139-146, 164-182, 1989: 200-228); Lomtatidze 1983; Klychev 1994; Avidzba 2017; Arkadiev & Maisak (2018: 121-127)

Lexical affixation and incorporation

West Circassian locative preverbs related to nouns (Kumakhov 1964: 177-179):

(13) *ḳʷeċə* 'intestines': *ḳʷeċə-λhe-n* 'put inside smth'
      ḳʷeċə-rə-čə-n 'run through
                                              smth'

(14) *ʔʷə* 'mouth':   *ʔʷə-cʷe-n* 'stand near smth'
      ʔʷə-šʼə-n 'lead away from
                                              smth'

Lexical affixation and incorporation

- Some preverbs can be synchronically viewed as incorporated nouns:
  - denote the same object as the noun;
  - can host pronominal prefixes referring to the possessor;
  - are more widespread in Abaza and Abkhaz than in Circassian.

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Lexical affixation and incorporation

Standard Kabardian incorporated body-part nouns (Kumakhov 1964: 181-182):

(15) *ŝhe* 'head':   *ŝhe-rə-xə-n* 'take from one's head'

(16) *ʔe* 'hand':   *ʔe-ṣe-xə-n* 'take from one's hands'

Lexical affixation and incorporation

West Circassian incorporated non-relational noun (textual example, Rainer Feer, p.c.):

(17) *qə-d-de-ʁʷegʷə-r-e-ḳʷe*
      CLS-1PL.IO-COM-way-INSTR-DYN-go
      'He goes with us along the way.'

COM – comitative applicative
CSL – cislocative
INSTR – instrumental applicative

Lexical affixation and incorporation

Abaza incorporated body-part noun (Klychev 1995: 154):

(18) *a-saba*   *ʕa-rə-lakta-ṗl-əw-n*
DEF-dust   CSL-3PL.IO-face-pour.powder-IPF-PST
'Dust was pouring onto their faces.'

Lexical affixation and incorporation

Abkhaz incorporated non-relational noun (Avidzba 2017: 99):

(19) *a-raχʷ*   *ʁə-c̣a-h-ga-ra.wə-ṗ*

DEF-cattle   LOC:winter-LOC:under-1PL.ERG-carry-DEB-NPST.DCL

'We have to keep the cattle during the winter.'

Lexical affixation and incorporation

- Peculiarities of NWC noun incorporation:
  - only locations, never patients / direct objects;
  - synchronically applies to a very limited set of nouns;
  - patterns with locative affixes and applicatives, grammaticalises.

Arkadiev 2022

Lexical affixation and incorporation

- Some directional suffixes can be analysed as verb-root serialisation (cf. discussion of "incorporation" in Circassian by Kumakhov 1964: 139-146; Bersirov 2001: 157-185):
  - can be used as roots of independent verbs with the same directional meaning;
  - introduce goal or source arguments by means of applicative preverbs.

Lexical affixation and incorporation

West Circassian verb-root serialisation:

(20) *de-ṭəs-ha-n*

LOC:enclosure-sit.down-enter-MSD

'to sit down in between' (Kumakhov 1964: 143)

Cf. *de-ha-n* 'to go into an enclosure'

(21) *je-pλə-xə-n*

DAT-look-descend-MSD

'to look down' (Kumakhov 1964: 139)

Cf. *je-xə-n* 'to descend'

Lexical affixation and incorporation

- In terms of Mattissen's typology, the Northwest Caucasian polysynthesis is transitional between "compounding" and "affixal" types:
  - many lexical affixes have cognate roots;
  - some lexical affixes retain the original semantics of their root counterparts;
  - both noun incorporation and verb-root serialisation are attested, but apply to closed classes of roots;
  - incorporated roots tend to become grammaticalised and pattern with affixes.

Roadmap

- Overview of the NWC family
- Polysynthesis NWC-style
- Polypersonalism and head-marking
- Lexical affixation and incorporation
- Morphological organisation
- Interim summary

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Morphological organisation

Morphological organisation of Northwest Caucasian languages presents an intricate and complex interplay of templatic and scope-ordered principles.

Korotkova & Lander 2010, Arkadiev & Letuchiy 2011, Lander 2016 on West Circassian, Panova 2018a on Abaza.

Morphological organisation

The schematic verbal template (Arkadiev & Lander 2020: 404)

prefixes						root	suffixes			
argument structure zone				pre-stem elements			stem (Σ)			endings
absolu-tive	subor-dinators	applicatives and indirect objects	erga-tive	preradical negation	causative	root	aspectual, modal and evaluative operators	temporal operators	suffixal negation	illocutionary operators or subordinators
1	1	>1	1	1	1 or 2	may be complex	>1	>1	1	>1

Morphological organisation

- Scope-ordering of suffixes:
  actional modifiers < aspect < tense < negation <
  < clause-type

- Partial scope-ordering of prefixes:
  subordinators > potential >   compositional >
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  > lexicalised
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    > lexicalised
       applicatives

Morphological organisation

West Circassian scopal reordering of suffixes (Lander 2016: 3523)

(22) a.   *gʷəŝʷe-ŝʷe-ž'ə-ʁ*   refactive > similative

        be.glad-SML-RE-PST

        's/he pretended again that s/he was happy'

    b.   *gʷəŝʷe-ž'ə-ŝʷa-ʁ*   similative > refactive

        be.glad-RE-SML-PST

        's/he pretended that s/he was happy again'

Morphological organisation

Abaza counter-scopal ordering of prefixes (textual examples):

(23) *h-a-kʷ-də-r-ĉ̣a-ṭ*
      1PL.ABS-3SG.N.IO-LOC:top-3PL.ERG-CAUS-sit-DCL
      'they put us on it' (causative > applicative)

(24) *č-a-z-sə-m-rə-hazər-wa-ta*
      RFL-3SG.N.IO-BEN-1SG.ERG-NEG-CAUS-be_ready-IPF-ADV
      'without having prepared myself to it'
      (negation > reflexive > benefactive > causative)

Morphological organisation

Dependencies between non-adjacent slots in Ubykh (Dumézil & Esenç 1975: 173, transcription adapted, glosses added):

(25) a.　*sə-w-də-q̇ʷe.tʷ-q̇e*
　　　1SG.ABS-2SG.ERG-CAUS.SG-stop.SG-PST
　　　'You (sg) made me stop.'

　　b.　*š'ə-w-ʁe-q̇ʷe.χe-q̇e-n*
　　　1PL.ABS-2SG.ERG-CAUS.PL-stop.PL-PST-PL
　　　'You (sg) made us stop.'

Morphological organisation

"Floating" prefixes in Besleney Kabardian (elicited, Ulyap, 2011):

(26) a.   *sə-q̇-a-de-ḳʷ-a*

        1SG.ABS-DIR-3PL.IO-COM-go-PST

   b.   *s-a-q̇ə-de-ḳʷ-a*

        1SG.ABS-3PL.IO-DIR-COM-go-PST

        a=b 'I came with them.'

Morphological organisation

Morphological organisation in Northwest Caucasian

- is not uniform and defies any straightforward analysis aiming to reduce affix combinatorics and ordering either to semantic scope or to a rigid template;

- obviously reflects different historical layers of successive grammaticalisation and morphologisation (as well as lexicalisation).

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Interim summary

- Northwest Caucasian languages adhere to the cross-linguistic "prototype" of polysynthesis, but show a number of specific features betraying a complex and unique history.

Interim summary

- Extraordinary polypersonalism enhanced by an extremely rich system of applicatives.

- Vestiges of different types and diachronic layers of incorporation in the system of "lexical affixes" on verbs.

- Predominantly spatial profile of "lexical affixation" (NB an areal feature even going beyond the Caucasus itself).

- A complex mixture of scope-based and tempatic morphological organisation.

tha ŝʷ-j-e-ʁe-psew!
god 2PL.ABS-3SG.ERG-DYN-CAUS-live

ŝə-zʕʷada-χa-ṭ!
2PL.ABS-healthy-INC-DCL

Thank you for your attention!
Merci de votre attention!