

# Nominal stems in East Caucasian

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# Plan of the talk

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- Introduction

- What is the EC nominal system like?

- A family resemblance

- What do EC stem formation systems have in common?

- Parameters of variation

- How do these systems differ?

- Extending the system beyond nouns

- How do EC languages deal with inflection on other kinds of nominal?

# 1. Introduction: The EC nominal

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Three important kinds of morphosyntactic features:

- Number

singular vs plural (vs collective?)

- Case

absolute, ergative, dative... ; in-essive, in-lative, sub-essive, sub-lative...

- Gender (usually)

masculine vs feminine vs (animate vs) neuter(s); human vs non-human

# Not just nouns are relevant

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This talk will also touch on other things that can fulfil argument functions:

- (Pronouns)

- Substantivized modifiers

(1) žag<sup>w</sup>ara-m-mi a<d>i ?

white-ATTR-PL <NPL>arrive.PF old-OBL-DAT

‘Have the white ones arrived?’

(Tsakhur; Kazenin & Testeleets 1999: 321)

- Infinitive clauses

(2) [ʃaraq’i ħaλ-a] ħaramaw r-iči-x.

booze(III).ABS drink-INF harmful IV-stay-PRS

‘To drink alcohol continues to be harmful.’

(Tsez; Polinsky 2015: 219)

# Fragment of a nominal paradigm: Lak

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'fly'	SG	PL
Absolutive	<i>zimiz</i>	<i>zimiz-ru</i>
Ergative/Genitive	<i>zimiz-ra-l</i>	<i>zimiz-irt:a-l</i>
Dative	<i>zimiz-ra-n</i>	<i>zimiz-irt:a-n</i>
Comitative	<i>zimiz-ra-š:al</i>	<i>zimiz-irt:a-š:al</i>
Possessive	<i>zimiz-ra-x</i>	<i>zimiz-irt:a-x</i>
Sub-essive	<i>zimiz-ra-lu</i>	<i>zimiz-irt:a-lu</i>
(etc.)	...	...

(after Murkelinskij 1971)

# Two types of inflectional behaviour

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Turkish		
'lion'	SG	PL
Nominative	<i>aslan</i>	<i>aslan-lar</i>
Genitive	<i>aslan-ın</i>	<i>aslan-lar-ın</i>

Latin		
'lion' (3 <sup>rd</sup> decl.)	SG	PL
Nominative	<i>leō</i>	<i>leōn-ēs</i>
Genitive	<i>leōn-is</i>	<i>leōn-um</i>

Turkish – agglutinative: ‘one meaning, one form’; easily separable morphemes; suffixes predictable without notion of inflectional class

Latin – fusional: cumulative exponence; frequent stem alternation; inflectional classes required

# An easily analysed paradigm: Godoberi (Andic)

'spider'	SG	PL
Absolutive	<i>nusaxar</i>	<i>nusaxar-di</i>
Ergative	<i>nusaxar-di</i>	<i>nusaxar-di-di</i>
Genitive	<i>nusaxar-tʃi</i>	<i>nusaxar-di-tʃi</i>
Dative	<i>nusaxar-ʃi</i>	<i>nusaxar-di-ʃi</i>
Affective	<i>nusaxar-ra</i>	<i>nusaxar-di-ra</i>
Adessive	<i>nusaxar-qi</i>	<i>nusaxar-di-qi</i>
Contessive	<i>nusaxar-č'u</i>	<i>nusaxar-di-č'u</i>

In both singular and plural, this can be called a *one-stem* form.

No morphological material is 'wasted': the structure is ROOT – NUM – CASE.

(Saidova 2006: 428)

# An easily analysed paradigm (2): Khinalug

'skin'	SG	PL
Absolutive	<i>k'ir</i>	<i>k'ir-dir</i>
Ergative	<i>k'ir-i</i>	<i>k'ir-dir-i</i>
Genitive I	<i>k'ir-i</i>	<i>k'ir-dir-i</i>
Dative	<i>k'ir-u</i>	<i>k'ir-dir-u</i>
Comitative	<i>k'ir-išk:ili</i>	<i>k'ir-dir-išk:ili</i>
Locative I	<i>k'ir-ix</i>	<i>k'ir-dir-ix</i>
Comparative I	<i>k'ir-iq'</i>	<i>k'ir-dir-iq'</i>

Again, things are as simple as they could be.

But Khinalug is *distinctive* among EC languages in predominantly using this one-stem pattern (Kibrik 2003: 61). And even Khinalug has a multitude of different plural markers.

(Ganieva 2002: 474, 476)

# Returning to Lak

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	'fly'	
	SG	PL
Absolutive	<i>zimiz</i>	<i>zimiz-ru</i>
Erg/Gen	<i>zimiz-ra-l</i>	<i>zimiz-irt:a-l</i>
Dative	<i>zimiz-ra-n</i>	<i>zimiz-irt:a-n</i>
Comitative	<i>zimiz-ra-š:al</i>	<i>zimiz-irt:a-š:al</i>
Possessive	<i>zimiz-ra-x</i>	<i>zimiz-irt:a-x</i>
Sub-essive	<i>zimiz-ra-lu</i>	<i>zimiz-irt:a-lu</i>

(after Murkelinskij 1971)

# Returning to Lak

	'fly'		'law'	
	SG	PL	SG	PL
Absolutive	<i>zimiz</i>	<i>zimiz-ru</i>	<i>zakon</i>	<i>zakon-nu</i>
Erg/Gen	<i>zimiz-ra-l</i>	<i>zimiz-irt:a-l</i>	<i>zakon-dalu-l</i>	<i>zakon-n-a-l</i>
Dative	<i>zimiz-ra-n</i>	<i>zimiz-irt:a-n</i>	<i>zakon-dalu-n</i>	<i>zakon-n-a-n</i>
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(after Murkelinskij 1971)

## 2. A family resemblance

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East Caucasian as a family is at least 6000 years old, comprising dozens of languages across 6 or more branches (depending on how you count):

- Nakh
- [Avar-Andic]-Tsezic
- Lak
- Dargwa
- Lezgic
- Khinalug

But the basic ‘body plan’ seen so far for the noun paradigm is found in all of these.

# Lezgian (Lezxic)

'mother'	SG	PL
Absolutive	<i>dide</i>	<i>dide-jar</i>
Ergative	<i>dide-di</i>	<i>dide-jr-i</i>
Genitive	<i>dide-di-n</i>	<i>dide-jr-i-n</i>
Adessive	<i>dide-di-w</i>	<i>dide-jr-i-w</i>
Inessive	<i>dide-d-a</i>	<i>dide-jr-a</i>
Superrelative	<i>dide-di-laj</i>	<i>dide-jr-i-laj</i>
(etc.)	...	...

'Two-stem' in both singular and plural

(Haspelmath 1993: 80)

# Standard Dargwa

'girl'	SG	PL
Absolutive	<i>rursi</i>	<i>rurs-bi</i>
Ergative	<i>rursi-li</i>	<i>rurs-b-a</i>
Genitive	<i>rursi-la</i>	<i>rurs-b-a-la</i>
Dative	<i>rursi-li-s</i>	<i>rurs-b-a-s</i>
Superlative	<i>rursi-li-či</i>	<i>rurs-b-a-či</i>
Sublative	<i>rursi-li-ʔu</i>	<i>rurs-b-a-ʔu</i>
(etc.)	...	...

'Two-stem' in both singular and plural

(after van den Berg 2001: 18-23)

# Batsbi (Nakh)

'knife'	SG	PL
Absolutive	<i>nek'</i>	<i>nek'-i</i>
Ergative	<i>nek'-e-v</i>	<i>nek'-i-v</i>
Genitive	<i>nek'-e-n</i>	<i>nek'-a<sup>n</sup></i>
Dative	<i>nek'-e-n</i>	<i>nek'-i-n</i>
Allative	<i>nek'-e-gǝ</i>	<i>nek'-i-gǝ</i>
Adverbial	<i>nek'-e-ǧ</i>	<i>nek'-i-ǧ</i>
(etc.)	...	...

'Two-stem' in singular,  
'one-stem' in plural

(Holisky & Gagua 1994: 165)

# Interim summary

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To spell out some of the characteristics of EC noun paradigms:

- Within a given language, case marking is largely or entirely consistent across lexemes and across numbers
- Most of the time, the absolutive singular is formally unmarked
- There is often a morphological split in the paradigm between absolutive and non-absolutive (= 'oblique') stem forms
- Number marking may interact with this absolutive / oblique opposition
- (Later we will see how gender can be relevant to inflection too)

# Aside: absolutive vs oblique in East Caucasian

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The existence of an absolutive / oblique opposition in the paradigm is in keeping with other ways in which the absolutive is special in EC.

- Clausal agreement in EC languages is generally with the absolutive:

Hinuq *meži de b-ac'-an* [*you.PL.ABS* I.ERG *HPL*-eat-INTFUT] 'I will eat you.PL'

(Forker 2013: 467)

- The absolutive lexical root is sometimes fully suppletive (or even absent):

Andi logophoric pronoun *ži-* (ABS) / *en-* (OBL) ; reciprocal pronoun  $\emptyset$  / *sonso-*

- NP modifiers sometimes agree with the head noun in 'obliqueness':

Ingush 'good person': *dika sag* (ABS), *dika-cha saguo* (ERG), *dika-cha sagaa* (DAT)

(Nichols 2011: 221)

# Stem formation as ‘pure morphology’?

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What kind of phenomenon is nominal stem formation?

- Stem formatives are lexically specific, but give no lexical information (under ordinary circumstances)
- Stem formatives are case-sensitive, but do not specify case
- Stem formatives cannot always even be said to encode number:  
cf. Andi: *gurdo* ‘shirt’, SG.OBL *gurd-i-* ; *k’otu* ‘horse’, PL.OBL *k’ot-i-*

In synchrony, this is fundamentally about the morphological system ‘doing its own thing’.

### 3. Parameters of variation

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Within this framework there is still plenty of room for variation across words and across languages, for example:

- Does the oblique stem mean anything in its own right?
- What is the morphological 'shape' of the paradigm?
- How easy is it to separate a stem formative from its surroundings?
- How many different formatives are there, and in what roles?
- What determines their distribution over the lexicon?

Further issues will arise in section 4, looking at this system as it applies beyond the noun.

# Status of the oblique stem

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## Does the oblique stem exist as an inflected form? With what meaning?

- OBL is an abstraction – does not exist in its own right:
  - This is widespread, e.g. Hunzib (Tsezic), Karata (Andic), Udi (Lezgic), Batsbi (Nakh), Lak
- OBL = ERG. Particularly characteristic of Lezgic and Dargwa varieties:
  - Archi (Lezgic) ergatives: *gel-li-Ø* ‘cup’, *gel-um-čaj-Ø* ‘cups’, etc.  
(Kibrik 2003: 60)
  - Standard Dargwa ergatives: *rursi-li-Ø* ‘girl’, *adam-t-a-Ø* ‘people’, etc.  
(van den Berg 2001: 19)

# Status of the oblique stem

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- OBL = ERG in plural only
  - e.g. some nouns in Inkhokwari Khwarshi: *obut'*-*za*-Ø 'father.PL.ERG'  
(Khalilova 2009: 66)
- OBL = GEN
  - Kryz (Lezgetic) genitives: *k'ul-ci*-Ø 'house.GEN', *sil-i*-Ø 'tooth.GEN', *pip-il*-Ø 'knee.GEN', etc.  
(Authier 2009: 30f., 34f.)
  - Northern Akhwakh (Andic) genitives of *masculines and human plurals*:  
*waš-o*-Ø 'boy.GEN', cf. *jaš-o-tṭ:i* 'girl.GEN'  
(Creissels 2013: 339)

# Shape of the paradigm

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## What is the formal relationship between different paradigm zones?

Different nouns within a given language can – and often do – show different patterns.

- Only number is marked, not absolutive vs. oblique, e.g. Khinalug *k'ir* 'skin':

'skin'	SG	PL
Absolutive	<i>k'ir</i>	<i>k'ir-dir</i>
Ergative	<i>k'ir-i</i>	<i>k'ir-dir-i</i>
etc.	...	...

Khinalug is the only EC language where this pattern predominates.

# Shape of the paradigm

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- ABS vs. OBL is primary, the number opposition is secondary, e.g. Rutul (Lezgetic) *p'iz* 'lip':

'lip'	SG	PL
Absolutive	<i>p'iz</i>	<i>p'iz-bir</i>
Ergative	<i>p'iz-i-r</i>	<i>p'iz-i-mi-r</i>
etc.	...	...

(Kibrik 2003: 63)

This is also rare; it is otherwise attested e.g. in Lak (Kibrik 1991: 260).

# Shape of the paradigm

- All of SG.OBL, PL.ABS and PL.OBL are built independently: e.g. Hinuq *humer* ‘face’. This pattern is rarely found outside the Tsezic branch.

‘face’	SG	PL
Absolutive	<i>humer</i>	<i>humer-be</i>
Ergative	<i>hume-li-y</i>	<i>humer-za-y</i>
Genitive I	<i>hume-li-s</i>	<i>humer-za-s</i>
Contessive	<i>hume-li-†</i>	<i>humer-za-†</i>
Adessive	<i>hume-li-qo</i>	<i>humer-za-qo</i>
etc.	...	...

(Forker 2013: 60, 66)

# Shape of the paradigm

- A variant of this pattern, also largely restricted to Tsezic, has a one-stem singular, e.g. Inkhokwari Khwarshi *tawxan* ‘chimney’:

‘chimney’	SG	PL
Absolutive	<i>tawxan</i>	<i>tawxan-be</i>
Ergative	<i>tawxan-i</i>	<i>tawxan-za</i>
Genitive I	<i>tawxan-is</i>	<i>tawxan-za-s</i>
Genitive II	<i>tawxan-la</i>	<i>tawxan-za-la</i>
Inessive	<i>tawxan-ma</i>	<i>tawxan-za-ma</i>
etc.	...	...

(Khalilova 2009: 54)

# Shape of the paradigm

- SG.OBL stem  $\leftarrow$  SG.ABS  $\rightarrow$  PL.ABS  $\rightarrow$  PL.OBL stem  
i.e. 2 stems in singular, 2 stems in plural. This is an extremely common pattern. It is universal in Dargwa, and also predominates in Lezgian, Avar, Andic.

Lezgian (Lezgian)		
'mother'	SG	PL
Absolutive	<i>dide</i>	<i>dide-jar</i>
Ergative	<i>dide-di</i>	<i>dide-jr-i</i>
Genitive	<i>dide-di-n</i>	<i>dide-jr-i-n</i>

(Haspelmath 1993)

Karata (Andic)		
'tail'	SG	PL
Absolutive	<i>miβa</i>	<i>miβa-di</i>
Ergative	<i>miβ-o-l</i>	<i>miβa-d-a-l</i>
Genitive	<i>miβ-o-tt:i</i>	<i>miβa-d-a-tt:i</i>

(Magomedova 2001)

# Shape of the paradigm

- Variants of this pattern: 1-stem in SG, 2-stem in PL (e.g. Akhwakh);  
2-stem in SG, 1-stem in PL (e.g. Batsbi)

Akhwakh (Andic)		
'stallion'	SG	PL
Absolutive	<i>bati</i>	<i>bat-a</i>
Ergative	<i>bati-de</i>	<i>bat-a-le-de</i>
Genitive	<i>bati-tʃ:i</i>	<i>bat-a-le-tʃ:i</i>

(Magomedbekova 1967: 56, 179)

Batsbi (Nakh)		
'knife'	SG	PL
Absolutive	<i>nek'</i>	<i>nek'-i</i>
Ergative	<i>nek'-e-v</i>	<i>nek'-i-v</i>
Genitive	<i>nek'-e-n</i>	<i>nek'-i-n</i>

(Holisky & Gagua 1994: 165)

# Shape of the paradigm

- Finally, we even find ‘Latin-like’ instances where the morphologically basic form is the odd one out, e.g. Rutul (Lezgetic) *tɪla* ‘dog’. This means that *-j(e)-* is not specifically an *oblique* stem – rather, it is ‘not ABS.SG’.

Rutul		
‘dog’	SG	PL
Absolutive	<i>tɪla</i>	<i>tɪla-j-ma-r</i>
Ergative	<i>tɪla-je-r</i>	<i>tɪla-j-ma-ši</i>

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cf.

Latin		
‘lion’	SG	PL
Nominative	<i>leō</i>	<i>leōn-ēs</i>
Genitive	<i>leōn-is</i>	<i>leōn-um</i>

(Kibrik 2003: 65)

# Shape of the paradigm: summing up

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Despite the striking family resemblance overall, universals are hard to come by.

- PL.OBL stem formation is most often related to PL.ABS in its shape – but more rarely it can be related to SG.OBL, or neither...
- Few languages show a consistent paradigm shape across the lexicon – perhaps only Lezgian, Tabasaran (Lezgic) and the Dargwa varieties, which are 2-stem in both singular and plural.
- There is almost always a formal absolute/oblique opposition in the singular or the plural, and very often in both.

# Morpho-phonological interactions

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## How easily can the stem formative be separated from its context?

### ■ Interaction between **formative** and **case suffix**:

- Archi (Lezgic) PL.OBL -*čaj* becomes -*če*- before any following case suffix  
(Chumakina et al. 2016: 26)
- Hunzib (Tsezic): SG.OBL -*lo*-, -*li*- become -*l*- before certain case suffixes only  
(van den Berg 1995: 39)
- Godoberi (Andic) ergatives:
  - š:u*- + -*di* → -*št:i* (mandatory)
  - t:i*- + -*di* → -*t:i* (optional)

(Tatevosov 1996: 21)

# Morpho-phonological interactions

Avar: more substantial interaction. The regular ergative suffix is *-c:a*, but in the presence of certain SG.OBL formatives this suffix is omitted (Charachidzé 1981: 38-40):

	'rain.SG'	'brother.SG'	'knife.SG'
Absolutive	<i>c':ad</i>	<i>wac:</i>	<i>nus</i>
Ergative	<i>c':ad-a-c:a</i>	<i>wac:-as:-∅</i>	<i>nus-a†:-∅</i>
Genitive	<i>c':ad-a-l</i>	<i>wac:-as:-ul</i>	<i>nus-a†:-ul</i>

Similarly, Chirag Dargwa marks the ergative with *-d*, except after OBL.SG *-li* (Ganenkov 2021: 6).

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Ergative	<i>c':ad-a-c:a</i>	<i>wac:-as:-∅</i>	<i>nus-a†:-∅</i>
Genitive	<i>c':ad-a-l</i>	<i>wac:-as:-ul</i>	<i>nus-a†:-ul</i>

Similarly, Chirag Dargwa marks the ergative with *-d*, except after OBL.SG *-li* (Ganenkov 2021: 6).

# Morpho-phonological interactions

Standard Dargwa shows something like the reverse process: nouns which usually take a SG.OBL formative lose it before genitive *-la*.

	‘girl.SG’	‘woman.SG’
Absolutive	<i>rursi</i>	<i>âunul</i>
Ergative	<i>rursi-li</i>	<i>âunu-j</i>
Genitive	<i>rursi-la</i>	<i>âun-a</i>
Dative	<i>rursi-li-s</i>	<i>âunu-j-s</i>

‘person-PL’
<i>adam-ti</i>
<i>adam-t-a</i>
<i>adam-t-a-la</i>
<i>adam-t-a-s</i>

(van den Berg 2001: 19)

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Genitive	<i>rursi-la</i>	<i>âun-a</i>
Dative	<i>rursi-li-s</i>	<i>âunu-j-s</i>

‘person-PL’
<i>adam-ti</i>
<i>adam-t-a</i>
<i>adam-t-a-la</i>
<i>adam-t-a-s</i>

(van den Berg 2001: 19)

# Morpho-phonological interactions

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- Interaction between **formative** and **lexical material**:

Concatenation (*ROOT-FORMATIVE-SUFFIX*) or alternation (*STEM-SUFFIX*)?

- Botlikh (Andic) *rea* ‘hand’, SG.OBL *re***u**- (Saidova & Abusov 2012: 543)
- Standard Dargwa *âunul* ‘woman’, SG.OBL *âunuj*- (van den Berg 2001: 19)
- Archi (Lezgif) *baʼk* ‘ram’, SG.OBL *beʼkiri*- (Chumakina et al. 2016: 26)

Sometimes a non-concatenative analysis is preferable, or unavoidable:

- Inkhokwari Khwarshi (Tsezic) *réxne* ‘spade’, SG.OBL *rexne***é**- (Khalilova 2009: 56)
- Ingush (Nakh) *butt* ‘moon’, SG.OBL *bett*- (Nichols 2011: 130)
- Archi (Lezgif) *ʔonnoł* ‘woman’, PL.ABS *χom* (Chumakina et al. 2016: 26)

# Diversity of stem formatives

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EC languages often show many formatives fulfilling the same function.

PL.OBL markers are always least diverse, and many languages have just one. **But what about SG.OBL and PL.ABS?**

- Hinuq (Tsezic), Forker 2013:
  - SG.OBL – 15 (-*mo*- -*a*- -*la*- -*i*- -*ja*- -*o*- -*li*- -*ji*- -*ra*- -*ro*- -*ru*- -*do*- -*u*- -*na*- -*nu*-)
  - PL.ABS – 1 (-*be*)
- Sanzhi Dargwa, Forker 2018:
  - SG.OBL – 1 (-*li*-)
  - PL.ABS – 14 (-*e* -*te* -*be* -*me* -*re* -*ne* -*up:e* -*urbe* -*urme* -*rme* -*ube* -*de* -*une* -*ubme*)

But it is not a trade-off: Lak has 50 SG.OBL and 30 PL.ABS (Kibrik 2003: 69).

# Types of conditioning

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## Lexical

- ‘Hunzib has a large number of oblique markers. The distribution of these markers is **almost entirely lexically determined**’ (van den Berg 1995: 37)
- Agul: ‘Выбор конкретного показателя косвенной основы является **лексическим** и в большинстве случаев не выводится однозначно из звукового облика или семантики слова’ (Maisak 2014: 395)
- Mehweb Dargwa: ‘Strictly speaking, the choice of the plural suffix is **lexical**. In most cases, it cannot be predicted from either the formal properties of the stem or from the semantics of the noun.’ (Chechuro 2018: 42)

Against this background, what organizing principles can different languages use?

# Types of conditioning

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## Default

Where there are multiple formatives available (as is usual with SG.OBL or PL.ABS), one of them may clearly be the default:

- Batsbi (Nakh): the vast majority of nouns form their PL.ABS in *-i*, including verbal nouns and borrowings from Georgian (Holisky & Gagua 1994: 163)
- Archi (Lezgif): although there are 12 SG.OBL formatives altogether, the default *-li-* is used with 80% of nouns (Kibrik 2003: 69f.)
- Hinuq (Tsezic): *-mo-* is the only productive SG.OBL marker, ‘a kind of default oblique suffix that may be used as an alternative to other suffixes’ (Forker 2013: 57)

# Types of conditioning

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## Morphological

It is no surprise if a single derivational suffix always inflects in the same way:

- Mehweb Dargwa *-an-* ‘inhabitant of’ regularly takes PL.ABS *-t* :

*meḥ<sup>w</sup>-an-t* ‘Mehweb people’, *surbatl-an-t* ‘Sogratl people’

(Chechuro 2018: 70)

But it is less common to find suffixes associated with unique inflectional behaviour:

- Lezgian: nouns with a back vowel in the final syllable regularly have PL.ABS *-ar*, PL.OBL *-r-i-*.  
But nouns with the abstract noun suffix *-wal* are exceptional:

*q’ehäl-wal* ‘bravery, feat’: PL.ABS *q’ehäl-wil-er*, PL.OBL *q’ehäl-wil-er-i-*

(Haspelmath 1993: 71-3)

# Types of conditioning

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## Phonological

It is rare for phonology to *fully determine* the choice of formative, but it very often has some influence.

- Standard Dargwa: roots ending in *-l/li/la*, *-n/ni/na* replace this with OBL.SG *-j-* (van den Berg 2001: 17)
- Tabasaran (Lezgif): some lexically conditioned variants are found, but PL.ABS has the default form *-jir* after V and *-ar* after C (Alekseev & Shikhalieva 2003: 36)
- Bagwalal (Andic): PL.ABS *-dari*, *-di* appear primarily after polysyllabic stems ending in a sonorant: *-dari* especially after /n/, /b/, and *-di* after /l/. But this is a one-way relationship, cf. *tuxtur* 'doctor', PL.ABS *tuxtur-a:ri* (Daniel 2001: 133f.)

# Types of conditioning

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## Semantic

Again, semantics is never taken to be the *only* relevant factor, but in some languages it clearly plays some role.

- in Godoberi, PL.ABS *-e* is usual with animates: *unsa* 'ox', *uns-e* 'oxen'; but some *young* animates take *-i/ubedi*: *wašo* 'son', *waš-ibedi* 'sons' (Kibrik 1996: 13)

EC gender assignment is also heavily semantic, and gender can be relevant too.

- Andi *c':e* 'guest' may be masculine or feminine, but the SG.OBL is more complex:
  - for a male guest, the SG.OBL form is *c':e-š:u-*
  - for a female guest, the SG.OBL form is *c':e-lt:i-*

# Stem vacillation in a single lexeme

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A single lexeme may be able to inflect in different ways:

- Hunzib (Tsezic): van den Berg (1995: 39) reports that 7% of the nouns in her material take multiple SG.OBL markers, even in the speech of one consultant
- Ingush (Nakh): 'In everyday usage, variation is considerable. In addition, the declension classes are being simplified, with more and more nouns declining in the simple class 1 [i.e. SG.ABS=SG.OBL].' (Nichols 2011: 128)
- 'While in most Daghestanian languages a limited number of nouns is inflectionally versatile, some (especially Avaric) permit such variation quite regularly' (Kibrik 2003: 70)

But understandably, there is rarely precise information on the prevalence of this behaviour across the whole nominal lexicon.

# One lexical distribution in detail

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Authier (2009: 32-37) on SG.OBL formatives in the Kryz variety of Alik:

- **zero** : nouns highest in referentiality (*bubay* ‘father’, *Majlis* ‘personal name’); some monosyllabic words for places (*nik* ‘field’, *kum* ‘village’)
- **-a** : mass nouns (*muk* ‘ice’, *irac* ‘blood’); some body parts (*kil* ‘arm’)
- **-i** : includes *small* body parts (*sil* ‘tooth’, *siy* ‘mouth’, *ʰul* ‘eye’)
- **-Vrd** : only monosyllabic animals (*lem* ‘donkey’, *kis* ‘chicken’, *ziz* ‘ant’, *vak* ‘pig’)
- **-VI** : *inter alia*, more monosyllabic animals (*tʰutʰ* ‘fly’, *eb* ‘wolf’, *tsʰeʰ* ‘goat’)
- **-c** : vowel-final disyllables (*nisi* ‘cheese’, *saku* ‘stool’); borrowed words
- **-ci** : lexicalized compounds (*siupel* ‘moustache’ = ‘mouth-forehead’)
- ...

That is: semantics, phonology, morphology, and non-native status are all invoked.

## 4. Nominal stem formation beyond the noun

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In general, EC languages make it very easy to take an attributive modifier and use it as the head of a noun phrase.

Only a few languages require any special morphology on the ABS.SG substantive:

- Lezgian *qacu* ‘green’ – *qacu-di* ‘green one’ (Haspelmath 1993: 110)
- Ingush *diesha* ‘reading’ – *diesha-r* ‘someone reading’ (Nichols 2011: 225)

In most languages, a modifier can just undergo conversion directly.

- Batsbi *mos:i<sup>n</sup> bader* ‘bad boy’ – *mos:i<sup>n</sup>* ‘bad one’ (Holisky & Gagua 1994: 172)
- Andi *how* ‘this (masculine)’ – *how* ‘this one’, ‘he’ (Salimov 2010: 147)

But either way: how do languages inflect ‘secondary nominals’ like these?

# Specific behaviour by category / lexeme

Khinalug *du* ‘this’, when substantivized, operates as a 3<sup>rd</sup> person pronoun – clearly inflection here involves strong suppletion:

	SG				PL	
	I	II	III	IV	I-II	III-IV
Absolutive	<i>du</i>	<i>dä</i>		<i>ži</i>	<i>dur</i>	<i>žit</i>
Ergative	<i>buī</i>	<i>bī</i>	<i>sī</i>		<i>bozi</i>	<i>sedri</i>
Dative	<i>bu</i>	<i>bu</i>	<i>su</i>		<i>bozu</i>	<i>sedru</i>
Locative I	<i>bwax</i>	<i>bex</i>	<i>sex</i>		<i>bozix</i>	<i>sedrix</i>

(Ganieva 2002: 479)

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(Ganieva 2002: 479)

# Specific behaviour by category / lexeme

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In Hinuq, the universal PL.ABS *-be* and PL.OBL *-za-* are easily applied to secondary nominals too: *q'uya* 'other', *q'uya-za-de* *c'adaq* 'with others'. SG.OBL is more complex:

- participles and many substantivized adjectives have no SG.OBL marker, and attach case suffixes directly
- just a few adjectives use the marker *-a-*, e.g. *y-eg<sup>w</sup>ey-a-s* 'the small one's'
- all numerals have distinct absolutive and oblique stems, formed in different ways:
  - 'one' shows strong suppletion (*hes* / *se-da-*);
  - 'two' shows an unpredictable alternation in the root (*q'ono* / *q'<sup>w</sup>en-a-*);
  - all other numerals show a predictable alternation, e.g. 'three' (*ʈono* / *ʈo-ra-*)

# ‘Attributive declension’

But many EC languages have developed a distinct stem-formation process specially for secondary nominals, sometimes called ‘attributive declension’.

This pattern is observed in several Lezgian languages. For example, the Lezgian pattern below applies to substantivized: adjectives (*the green one*); genitives (*hers*); numerals (*the three of them*); participles (*the one eating*)...

Lezgian	SG	PL
Absolutive	- <i>di</i>	- <i>bur</i>
Oblique	- <i>da</i>	- <i>bur-u-</i>

(Haspelmath 1993: 110)

Agul	SG	PL
Absolutive	- <i>f</i>	- <i>t:ar</i>
Oblique	- <i>t:i</i>	- <i>t:ar-i-</i>

(Maisak 2014: 396)

# ‘Attributive declension’

The formatives required can depend on gender. Tsakhur (also Lezgetic) shows a system with a three-way distinction in the singular:

‘this (one)’	SG			PL	
	I	II	III-IV	I-II	III-IV
Absolutive	<i>mana</i>	<i>mana</i>	<i>man(a)</i>	<i>mam-mi</i>	<i>mam-mi</i>
Ergative	<i>man-G<sup>w</sup>-e:</i>	<i>man-G-e:</i>	<i>man-či-še:</i>	<i>mam-m-iš-e</i>	<i>man-či-še:</i>
Dative	<i>man-GU-s</i>	<i>man-Gi-s</i>	<i>man-či-s</i>	<i>mam-m-iši-s</i>	<i>man-či-s</i>

(Sosenskaya 1999: 200)

# ‘Attributive declension’

Andic has a particularly well-developed system. Every language in the branch has some close cognate of this inflectional behaviour from Andi, where gender-sensitive oblique marking applies to *all* substantivized modifiers (even ‘he, she, it’):

‘beautiful (one)’	SG		PL	
	I	II-V	I	II-V
Absolutive	<i>baʁu</i>		<i>baʁ-ol</i>	
Ergative	<i>baʁu-š-di</i>	<i>baʁu-l-d:i</i>	<i>baʁ-ol-u-di</i>	<i>baʁ-ol-i-di</i>
Dative	<i>baʁu-š:u-j</i>	<i>baʁu-l̥:i-j</i>	<i>baʁ-ol-u-j</i>	<i>baʁ-ol-i-j</i>

(Salimov 2010: 128)

# Origins of the attributive declension

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Harris (2010) suggests that these inflected forms in Avar-Andic descend from an earlier sequence of modifier + suppletive demonstrative:

*bavʉ* 'beautiful' + \**š:u-di* 'that(M).OBL-ERG' > *bavʉ-š-di* 'beautiful.one.ERG'

The problem is that no such demonstrative exists independently in Avar-Andic.

But this is exactly what we see synchronically in Khinalug (entries from Ganieva 2012):

*azallɨ* 'sick' + *bu-i* 'that(M).OBL-ERG' > *azallɨ-bu-i* 'patient.ERG'

*činä* 'one' + *bu-i* 'that(M).OBL-ERG' > *činä-bu-i* 'someone.ERG'

So do all such patterns in EC languages come from fusion with inflected demonstratives?

Are these all separate developments, or do they go back to a single source?

# Not only on attributives (1)

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In Avar-Andic, besides substantivized modifiers, this pattern even provides inflectional stems to some primary nouns. E.g. Andi:

**masculine:**        *Allahi* ‘God’, erg. sg. *Allahi-š-di*;

*hek’<sup>w</sup>a* ‘person’, erg. sg. *hek’<sup>w</sup>a-š-di*

**non-masculine:** *nusa* ‘bride’, erg. sg. *nusa-l-di*;

*hinc’o* ‘stone’, erg. sg. *hinc’o-l-di*                    (Salimov 2010)

This is why stem formation can sometimes mark gender on oblique nouns:

- *homolovi* ‘friend’ → *homolovi-š-di* ‘male friend’; *homolovi-l-d:i* ‘female friend’
- *c’:e* ‘guest’ → *c’:e-š-di* ‘male guest’, *c’:e-l-d:i* ‘female guest’

## Not only on attributives (2)

In Andi, the non-M marker **-I-** makes case-marking available to a wide range of syntactic items:

- (1) *[každoje xozjajstvo]-I-di*                      hoc'o-hoc'o-gu                      van=no                      b-i?oll-ija  
each                      household-SG.OBL-ERG                      ten-ten-NUM                      bread(IV)=ADD                      IV-bring-FUT  
'Each household brings ten breads.'
- (2) biha                      [...Hila=si-š:u-b                      Pač:ahiṭir-o-lo                      w-orč'un-nu]-I-č'u  
easy                      above=ATTR-SG.OBL-IV                      kingdom(IV)-SG.OBL-IN.LAT                      I-enter-INF-SG.OBL-CONT  
'...easier than to enter the Kingdom of the Almighty.'
- (3) [onš:i                      χ<sup>w</sup>ar-du=lo,                      hinc'-obil                      b-ač:un-nu=lo]-I-č'u...  
earth(IV)[SG.ABS]                      dig-INF=ADD                      stone(IV)-PL.ABS                      IV-PL/drag-INF=ADD-SG.OBL-CONT  
'(To relax is much nicer) than to dig earth and lug stones'.

# Summary

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- The nominal paradigm in East Caucasian has a distinctive ‘feel’, and one reason for this is its characteristic stem-formation behaviour
- Nominal morphology is far from being heavily fusional, but has complexities which take it beyond straightforward agglutinativity
- In particular, the widespread absolutive / oblique distinction is not ‘necessary’ – although we can clearly connect it with a syntactic distinction
- Against this backdrop, there is a large amount of variation both across and within languages
- This involves especially the *form* of stem markers; the principles of their *lexical distribution*; the *implicational patterns* in the paradigm; and the use made of an *attributive declension*
- Nominal stem-formation processes can apply beyond the noun, and arguably even to things which are not lexemes

Thank you for your attention!

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# References

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- Alekseev, Mikhail, and Sabrina Shikhalieva. 2003. *Tabasaranskij jazyk*. Moscow: Academia.
- Authier, Gilles. 2009. *Grammaire kryz : langue caucasique d'Azerbaïdjan, dialecte d'Alik*. Paris; Leuven: Peeters.
- Charachidzé, Georges. 1981. *Grammaire de la langue avar : langue du Caucase nord-est*. Saint-Sulpice de Favières: Jean-Favard.
- Chechuro, Ilya. 2018. Nominal morphology of Mehweb. In M. Daniel, N. Dobrushina, and D. Ganenkov (eds.), *The Mehweb language: Essays on phonology, morphology and syntax*. Berlin: Language Science Press, 39-73.
- Chumakina, Marina, Oliver Bond, and Greville G. Corbett. 2016. *Essentials of Archi grammar*. In O. Bond, G. G. Corbett, M. Chumakina, and D. Brown (eds.), *Archi: Complexities of agreement in cross-theoretical perspective*. Oxford: Oxford University Press.
- Creissels, Denis. 2013. Floating genitives and possessive framing in Northern Akhwakh. In A. Carlier and J.-C. Verstraete (eds.), *The genitive*. Amsterdam; Philadelphia: John Benjamins, 333-354.

- Daniel, Mikhail A. 2001. Imja suščestvitel'noe. In A. E. Kibrik, S. G. Tatevosov and K. I. Kazenin and E. A. Ljutikova (eds.), *Bagvalinskij jazyk. Grammatika, teksty, slovari*. Moscow: IMLI RAN, 127-150.
- Forker, Diana. 2013. *A grammar of Hinuq*. Berlin: De Gruyter Mouton.
- Forker, Diana. 2018. *A grammar of Sanzhi Dargwa*. Berlin: Language Science Press.
- Ganenkova, Dmitry. 2021. Person agreement with inherent case DPs in Chirag Dargwa. *Natural language and linguistic theory*. <https://doi.org/10.1007/s11049-021-09520-3>
- Ganieva, Faida A. 2002. *Xinalugsko-russkij slovar'*. Makhachkala: DNC RAN.
- Harris, Alice C. 2010. On the Fused Pronoun in Andi, Avar and Andian Languages. In F. Floricic (ed.), *Essais de typologie et de linguistique générale: Mélanges offerts à Denis Creissels*. Lyon: ENS Editions, 251-267.
- Haspelmath, Martin. 1993. *A grammar of Lezgian*. Berlin: De Gruyter Mouton.
- Holisky, Dee Ann, and Rusudan Gagaa. 1994. Tsova-Tush (Batsbi). In R. Smeets (ed.), *The indigenous languages of the Caucasus. Volume 4: The North East Caucasian Languages*. Delmar, NY: Caravan Books, 147-212.
- Kazenin, Konstantin I., and Jakov G. Testeleto. 1999. Struktura sostavljajuščix. In A. E. Kibrik (ed.), *Èlementy tsakhurskogo jazyka v tipologičeskom osveščanii*. Moscow: Nasledie, 314-346.

- Khalilova, Zaira. 2009. *A grammar of Khwarshi*. Utrecht: LOT.
- Kibrik, Aleksandr E. 1991. Organising principles for nominal paradigms in Daghestanian languages: Comparative and typological observations. In F. Plank (ed.), *Paradigms. The Economy of Inflection*. Berlin; New York: Mouton de Gruyter, 255-274.
- Kibrik, Aleksandr E. 1996. Stem formation. In A. E. Kibrik (ed.), *Godoberi*. Munich: Lincom Europa, 8-16.
- Kibrik, Aleksandr E. 2003. Nominal inflection galore: Daghestanian, with side glances at Europe and the world. In F. Plank (ed.), *Noun Phrase Structure in the Languages of Europe*. Berlin: De Gruyter Mouton, 37-112.
- Magomedbekova, Zagidat M. 1967. *Axvaxskij jazyk. Grammatičeskij analiz, teksty, slovar'*. Tbilisi: Mecniereba.
- Magomedova, Patimat T., and Rashidat Sh. Khalidova. 2001. *Karatinsko-russkij slovar'*. Makhachkala: Scriptorium.
- Maisak, Timur A. 2014. *Agul'skie teksty 1900–1960-x godov*. Moscow: Academia.
- Murkelinskij, Gadži B. 1971. *Grammatika lakskogo jazyka. Čast' 1 (fonetika i morfologija)*. Makhachkala: Dagestanskoe učebno-pedagogičeskoe izdatel'stvo.
- Nichols, Johanna. 2011. *Ingush Grammar*. Berkeley; London: University of California Press.

- Polinsky, Maria. 2015. *Tsez syntax: a description*. MS, Harvard University.
- Saidova, Patimat A. 2006. *Godoberinsko-russkij slovar'*. Makhachkala: DNC RAN.
- Saidova, Patimat A., and Magomed G. Abusov. 2012. *Botlikhsko-russkij slovar'*. Makhachkala: IJaLI.
- Salimov, Khangerej S. 2010 (1968). *Gagatlinskij govor andijskogo jazyka*. Makhachkala: IJaLI.
- Sosenskaya, Tat'jana B. (1999). Atributivnaja reprezentatsija. In A. E. Kibrik (ed.), *Èlementy tsakhurskogo jazyka v tipologičeskom osveščanii*. Moscow: Nasledie, 193-201.
- Tatevosov, Sergei G. 1996. Attributives. In A. E. Kibrik (ed.), *Godoberi*. Munich: Lincom Europa, 20-36.
- van den Berg, Helma. 1995. *A grammar of Hunzib (with texts and lexicon)*. Munich: Lincom Europa.
- van den Berg, Helma. 2001. *Dargi folktales: oral stories from the Caucasus with an introduction to Dargi grammar*. Leiden: Research school of Asian, African and Amerindian Studies, Universiteit Leiden.