





Background



What is a postposition?

"Adpositions may be defined as grammatical tools which mark the relationship between two parts of a sentence: one is the element which an adposition governs. It is traditionally called its complement and is mostly represented by a noun or noun-like word or phrase[...] The other part is an entity which either functions as the predicate of this sentence, or is a non-predicative noun."

(Hagège 2010:1)

Head-final (left-branching) languages typically have *postpositions*, i.e. adpositions that linearly follow their governed noun phrase (NP).

A quick reminder: nominal inflection in E-C

"Syntactic" cases*	Spatial "cases"**		
	Localization	Directionality	
ABSOLUTIVE [bare form]	IN [obl. stem + suffix]	ESSIVE [localization (+class suffix)]	
ERGATIVE [obl. stem (+ suffix)]	INTER [obl. stem + suffix]	LATIVE [localization + suffix]	
GENITIVE [obl. stem (+ suffix)]	CONT [obl. stem + suffix]	ELATIVE [localization + suffix]	
DATIVE [obl. stem + suffix]	SUPER [obl. stem + suffix]	TRANSLATIVE [localization + suffix]	
INSTRUMENTAL [obl. stem + suffix]	SUB [obl. stem + suffix]	DIRECTIVE [localization + suffix]	

^{*}The split is not always as straightforward as one might expect (see M. Daniel's lecture from Dec 1)

^{**}Not all E-C languages have a bi-morphemic organization of spatial inflection (ibid.)

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Note: a possible analysis of these systems is as bi-partite case systems distinguishing just direct (ABS) and oblique forms (all the rest), cf. Comrie & Polinsky 1998, Polinsky 2020, Testelec 2019, Lyutikova 2021 a.o. Under that view all suffixes attaching to the oblique stem are viewed as (clitic/incorporated) postpositions or relational nouns.

What we are discussing today are not these bound elements, but rather independent lexemes traditionally called postpositions in the grammars of E-C languages

E-C postpositions: key properties

- a relatively small class of lexemes, compared to Standard Average European *pre*positions
- most postpositional lexemes can be used adverbially, i.e. without a dependent NP
- many lexemes allow various forms of the dependent
 NP
- most postpositions (spatial and some temporal ones) inflect for directionality (also called orientation)
- → E-C postpositions are atypical and worthy of special consideration.

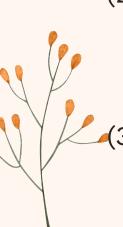


Morphological make-up

Attested etymological sources

Postpositions in E-C can be classified by origin as:

- (1) **Primary** (not derived from any other part of speech)
- (2) **Secondary**
 - derived from nouns (denominal)
 - derived from verb forms (deverbal)
 - cognate with (spatial and temporal) adverbs
 - B) Borrowed from other E-C or non-E-C languages



Attested etymological sources

- Primary: Avar folo 'for the sake of'
- Secondary
 - denominal: Hinuq močaː 'instead' (moč-aː place.IN 'in place')
 - deverbal: Ingush *laecaa* 'about, concerning' (*laec-aa* catch-CVB 'having caught')
 - cognate with adverbs: Rutul xura 'in front' (adverb and postposition)

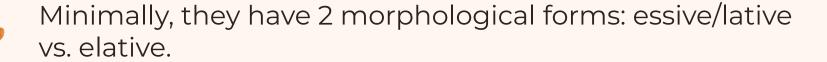
Borrowed from other E-C or non-E-C languages:

- Tsez sadaq 'with' < Avar cadaq 'with'
- Standard Dargwa *sababli* 'for, because of' < Arabic *sabab* 'cause'



Inflectional morphology: directionality

Most spatial postpositions inflect for directionality and potentially encode all the oppositions that are found on other 'spatials' (in the sense of M. Daniel) in the language.



We consider these as variants of one lexeme unless they are significantly semantically distinct or have different government properties.

Inflectional morphology: directionality

Directional forms of the postposition 'under' in various languages

language	branch	directional forms	source
Hinuq	Tsezic	geł (ESS), geł-es (ABL1), geł-zo (ABL2), geł-er (LAT), geł-edo (DIR)	Forker 2013: 379
Mehweb	Dargic	?u (LAT), ?u-b (ESS), ?u-b-adal (EL)	Magometov 1982: 126
Bagvalal	Andic	hiði (ESS), hiði-s: (EL), hiði-s:ini (TRLAT)	Sosenskaja 2001: 170
Lezgian	Lezgic	k'anik (ESS), k'anikaj (EL)	Haspelmath 1993: 219-220



Inflectional morphology: agreement

A number of East-Caucasian languages have several adverbs and postpositions that contain an agreement slot (suffixal, prefixal or both): they agree in class (gender) with the absolutive argument (and their dependent).



<i>školal–da</i> school.OBL–LOC		<i>jasał</i> girl.ERG		w–uχana M–beat.PST	
'The girl beat the b		_	-		
9	ask'o- r			r –uχana	
school.OBL-LOC	near- PL	girl.ERG	boys.ABS	PL -beat.PST	
'The girl beat the boy <u>s</u> up near the school.'					

Inflectional morphology: agreement



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Prefix agrees with ABS (Godoberi, Kibrik et al. 1996: 88)
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waša hamaχi-č'u w=oχut'u wu=na boy donkey-CONT M=after M=go.PST

'The boy went after the donkey'

Prefix and suffix agrees with ABS (Sanzhi Dargwa, Forker 2020: 155)

qal-la r-i-r=da

house-GEN F-in-F=1

'I (fem.) am inside the house.'

Prefix agrees with the dependent NP, suffix with ABS (Mehweb

Dargwa, courtesy of M. Daniel)

heš šara=g™a ʁir-**me**-la d-ajcana-b

this lake=PTCL rock-PL-GEN NPL-amidst-N

'This lake is amidst rocks.'

Inflectional morphology: agreement

Agreeing postpositions are found in languages of all branches of Nakh-Daghestanian except for Nakh and Khinalug.

- Avar-Andic: Avar (6)*, Rikvani Andi (1), Godoberi (4), Bagvalal (1)
- Dargwa:
 - suffixal: all
 - o prefixal and suffixal: Sanzhi (2), Kubachi (2), Mehweb (?)
- Lezgic: Tsakhur (2), Archi (1)
 - Tsezic: Khwarshi (2), Bezhta (1), Hunzib (1)

* Numbers in parentheses refer to the number of agreeing adpositions in the language





Syntactic properties



Syntactic properties of E-C postpositions

The core problem is how to separate postpositions from adverbs.

Many grammars consider postpositions together with a considerable fraction of spatial adverbs, and often call the group наречия-послелоги 'adverb-postpositions'

(see e.g. Zhirkov 1955 for Lak, Magometov 1965 for Tabasaran, Temirbulatova 2004 for Kajtak Dargwa, Saidova & Abusov 2012 for Botlikh)

Adverb-postpositions

In most languages adpositions seem to be quite easily distinguishable from adverbs since the former but not the latter require an argument.

However, in E-C languages most lexemes described as postpositions may appear without an NP dependent, similarly to adverbs.

Hinuq (Forker 2013: 156)

nuš:a (š:i-la) t:ura ag-ur=da

1PL village-GEN outside go.PFV-PRET=1

'We went out (of the village).'

Postpositions that require a dependent are few or absent.

Adverb-postpositions

Should we then single out postpositions as a separate category in E-C? Or are they just being labelled as such due to some descriptive tradition?

We contend that it is only possible to posit a special category of postpositions if these lexemes have properties that are not characteristic of adverbs.

Let us see the possible structures behind linear strings of the form NP + adverb-postposition in E-C

How do we deal with this issue?

Consider an utterance where we have a noun phrase in some form followed by an adverb that is claimed to have postpositional uses. Such a string may result from 3 different configurations:

- accidental adjacency → Adverb
- 2) juxtaposition of an adverb and an NP in a spatial form, specifying the location → **Adverb**
 - the lexeme governing the form of the NP (requiring it to bear a specific case or localization marker) →

Postposition

The availability of configuration 3 is the necessary and sufficient condition for postposition-hood.

Syntactic properties of E-C postpositions

1) Accidental adjacency

kura ruxa-d **lec'-ur-da** [**la-7** d-i?i-na] Kura 4.say.IPFV river-OBL-APUD up-LAT HPL-go.IPFV-CVB 'They went up past the river named Kura.' (Kina Rutul, field data)

2) One constituent, no government

b-e:-r-łā-χ b-uk'-ur **bes-ija-la**HPL-come-HPL-IPFV-CVB HPL-be-HPL mountain-OBL-SUP

č'ihi-s: hi⁄i'i up-EL down

'We started to come down from the mountain.' (Bagvalal, Kibrik et al. 2001: 764)

Postpositional phrase

lamp:učk:a **ust'u-la qari-b** kemq-un ca-b lamp table-GEN above-N hang-PRET COP-N 'The lamp hangs above the table.' (Sanzhi Dargwa, Forker 2020: 152)



How to diagnose government?

One can apply several formal tests:





- **adjacency to NP requirement:** Is it possible to separate the adverb-postposition and the NP by elements not belonging to the alleged PP?
- linear order: Is it strictly postpositional?



How to diagnose government?

test	yes	no
omission of the adverb-postposition	→ Adverb	→ Postposition
omission of the alleged dependent NP	→ Adverb	→ Postposition
adjacency to NP requirement	\rightarrow Postposition	→ Adverb
linear order: strictly postpositional?	→ Postposition	→ Adverb



u: 'above' (suppletive lative form la?)

- 1) *čaška isk'am-a (u:) ʁa-ni i* cup table-SUP above UP.be-CVB COP2 'The cup is on the table.'
- 2) (xuk-a:) u: ki-d eč-bir tree-SUP above CONT.be-ATTR apple-PL 'Apples that were above (on the tree).'
 - siw-a ві^srč la-? l-o<w>či-r mountain-SUP deer up-LAT UP-<3>jump.PFV-CVB 'Deer ran up the mountain.'
- 4) **u**: **gow-a** <u>zin-a-d</u> ses ru?u-r=a above ceiling-SUP genie-OBL-ATTR voice 4.come.IPFV-CVB=be 'Genie's voice comes from the ceiling.'

(field data by the HSE Rutul research team)

ǯibra 'following, after'

- 1) tɨla **iz-dɨ *(ʒɨbra)** q-ixu-r=a dog I-ATTR after RE-<3>appear.PFV-CVB=be 'The dog chased (lit. was after) me.'
- 2) **(ha-nuw-di) ǯibra** wtaroj gruzin hɨxɨ-r=a that-OBL-ATTR after second Georgian 1.go.PFV-CVB=be 'After (him), the second went Georgian.'
 - iz-di tila ğibra q-ixu-r=aI-ATTR dog after RE-<3>appear.PFV-CVB=be'The dog chased (lit. was after) me.'
 - #**ʒibra** [**iz-di** tɨla] q-ixu-r=a after I-ATTR dog RE-<3>appear.PFV-CVB=be 'Then my dog returned.'

(field data by the HSE Rutul research team)

wajire 'except for'

- 1) iz-dɨ χizan **šu-la** *(sajire) mu^rq^w-a d-iʔi
 I-ATTR family brother-SUPEL except village-IN HPL-COPI
 'My family, except for my brother, is in the village.'
- 2) iz-di $\chi izan$ *($\tilde{s}u$ -la) $\omega ajire$ $mu^{\varsigma}q'^{w}$ -a d-i?i I-ATTR family brother-SUPEL except village-IN HPL-COPI 'My family, except for my brother, is in the village.'
 - *iz-dɨ χizan **šu-la** mu^ςq'w-a **ʁajire** d-iʔi I-ATTR family brother-SUPEL village-IN except HPL-COPI
- 4) *iz-dɨ χizan κajire šu-la mu^ςq'w-a d-iʔi
 I-ATTR family except brother-SUPEL village-IN HPL-COPI
 (field data by the HSE Rutul research team)

		u: 'above'	<i>ǯɨbra</i> 'after'	<i>ваjire</i> 'except'
C	omission of the lexeme	yes	no	no
	omission of the alleged dependent	yes	yes	no
r	nust be adjacent to NP	no	no	yes
/	trictly postpositional inear order	no	yes	yes
r	esult	adverb	adverb-postposition	postposition
2	20 lexemes	6	10	4

The case of Tsez

Polinsky (2015: 105-114) suggests the following tests to distinguish postpositions and adverbs:

- adjacency to NP requirement: Is it possible to separate the adverb-postposition and the NP by elements not belonging to the alleged PP?
- omission of the adverb-postposition: Does it affect grammaticality and interpretation?
 - coordination (adverb coordination construction differs from the postposition coordination construction)

Polinsky systematically reports only on the results of the first test. The descriptions of other E-C languages contain even less data.

E-C postpositions: government properties

Across E-C grammatical descriptions we find items labelled as postpositions that take their dependent NP in all sorts of forms (some are said to govern some syntactic case, others to govern a spatial case form or several case forms).

"Syntactic" cases	Spa	atial "cases"	
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E-C postpositions: government properties

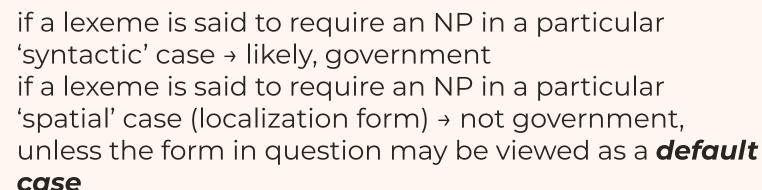
In principle, we only need to consider the government of lexemes that behave as postpositions (and, possibly adverb-postpositions) on our tests.

However, there is typically no access to such data for most languages.

E-C postpositions: government properties

Our guiding principles:

 if a lexeme is described as occurring with NPs bearing several different cases → not government, probably an adverb





E-C postpositions: default case

A case form may be considered a default/dedicated postpositional case if the majority of postpositions in a language require it on their nominal dependent.



In some E-C languages postpositions tend to govern a 'syntactic' case (e.g. DAT in Nakh, GEN in Lak, Kwarshi, Khinalug and several Lezgic and Dargic languages; possibly, ABS in Bagvalal and Itsari Dargwa).

In others we find a particular spatial 'case' form that co-occurs with postpositions of different semantics (e.g., SUPER and CONT in Avar-Andic).

Properties of postpositions proper

- not numerous (max 29% of all postposition-like lexemes, in Kina Rutul)
- borrowed lexemes (if present) tend to fall into this group
- these lexemes tend to have non-spatial meanings

→ Postpositions proper are apparently not characteristic of E-C languages

Properties of postpositions proper

language	branch	n of postp.	% of borrowings	governed cases	default case
Batsbi	Nakh	6	0%	Gen, All, Dat	Dat
Avar	Avar-Andic	1	0%	Dat	Super
Avar (Zaqatala)	Avar-Andic	2	0%	Super	Super
Hinuq	Tsezic	2	100%	Abs, abstract suffix	Loc
Khwarshi	Tsezic	2	100%	Super, Abs	Gen
Kina Rutul	Lezgic	4	100%	Gen, Dat, SupEl	Gen





Conclusions







Postpositions in E-C are a separate category

However, one has to bear in mind that

 not everything that is described as a postposition in E-C grammatical descriptions qualifies as such; at the same time, lexemes described as adverbs might behave as postpositions on the tests introduced above;

this category is rather small (especially if adverb-postpositions are excluded), much smaller than that of SAE prepositions it should probably only be compared to secondary prepositions of SAE, the function of primary SAE prepositions being fulfilled by case morphology in East Caucasian

→ it is not surprising that some generative linguists consider suffixes that attach to oblique stems to be postpositions (P-heads)



Comparing adpositions across languages

A more general point emerging from the above:

Whenever comparing adpositions across languages, one should also take the case system into account.

That is, the term *adposition* corresponds to members of language-specific categories which may not enable direct comparison.

Instead, one should either take a formal approach and compare the systems of **flagging** (that Haspelmath 2019 seems to advocate for) or more of a **semantically driven approach**, whereby what's compared is the encoding of localization and directionality meanings (similar in spirit to Kibrik 1970) or yet **develop a combination** of the two.





Thank you!







References

Comrie, B., & M. Polinsky. (1998). The great Daghestanian case hoax. In Anna Siewierska & Jae Jung Song (eds.). Case, Typology and Grammar: In Honor of Barry J. Blake, 95-114. Amsterdam: John Benjamins. Forker, D. (2013). A grammar of Hinug. Walter de Gruyter. Forker, D. (2020). A grammar of Sanzhi Dargwa. Berlin: Language Science Press. Hagège, C. (2010). Adpositions. New York: Oxford University Press. **Haspelmath, M. (1993).** A grammar of Lezgian. Berlin: Mouton de Gruyter. Haspelmath, M. (2019). Indexing and flagging, and head and dependent marking. Te Reo, 62(1 (Issue in Honour of Frantisek Lichtenberk)), 93-115. Kibrik, A. E. (1970). K tipologii prostranstvennyx značenij (na materiale padežnyx sistem dagestanskix jazykov) Towards a typology of spatial meanings: data from case systems of the languages of Daghestan]. In Jazyk i čelovek. Sbornik statej pamjati professora P.S. Kuznecova (OSiPL working papers, 4). Moscow: MGU. Kibrik, A. E., Tatevosov, S. G., & A. Eulenberg (eds.). (1996). Godoberi. Munich, Newcastle: LINCOM Europa. Kibrik, A. E., Kazenin, K. I., Lyutikova, E. A., & Tatevosov, S. G. (2001). Bagvalinskij jazyk: grammatika, teksty, slovari [The Bagvalal language: a grammar, texts, and dictionaries]. Moscow: Nasledie. Lyutikova, E. A. (2021). Soglasovanie po kosvennosti v dagestanskikh jazykakh: eskiz sintaksicheskoj modeli [Oblique agreement in Daghestanian languages: a sketch of a syntactic model]. In: Durqasi Xazna. Sbornik statej k 60-letiju R. O. Mutalova. Maisak, T. A., \$umbatova, N. R., Testelec, Ja. G. (eds.). Moscow: Buki Vedi.

References

Magometov, A. A. (1965). Tabasaranskij jazyk: issledovanie i teksty [The Tabasaran language: a grammar and texts]. Tbilisi: Mecniereba. Magometov, A. A. (1982). Megebskij dialekt darqinskogo jazyka: Issledovanie i teksty [Mehweb Dargwa: a grammar and texts]. Tbilisi: Mecniereba. Polinsky, M. (2015). Tsez syntax: A description. Ms., Harvard University, Cambridge, MA. Polinsky, M. (2020). Introduction. In Maria Polinsky (ed.) Oxford Handbook of Languages of the Caucasus. Oxford: Oxford University Press. Rudnev, P. (2020). Agreeing adpositions in Avar and the directionality-of-valuation debate. Linguistic Inquiry, 51(4), 829-844. Saidova, P. A., & M. G. Abusov (2012). Botlikhsko-russkij slovar' [Botlikh-Russian Dictionary]. Makhachkala: Dagestanskij nauchnyj centr Rossijskoj akademij nauk. Sosenskaja, T. B. (2001). Narechie i poslelog [Adverbs and postpositions]. In Bagvalinskij jazyk: Grammatika. Teksty. Slovari [The Bagvalal language: a grammar, texts, and dictionaries] (ed. Kibrik, A. E., et al.). Moscow: Nasledie. **Temirbulatova, S. M. (2004).** Khaidakskij dialekt darginskogo jazyka [Haidaq Dargwa]. Makhachkala. **Testelec, Ja. G. (2019).** Grammatika kosvennosti v dagestanskikh jazykakh [The grammar of obliqueness in Daghestanian languages. In Mezhdunarodnaya konferencija «Kavkazskije jazyki: tipologija i diakhronija» pam. M. E. Alekseeva. Institut jazykoznanija RAN, Moscow: Book of abstracts / Ed. I. G. Bagirokova, T. A. Majsak, Zhirkov, L. I. (1955). Lakskij jazyk: fonetika i morfologija [The Lak language: Phonetics and Morphology]. Moscow: Izd-vo Akademii nauk S\$\$R.