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Prominence hierarchies and indexing of oblique participants

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Acknowledgment

- This work is part of a long-term typological project on the interactions between head-marking (indexing) and dependent-marking (flagging) in the languages of the world.
- Some results have already been presented and published (Arkadiev 2011, 2013, 2016, 2024a,b,c, 2025), but still work in progress.

Acknowledgment

- Project “Typology of flagging in head-marking languages”, supported by a Marie-Curie senior fellowship at the Freiburg Institute for Advanced Studies (November 2023-August 2024).

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SFB 1252 PROMINENCE IN LANGUAGE

Roadmap

- What it is about
- Sample and distribution
- Indexed participants
- Role of prominence hierarchies
- Summary

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What it is about

- The terms dependent-marking and head-marking have been introduced by Nichols (1986), see also Lander & Nichols (2020).
- The terms flagging and indexing have been introduced by Haspelmath (2005), see also Haspelmath (2013, 2019).
- They serve as typologically-grounded extensions of such notions as “case-marking” and “verbal agreement” or “cross-reference”, respectively.
- Both are grammatical mechanisms central for the encoding of syntactic and semantic relations in many languages of the world.

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return=1PL.EX.SBJ=3PL.AVERS went
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spirit-AVERS biting-AVERS
'We turned back to avoid the spirits biting us.'

AVERS – aversive case, EX – exclusive, SBJ – subject

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- A phenomenon that has almost completely evaded the attention of typologists.
- Indexing is (unsurprisingly) believed to be restricted to core grammatical relations.
- Nichols (1986: 78): a hierarchy of construction types favouring head-marking:

  most likely — least likely

  governed > subcategorized > inner adverbials > outer adverbials
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- Indexing of non-subject (S/A) participants flagged differently from direct and indirect objects (P[atient], T[heme], R[ecipient]).
- In other words, double-marking (simultaneous flagging and indexing) of participants that are treated as oblique in a given language.
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Sample and distribution

- Language sample:
  - a representative convenience sample of languages showing double-marking of at least some non-subject (S/A) participants;
  - 188 languages from 72 families and 104 genera (including isolates);
  - the sample in purposefully not genealogically stratified, in order to capture family-internal variation;
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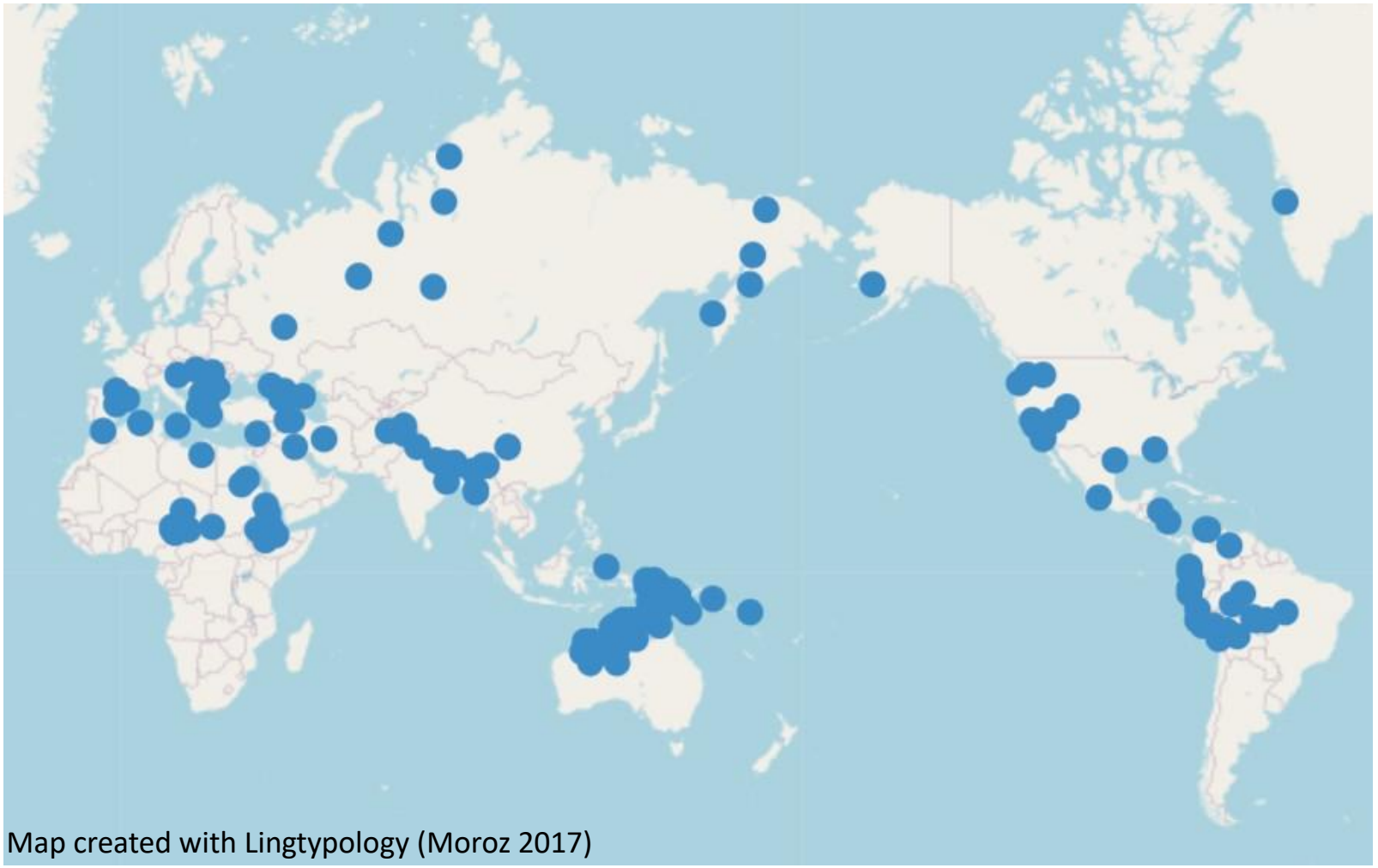

Map created with Lingtypology (Moroz 2017)

Sample and distribution

Indexing of obliques is attested in

- 53 languages (28%) of the sample;
- 34 genera (33%), 28 families (39%);
- in all macroareas, with a particularly high concentration in Australia and New Guinea

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Sample and distribution

area	attested		not attested	
	languages	genera	languages	genera
Africa	3	1	16	8
Asia	4	4	36	12
Europe	4	4	13	8
Australia	23	13	7	7
Oceania	13	8	32	25
N.America	1	1	15	9
S.America	6	5	15	12

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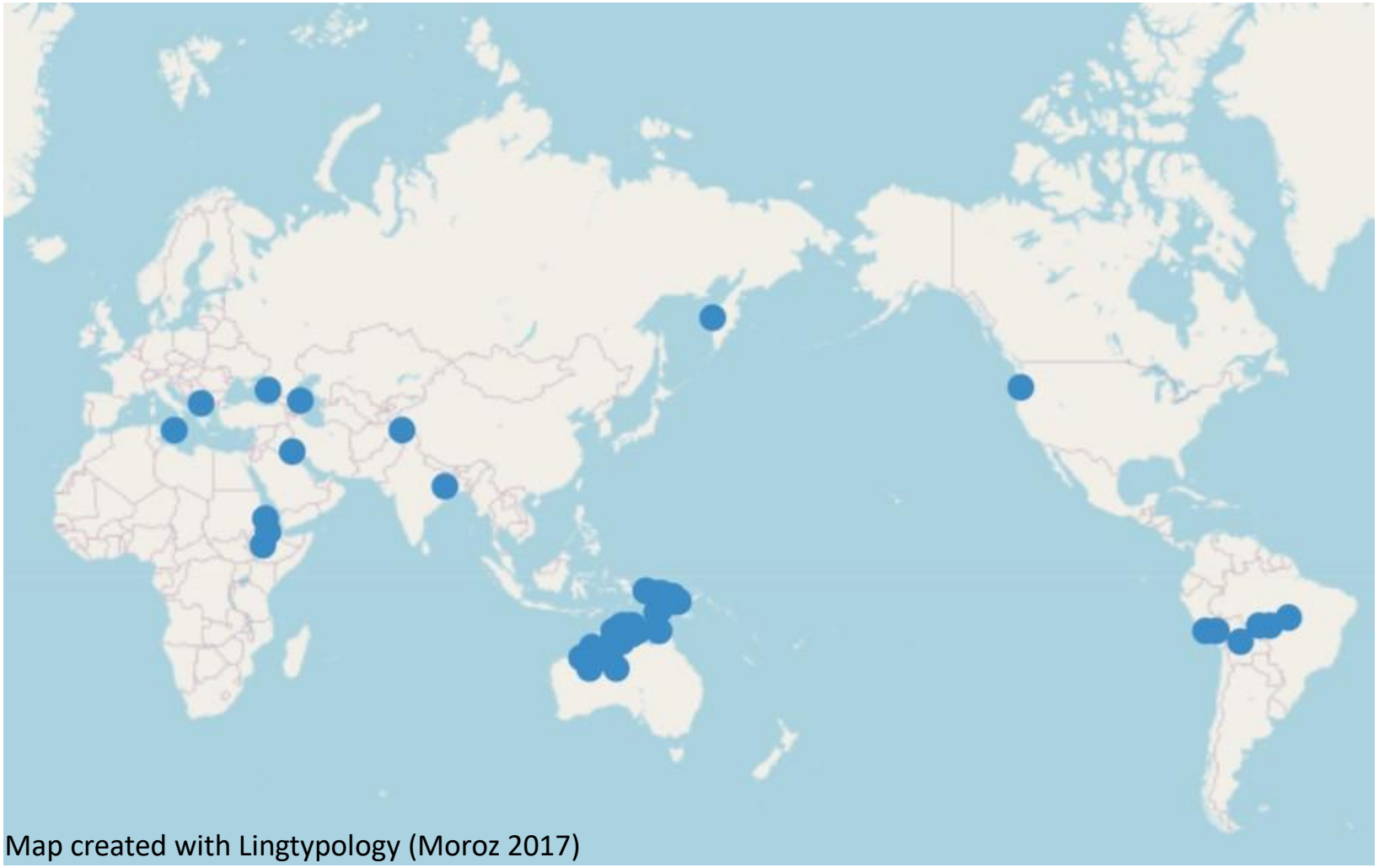

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Sample and distribution

- Number of distinct oblique flagging-types (“cases”) that can be indexed (two unclear cases excluded):

number	languages	genera	example
1	28	23	West Circassian
2	11	7	Amharic
3	6	4	Bilinarra
4	3	3	Ayacucho Quechua
5	3	3	Panará
6 or more	1	1	Tabasaran

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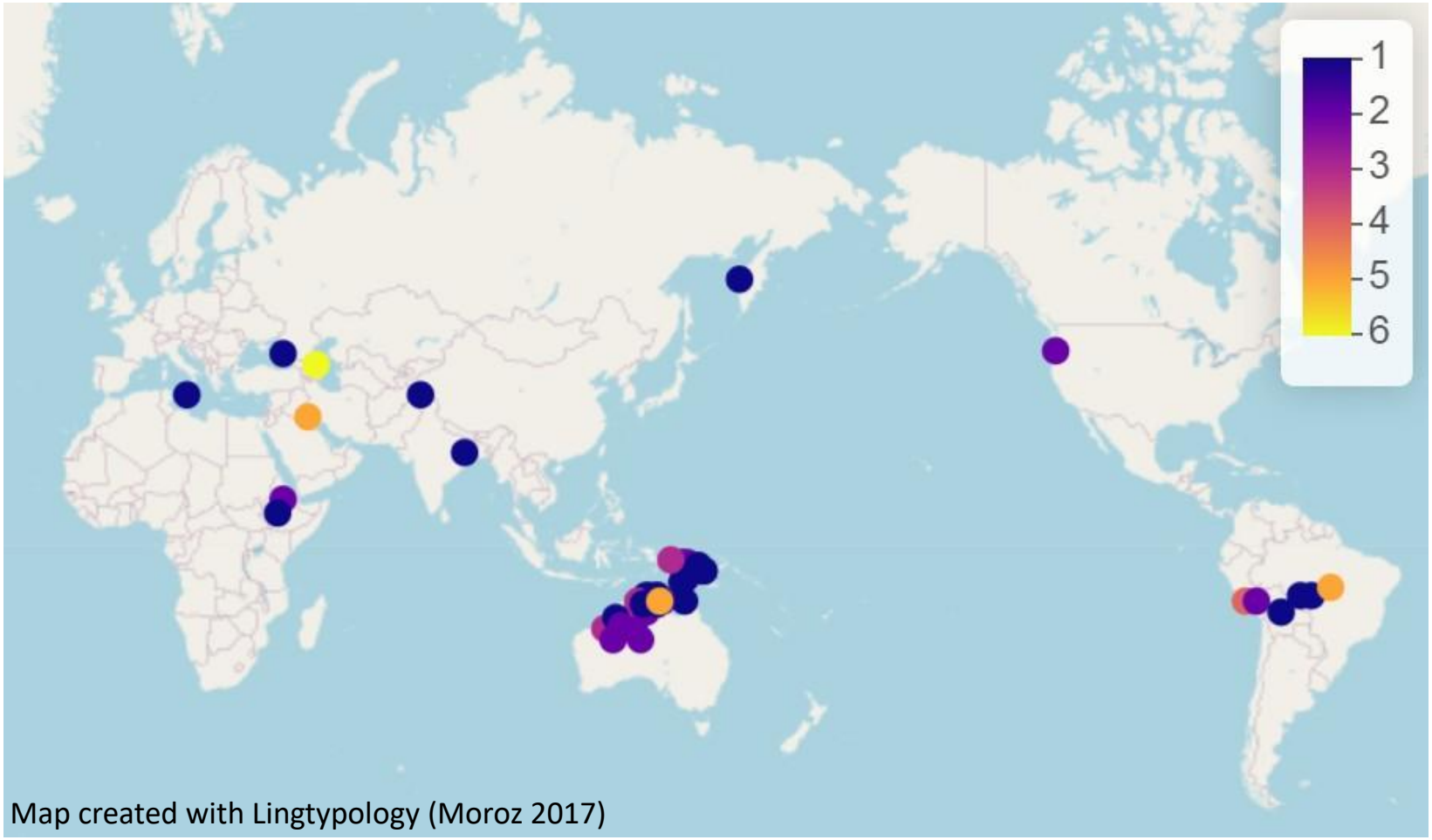

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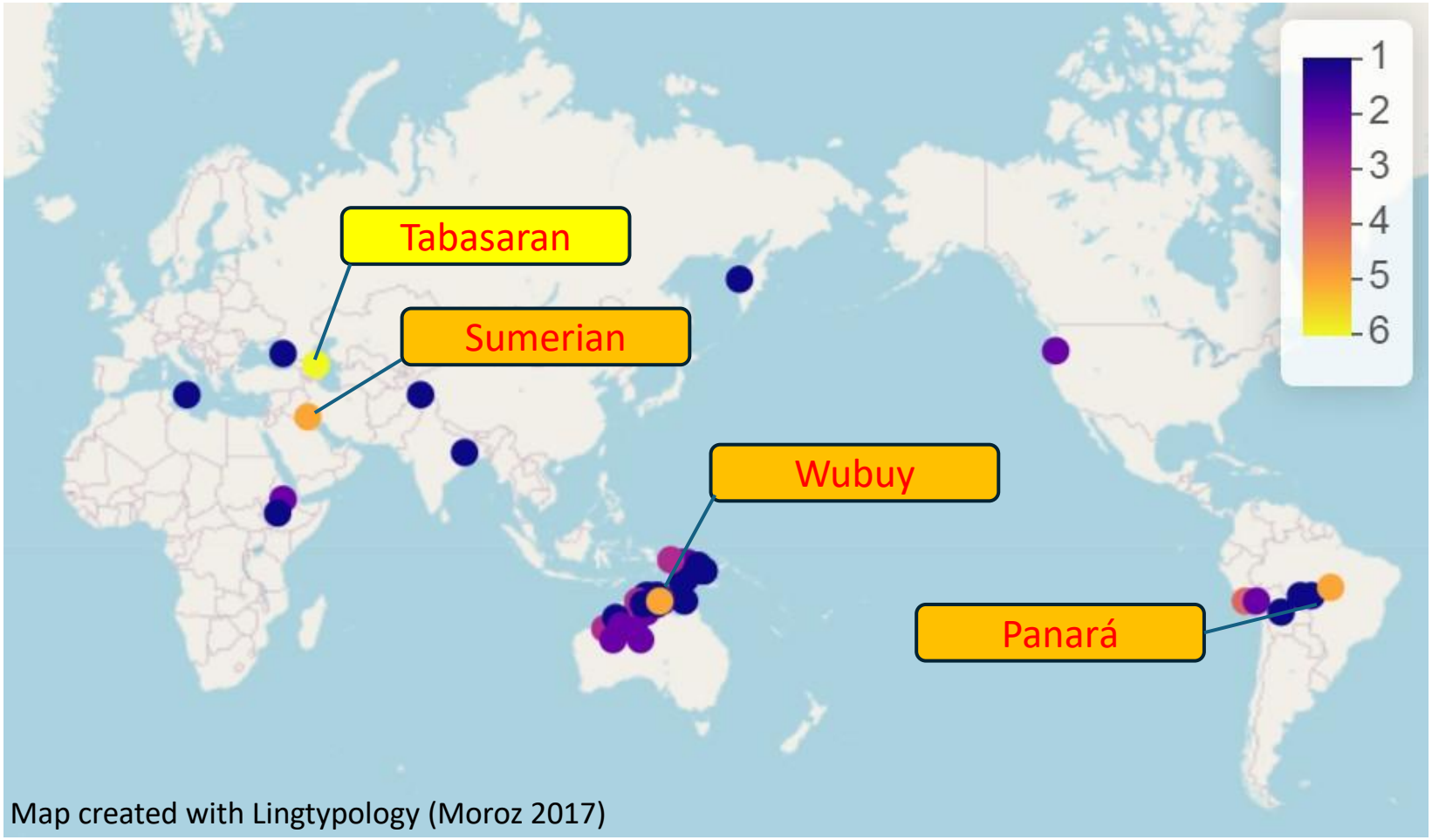

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- The absolute record:
  Tabasaran (Nakh-Daghestanian > Lezgic), where in principle any of the ca. 40 oblique and spatial cases can be indexed by suffixed pronominals (e.g. Bogomolova 2012, 2018):

(2) a. *uzu uvu-x-na ʁuˁ-ra=za=vu-x-na*.
1SG 2SG-APUD-LAT come-PRS=1SG.A-2SG-APUD-LAT
'I am going to you.' (Bogomolova 2018: 827)

b. *baj izu-q^h hitʼikʼ-nu-zu-q^h*.
boy.ABS 1SG-POST hide-AOR-1SG-POST
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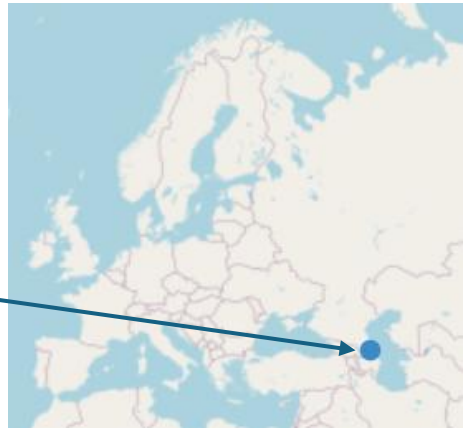

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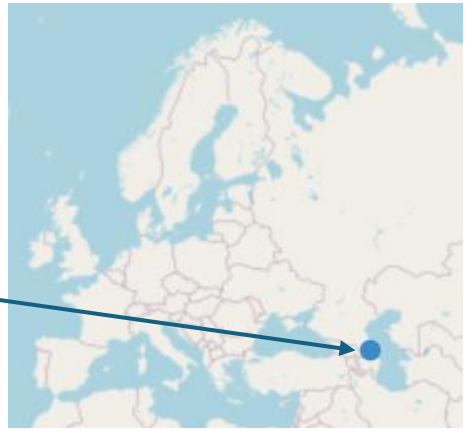

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A – agent, ABS – absolutive, AOR – aorist, APUD – localisation "at", LAT – lative, POST – localisation "behind", PRS – present tense

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Indexed participants

- Which semantic roles are obliquely flagged and simultaneously indexed?
- Not always easy to determine:
  - distinguishing between semantic roles can be notoriously difficult;
  - most descriptions do not provide enough material.

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Indexed participants

- beneficiary

Fore (Trans-New-Guinean > Kainantu-Gorokan, Papua New Guinea; Scott 1978: 112)

(3) *na-ba:-ném-pá‘-ti* *a-‘ta-y-e*
1SG-father-1SG-SG-ALLAT 3SG.O-put-3SG.S-IND
‘He puts it there for my father.’

ALLAT – allative, IND – indicative,
O – object, S – subject

Indexed participants

- maleficiary

Panará (Macro-Je > Je, Brasil; Bardagil-Mas 2018: 150).

(4) *kwakriti* *jy=ra=pêê=ty* *inkjẽ* *pêê*
spider.monkey INTR=1SG=MAL=die 1SG MAL
'My spider-monkey died (on me).'

INTR – intransitive, MAL – malefactive

Indexed participants

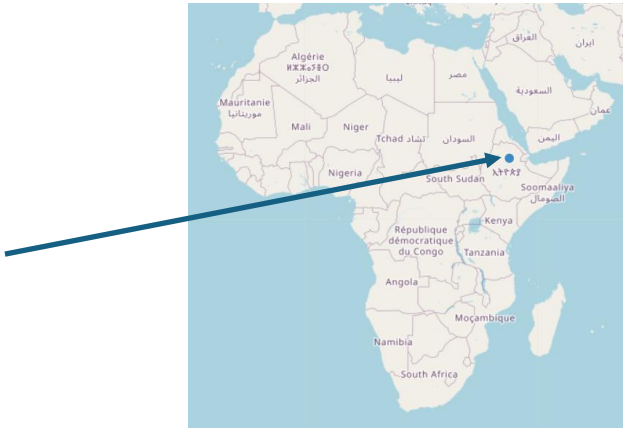
- comitative

Yurakaré (isolate, Bolivia; van Gijn 2005: 60):

(5) *më-jti* *lëtta-m* *ku-winani-shta-m* *mi-ye=tina*
2SG-LIM one-2SG.S 3SG.AO-walk-FUT-2SG.S 2SG-sister=COM
'You will be the only one that is going to live together with your sister.'

AO – applicative object, COM – comitative, FUT – future tense, LIM – limitive, S – subject

Indexed participants



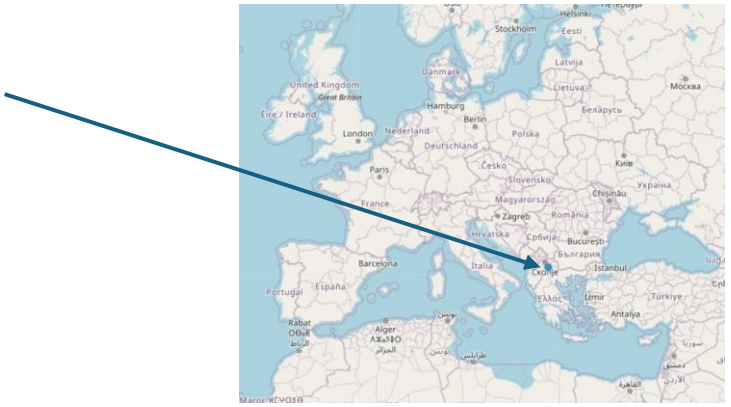
- instrument

Amharic (Afro-Asiatic > Semitic, Ethiopia; Leslau 1995: 430):

(6) *almaz* *b-addisu* *ərsasə-wa* *ṣaf-äčč-əbb-ät*
Almaz INS-new pencil-3SG.F write.PFV-3SG.F.S-INS-3SG.O
'Almaz wrote with her new pencil.'

F – feminine, INS – instrumental, O – object, PFV – perfective, S – subject

Indexed participants



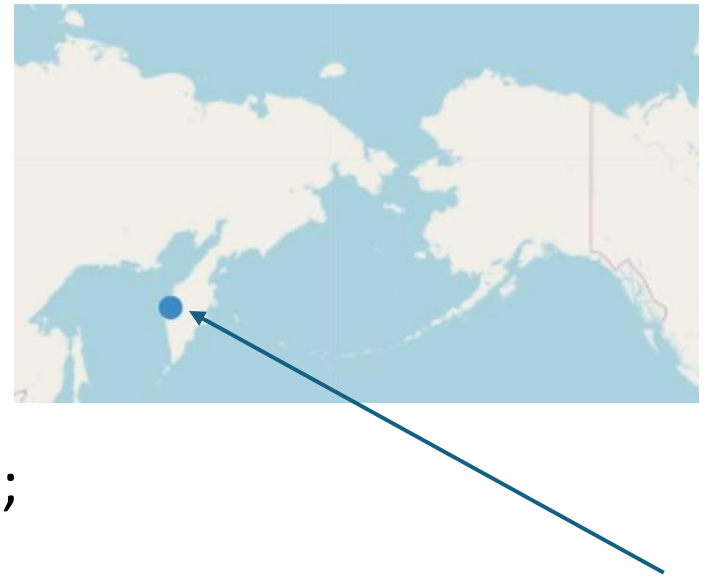
- spatial goal

Macedonian (Indo-European > Slavic; Lunt 1952: 108):

(7) *Naizlego-a* *gluvc-i* *i* *mu=pojdo-a*
come.out-AOR.3PL.S rat-PL and 3SG.M.IO=go-AOR.3PL.S
kaj *adži* *mačor-ot...*
to Haji cat-DEF
'The rats came out in crowds and went to Haji Cat...'

AOR – aorist, DEF – definite, IO – indirect object, M – masculine

Indexed participants



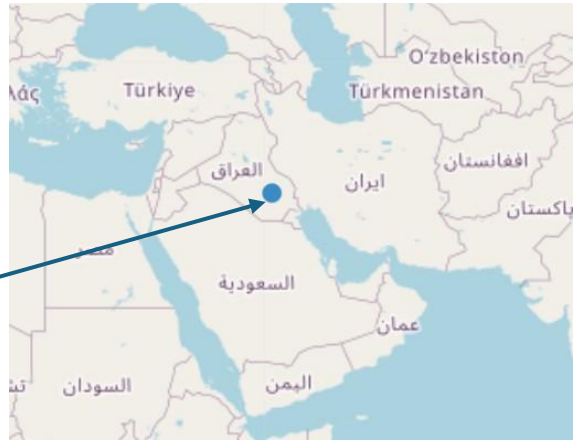
- location

Itelmen (Chukotko-Kamchatkan, Russia; Bobaljik & Wurmbrand 2002: 23)

(8) *nt-čaja-kinen* *ənna-nk*
1PL.S-drink.tea-3SG.OBL 3SG-LOC
'We had tea at/by him (at his place).'

LOC – locative, OBL – oblique

Indexed participants



- spatial source

Sumerian (isolate, Ancient Near East; Jagersma 2010: 457):

(9) *anše=ta* *udu=ta* *ú.du.l=be*
donkey=ABL sheep=ABL shepherd=3SG
ʔi-b-ta-n-ru.
PREF-3N.IO-ABL-3SG.A-eject
'From the donkeys and sheep, he dismissed their shepherds.'

A – agent, ABL – ablative, IO – indirect object, N – neuter, PREF – prefix

Indexed participants

- topic of speech

Ayacucho Quechua (Quechuan, Peru; Parker 1969: 95):

(10) *ñuqa-manta* *rima-wa-n*
1SG-ABL speak-1SG.O-3SG.S
'He talks about me.'

Indexed participants

role	languages	genera
bene/maleficiary	38	23
goal	18	14
location	16	7
source	13	8
comitative	11	7
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That the bene/maleficiary is by a large margin the most frequently indexed oblique relation is unsurprising given its strong correlation with animacy (see further)

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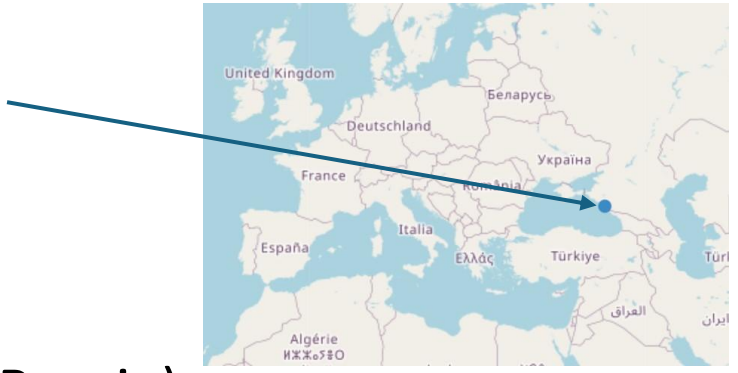


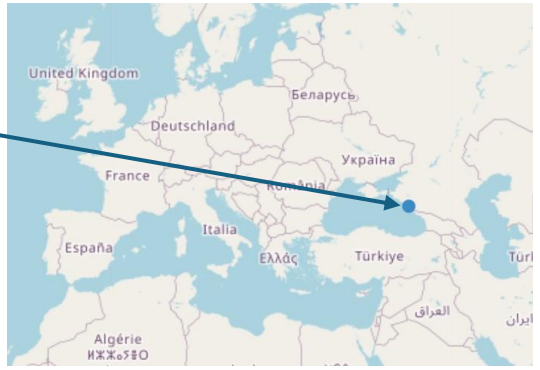
West Circassian (Northwest Caucasian, Russia):

(11) a. *ja allah, se qə-s-fe-ʁeʁʷ*
PTCL God 1SG CSL-1SG.IO-BEN-forgive/IMP
'Oh God, forgive me.' (Quran 38:35, AdCorp)

b. *se-šʼ paje s-fe-w-e-ʁe.ŝʷe.žʼə*
1SG-OBL for 1SG.IO-BEN-2SG.A-PRS-preserve
'[When you see beautiful and sweet things,] you keep (them) for me.' (Lander 2015: 21)

BEN – benefactive, CSL – cislocative, IMP – imperative,
OBL – oblique case, PTCL – particle

Indexed participants



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The default encoding for a pronominal applicative object (if expressed at all) is the unmarked form of the pronoun

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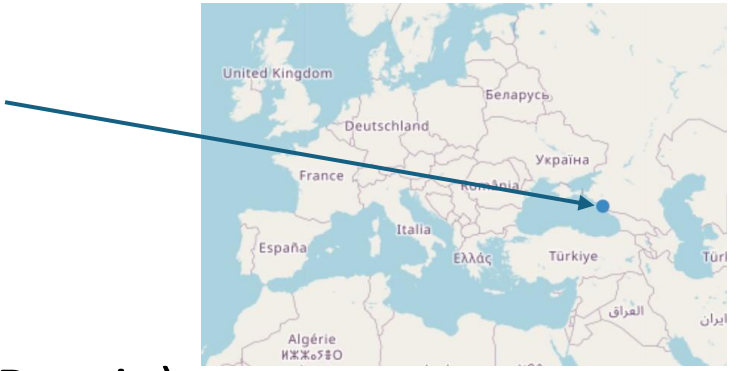

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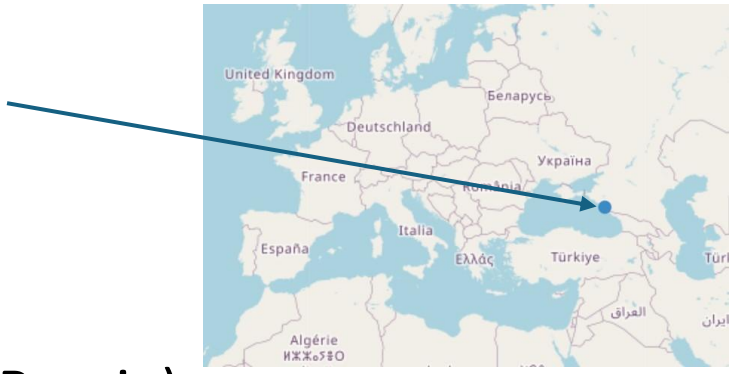

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(11) a. *ja allah, se qə-s-fe-ʁeʁʷ*
PTCL God 1SG CSL-1SG.IO-BEN-forgive/IMP
'Oh God, forgive me.' (Quran 38:35, AdCorp)

b. *se-šʼ paje s-fe-w-e-ʁe.ŝʷe.žʼə*
1SG-OBL for 1SG.IO-BEN-2SG.A-PRS-preserve
'[When you see beautiful and sweet things,] you keep (them) for me.' (Lander 2015: 21)

BEN – benefactive, C
OBL – oblique case, P

Elaborate marking by means of the purposive postposition is a rare option admittedly used for special emphasis; attested in texts but hardly mentioned in descriptions

Roadmap

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- Indexing of obliques is cross-linguistically sensitive to the same prominence hierarchies of person, animacy, referentiality and topicality as the better-known phenomena of differential object flagging and differential object indexing.

(12) a. 1, 2 person > 3 person
b. human > non-human animate > inanimate
c. definite > specific indefinite > non-specific
d. topic > focus

Silverstein 1976, Siewierska 2003, Aissen 2003, Iemmolo 2011, Haig 2018, Just 2022, Heusinger et al. 2024, Walker & van Lier 2026 etc.

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- This sensitivity reveals itself in two ways:

1. In most languages of my sample, only oblique participants high on some prominence hierarchy are eligible for indexing.
2. The range of semantic relations (beneficiary, maleficiary, comitative, goal) that participate in oblique indexing cross-linguistically aligns with prominence, in particular, with animacy.

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- person

Ayacucho Quechua (Quechuan, Peru; Parker 1969: 71, 42): indexing only for 1st and 2nd person objects

(13) a. *ñuqa-paq rima-pu-wa-n-qa*
1SG-BEN speak-BEN-1SG-3SG-NPRS
'He will speak for me (in my stead or in my behalf).'

b. *amigu-m-paq=mi rima-pu-n-qa*
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Role of prominence hierarchies

- animacy

Nyangumarta (Pama-Nyungan > Desert Nyungic; Sharp 2004: 333):

(14) a. *Karnti-nyi-li* *yawarta-nga*.
climb-NFUT-3SG.OBL horse-LOC
'He climbed onto the horse.'

b. *Partany karnti-nyi* *mungka-nga.*
child climb-NFUT tree-LOC
'The child climbed the tree.'

LOC – locative case, NFUT – non-future,
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- definiteness

Amharic (Amberber 2024: 267-268):

(15)a. *aster bə-billawa-w dabbo-w-ɨn k'orrət'-əttʃ-ɨbb-ət*
Aster INS-knife-DEF bread-DEF-ACC cut/PFV-3SG.F.S-INS-3SG.O
'Aster cut the bread with the knife.'

b. *aster dabbo-w-ɨn bə-billawa k'orrət'-əttʃ(-ɨw)*
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Note also the relative order of instrument and theme in (15a) and (15b)

ACC – accusative, DEF – definiteness, F – feminine, INS – instrumental, M – masculine, O – object, PFV – perfective, S – subject

Role of prominence hierarchies

- topicality

Manambu (Ndu, Papua New Guinea; Aikhenvald 2008: 62, 365):

(16) a. *wun* *a-də* *yab-a:r* *yi-tua-d*
1SG DIST-SG.M road-ALLAT go-1SG.S-3SG.M.B
'I went towards this road (that we are talking about).'

b. *təp-a:r* *yi-di*
village-ALLAT go-3PL.B
'(having done so-and-so) they went to their village.'

ALLAT – allative, B – basic index set,
DIST – distal demonstrative,
M – masculine, S – subject index set

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Role of prominence hierarchies

- Prominence also plays an important role in the diachronic emergence of oblique indexing, which commonly arises from “pronominal doubling” of salient discourse participants (Givón 1976 and subsequent literature).

Role of prominence hierarchies

Tabasaran (Nakh-Daghestanian > Lezgic; Russia) presents a clear case of a relatively recent development of this type (Harris 1994; Bogomolova 2012, 2018):

- person agreement only with 1st and 2nd person arguments;
- obligatory for S/A, optional for other participants and only when the participant "makes a significant contribution to the situation" (Bogomolova 2018: 826);
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Role of prominence hierarchies

Tabasaran (Bogomolova 2018: 825): partial paradigm of free pronouns and person indexes

case	free 2Sg	verbal index 2Sg
dative	*uvu-z*	*=vu-z*
apud(essive)	*uvu-x*	*=vu-x*
post(essive)	*uvu-q*	*=vu-q*
super(ess)	*uvu-ʔin*	*=vu-ʔin*
apudlative	*uvu-x-na*	*=vu-x-na*

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Summary

- Indexing of obliquely-marked participants is an infrequent phenomenon, but it is attested in a considerable number of language families all over the world.
- Highly systematic in some languages (e.g. Pama-Nyungan, Manambu), clearly marginal in others (e.g. West Circassian, Yurakaré).
- Oblique indexing seems to be found across groups of closely related languages (e.g. Ngumpin-Yapa subgroup of Pama-Nyungan, Southern Quechua or Ethiosemitic) as well as to undergo areal spread (e.g. Northern Australia).

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Summary

- Like other types of indexing, oblique indexing tends to be systematically related to prominence hierarchies, being in most cases restricted to highly animate participants.
- This correlates well with the range of semantic roles particularly prone to oblique indexing, i.e. bene/maleficiary, animate locations and comitative.
- Unsurprising given that these factors are known to constrain indexing in general (Just 2022, Haspelmath 2026, Walker & van Lier 2026), both synchronically and diachronically.

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Summary

- The phenomenon, which has been largely neglected by typologists, clearly deserves further typological and diachronic investigation.

Thank you for your attention!
Danke für Ihre Aufmerksamkeit!

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