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Indexing of oblique participants: a preliminary typology

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tinyurl.com/INDOBL2025

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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), but still work in progress.

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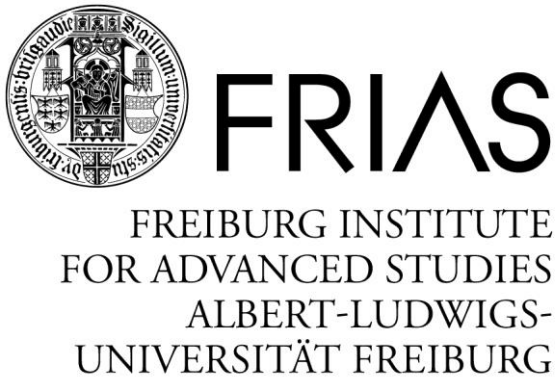
Acknowledgment

- 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).



- Project “Prominence hierarchies and the double-marking of objects” supported by a three-months senior fellowship at the SFB 1252 “Prominence in Language”, University of Cologne (September-November 2024).

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Roadmap

- What it is about
- Sample and distribution
- Indexed participants
- Role of prominence hierarchies
- Possible diachronic origins
- Discussion

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What it is about

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Pintupi (Pama-Nyungan > Desert Nyungic; Hansen & Hansen 1978: 61)

(1) *ma̲laku=latju=tjanampalura* *pitjangu*
return=1PL.EX.SBJ=3PL.AV went
ma̲lpu-ngkamarra *patjal-tjakumarra*
spirit-AV biting-AV
'We turned back to avoid the spirits biting us.'

AV – avoidance case, EX – exclusive, SBJ – subject

What it is about

- 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
- Still, indexing of obliquely-marked participants is attested across the languages of the world.

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- Indexing of non-subject (S/A) participants flagged differently from objects (P, T, R).
- In other words, double-marking (simultaneous flagging and indexing) of participants that are treated as oblique in a given language.
- Semasiological approach: from form to meaning.

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Excluded:

- various “non-canonical” roles encoded in the same way as core participants, e.g. experiencers, inanimate causes etc.
- cases where a peripheral participant is promoted to core status (e.g. by an applicative) and hence indexed and flagged in the same way as P (or, more rarely, R);
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- 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);
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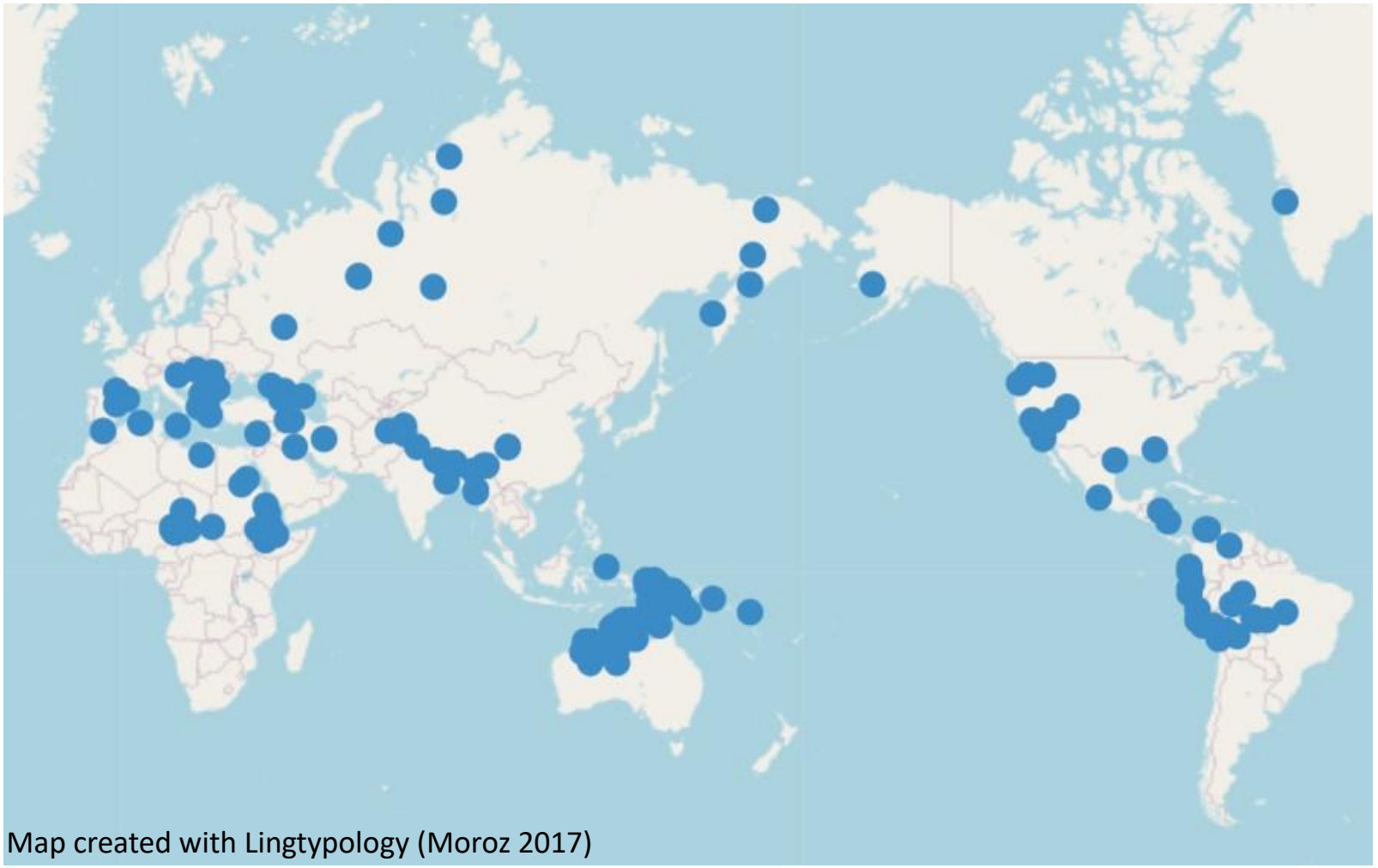

Map created with Lingtypology (Moroz 2017)

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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area	yes		no	
	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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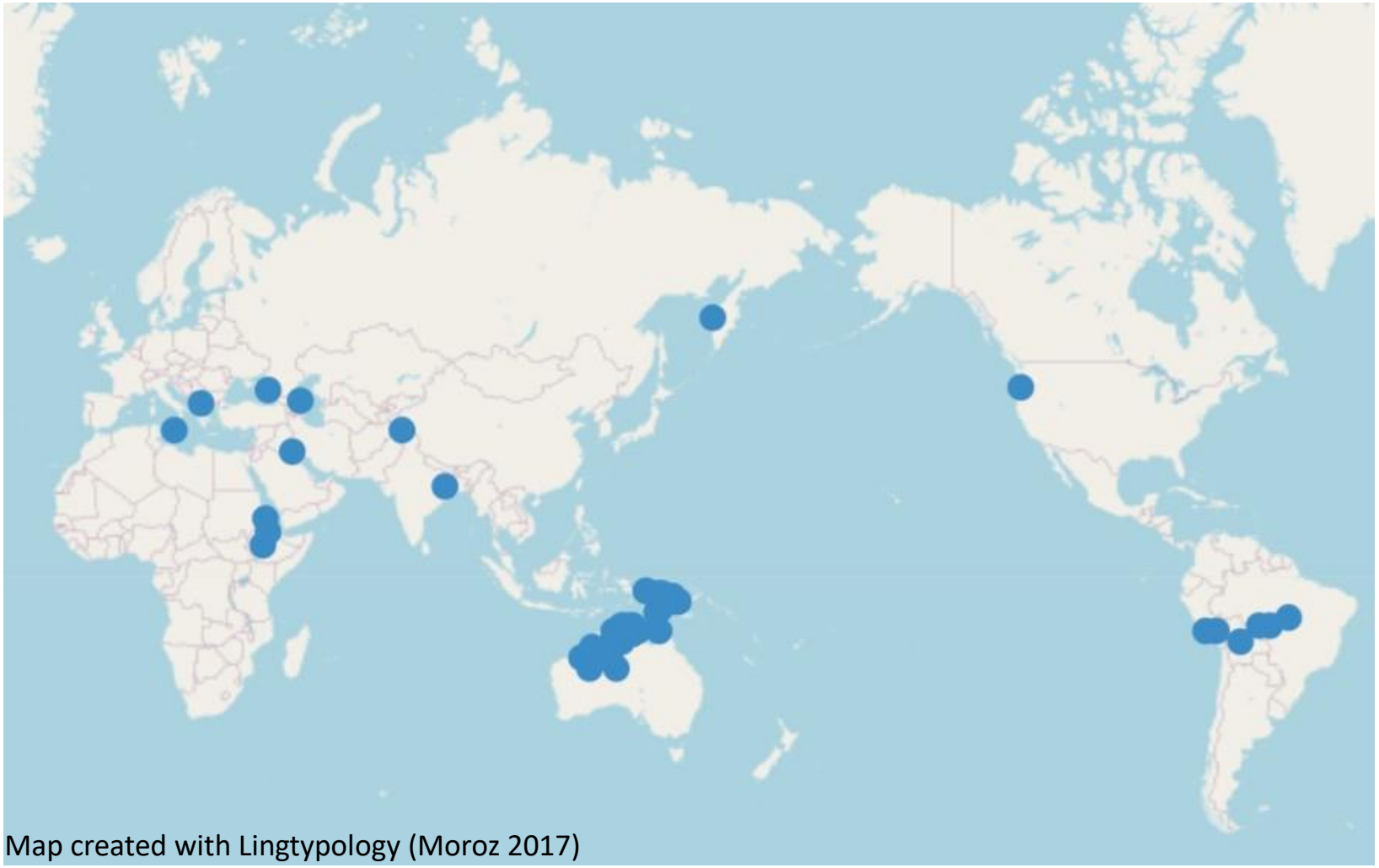

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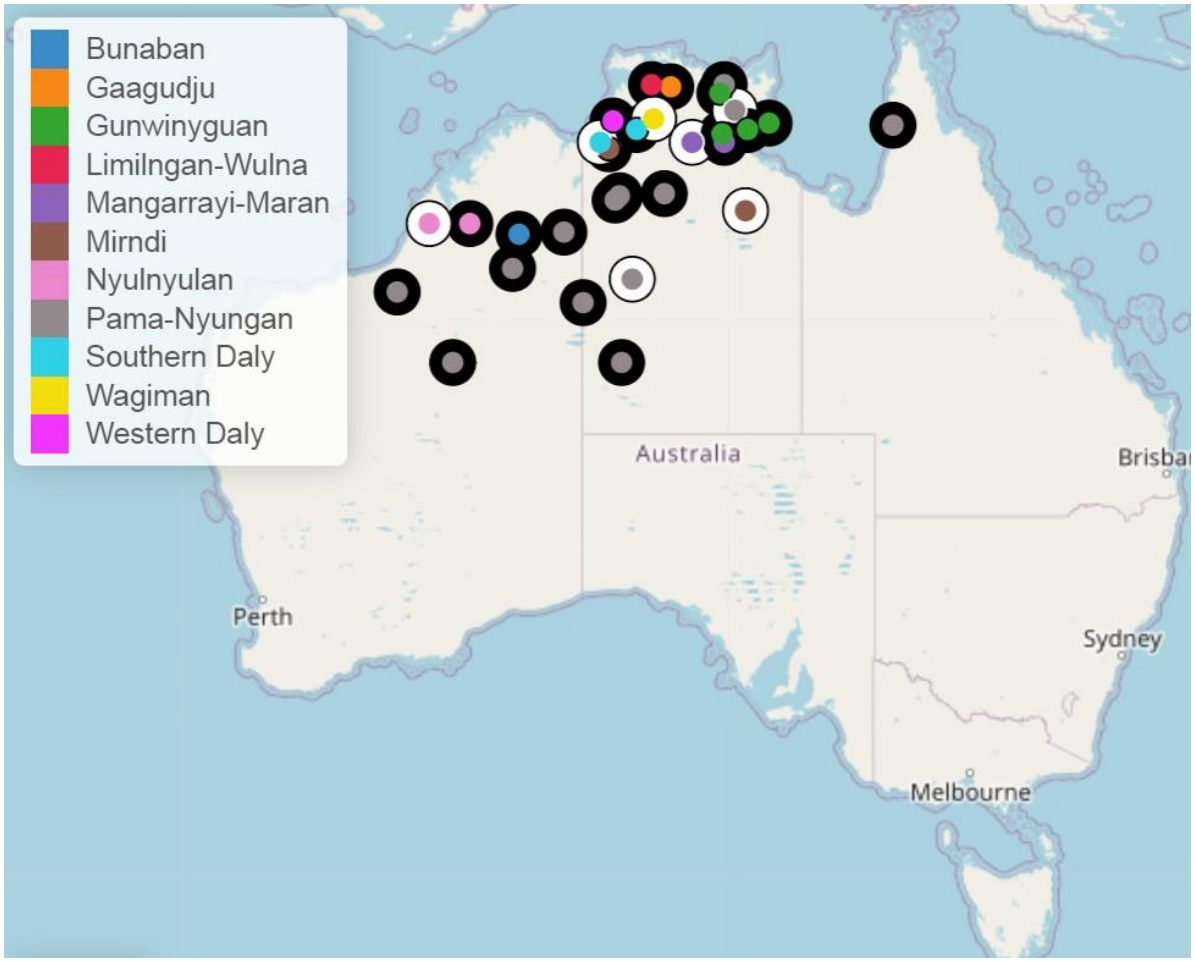

Gooniyandi
Gaagudju
Anindilyakwa
Ngalakan
Ngangi
Wubuy
Limilngan
Mara
Jaminjung
Nyigina
Bilinarra
Djaru
Djinang
Gurindji
Kuku Nganhcara
Mudburra
Ngardi
Nyangumarta
Pintupi
Walmatjarri
Wangkajunga
Ngangityemerri
Marithiel

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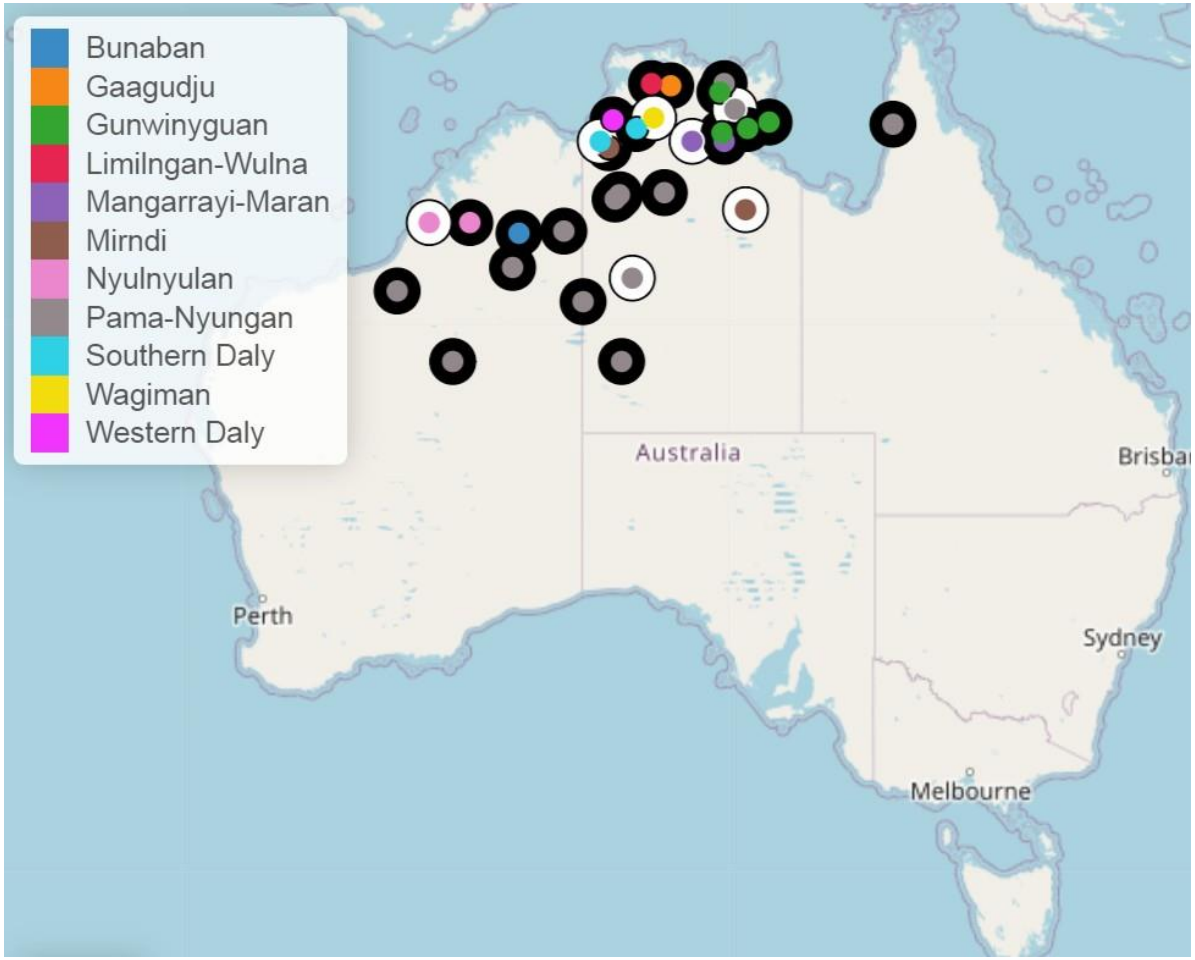
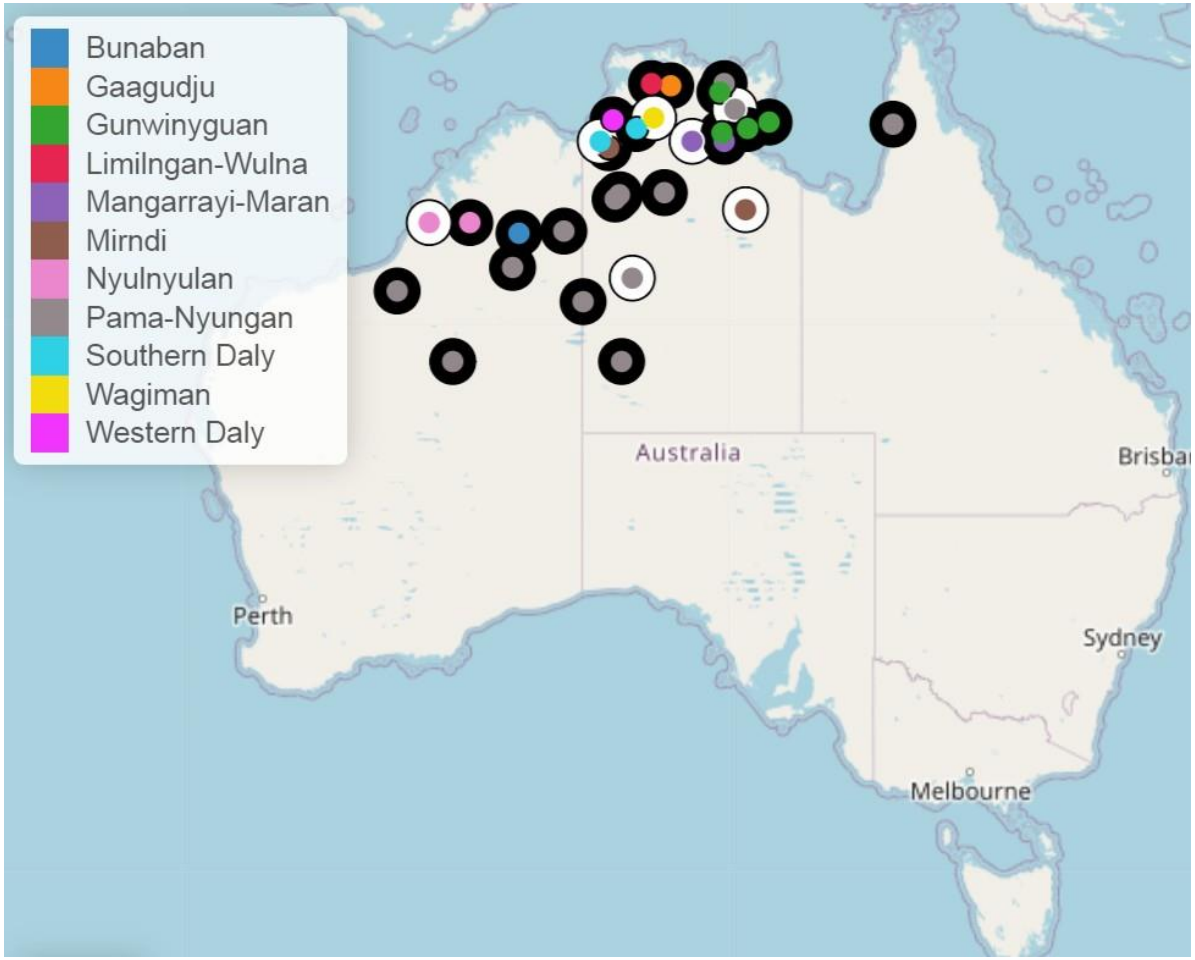


A clear areal feature transcending the borders of language families

Sample and distribution



A clear areal feature transcending the borders of language families

Particularly well-attested in the Pama-Nyungan languages of the North(-West), cf. Ennever & Browne 2023

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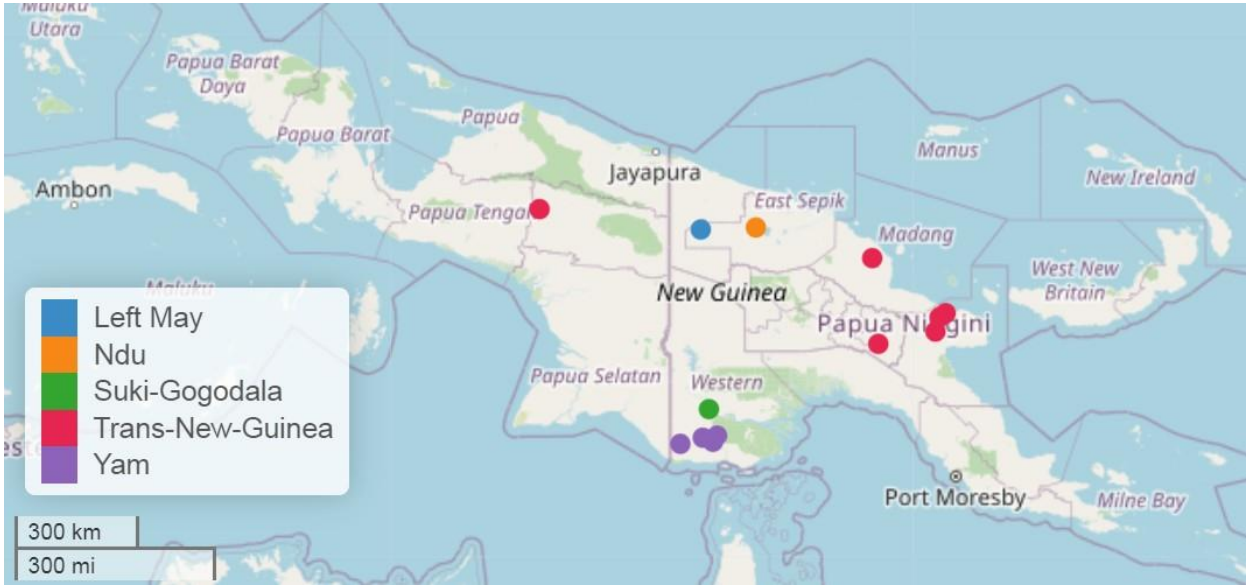

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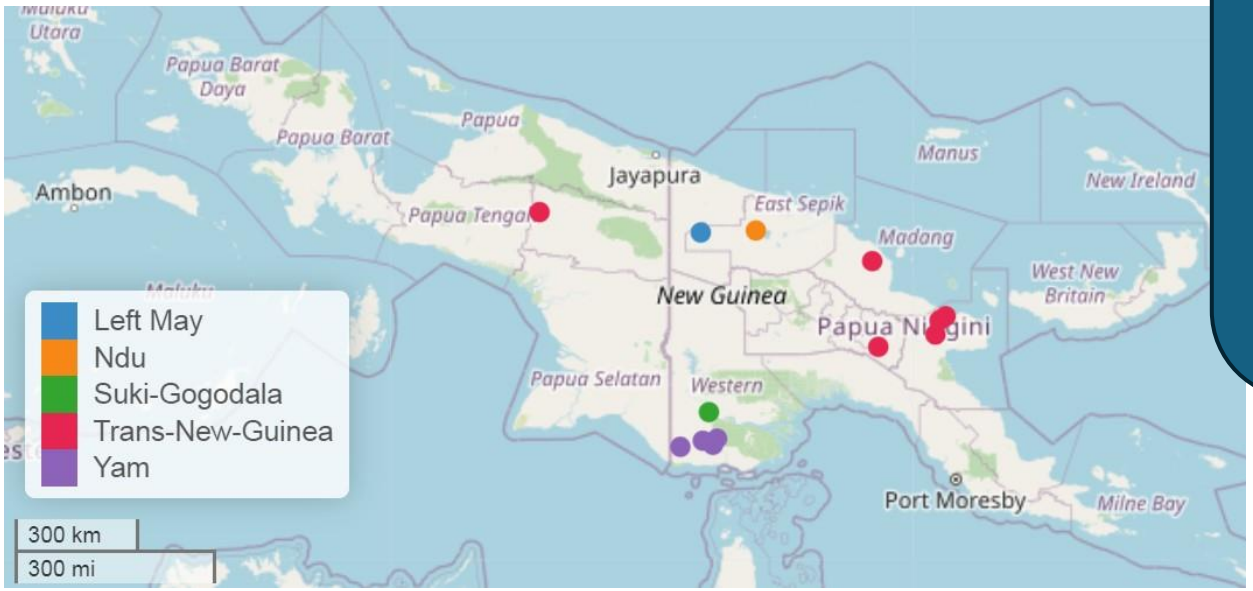

No clear areal patterning in New Guinea, but oblique indexing is attested in different families as well as different branches of the Trans-New-Guinea phylum

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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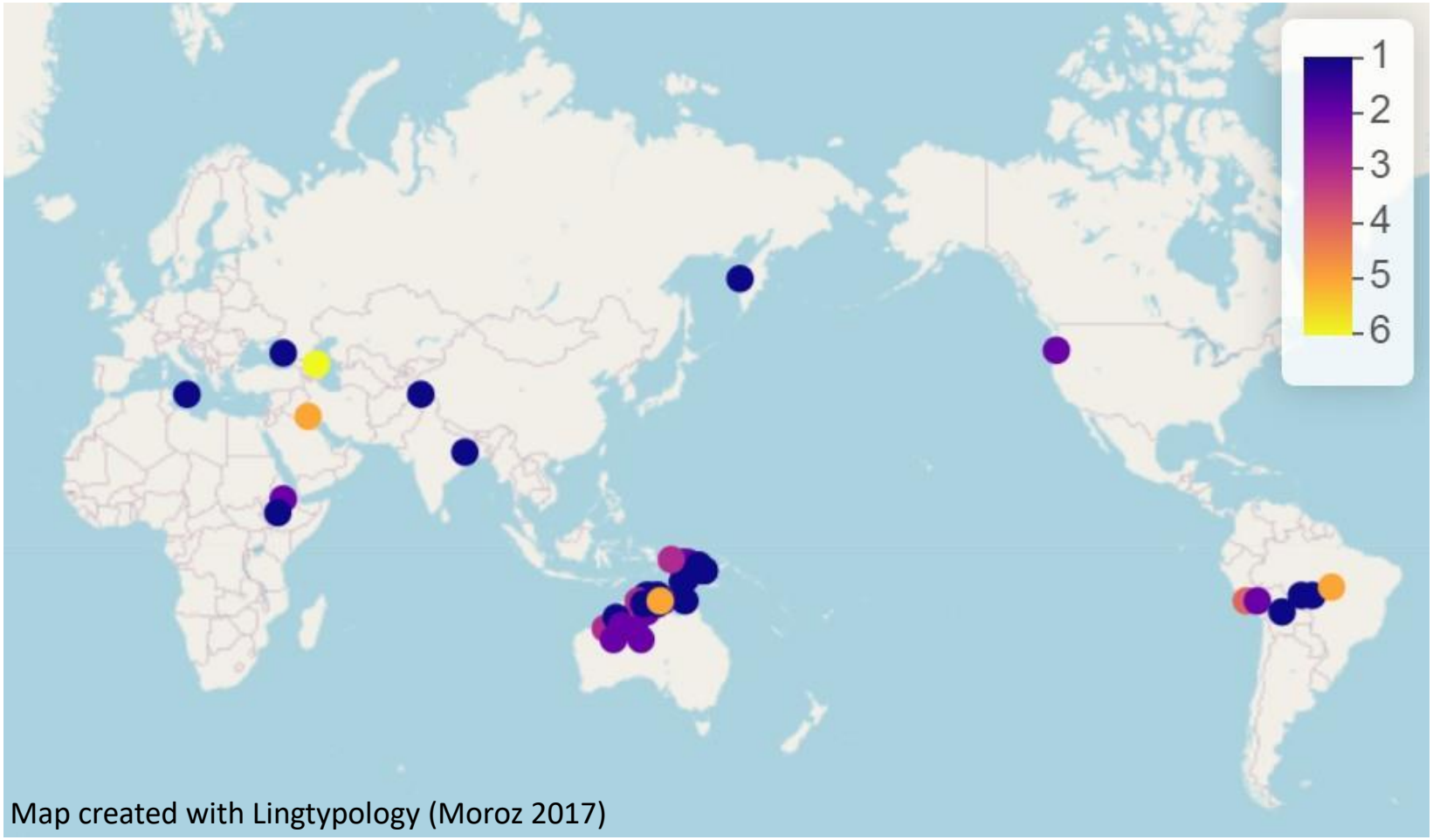

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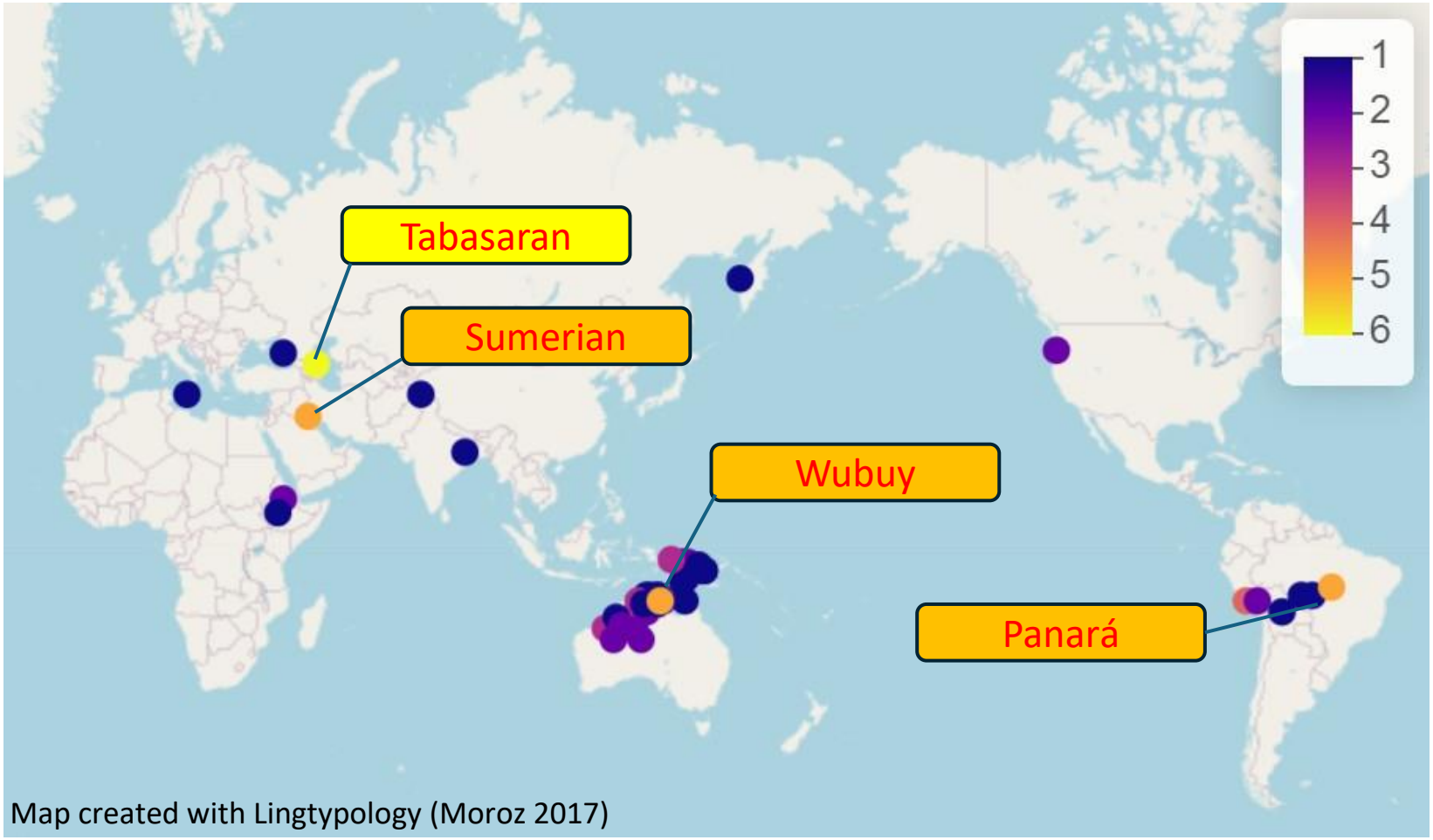

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Sample and distribution

- 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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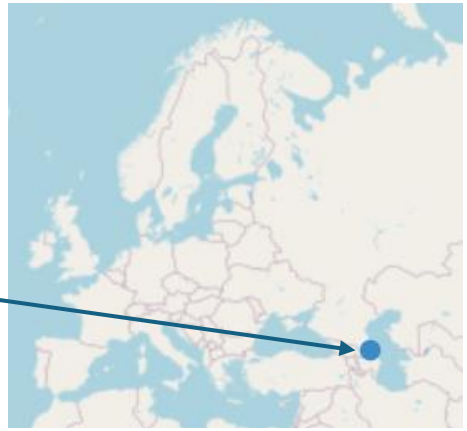

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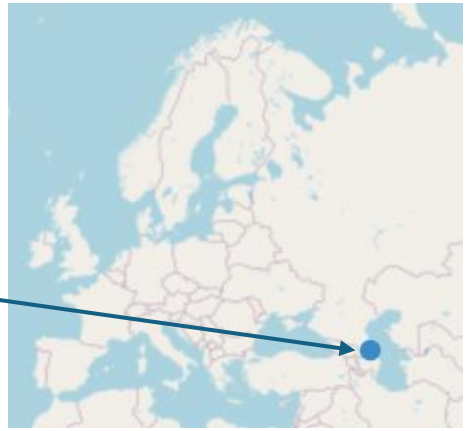

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A – agent, ABS – absolutive, AOR – aorist, APUD – localisation "at", LAT – lative, POST – localisation "behind", PRS – present tense

Sample and distribution

- Indexing (i.e. double-marking) of obliques presupposes indexing of core arguments, most notably P and R (no exceptions among the languages of the sample).
- This is not surprising, given the overall preference for indexing of core participants.
- However, it is not the case that double-marking of obliques presupposes double-marking of P or R:
  in 11 (i.e. more than 20%) of the languages with oblique indexing neither P nor R receive any flagging.
- Obliques can be the only double-marked participants.

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- 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

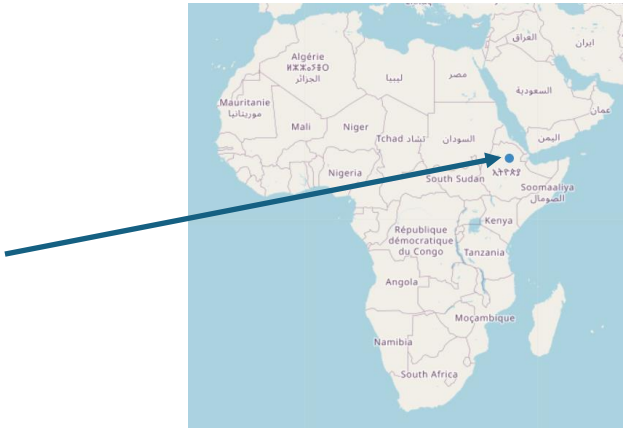
- comitative

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



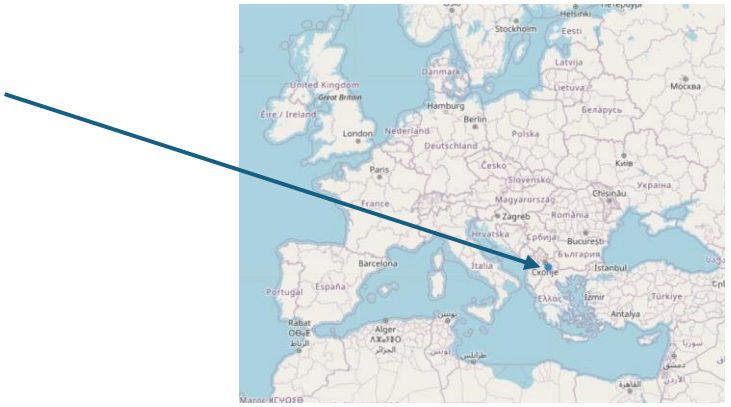
- instrument

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



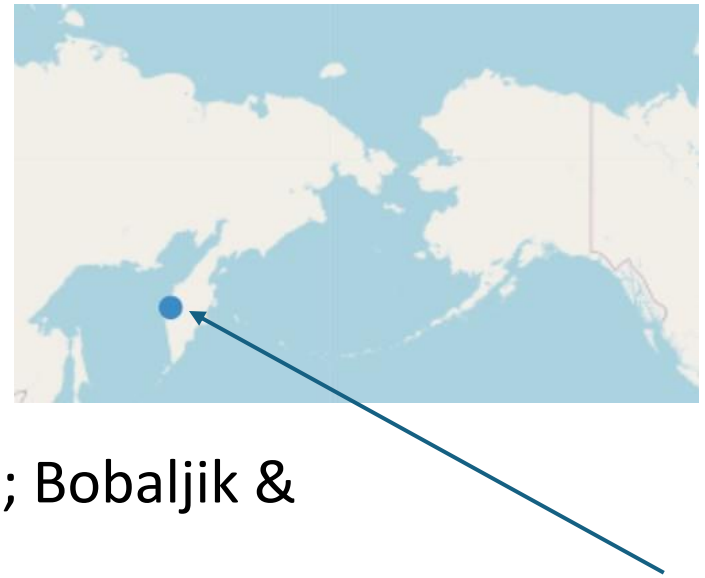
- spatial goal

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



- spatial 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
other	21	14

Indexed participants

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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)

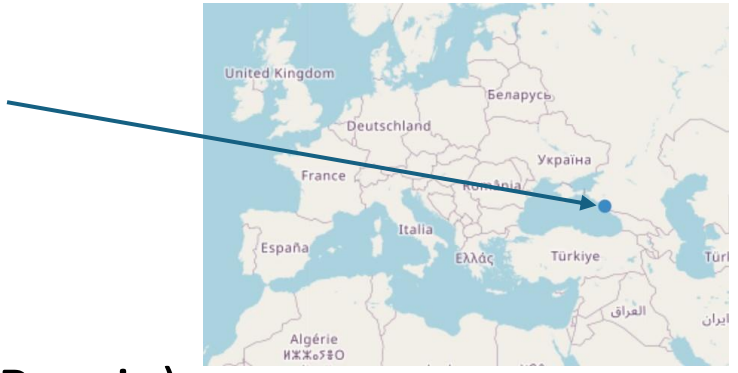
Indexed participants

- In some languages and in some cases, double-marking of obliques is a highly systematic phenomenon.
- However, in many languages it is just one of the competing options, and often a marginal one.

Indexed participants

- In some languages and in some cases, double-marking of obliques is a highly systematic phenomenon.
- However, in many languages it is just one among several competing options, and often a marginal one.

Indexed participants



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

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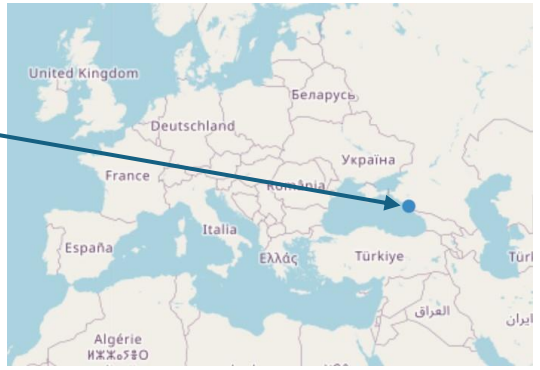

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The default encoding for a pronominal applicative object (if expressed at all) is the unmarked form of the pronoun

BEN – benefactive, CSL – cislocative, IMP – imperative,
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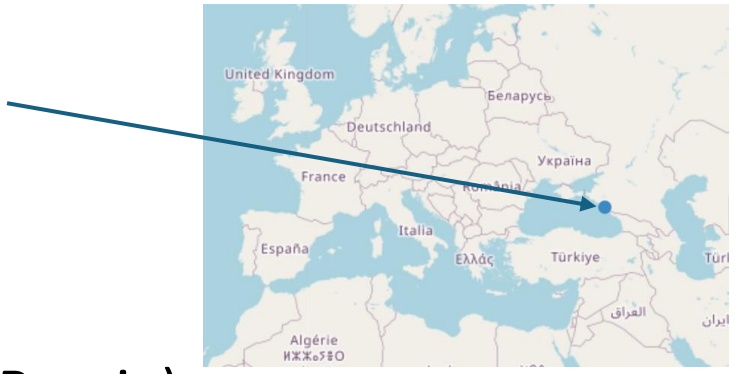

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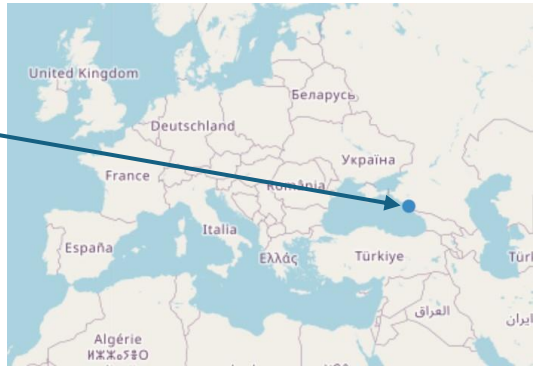

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Elaborate marking by means of the purposive postposition is a rare option admittedly used for special emphasis; attested in texts but hardly mentioned in descriptions

Roadmap

- What it is about
- Sample and distribution
- Indexed participants
- Role of prominence hierarchies
- Possible diachronic origins
- Discussion

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Role of prominence hierarchies

- 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 etc.

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Role of prominence hierarchies

- 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*
friend-3SG-BEN=ASS speak-BEN-3SG.S-NPRS
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O – object, S – subject

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Role of prominence hierarchies

- animacy

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

(27) a. *Partany karnti-nyi mungka-nga.*
child climb-NFUT tree-LOC
'The child climbed the tree.'

b. *Karnti-nyi-li yawarta-nga.*
climb-NFUT-3SG.LOC horse-LOC
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LOC – locative case, NFUT – non-future,
OBL – oblique index set

Role of prominence hierarchies

- topicality

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

(15) 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

- Unfortunately, most descriptions lack a clear let alone comprehensive account of the relevant factors.

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Possible diachronic origins

- It is possible to propose a number of tentative diachronic pathways of emergence of oblique indexing:

1) extension of object (P/R) indexes to obliques, sometimes mediated by applicativisation (e.g. Macedonian, Circassian, Wubuy, Quechuan);
2) doubling by pronouns in oblique cases (e.g. Tabasaran, Pama-Nyungan);
3) incorporation of postpositions with indexes as applicatives (e.g. Sumerian, Ethiosemitic, Panará).

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- Extension of P/R indexes to obliques mediated by applicatives

Wubuy (aka Nunggubuyu, Gunwinyguan, Australia)

(16) *ngarra-maŋi-nyung* *ngunu-yi-yarrbu-mana*
F-woman-HUM.SG 3FSG>3MSG-face-wash-PRS
na-wulmurr-inyung *ngarr-ibiyung-yungguyung*
M-young.man-HUM.SG F-mother.PROP3-PURP
'The woman washes the boy on the face for his mother.'
(Horrack 2018: 153)

HUM – human, PROP – proprietive, PURP – purposive

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The beneficiary can be expressed by an adjunct in the purposive case

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na-doctor-wuy / *na-doctor-yungguyung*
M-doctor-DAT / M-doctor-PURP
'The woman coughs for the doctor.' (Horrack 2018: 142)

APPL – applicative, DAT – dative, HUM – human, PURP – purposive

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In the applicative construction, the beneficiary is indexed and is either flagged by the dative case

[illegible]n, PURP – purposive

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na-doctor-wuy / *na-doctor-yungguyung*
M-doctor-DAT / M-doctor-PURP
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In the applicative construction, the beneficiary is indexed and is either flagged by the dative case or optionally retains the purposive case

…n, PURP – purposive

Possible diachronic origins

- Retention of flagging distinctions disambiguates semantic roles

Wubuy (aka Nunggubuyu, Gunwinyguan, Australia; ibid.)

(18) a. *anaani* *ngana-a-jura-ngi* *ana-mamanunggu*
this 1>2PL-APPL-take-PC N.TOP-good
ana-lhaawu *nugurri-wuy*
N.TOP-story 2PL-ALLAT
'We were taking these good news to you.'

b. *nguna-a-gamaji* *na-walyi-nyung-gala*
3FSG>3MSG-APPL-thieve/PC M-man-HUM.SG-ABL
'She was thieving from the man.'

ABL – ablative, ALLAT – allative, N – neuter, PC – past continuous, TOP – topic

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- Doubling of discourse-prominent obliques with pronouns in oblique cases

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;
- agreement suffixes/enclitics are clearly related to various case forms of independent pronouns.

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Possible diachronic origins

Tabasaran (Nakh-Daghestanian > Lezgic; Russia, 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*

Possible diachronic origins

- The pronominal doubling scenario is also applicable for some Australian languages (cf. Dixon 2004: 379-93; Mushin & Simpson 2008), however, in many of them free and bound pronouns are formally quite divergent.

Possible diachronic origins

- Incorporation of adpositions with indexes as “applicative complexes”.
- In fact is difficult (if at all possible) to distinguish from pronominal doubling.

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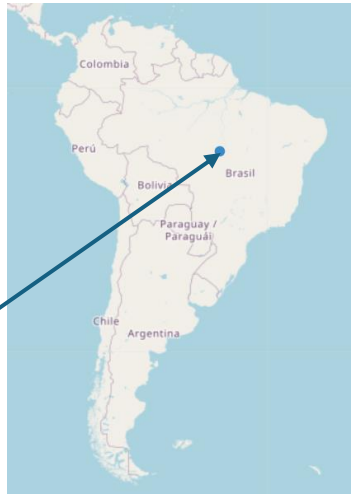
- Incorporation of adpositions with indexes as “applicative complexes”.
- In fact, a combination of the two other scenarios.

Possible diachronic origins



Panará (Macro-Je > Je, Brasil; Bardagil-Mas 2018: 155):

(19) *ka* *ka=ti=ra=kõõ=a=kwy* *tepi* *suu* *inkjẽ* *kõõ*
2SG IRR=NSPK=1SG=COM=ADRE=go fish PUPR 1SG COM
'You'll go fishing with me.'

ADRE – addressee, COM – comitative, IRR – irrealis, NSPK – non-speaker, PURP – purposive

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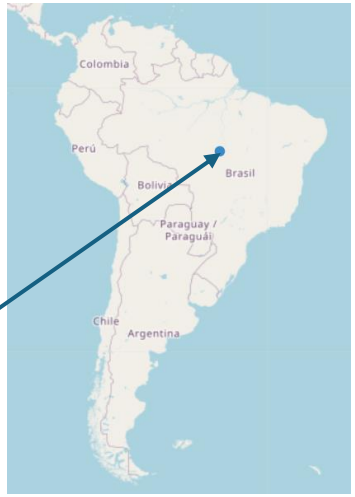

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The stem of the free pronoun has nothing in common with the verbal proniminal index

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The set of verbal indexes appearing before incorporated postpositions is identical to the S/P indexes

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Discussion

- 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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- 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 location and comitative.

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- Oblique indexing can arise through distinct and cross-linguistically recurrent diachronic pathways, e.g.:
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  - grammaticalisation of pronouns in oblique cases in constructions involving “doubling”;
  - development of “non-promotional” uses of applicatives with concomitant extension of indexes from core to oblique arguments.

Discussion

- 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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Appendix

Indexed participants

Map created with Lingtypology (Moroz 2017)

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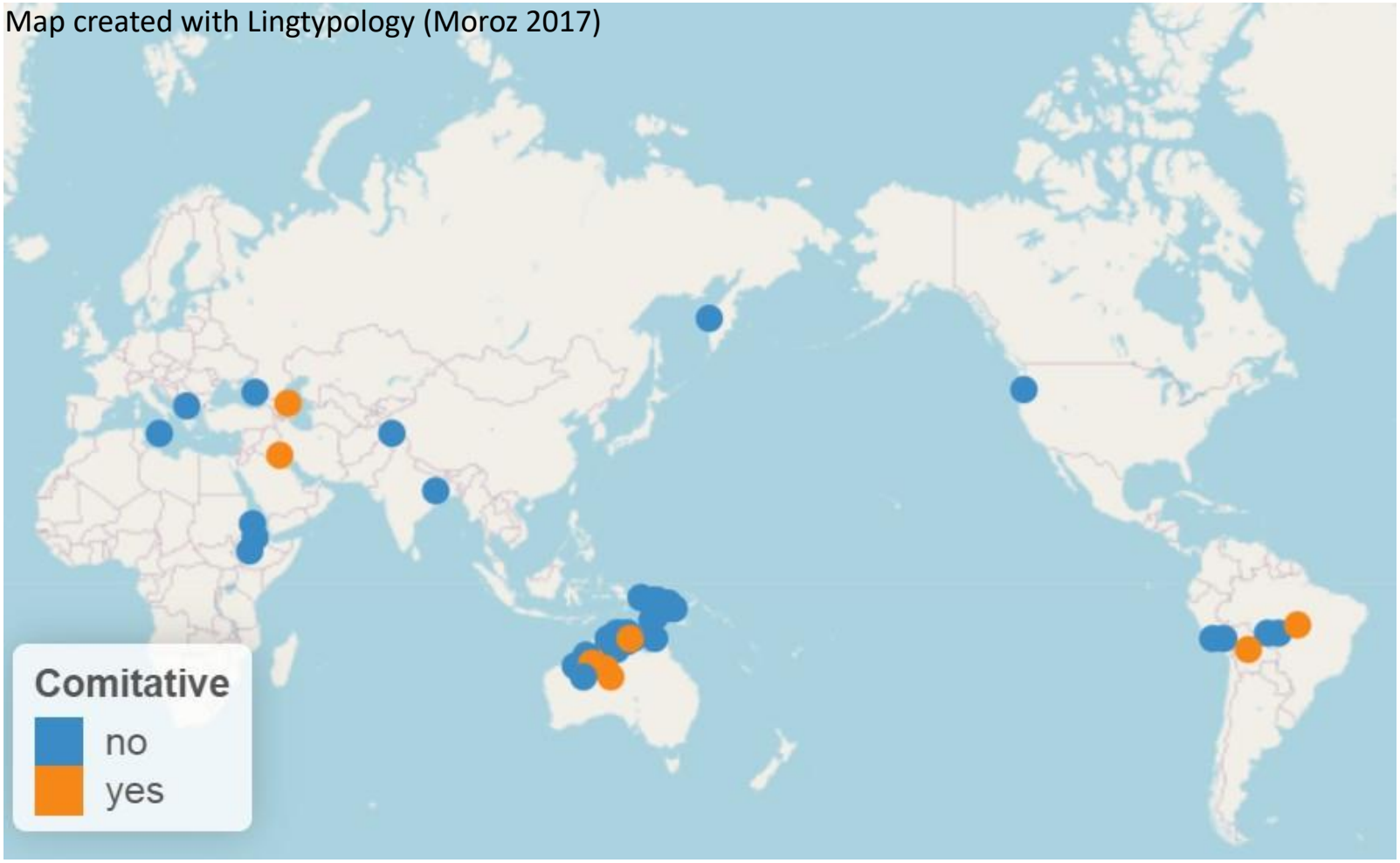

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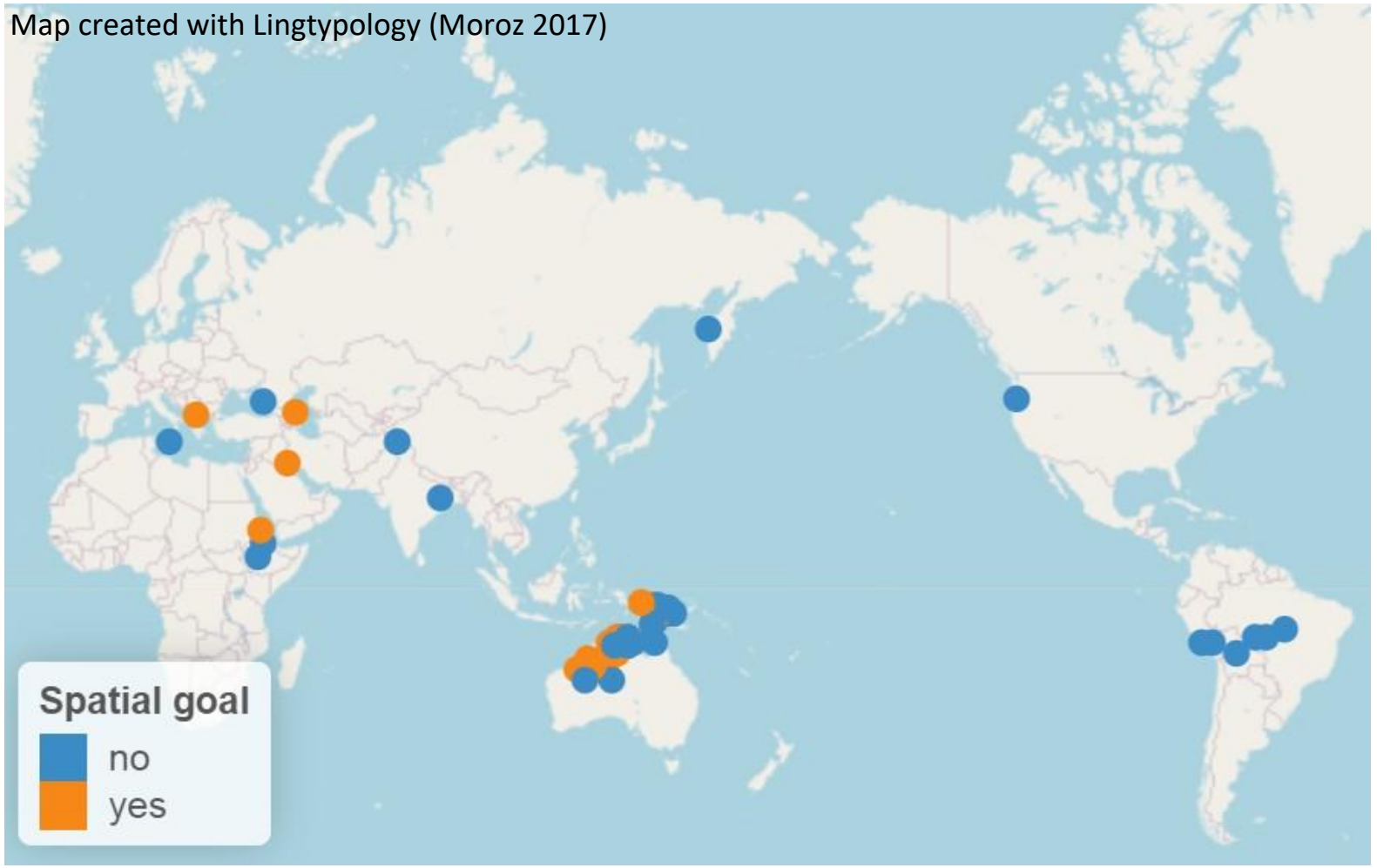

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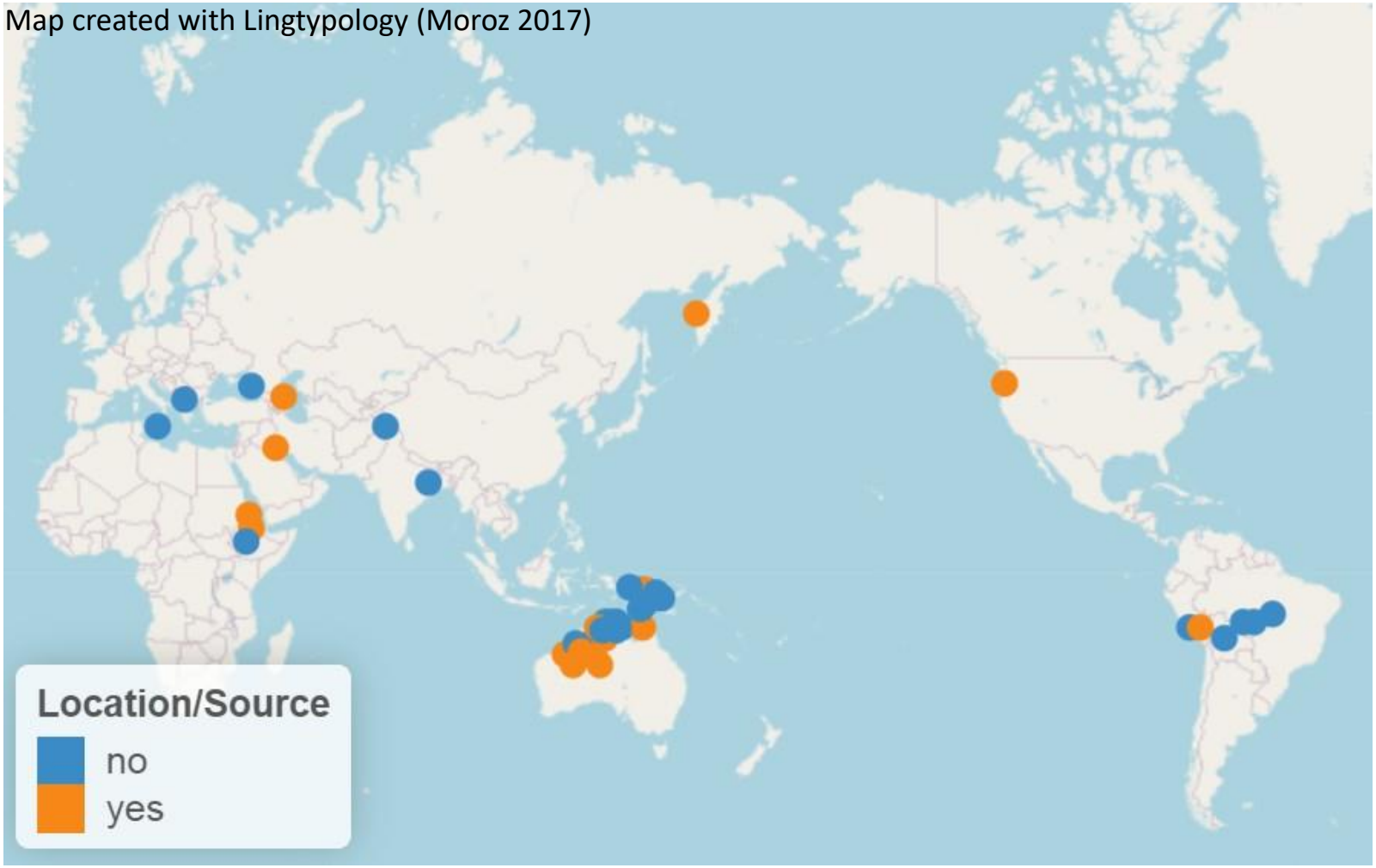

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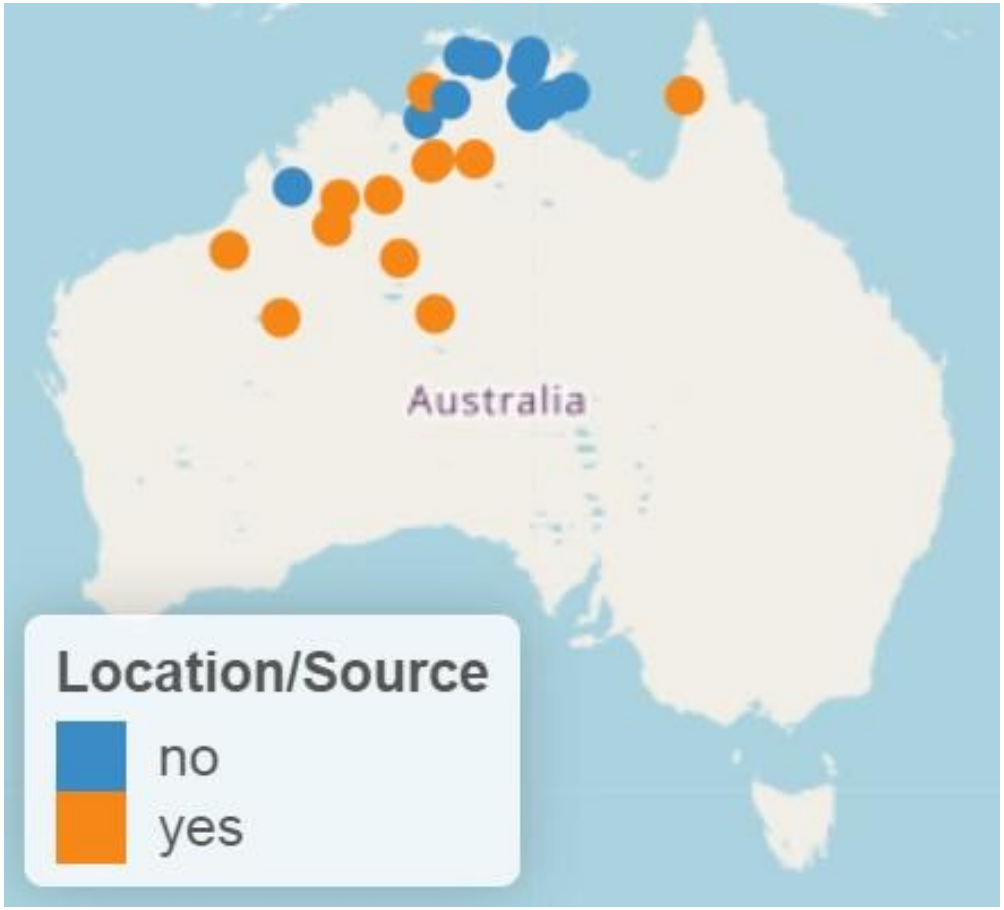

Indexing of spatial roles is a salient feature of the Northern Australian languages

Role of prominence hierarchies

- person

Tabasaran (Nakh-Daghestanian > Lezgic; Russia, Bogomolova 2012, 2018): only 1st and 2nd persons, and only if "the non-subject participant … makes a significant contribution to the situation"

(26) a. *rasul uzu-x-na ʁa-f-nu(=zu-x-na)*
Rasul 1SG-APUD-LAT PFV-come-PST(=1SG-APUD-LAT)
'Rasul came to me.' (Bogomolova 2018: 826)

b. *ǯarʁ χazʲajin.ǯi-x-na*
run[IMP] landlord-APUD-LAT
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Role of prominence hierarchies

- animacy and humanness

In the Australian languages, indexing of oblique participants is largely restricted to animate or human referents (Ennever & Browne 2023: 6).

Possible diachronic origins

- Extension of P/R-markers to obliques

Nama (Yam > Nambu, Papua New Guinea; Siegel 2023)

(29) a. *ghakr-am mèrès yè-frango-t-e*
boy-ERG girl 3SG.ABS-leave-IPFV-2|3SG.A
'The boy is leaving the girl.' (p. 30)

b. *yèmo náifè y-a-ram Mawai-e*
3SG.ERG knife 3SG.ABS-APP-give:INC.3SG.A Mawai-DAT
'He just gave Mawai the knife.' (p. 57)

c. *ágha-f-e-t ne*
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'I threw the guts to/for the dogs.' (p. 75)

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- All Yam languages index overtly flagged recipients and beneficiaries by the Absolutive prefixes.
- However, only in a few closely-related languages of the Nambu subgroup and only marginally (e.g. in Nama only in the plural), are beneficiaries flagged differently from recipients.

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