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Double-marking of prominent objects cross-linguistically: patients, recipients and beyond

Peter Arkadiev

Universität zu Köln

alpgurev@gmail.com, https://peterarkadiev.github.io/

UNIVERSITÄT ZU KÖLN

SFB 1252 PROMINENCE IN LANGUAGE

Roadmap

1. Setting the scene
2. My study
3. Double-marking of objects
4. Double-marking of obliques

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Setting the scene

- Dependent-marking (flagging, DM) is morphological marking of participants expressed by nominals for their grammatical and/or semantic role.
- Head-marking (indexing, HM) is morphological expression on the predicate of such properties of participants as person, number and gender, as well as their grammatical and/or semantic role.

Nichols 1986, 1992, Lander & Nichols 2020, Haspelmath 2013, 2019

Cf. also Milewski 1950 and Lehmann 1983, 1985

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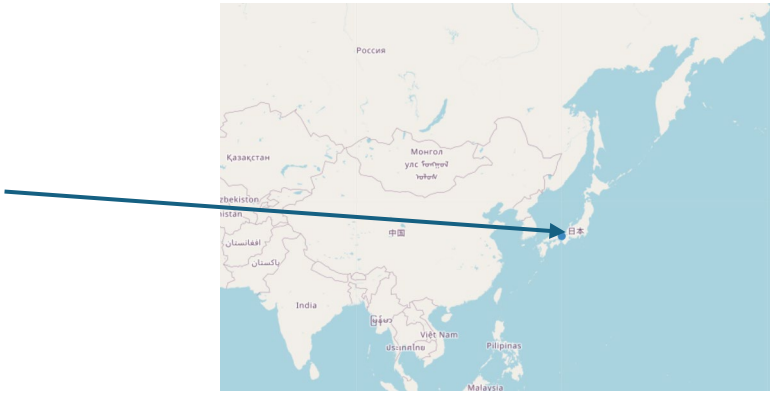
Nichols 1986, 1992, Lander & Nichols 2020, Haspelmath 2013, 2019

Cf. also Milewski 1950 and Lehmann 1983, 1985

Setting the scene

- These terms serve as typologically-grounded extensions of such notions as “case-marking” and “verbal agreement” or “cross-referencing”, respectively.
- Both are grammatical mechanisms central for the encoding of syntactic and semantic relations in many languages of the world.

Setting the scene



Map created with Lingtypology (Moroz 2017)

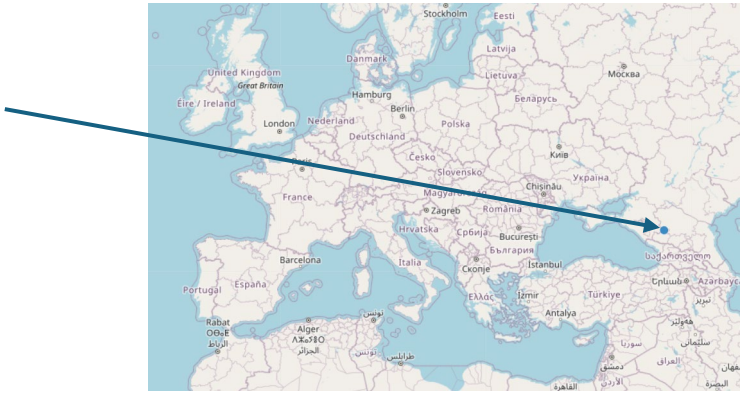
- Dependent-marking (flagging)

(1) Japanese (Altaic; constructed)

shōjo-ga	*shōnen-o*	*mi-ta*
girl-NOM	boy-ACC	see-PST

'The girl saw the boy.'

Setting the scene



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girl-NOM	boy-ACC	see-PST

'The girl saw the boy.'

- Head-marking (indexing)

(2) Abaza (Northwest Caucasian; constructed)

a-phʷəspa	*a-čʼķʷən*	*də-l-ba-ṭ*
DEF-girl	DEF-boy	3SG.H.ABS-3SG.F.ERG-see-DCL

'The girl saw the boy.'

ABS – absolutive, DCL – declarative, ERG – ergative, H – human

Setting the scene

- DM and HM do not exclude each other and can co-occur jointly applying to the same argument → double-marking or bilocal marking (M. Haspelmath, p.c.).

(3) Amharic (Afro-Asiatic > Semitic; Ethiopia):
lämma ṭärmus-u-n säbbär-ä-w.
Lemma bottle-DEF-ACC break:PST-3SG.M.SBJ-3SG.M.OBJ
'Lemma broke the bottle.' (Amberber 2005: 299)

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Accusative case (flagging)

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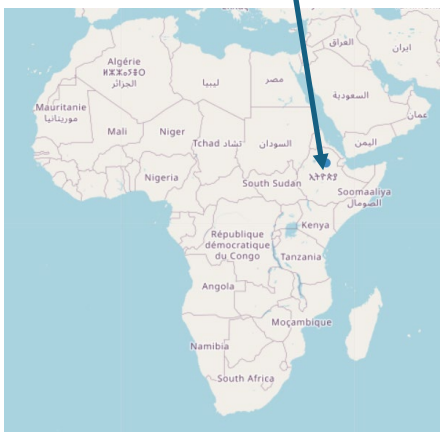

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Accusative case (flagging)

Object agreement (indexing)

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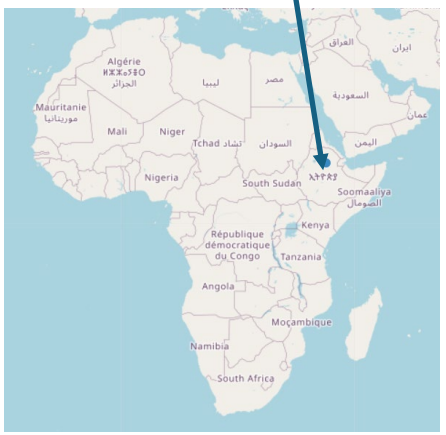

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Setting the scene

- Patterns of co-occurrence of HM and DM are not sufficiently studied from a cross-linguistic perspective (Vakhtin & Volodin 1986; Foster & Hofling 1987; Bakker & Siewierska 2009; Keine 2010; Baker 2013).
- In particular, the cross-linguistic distribution of double-marking across various grammatical and semantic relations remains underexplored.

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- In particular, the cross-linguistic distribution of double-marking across various grammatical and semantic relations remains underexplored.

Setting the scene

Amharic (Afro-Asiatic > Semitic; Ethiopia):

(4) a. *lämma ṭärmus-u-n säbbär-ä-w*.
Lemma bottle-DEF-ACC break:PST-3SG.M.SBJ-3SG.M.OBJ
'Lemma broke the bottle.' (Amberber 2005: 299)

b. *lä-läğ-u bet-u-n asayy-ä-w*.
DAT-child-DEF.M house-DEF.M-ACC showed-3SG.M.SBJ-3SG.M.OBJ
'He showed the house to the child.' (Leslau 1995: 893)

DEF – definite, M – masculine, OBJ – object, SBJ – subject

Setting the scene

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b. *lä-läğ-u bet-u-n*
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'He showed the house to the child.' (

Double-marking of the direct object (P)

DEF – definite, M – masculine, OBJ – object, SBJ – subject

Setting the scene

Amharic (Afro-Asiatic > Semitic; Ethiopia):

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Lemma bottle-DEF-ACC break:PST-3SG.M.SBJ-3SG.M.OBJ
'Lemma broke the bottle.' (Amberber 2005: 299)

b. *l-aster* *ləğ-u-n* *asayy-äh^{w}-at*.
DAT-Aster child-DEF-ACC show-PST.1SG.SBJ-3SG.F.OBJ
'I showed Aster the child.' (Baker 2012: 259)

DEF – definite, F – feminine, M – masculine, OBJ – object, SBJ – subject

Setting the scene

Amharic (Afro-Asiatic > Semitic; Ethiopia):

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b. *l-aster ləğ-u-n asayy-äh^{w}-at*.
DAT-Aster child-DEF-ACC show-PST.1SG.SBJ-3SG.F.OBJ
'I showed Aster the child.' (Baker 2012: 259)

Double-marking of the indirect object (R)

DEF – definite, F – feminine, M – masculine, OBJ – object, SBJ – subject

Setting the scene

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

(5) *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, EX – exclusive

Setting the scene

Double-marking of an oblique participant

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My study

- 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 2013, 2016, 2024a,b), but still work in progress.
- Some overlap with Bárány (2021, 2022)

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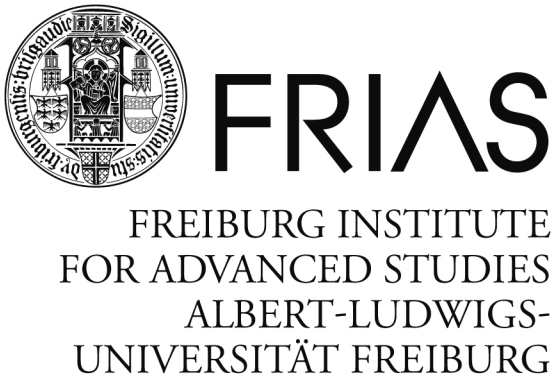
My study

- 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 senior fellowship at the SFB 1252 “Prominence in Language”, University of Cologne (September-November 2024).

My study

- Only “objects”, i.e.
  - P (patient of monotransitive predicate like ‘break’)

  (4) *I broke the vase*.
  - T (theme of ditransitive predicate like ‘give’)
  - R (recipient of ditransitive predicate like ‘give’)

  (5) *I gave the book to Mary*.

My study

- Only “objects”, i.e.
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Dryer 1986, Haspelmath 2005, Malchukov et al. 2010

My study

- Only “objects”, i.e.
  - P (patient of monotransitive predicate like ‘break’)
  - T (theme of ditransitive predicate like ‘give’)
  - R (recipient of ditransitive predicate like ‘give’)
  - other semantic relations (beneficiaries, locations, comitatives etc.), in particular if they receive specific encoding by flagging and/or indexing

My study

- Only the distribution of overt morphological marking:
  - overt flagging by cases or adpositions;
  - overt indexing by verbal affixes or mobile clitics
    - should be at least minimally sensitive to person, number or gender of the participant, not merely to its presence ("registration" vs. "indexing")

My study

- Parameters related to the so-called referential hierarchies (Silverstein 1976; Aissen 2003 etc.):

  1,2 person > 3 person > human > animate > inanimate

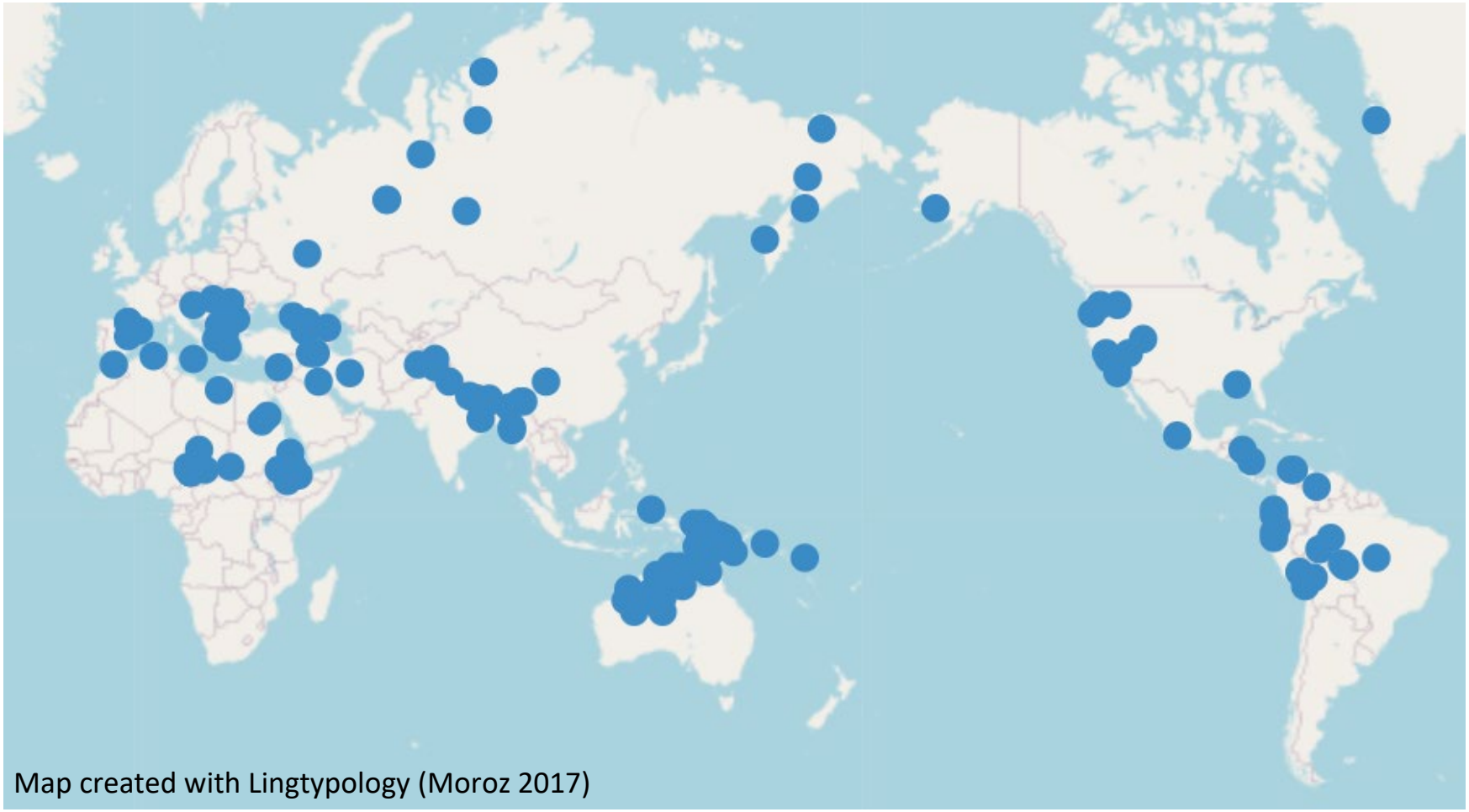
  definite > indefinite specific > non-specific

  primary topic > secondary topic > focus

My study

- Language sample:
  - a representative convenience sample only including languages possessing the relevant phenomena;
  - 163 languages from 66 families and 93 genera (including isolates);
  - the sample in purposefully not genealogically stratified, in order to capture family-internal variation;
  - for statistical purposes, families and genera will be counted (as many times as many types they represent).

My study



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My study

Two case-studies:

1) Double-marking of objects of monotransitive and ditransitive predicates (P, T, R).
2) Double-marking of oblique objects.

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Double-marking of objects

- The main parameter: which roles and role combinations are subject to double-marking?
- Logically possible options:
  - P
  - T
  - R
  - P+T
  - P+R
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  - T *
  - R ✓
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  - P+R ✓
  - T+R *
  - P+T+R ✓

Double-marking of objects

- Double-marking of P+T

Moksha (Uralic; Toldova et al. 2018: 575)

(8) a. *Vasʼɛ kerʼ-sʼ šuftə*
Vasya cut-PST.3SG tree
'Vasya cut a tree.'

b. *Vasʼɛ kerʼ-əzʼə šuft-tʼ*
Vasya cut-PST.3SG>3SG tree-DEF.SG.GEN
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c. *maks-k monʼ-dʼejə-n tʼɛ uzʼərʼ-tʼ*
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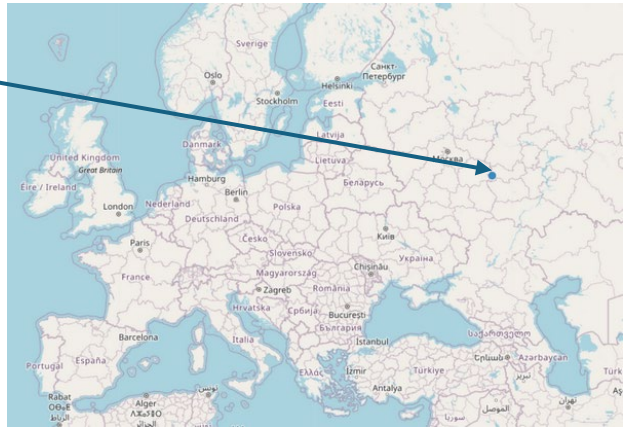
'Give me this axe!' (ibid.: 601)

Double-marking of objects



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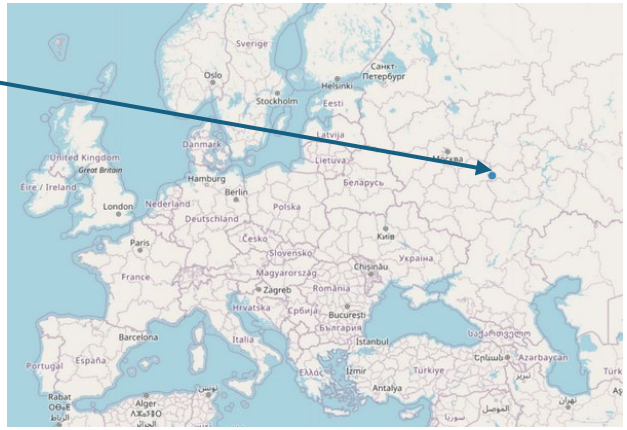

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indefinite P:
flagging: no
indexing: no

b. *Vas'ɛ* *ker'-əz'ə* *šuft-t'*
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definite P:
flagging: yes
indexing: yes

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definite T:
flagging: yes
indexing: yes

Double-marking of objects

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(any) R:
flagging: yes
indexing: no

Double-marking of objects

- Double-marking of P+T

Object indexing in Moksha (and more generally in Uralic) is strictly limited to the grammatical function of the direct object and never extends to indirect objects encoding the recipients (R) of ditransitive verbs like ‘give’.

Bárány 2022, Arkadiev 2024a

Double-marking of objects

- Double-marking of P+R

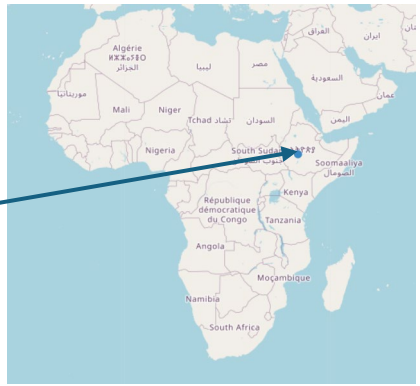
Ezha (Afroasiatic > Semitic, Ethiopia; Assefa 2018: 262)

(7) a. *dəsta ʒəbb k'ət'ər-ə-m*
Desta lion kill.PFV-3SG.M.S-DCL
'Desta killed a lion.'

b. *dəsta ʒəbb-ɨwe k'ʷət'ər-ə-n-ɨm*
Desta lion-DEF kill.PFV-3SG.M.SBJ-3SG.M.OBJ-DCL
'Desta killed the lion.'

c. *dəsta jə-gərəd-we dənnəg-ə-nə-m*
Desta OBJ-girl-DEF hit.PFV-3SG.M.SBJ-3SG.F.OBJ-DCL
'Desta hit the girl.'

Double-marking of objects



- Double-marking of P+R

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Double-marking of objects

non-human indefinite P:
flagging: no
indexing: no

- Double-marking of P+R

Ezha (Afroasiatic > Semitic, Ethiopia; Assefa 2018: 262)

(9) a. *dəsta* *ʒəbb* *k'ət'ər-ə-m*
Desta lion kill.PFV-3SG.M.S-DCL
'Desta killed a lion.'

b. *dəsta* *ʒəbb-ɨwe* *k'ʷət'ər-ə-n-ɨm*
Desta lion-DEF kill.PFV-3SG.M.SBJ-3SG.M.OBJ-DCL
'Desta killed the lion.'

c. *dəsta* *jə-gərəd-we* *dənnəg-ə-nə-m*
Desta OBJ-girl-DEF hit.PFV-3SG.M.SBJ-3SG.F.OBJ-DCL
'Desta hit the girl.'

DCL – declarative, F – feminine, M – masculine, O – object index, OBJ – object case
PFV – perfective, S – subject index

Double-marking of objects

non-human definite P:
flagging: no
indexing: yes

- Double-marking of P+R

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Desta lion-DEF kill.PFV-3SG.M.S-3SG.M.O-DCL
'Desta killed the lion.'

c. *dəsta jə-gərəd-we dənnəg-ə-nə-m*
Desta OBJ-girl-DEF hit.PFV-3SG.M.SBJ-3SG.F.OBJ-DCL
'Desta hit the girl.'

DCL – declarative, F – feminine, M – masculine, O – object index, OBJ – object case
PFV – perfective, S – subject index

Double-marking of objects

human definite P:
flagging: yes
indexing: yes

- Double-marking of P+R

Ezha (Afroasiatic > Semitic, Ethiopia; Assefa 2018: 262)

(9) a. *dəsta* *ʒəbb* *k'ət'ər-ə-m*
Desta lion kill.PFV-3SG.M.S-DCL
'Desta killed a lion.'

b. *dəsta* *ʒəbb-ɨwe* *k'ʷət'ər-ə-n-ɨm*
Desta lion-DEF kill.PFV-3SG.M.S-3SG.M.O-DCL
'Desta killed the lion.'

c. *dəsta* *jə-gərəd-we* *dənnəg-ə-nɑ-m*
Desta OBJ-girl-DEF hit.PFV-3SG.M.S-3SG.F.O-DCL
'Desta hit the girl.'

DCL – declarative, F – feminine, M – masculine, O – object index, OBJ – object case
PFV – perfective, S – subject index

Double-marking of objects

(human) R:
flagging: always
indexing: if definite

- Double-marking of P+R

Ezha (Afroasiatic > Semitic, Ethiopia; Assefa 2018: 268, 129)

(10) *dəsta j-əttəmʷ-ota məs'af ab-ə-na-m*
Desta OBJ-sister-3SG.M book give.PFV-3SG.M.S-3SG.F.O-DCL
'Desta gave his sister a book.'

(11) *s'əxaj j-adot-əxita j-ərɨddʒ-we*
Desta OBJ-mother-3SG.F OBJ-boy-DEF
dənnəg-ətʧ-ɨr-a-m
hit.PFV-3SG.F.S-BEN-3SG.F.O-DCL
'Tsehay hit the boy for the benefit of her mother.'

BEN – benefactive, DCL – declarative, F – feminine, M – masculine, O – object index, OBJ – object case, PFV – perfective, S – subject index

Double-marking of objects

human definite T:
flagging: yes
indexing: no

- Double-marking of P+R

Ezha (Afroasiatic > Semitic, Ethiopia; Assefa 2018: 268, 129)

(10) *dəsta j-əttəm^{w}-ota* *məs'af* *ab-ə-na-m*
Desta OBJ-sister-3SG.M book give.PFV-3SG.M.S-3SG.F.O-DCL
'Desta gave his sister a book.'

(11) *s'əxaj* *j-adot-əxita* *j-ərɨddʒ-we*
Desta OBJ-mother-3SG.F OBJ-boy-DEF
dənnəg-ətʃɨr-a-m
hit.PFV-3SG.F.S-BEN-3SG.F.O-DCL
'Tsehay hit the boy for the benefit of her mother.'

BEN – benefactive, DCL – declarative, F – feminine, M – masculine, O – object index, OBJ – object case, PFV – perfective, S – subject index

Double-marking of objects

- Double-marking of P+R
- Ezha instantiates a cross-linguistically common pattern:
  - the same nominal marker is used for flagging of R and for DOM;
  - the same verbal markers are used for indexing of R and P (under the conditions related to person/number/ animacy/definiteness etc.)

Double-marking of objects

- Double-marking of P+R
- Ezha instantiates a cross-linguistically common pattern:
  - the same nominal marker is used for flagging of R and definite/animate P (differential object marking);
  - the same verbal markers are used for indexing of R and P (under the conditions related to person/number/ animacy/definiteness etc.)

Double-marking of objects

- Double-marking of P+R
- Ezha instantiates a cross-linguistically common pattern:
  - the same nominal marker is used for flagging of R and definite/animate P (differential object marking);
  - the same verbal markers are used for indexing of R and P under the conditions related to person/number/ animacy/definiteness etc. (differential object indexing).

Double-marking of objects

- Double-marking of P+T+R

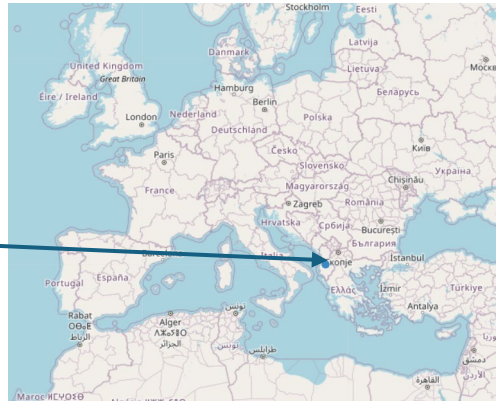
Albanian (Indo-European > Albanian)

(10) a. *Agim-i theu një pjatë*.
Agim-DEF.SG break.AOR.3SG INDF plate
'Agim broke a plate.' (Mišeska Tomić 2006: 312)

b. *Ana (e) lexoi libr-in*.
Ana 3SG.O read.AOR.3SG book-ACC.SG.DEF
'Ana read the book.' (ibid.: 311)

c. *E pashë Jan-in*.
3SG.O see.AOR.1SG Jan-ACC.SG.DEF
'I saw Jan.' (Kalluli 2000: 213)

Double-marking of objects



- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(10) a. *Agim-i theu një pjatë.*
Agim-DEF.SG break.AOR.3SG INDF plate
'Agim broke a plate.' (Mišeska Tomić 2006: 312)

b. *Ana (e) lexoi libr-in.*
Ana 3SG.O read.AOR.3SG book-ACC.SG.DEF
'Ana read the book.' (ibid.: 311)

c. *E pashë Jan-in.*
3SG.O see.AOR.1SG Jan-ACC.SG.DEF
'I saw Jan.' (Kalluli 2000: 213)

Double-marking of objects

indefinite P:
flagging: no
indexing: no

- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(12) a. *Agim-i* *theu* *një* *pjatë*.
Agim-DEF.SG break.AOR.3SG INDF plate
'Agim broke a plate.' (Mišeska Tomić 2006: 312)

b. *Ana (e)* *lexoi* *libr-in*.
Ana 3SG.O read.AOR.3SG book-ACC.SG.DEF
'Ana read the book.' (ibid.: 311)

c. *E* *pashë* *Jan-in*.
3SG.O see.AOR.1SG Jan-ACC.SG.DEF
'I saw Jan.' (Kalluli 2000: 213)

AOR – aorist, DO – direct object index, INDF – indefinite article, IO – indirect object index

Double-marking of objects

animate definite P:
flagging: yes
indexing: yes

- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(12) a. *Agim-i* *theu* *një* *pjatë*.
Agim-DEF.SG break.AOR.3SG INDF plate
'Agim broke a plate.' (Mišeska Tomić 2006: 312)

b. *E=pashë* *Jan-in*.
3SG.DO=see.AOR.1SG Jan-ACC.SG.DEF
'I saw Jan.' (Kalluli 2000: 213)

c. *I-a=dhashë* *libr-in* *Agim-it*.
3SG.IO-3SG.DO=give.AOR.1SG book-ACC.SG.DEF Agim-DAT.SG
'I did give the book to Agim.' (Mišeska Tomić 2006: 312)

AOR – aorist, DO – direct object index, INDF – indefinite article, IO – indirect object index

Double-marking of objects

definite T:
flagging: yes
indexing: yes

- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(12) a. *Agim-i* *theu* *një* *pjatë*.
Agim-DEF.SG break.AOR.3SG INDF plate
'Agim broke a plate.' (Mišeska Tomić 2006: 312)

b. *E=pashë* *Jan-in*.
3SG.DO=see.AOR.1SG Jan-ACC.SG.DEF
'I saw Jan.' (Kalluli 2000: 213)

c. *I-a=dhashë* *libr-in* *Agim-it*.
3SG.IO-3SG.DO=give.AOR.1SG book-ACC.SG.DEF Agim-DAT.SG
'I did give the book to Agim.' (Mišeska Tomić 2006: 312)

AOR – aorist, DO – direct object index, INDF – indefinite article, IO – indirect object index

Double-marking of objects

definite R:
flagging: yes
indexing: yes

definite T:
flagging: yes
indexing: yes

- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(12) a. *Agim-i* *theu* *një* *pjatë*.
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'Agim broke a plate.' (Mišeska Tomić 2006: 312)

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'I did give the book to Agim.' (Mišeska Tomić 2006: 312)

AOR – aorist, DO – direct object index, INDF – indefinite article, IO – indirect object index

Double-marking of objects

definite R:
flagging: yes
indexing: yes

definite T:
flagging: yes
indexing: yes

- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(12) a. *Agim-i* *theu* *një* *pjatë*.
Agim-DEF.SG break.AOR.3SG INDF plate
'Agim broke a plate.' (Mišeska Tomić 2006: 312)

b. *E=pashë* *Jan-in*.
3SG.DO=see.AOR.1SG Jan-ACC.SG.DEF
'I saw Jan.' (Kalluli 2000: 213)

c. *I-a=dhashë* *libr-in* *Agim-it*.
3SG.IO-3SG.DO=give.AOR.1SG book-ACC.SG.DEF Agim-DAT.SG
'I di[illegible]give the book to Agim.' (Mišeska Tomić 2006: 312)

No constraint on simultaneous flagging/indexing of both T and R

finite article, IO – indirect object index

Double-marking of objects

- Contrast Albanian with Ezha:

(13) *I-a=dhashë* *libr-in* *Agim-it*.
3SG.IO-3SG.DO=give.AOR.1SG book-ACC.SG.DEF Agim-DAT.SG
'I did give the book to Agim.' (Mišeska Tomić 2006: 312)

(14) *s'əxaj* *j-adot-əxita* *j-ərɨddʒ-we*
Desta OBJ-mother-3SG.F OBJ-boy-DEF
dənnəg-ətʧ-ɨr-a-m
hit.PFV-3SG.F.S-BEN-3SG.F.O-DCL
'Tsehay hit the boy for the benefit of her mother.'
(Assefa 2018: 129)

Double-marking of objects

- Contrast Albanian with Ezha:

(13) *I-a=dhashë* *libr-in* *Agim-it*.
3SG.IO-3SG.DO=give.AOR.1SG book-ACC.SG.DEF Agim-DAT.SG
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'Tsehay hit the boy for the benefit of her mother.'
(Assefa 2018: 129)

Both R and T can be flagged in both languages

Double-marking of objects

In Albanian, both R and T can be indexed

- Contrast Albanian with E[illegible]

(13) *I-a=dhashë* *libr-in* *Agim-it*.
3SG.IO-3SG.DO=give.AOR.1SG book-ACC.SG.DEF Agim-DAT.SG
'I did give the book to Agim.' (Mišeska Tomić 2006: 312)

(14) *s'əxaj* *j-adot-əxita* *j-ərɨddʒ-we*
Desta OBJ-mother-3SG.F OBJ-boy-DEF
dənnəg-ətʃ-ɨr-a-m
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(Assefa 2018: 129)

Both R and T can be flagged in both languages

Double-marking of objects

In Albanian, both R and T can be indexed

- Contrast Albanian with Ezha:

(13) *l-a=dhashë* *libr-in* *Agim-it*.
3SG.IO-3SG.DO=give.AOR.1SG book-ACC.SG.DEF Agim-DAT.SG
'I did give the book to Agim.' (Mišeska Tomić 2006: 312)

(14) *s'əxaj* *j-adot-əxita* *j-ərɨddʒ-we*
Desta OBJ-mother-3SG.F OBJ-boy-DEF
dənnəg-ətʃ-ɨr-a-m
hit.PFV-3SG.F.S-BEN-3SG.F.O-DCL
'Tsehay hit the boy for the benefit of her mother.'
(Assefa 2018: 12[illegible])

In Ezha, only one object can be indexed, and it is the R

Both R and T can be flagged in both languages

Double-marking of objects

- Double-marking of R only

Burushaski (isolate, Pakistan; Munshi 2019: 96-97, 100)

(18) a. *loi-e qarqaamuc ṣi-imi*
fox-ERG hen eat.SG-PST.3SG.S
'The fox ate the hen.'

b. *saliim-a humaa mu-yeec-umi*
Salim-ERG Huma 3SG.F.O-see-PST.3SG.M.S
'Salim saw Huma.'

c. *mi-e in-e-re baarǰoko i-u-uman*
1PL-ERG 3SG-GEN-DAT money 3SG.M.O-give-PST.3PL
'We gave him money.'

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- Double-marking of R only

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'Salim saw Huma.'

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1PL-ERG 3SG-GEN-DAT money 3SG.M.O-give-PST.3PL
'We gave him money.'

Double-marking of objects

non-human P:
flagging: no
indexing: no

- Double-marking of R only

Burushaski (isolate, Pakistan; Munshi 2019: 96-97, 100)

(15) a. *loi-e* *qarqaamuc* *ṣi-imi*
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'The fox ate the hen.'

b. *saliim-a* *humaa* *mu-yeec-umi*
Salim-ERG Huma 3SG.F.O-see-PST.3SG.M.S
'Salim saw Huma.'

c. *mi-e* *in-e-re* *baarǰoko* *i-u-uman*
1PL-ERG 3SG-GEN-DAT money 3SG.M.O-give-PST.3PL
'We gave him money.'

Double-marking of objects

human P:
flagging: no
indexing: yes

- Double-marking of R only

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'The fox ate the hen.'

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Salim-ERG Huma 3SG.F.O-see-PST.3SG.M.S
'Salim saw Huma.'

c. *mi-e* *in-e-re* *baarǰoko* *i-u-uman*
1PL-ERG 3SG-GEN-DAT money 3SG.M.O-give-PST.3PL
'We gave him money.'

Double-marking of objects

human R:
flagging: yes
indexing: yes

- Double-marking of R only

Burushaski (isolate, Pakistan; Munshi 2019: 96-97, 100)

(15) a. *loi-e* *qarqaamuc* *ṣi-imi*
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'The fox ate the hen.'

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Salim-ERG Huma 3SG.F.O-see-PST.3SG.M.S
'Salim saw Huma.'

c. *mi-e* *in-ere* *baarǰoko* *i-u-uman*
1PL-ERG 3SG-DAT money 3SG.M.O-give-PST.3PL
'We gave him money.'

Double-marking of objects

Double-marking of R only

- Particularly widespread in languages with ergative-absolutive and neutral monotransitive alignments, where the P/T role is not overtly flagged.
- Otherwise only minimally different from the P+R type, since the (unflagged) P is usually also indexed.

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Double-marking of objects

A further type:

- Double-marking of P+T/R: either T or R can be double-marked, but not simultaneously
  - Subtype 1: T and R can both be flagged but compete for indexing (Amharic, Koryak etc.)
  - Subtype 2: T and R can both be indexed but compete for flagging (so far unattested)
  - Subtype 3: T and R both compete for indexing and flagging (Eastern Mansi, Central Alaskan Yupik)

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Double-marking of objects

- Double-marking of P+T/R

Amharic (Afroasiatic > Semitic; Ethiopia; Amberber 2005: 299)

(14) a. *lämma and ṭärmus säbbär-ä*.
Lemma one bottle break.PST-3SG.M.S
'Lemma broke one bottle.'

b. *lämma ṭärmus-u-n säbbär-ä-(w)*.
Lemma bottle-DEF-ACC break.PST-3SG.M.S-(3SG.M.O)
'Lemma broke the bottle.'

Double-marking of objects

indefinite P:
flagging: no
indexing: no

- Double-marking of P+T/R

Amharic (Afroasiatic > Semitic; Ethiopia; Amberber 2005: 299)

(16) a. *lämma and ṭärmus säbbär-ä*.
Lemma one bottle break.PST-3SG.M.S
'Lemma broke one bottle.'

b. *lämma ṭärmus-u-n säbbär-ä-(w)*.
Lemma bottle-DEF-ACC break.PST-3SG.M.S-(3SG.M.O)
'Lemma broke the bottle.'

Double-marking of objects

definite P:
flagging: yes
indexing: optional

- Double-marking of P+T/R

Amharic (Afroasiatic > Semitic; Ethiopia; Amberber 2005: 299)

(16) a. *lämma and ṭärmus säbbär-ä*.
Lemma one bottle break.PST-3SG.M.S
'Lemma broke one bottle.'

b. *lämma ṭärmus-u-n säbbär-ä-(w)*.
Lemma bottle-DEF-ACC break.PST-3SG.M.S-(3SG.M.O)
'Lemma broke the bottle.'

Double-marking of objects

definite T:
flagging: yes
indexing: possible

- Double-marking of P+T/R

Amharic (Afroasiatic > Semitic; Ethiopia; Leslau 1995: 191)

(17) a. *ləğ-u-n* *lä-ənnat-u* *säṭṭ-äčč-əw.*
child-DEF-ACC DAT-mother-3SG.M give.PST-3SG.F.S-3SG.M.O
'She gave the child to his mother.'

b. *ləğ-u-n* *lä-ənnat-u* *säṭṭ-äčč-at*.
child-DEF-ACC DAT-mother-3SG.M give.PST-3SG.F.S-3SG.F.O
'id.'

Double-marking of objects

definite R:
flagging: yes
indexing: possible

- Double-marking of P+T/R

Amharic (Afroasiatic > Semitic; Ethiopia; Leslau 1995: 191)

(17) a. *ləǧ-u-n* *lä-ənnat-u* *säṭṭ-äčč-əw.*
child-DEF-ACC DAT-mother-3SG.M give.PST-3SG.F.S-3SG.M.O
'She gave the child to his mother.'

b. *ləǧ-u-n* *lä-ənnat-u* *säṭṭ-äčč-at*.
child-DEF-ACC DAT-mother-3SG.M give.PST-3SG.F.S-3SG.F.O
'id.'

Double-marking of objects

flagging: both T and R
indexing: either T or R

- Double-marking of P+T/R

Amharic (Afroasiatic > Semitic; Ethiopia; Leslau 1995: 191)

(17) a. *ləğ-u-n* *lä-ənnat-u* *säṭṭ-äčč-əw.*
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child-DEF-ACC DAT-mother-3SG.M give.PST-3SG.F.S-3SG.F.O
'id.'

Double-marking of objects

- Double-marking of P+T/R

Central Alaskan Yupik (Eskimo-Aleut, USA)

(16) a. *Angute-m sass'a-q navg-aa.*
man-ERG.SG watch-ABS.SG break-IND.3SG>3SG
'The man broke the watch.' (Miyaoka 2012: 900)

b. *Cikir-ai arna-m akuta-mek angute-t.*
give-IND.3SG>3PL woman-ERG.SG ice.cream-ABL man-ABS.PL
'The woman gave ice cream to the men.' (ibid. 941)

c. *Tun-aa arna-m akuta-q angut-nun.*
give-IND.3SG>3SG woman-ERG.SG ice.cream-ABS.SG man-ALL.PL
'The woman gave/sold the ice cream to the men.'
(ibid. 942)

Double-marking of objects

P:
flagging: overt with some nouns
indexing: obligatory

- Double-marking of P+T/R

Central Alaskan Yupik (Eskimo-Aleut, USA)

(18) a. *Angute-m* *sass'a-q* *navg-aa.*
man-ERG.SG watch-ABS.SG break-IND.3SG>3SG
'The man broke the watch.' (Miyaoka 2012: 900)

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give-IND.3SG>3PL woman-ERG.SG ice.cream-ABL man-ABS.PL
'The woman gave ice cream to the men.' (ibid. 941)

c. *Tun-aa* *arna-m* *akuta-q* *angut-nun.*
give-IND.3SG>3SG woman-ERG.SG ice.cream-ABS.SG man-ALL.PL
'The woman gave/sold the ice cream to the men.'
(ibid. 942)

ABM – ablative-modalis, ABS - absolutive, ERG – ergative, IND – indicative

Double-marking of objects

R with “secundative” verbs:
flagging: overt with some nouns
indexing: obligatory

- Double-marking of P+T/R

Central Alaskan Yupik (Eskimo-Aleut, USA)

(18) a. *Angute-m* *sass’a-q* *navg-aa.*
man-ERG.SG watch-ABS.SG break-IND.3SG>3SG
‘The man broke the watch.’ (Miyaoka 2012: 900)

b. *Cikir-ai* *arna-m* *akuta-mek* *angute-t.*
give-IND.3SG>3PL woman-ERG.SG ice.cream-ABM man-ABS.PL
‘The woman gave ice cream to the men.’ (ibid. 941)

c. *Tun-aa* *arna-m* *akuta-q* *angut-nun.*
give-IND.3SG>3SG woman-ERG.SG ice.cream-ABS.SG man-ALL.PL
‘The woman gave/sold the ice cream to the men.’
(ibid. 942)

ABM – ablative-modalis, ABS - absolutive, ERG – ergative, IND – indicative

Double-marking of objects

T with “indirective” verbs:
flagging: overt with some nouns
indexing: obligatory

- Double-marking of P+T/R

Central Alaskan Yupik (Eskimo-Aleut, USA)

(18) a. *Angute-m* *sass’a-q* *navg-aa.*
man-ERG.SG watch-ABS.SG break-IND.3SG>3SG
‘The man broke the watch.’ (Miyaoka 2012: 900)

b. *Cikir-ai* *arna-m* *akuta-mek* *angute-t.*
give-IND.3SG>3PL woman-ERG.SG ice.cream-ABM man-ABS.PL
‘The woman gave ice cream to the men.’ (ibid. 941)

c. *Tun-aa* *arna-m* *akuta-q* *angut-nun.*
give-IND.3SG>3SG woman-ERG.SG ice.cream-ABS.SG man-ALL.PL
‘The woman gave/sold the ice cream to the men.’
(ibid. 942)

ABM – ablative-modalis, ABS - absolutive, ERG – ergative, IND – indicative

Double-marking of objects

Either T or R, but not both, are aligned with P in terms of both flagging and indexing, depending on the verb

- Double-marking of P+T/R

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(18) a. *Angute-m* *sass'a-q* *navg-aa.*
man-ERG.SG watch-ABS.SG break-IND.3SG>3SG
'The man broke the watch.' (Miyaoka 2012: 900)

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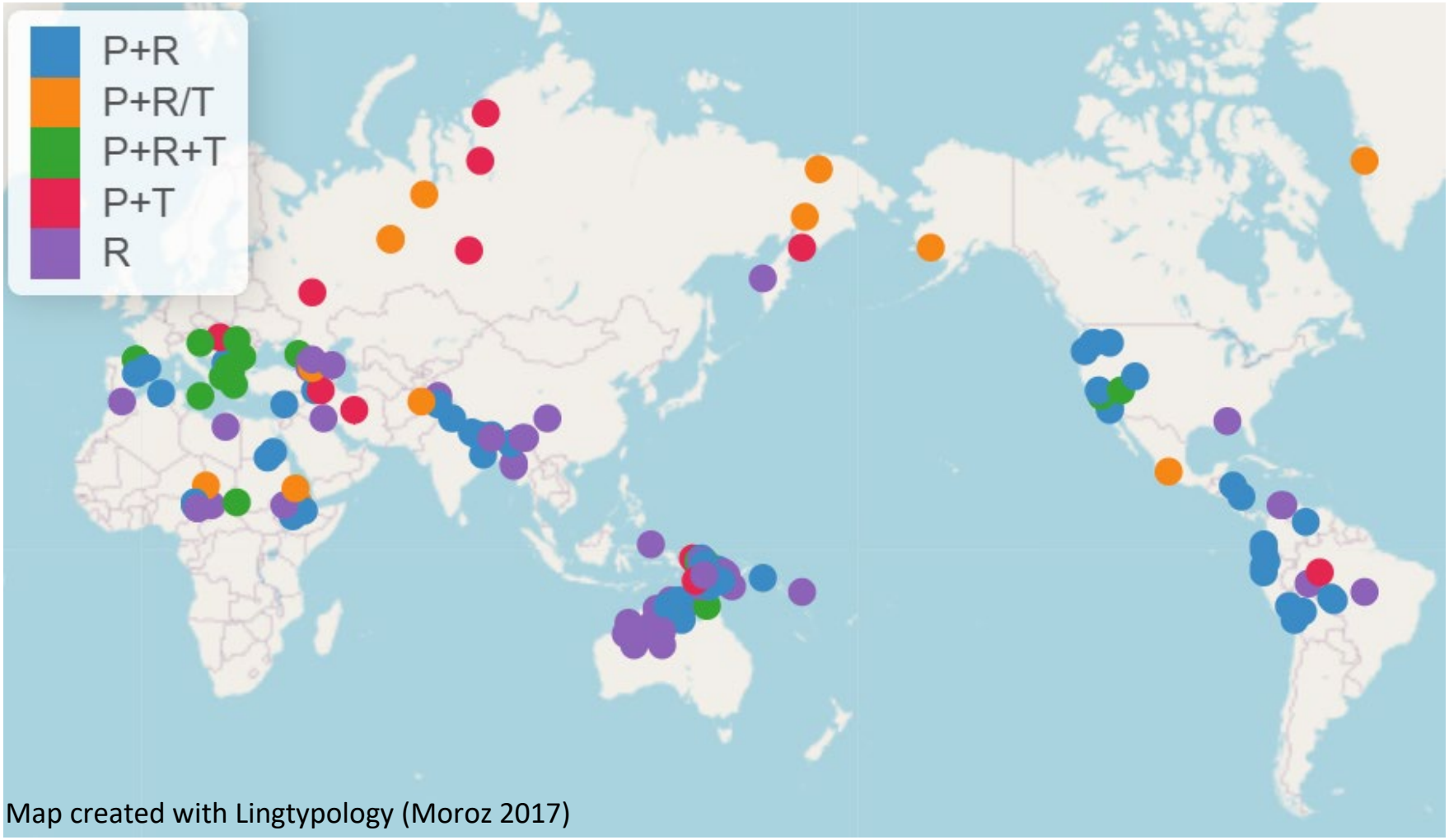
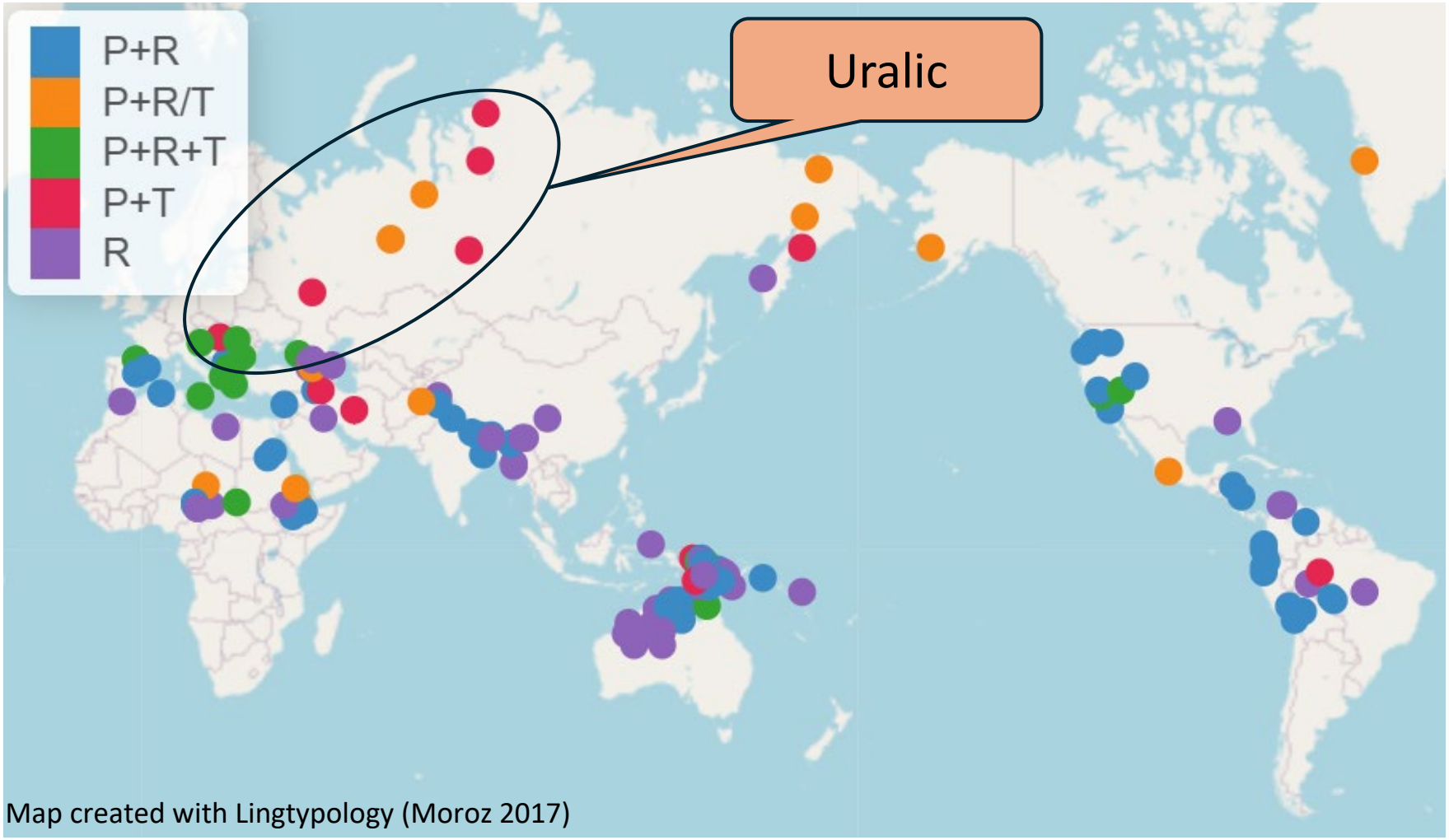
Double-marking of objects



Map created with Lingtypology (Moroz 2017)

Double-marking of objects



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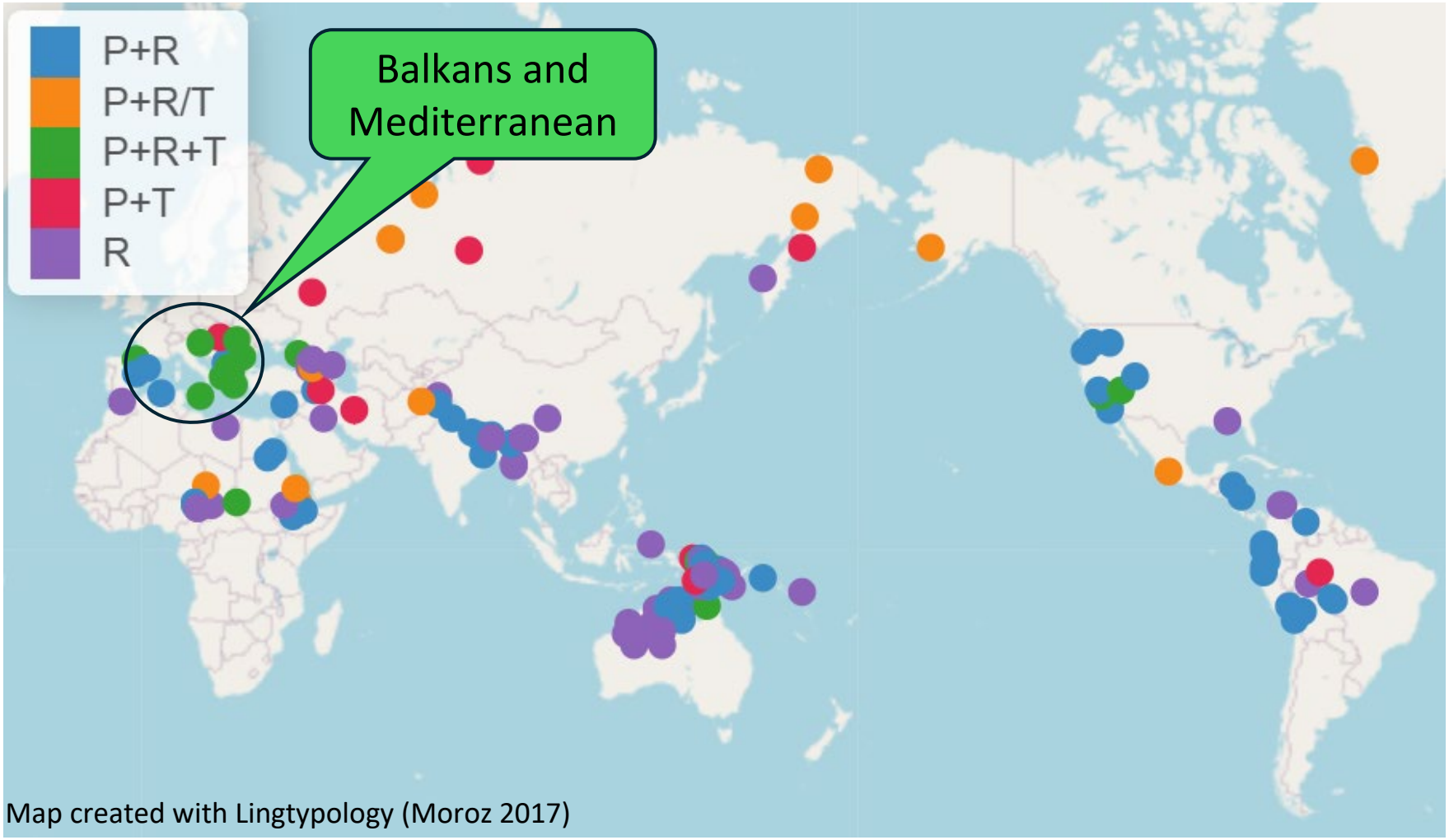

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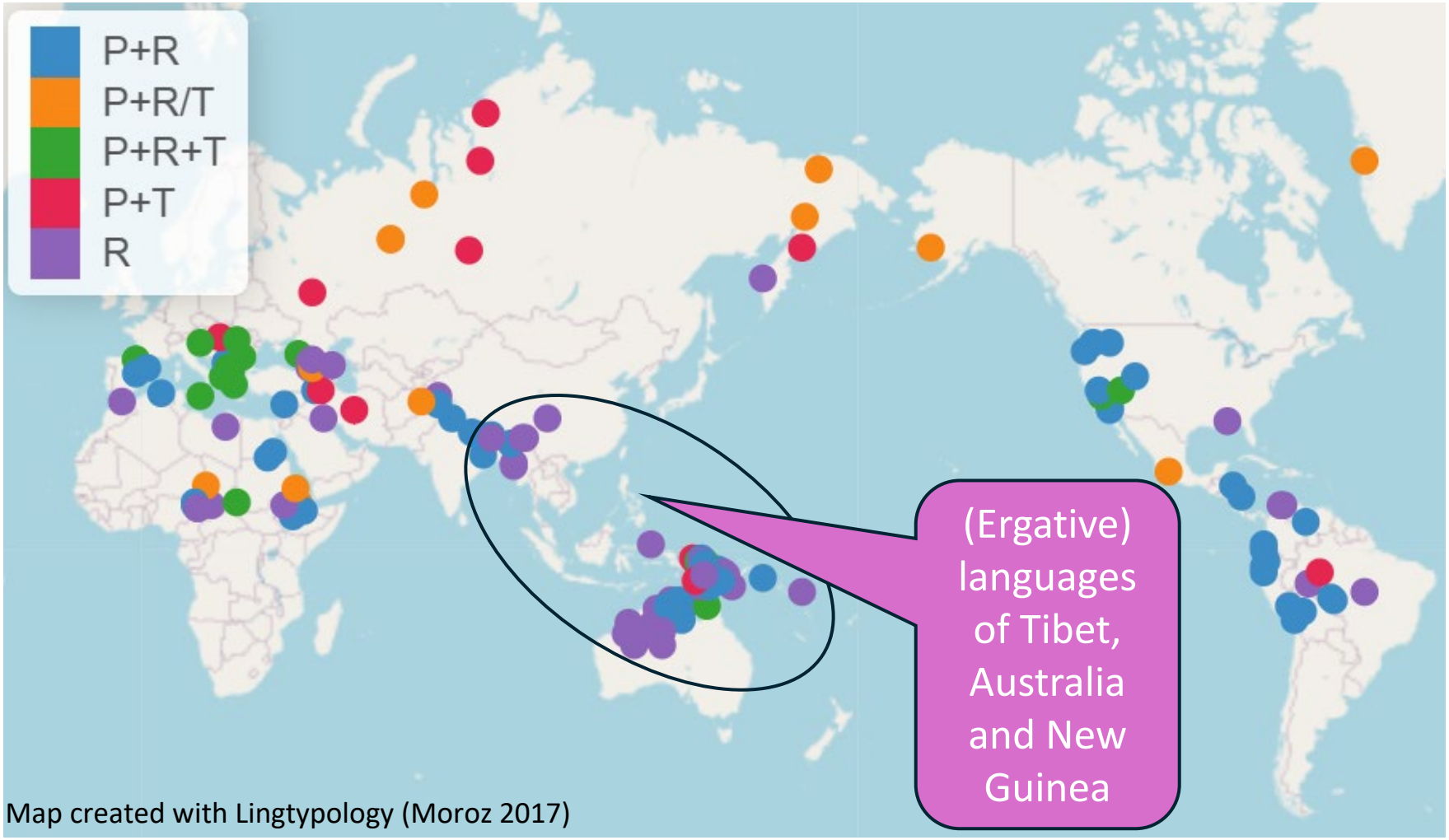

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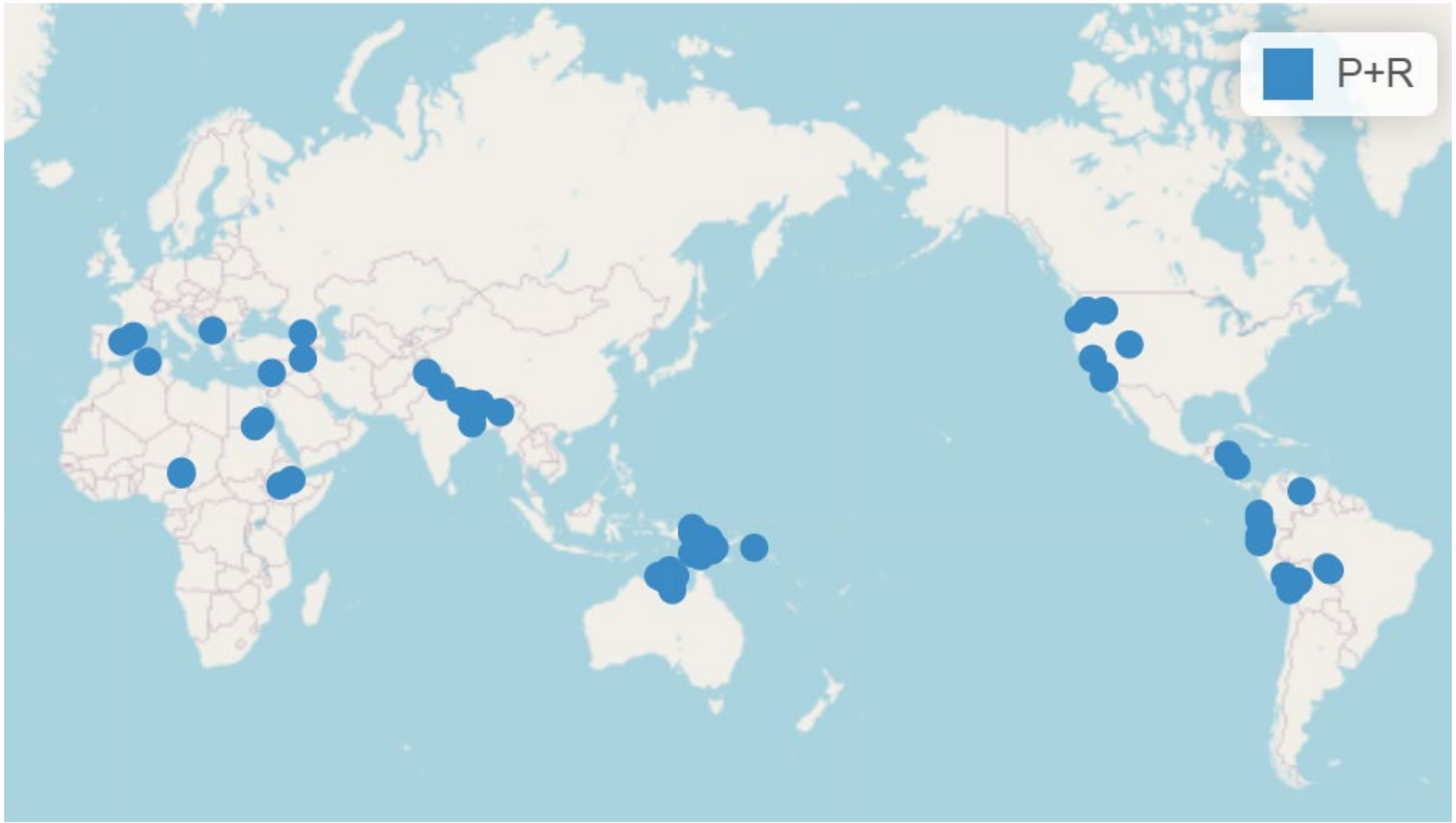

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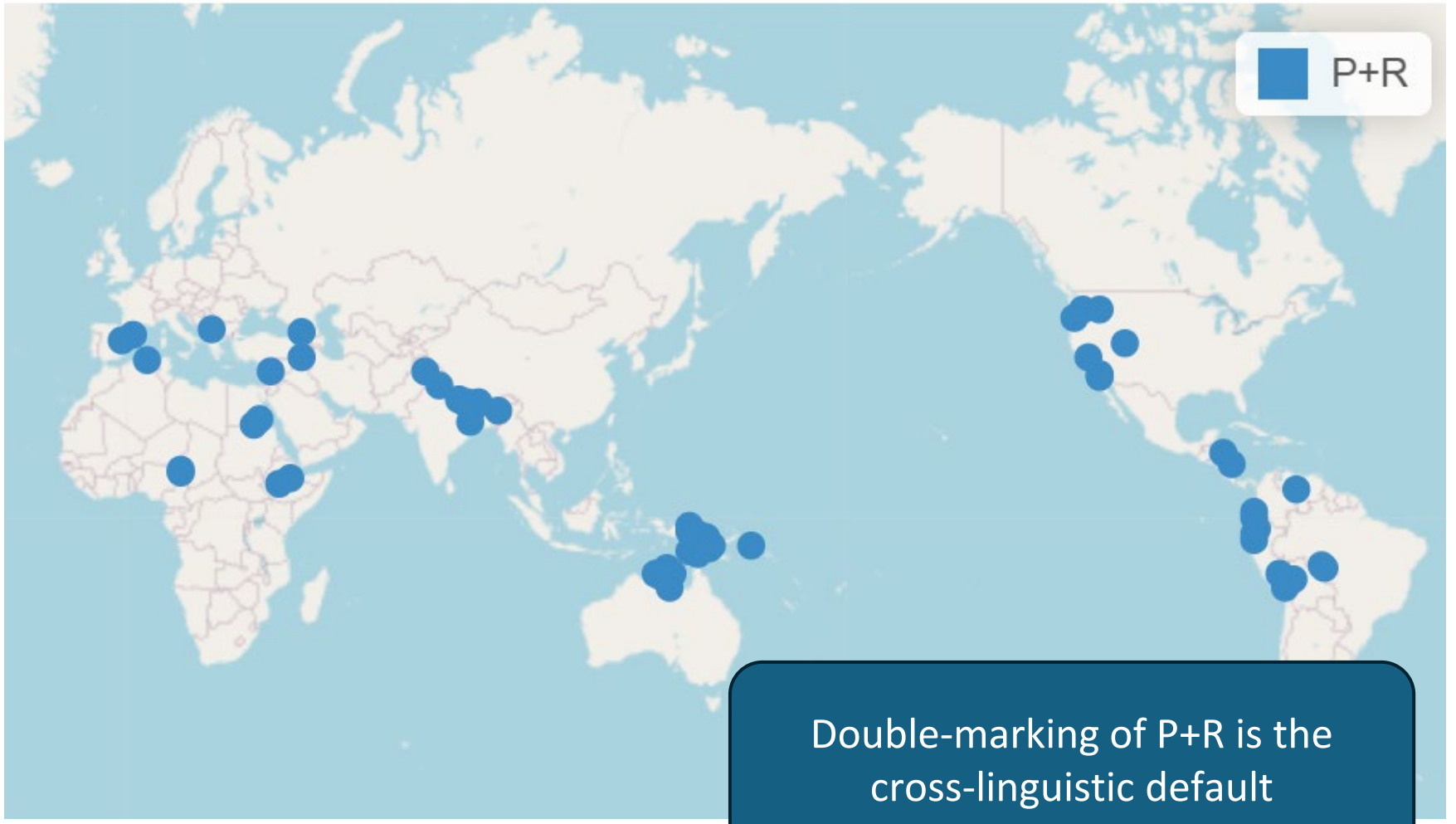

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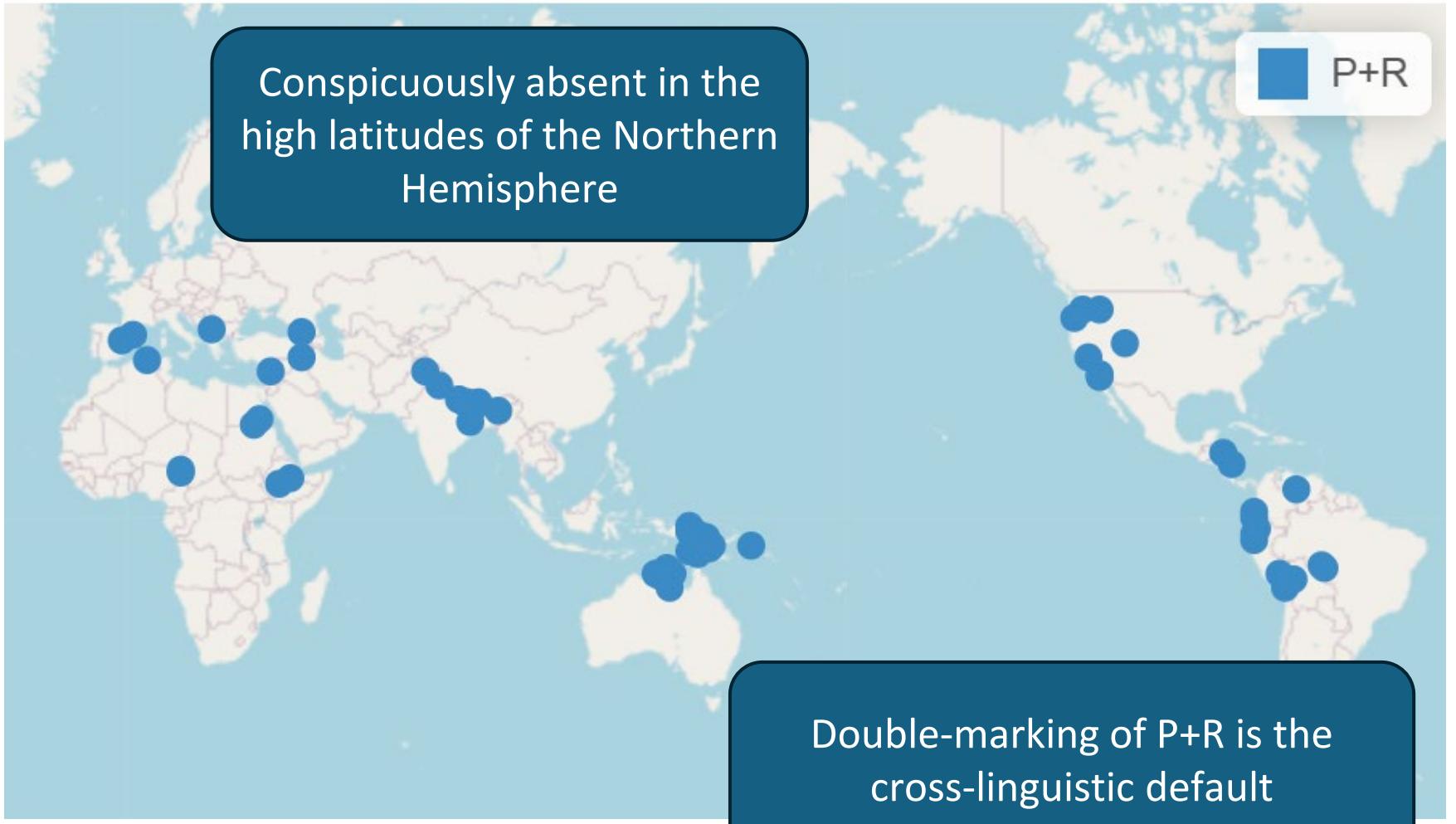

Double-marking of objects

- Distribution of types

Type	Languages	Genera	Families
P+R	64	46	37
P+R+T	18	13	10
P+R/T	13	9	8
P+T	11	9	7
R	57	36	28

Double-marking of objects

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R	57	36	28

Double-marking of P+R is the most frequent type cross-linguictically

Double-marking of objects

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P+R+T	18	13	10
P+R/T	13	9	8
P+T	11	9	7
R	57	36	28

Double-marking of only R to the exclusion of P is the second most frequent type

Double-marking of objects

- Areal breakdown (genera)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	6	1	2	0	3
Asia	7	0	5	4	9
Australia	5	1	0	0	6
Europe	2	7	0	2	1
N.America	6	1	2	0	1
S.America	10	0	0	1	3
Oceania	12	3	0	2	13

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Area	P+R	P+R+T	P+R/T	P+T	R
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Oceania	12	3	0	2	13

P+R and R are the only two types attested in all macro-areas

Double-marking of objects

- Areal breakdown (genera)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	6	1	2	0	3
Asia	7	0	5	4	9
Australia	5	1	0	0	6
Europe	2	7	0	2	1
N.America		1	2	0	1
S.America	0	0	0	1	3
Oceania		3	0	2	13

The dominant P+R type is underrepresented in Europe

Double-marking of objects

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Area	P+R	P+R+T	P+R/T	P+T	R
Africa	6	1	2	0	3
Asia	7	0	5	4	9
Australia	5	1	0	0	6
Europe	2	7	0	2	1
N.America	6		2	0	1
S.America	10		0	1	3
Oceania	12		0	2	13

The otherwise rare P+R+T type is dominant in Europe

Double-marking of objects

- Areal breakdown (genera)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	6	1	2	0	3
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N.America	6	1	2	0	1
S.America	10	0	0	1	3
Oceania	12	3	0	2	13

The otherwise rare P+T and P+R/T types are overrepresented in Asia

Double-marking of objects

- Areal breakdown (genera)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	6	1	2	0	3
Asia	7	0	5	4	9
Australia	5	1	0	0	6
Europe	2	7	0	2	1
N.America	6	1	2	0	1
S.America	10	0	0	1	3
Oceania	12	3	0		13

Double-marking of R only is particularly well-attested in Australia and Oceania

Double-marking of objects

An emergent “universal”:

(19) double-marking of P ⊂ double-marking of R

- Double-marking of R only is much more common than double-marking of P(+T) only (31 vs. 6 genera)
- Double-marking of R often tends to be more grammaticalized (obligatory, extended in its scope, less dependent on discourse conditions) than that of P.

Double-marking of objects

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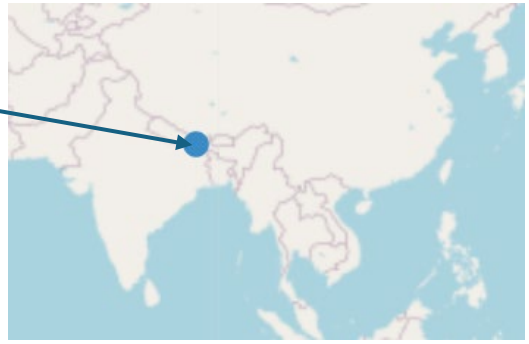
Double-marking of objects



Puma (Sino-Tibetan > Himalayish, Nepal; Sharma 2014: 191-3)

(20) a. *ŋa-a khim khaŋ-u-ŋ*
1SG-ERG house see-3.O-1SG.A
'I see a/the house.'

b. *ŋa-a khipa khaŋ-u-ŋ*
1SG-ERG dog see-3.O-1SG.A
'I see a dog.'

c. *ŋa-a khipa-lai khaŋ-u-ŋ*
1SG-ERG dog-OBJ see-3.O-1SG.A
'I see the dog.'

d. *ŋa-a pʌsupʌti iskul-lai kʌphekwa itd-u-ŋ*
1SG-ERG PN school-DAT money give-3.O-1SG.A
'I gave money to the Pashupati School.'

Double-marking of objects

inanimate P:
flagging: no
indexing: yes

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Double-marking of objects

animate indefinite P:
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inanimate R:
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Double-marking of objects

P/R flagging in Puma is borrowed from Nepali

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P: differential double-marking restricted to definite animates

Double-marking of objects

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R: consistent obligatory double-marking

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P: differential double-marking restricted to definite animates

R: consistent obligatory double-marking

Double-marking of objects

		flagging		indexing	
		languages	genera	languages	genera
P	**no**	47	29	5	5
	differential	86	56	90	56
	consistent	28	21	68	42
R	**no**	0	0	9	7
	differential	37	32	69	45
	consistent	126	74	85	55

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		languages	genera	languages	genera
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A mirror-image distribution of differential vs. consistent marking of P vs. R in both flagging and indexing

Double-marking of objects

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		languages	genera	languages	genera
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	differential	86	56	90	56
	consistent	28	21	68	42
R	**no**	0	0	9	7
	differential	37	32	69	45
	consistent	126	74	85	55

However, the difference between P and R is significant only for flagging (Fisher's exact test, $p << 0{,}0001$), but not for indexing ($p = 0{,}09$)

Double-marking of objects

		double-marking	
		languages	genera
P	**no**	57	36
	differential	97	62
	consistent	9	7
R	**no**	11	9
	differential	93	63
	consistent	59	39

Double-marking of objects

		double-marking	
		languages	genera
P	**no**	57	36
	differential	97	62
	consistent	9	7
R	**no**	11	9
	differential	93	63
	consistent	59	39

Consistent double-marking is attested significantly more frequently with R than with P (Fisher's exact test, $p << 0{,}001$), even though P and R show no difference wrt differential double-marking

Double-marking of objects

A fairly straightforward diachronic explanation for (19):

- R is usually higher on prominence hierarchies than P and especially T (e.g. Kittilä 2006);
- hence more frequently encoded by means of pronouns, which in turn have greater chances to become obligatory indexes (e.g. Givón 1976: 160–166; Siewierska 2003: 356).
- R is a more specific and less frequent semantic role than P, hence it has greater chances of being overtly marked (e.g. Dryer 1986: 841; Haspelmath 2005: 7, 11).

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The only language family where (19) does not hold is Uralic

Double-marking of objects

- Are P and R flagged resp. indexed in the same way?

Double-marking of objects

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	flagging: same	**flagging: different**
indexing: same	Puma	Burushaski
indexing: different	Imonda (rare)	Macedonian

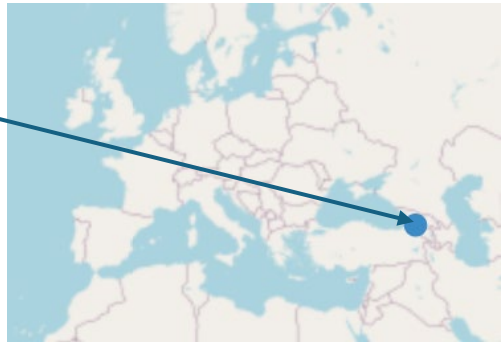
Double-marking of objects

- Are P and R flagged resp. indexed in the same way?
- Many languages show variation.

Double-marking of objects

- Are P and R flagged in the same way?

Double-marking of objects



- Are P and R flagged in the same way?

Old Georgian (Kartvelian, Geogia; Fähnrich 1991: 190): tense-aspect-based split in P/T-flagging

(21) a. *k'ac-i* *mšier-sa* *mi-s-c-em-s* *p'ur-s*
man-NOM hungry-DAT PVB-3.O-give-TH-PRS.3SG.S bread-DAT
'The man gives bread to the hungry one.'

b. *k'ac-man* *mšier-sa* *mi-s-c-a* *p'ur-i*
man-ERG hungry-DAT PVB-3.O-give-AOR.3SG.S bread-NOM
'The man gave bread to the hungry one.'

PVB – preverb, TH – "thematic" suffix

Double-marking of objects

Present tense:
R-flagging: dative
P/T-flagging: dative

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Double-marking of objects

Aorist tense:
R-flagging: dative
P/T-flagging: nominative

- Are P and R flagged in the same way?

Old Georgian (Kartvelian, Geogia; Fähnrich 1991: 190): tense-aspect-based split in P/T-flagging

(21) a. *k'ac-i* *mšier-sa* *mi-s-c-em-s* *p'ur-s*
man-NOM hungry-DAT PVB-3.O-give-TH-PRS.3SG.S bread-DAT
'The man gives bread to the hungry one.'

b. *k'ac-man* *mšier-sa* *mi-s-c-a* *p'ur-i*
man-ERG hungry-DAT PVB-3.O-give-AOR.3SG.S bread-NOM
'The man gave bread to the hungry one.'

PVB – preverb, TH – "thematic" suffix

Double-marking of objects

- Are P and R indexed in the same way?

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Malayo (Chibchan, Colombia; Williams 1993: 9-11): a number-based split

	direct object	indirect object
1Sg	*nə-*	*na-*
2Sg	*mə-*	*mo-*
3Sg	*Ø-*	*a-*
1Pl	*ne-*	
2Pl	*me-*	
3Pl	*ka-/ihka-*	

Double-marking of objects

Singular:
P and R indexes different

- Are P and R indexed in the same way?

Malayo (Chibchan, Colombia; Williams 1993: 9-11): a number-based split

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Double-marking of objects

Plural:
P and R indexes identical

- Are P and R indexed in the same way?

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Double-marking of objects

- Same vs. different marking or P and R

	flagging		**indexing**	
	languages	genera	languages	genera
same	60	40	84	52
different	75	48	23	17
both	28	21	43	30
n/a	0	0	13	11

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A somewhat significant (Fisher's exact test $p < 0,05$) preference for the same encoding of P and R in indexing, and a slight opposite trend in flagging

Double-marking of objects

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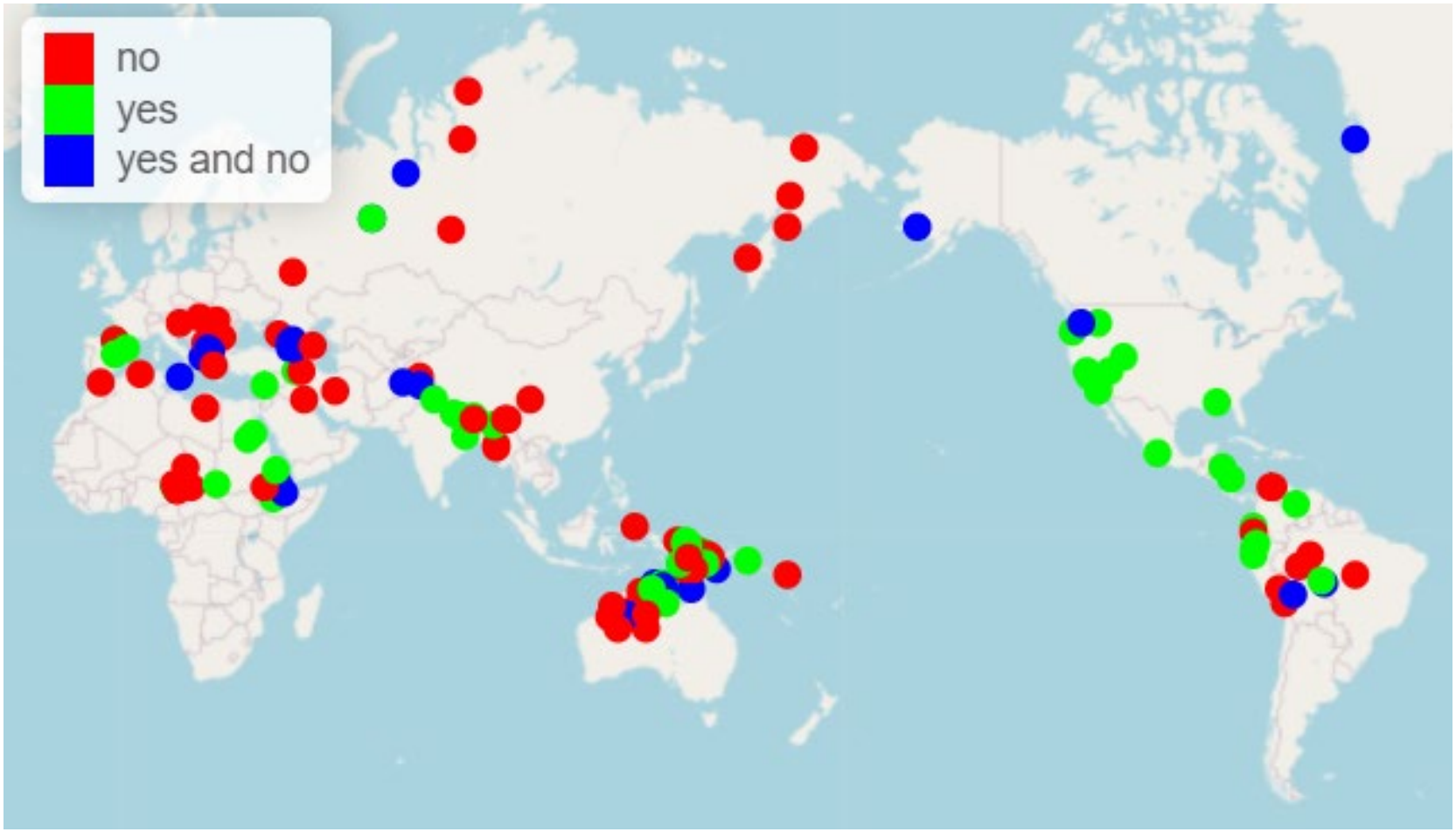

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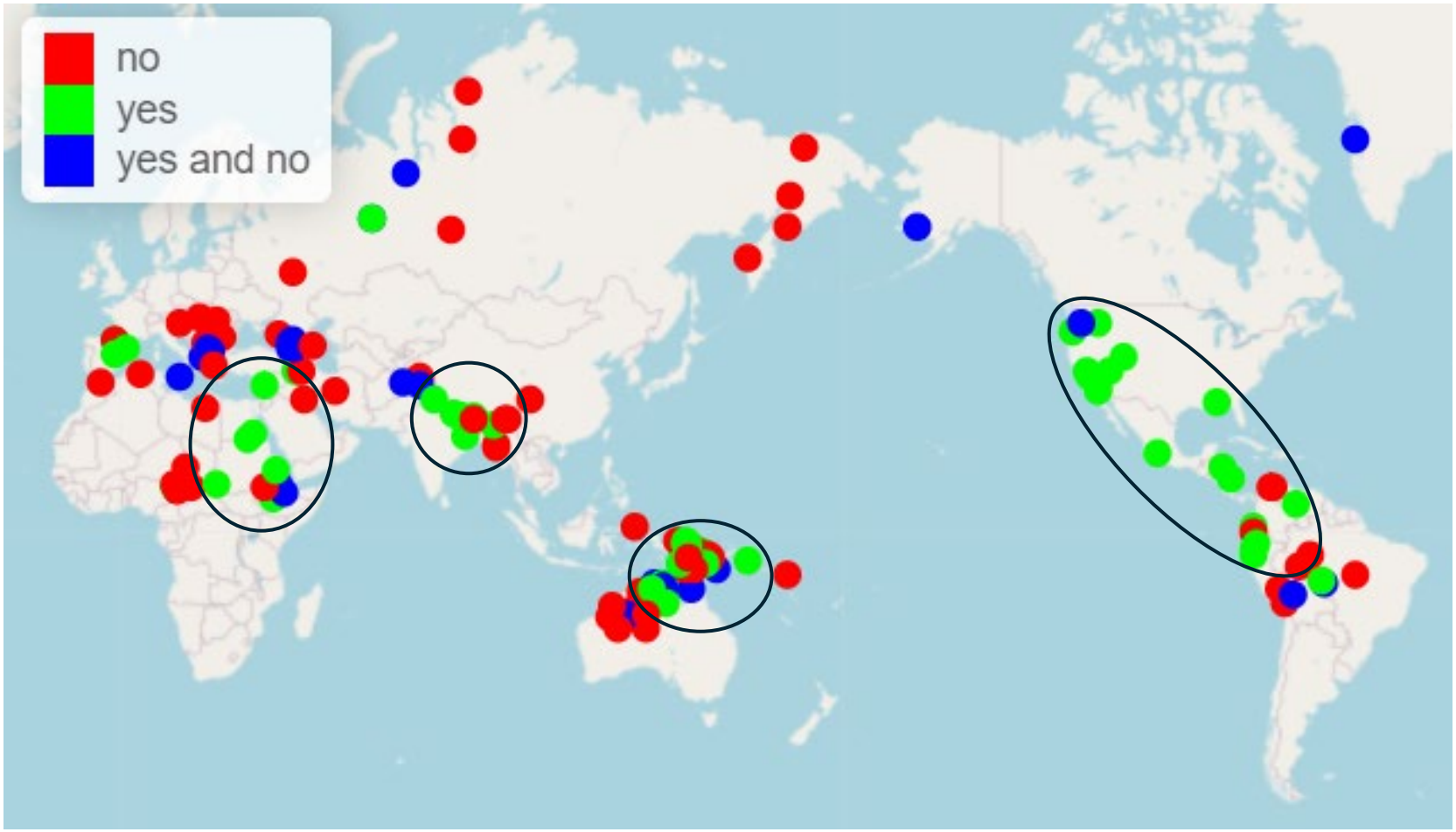

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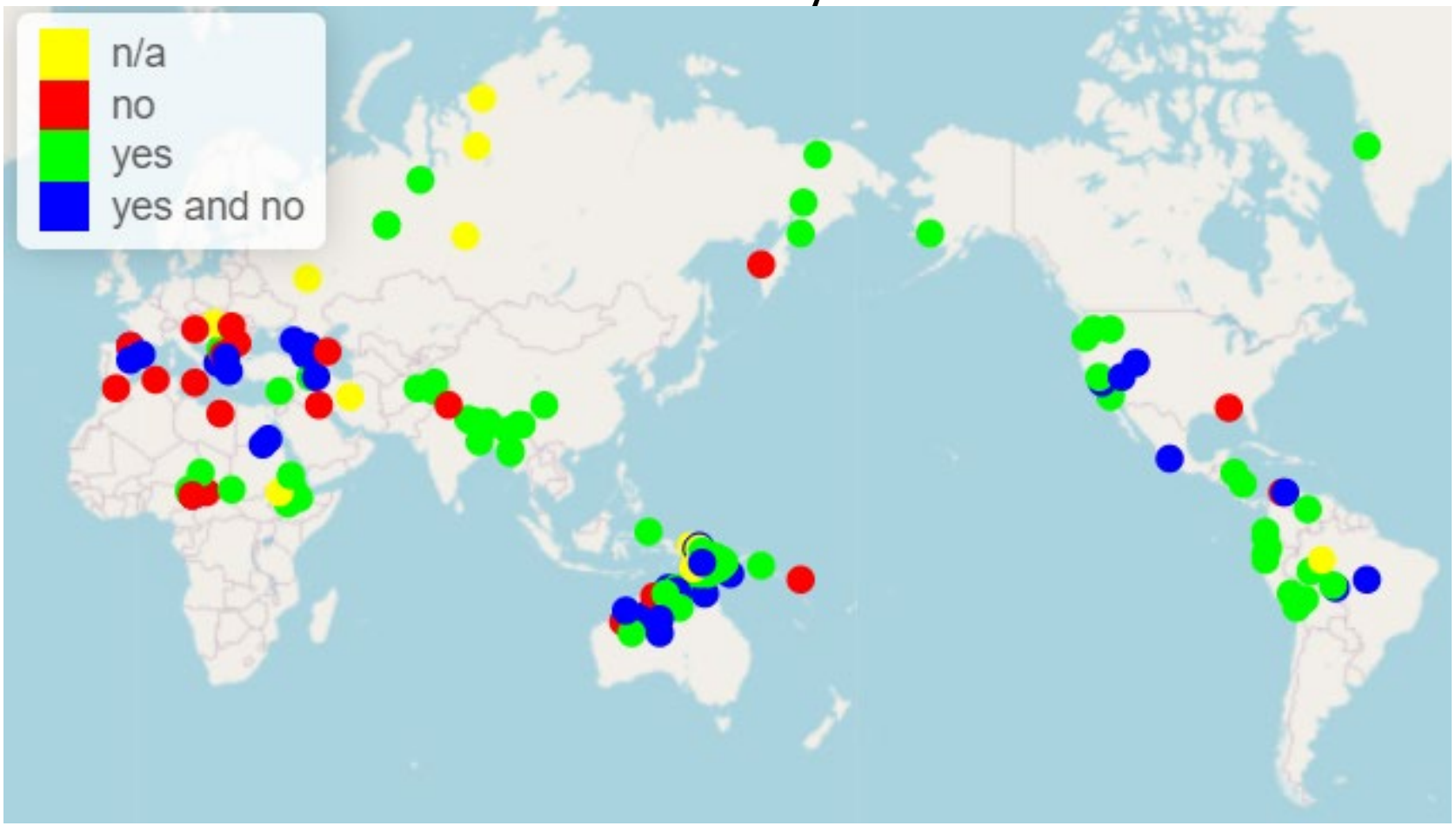

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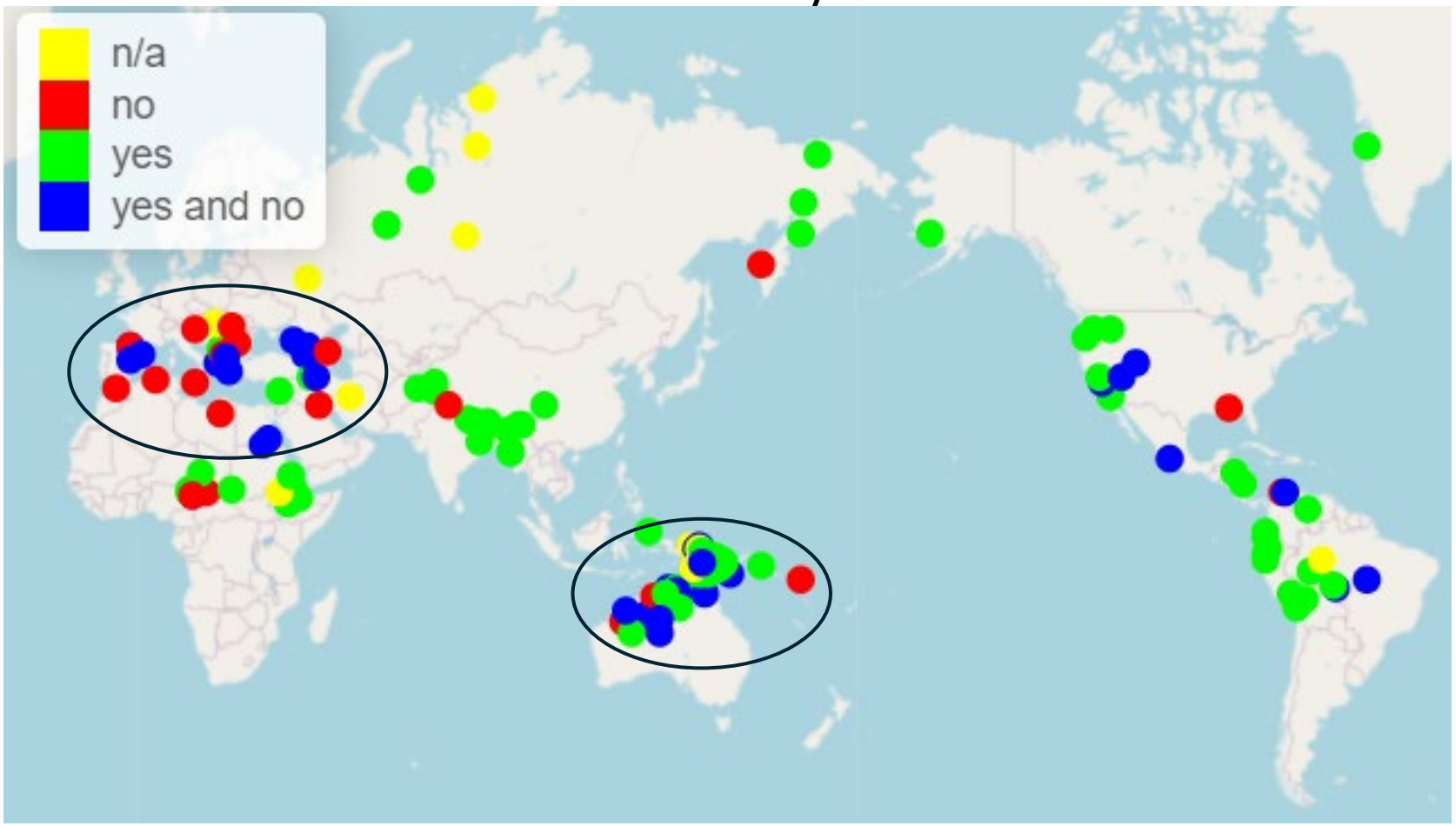

Double-marking of objects

- Double-marking of objects:
  - is well-attested cross-linguistically;
  - is diachronically and functionally motivated;
  - its cross-linguistic variation is constrained by an interplay of factors related to both semantic roles and referential prominence;
  - while some patterns appear to be cross-linguistic defaults, some of the less frequently attested patterns show clear areal and/or genealogical profiles.

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Roadmap

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2. My study
3. Double-marking of objects
4. Double-marking of obliques

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Double-marking of obliques

- 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

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- Still, indexing of obliquely-marked participants is attested.

Double-marking of obliques

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

(5) *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, EX – exclusive

Double-marking of obliques

- Indexing of non-subject (S/A) participants flagged differently from objects (P, T, R).
  - NB Should be distinguished from 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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Double-marking of obliques

- 34 languages of the sample (21 genera, 18 families)
- Attested in all macroareas, with a particularly high concentration in Australia and New Guinea

Double-marking of obliques

area	yes		no	
	languages	genera	languages	genera
Africa	3	1	15	8
Asia	3	3	36	13
Australia	14	7	6	7
Europe	3	3	14	9
N.America	1	1	14	8
S.America	2	2	14	12
Oceania	8	6	29	24

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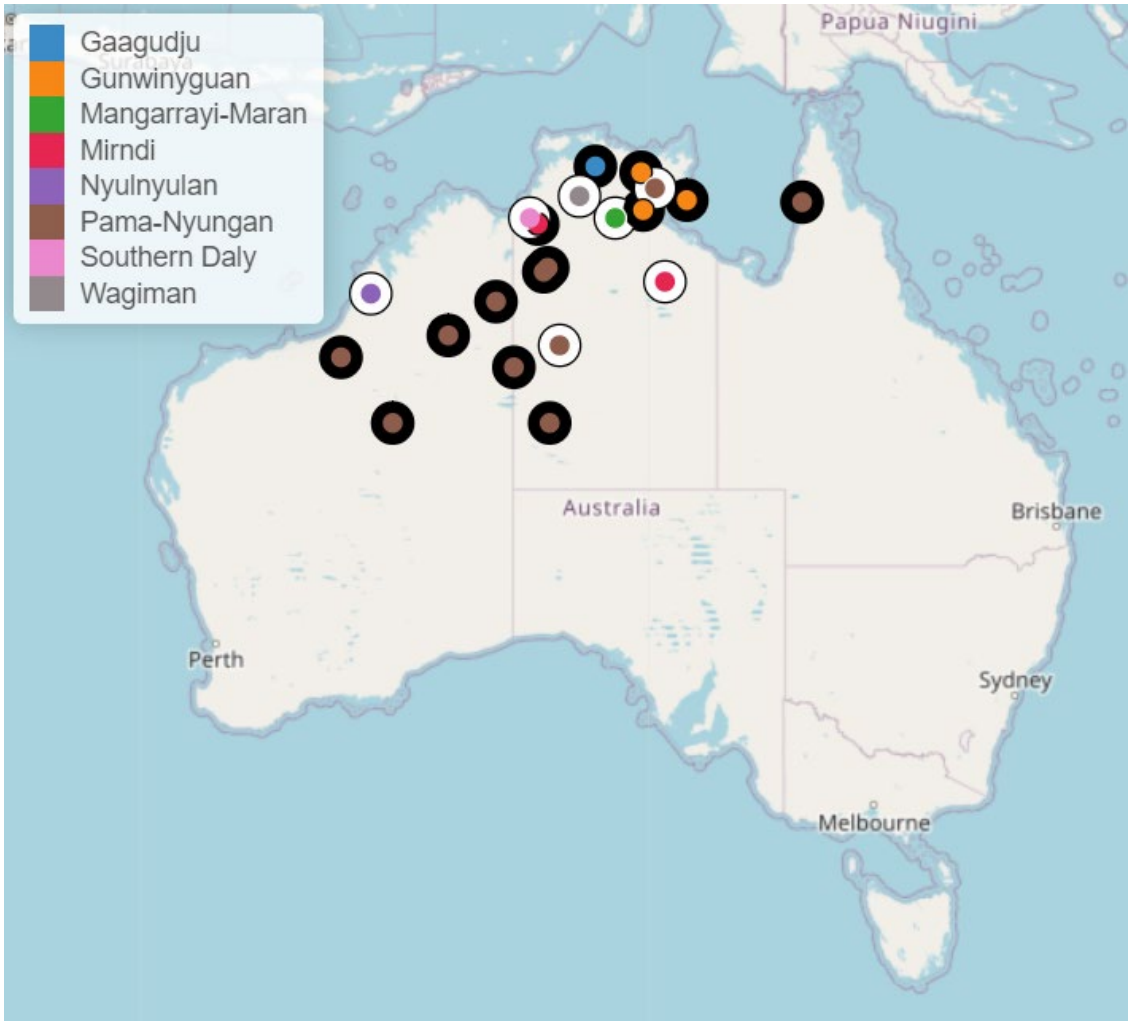
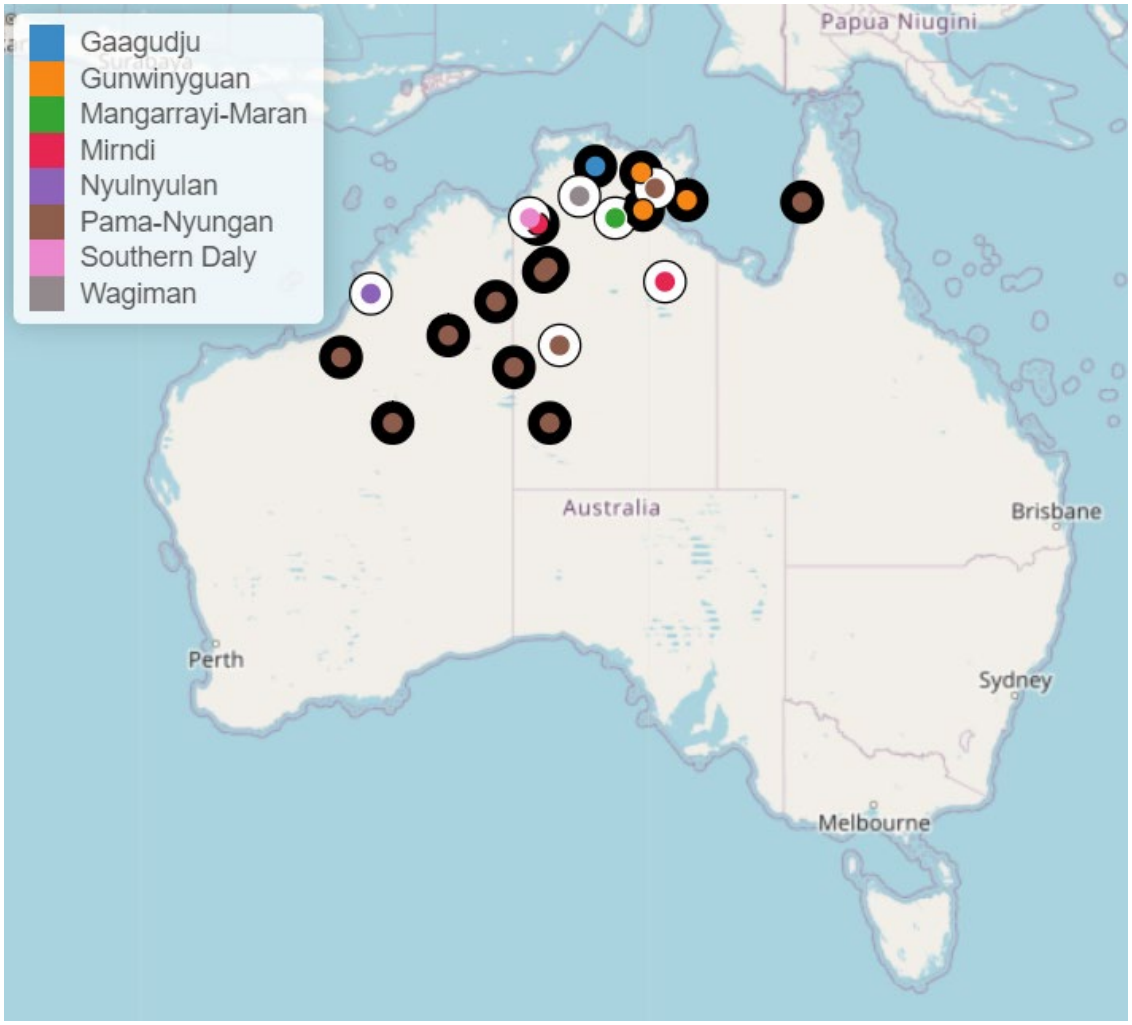


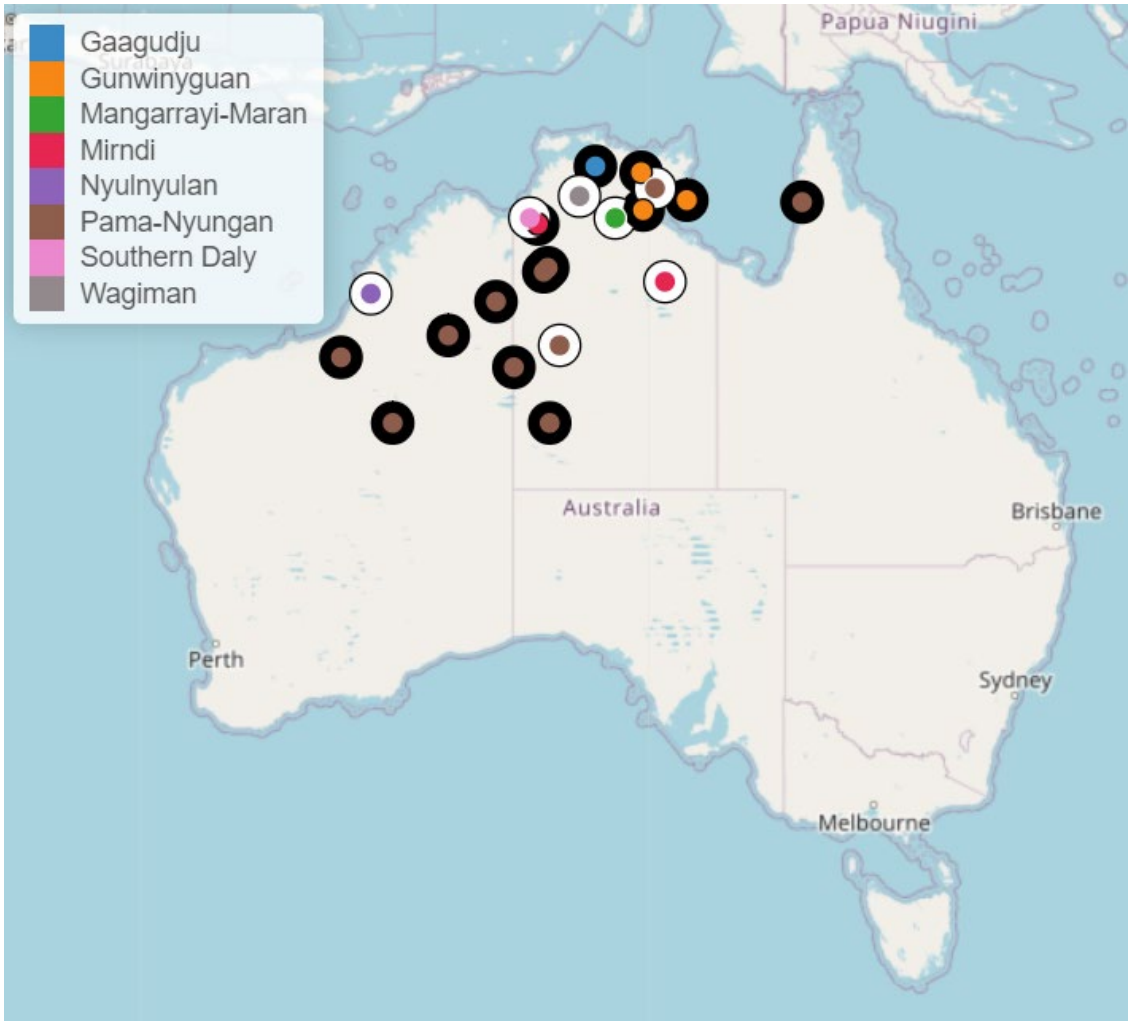
Gaagudju
Anindilyakwa
Ngalakan
Ngangi
Jaminjung
Bilinarra
Djaru
Gurindji
Kuku Nganhcara
Ngardi
Nyangumarta
Pintupi
Walmatjarri
Wangkajunga

Double-marking of obliques



A clear areal feature transcending the borders of language families

Double-marking of obliques



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

Double-marking of obliques

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

(22) *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

Double-marking of obliques

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

(23)	*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

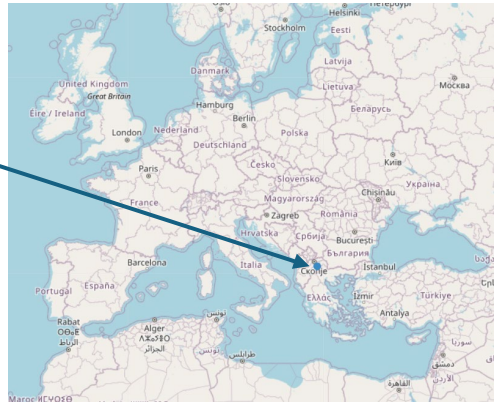
Double-marking of obliques

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

(24) *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.'

INS – instrumental case / instrumental applicative, PFV – perfective

Double-marking of obliques



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

(25) *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

Double-marking of obliques

Further parameter of variation (cf. Ennever & Browne 2023 on Pama-Nyungan):

- Are obliques indexed in the same way as R, or by a separate sets of indexes?
  - Not always straightforward to determine.
- Potentially points to distinct historical pathways.

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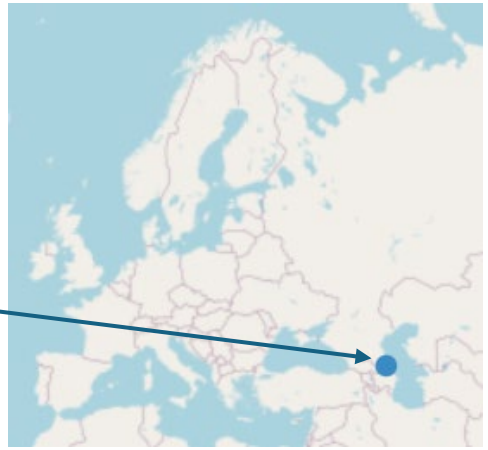
- Indexing of obliques vs. R

Double-marking of obliques



- Role of prominence hierarchies

Tabasaran (Nakh-Daghestanian > Lezgic; Russia, Bogomolova 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
'Run to the landlord!' (Bogomolova 2012: 116)

Double-marking of obliques

locutor object:
flagging: yes
indexing: optional

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APUD – "apud" localisation; LAT – lative

Double-marking of obliques

3rd person object:
flagging: yes
indexing: no

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Double-marking of obliques

- Role of prominence hierarchies

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

Double-marking of obliques

- Role of prominence hierarchies

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

(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
'He climbed onto the horse.'

Double-marking of obliques

inanimate object:
flagging: yes
indexing: no

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LOC – locative case, NFUT – non-future

Double-marking of obliques

animate object:
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indexing: yes

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LOC – locative case, NFUT – non-future,
OBL – oblique index set

Double-marking of obliques

- Role of prominence hierarchies

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

(28) *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).'

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

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Double-marking of obliques

- Tentative diachronic pathways:
  - extension of P/R-markers to obliques (Macedonian, some Papuan, Molalla);
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Double-marking of obliques

- 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*
dog-PL-DAT-ALLAT gu
'I threw the guts to/

ABS – absolutive, APP – applicative, C

Double-marking of obliques

Absolutive indexes: P (no flagging)

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c. *ágha-f-e-t* *ne* *e-wa-tárnan*
dog-PL-DAT-ALLAT guts 3NSG.ABS-APP-throw:CUR.1SG.A
'I threw the guts to/for the dogs.' (p. 75)

ABS – absolutive, APP – applicative, CUR – current tense, IPFV - imperfective

Double-marking of obliques

Absolutive indexes: R (dative flagging)

- Extension of P/R-markers to obliques

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'He just gave Mawai the knife.' (p. 57)

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

ABS – absolutive, APP – applicative, CUR – current tense, IPFV - imperfective

Double-marking of obliques

Absolutive indexes: Ben (dative-allative flagging)

- 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)

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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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Double-marking of obliques

- 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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Double-marking of obliques

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*

Double-marking of obliques

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

Double-marking of obliques

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

Double-marking of obliques

- Incorporation of adpositions with indexes as “applicative complexes” (Ethiosemitic, Sumerian, Panara).
- In fact is difficult (and sometimes hardly possible) to distinguish from pronominal doubling.

Double-marking of obliques

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

(23) *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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The stem of the free pronoun has nothing in common with the verbal proniminal index

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

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'You'll go fishing with me.'

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

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

Double-marking of obliques

- Indexing of obliquely-marked participants is an infrequent phenomenon, but it is attested in a number of language families all over the world.
- Like other types of indexing, tends to be systematically related to prominence hierarchies.
- Can arguably arise through several recurrent diachronic pathways.
- Clearly deserves a more comprehensive investigation.

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Thank you for your attention!
Danke für Ihre Aufmerksamkeit!

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Double-marking of objects

- Why are some logically possible options not attested?
- Haspelmath 2005, Malchukov et al. 2010; cf. Bárány 2021
  - P is aligned either with T or with R, hence “P+T” or “P+R” are attested, while “P” alone is unlikely
  - T is rarely indexed, but if it is, then P is also indexed; if T is both indexed and flagged, then in the same way as P, hence “T” alone is unlikely;
  - T and R seem to never be treated in the same way unless P is aligned with them, hence “T+R” alone is unlikely.

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Double-marking of objects cross-linguistically

- Double-marking of P+T/R

Eastern Mansi (Uralic, Virtanen 2012: 125-126):

(17) a. *söät lont wöänt-øtääm poolyøm-wooj-øl tøxt-iitø*
seven goose flock-ACC.3SG frozen-fat-INS feed-3SG>SG
'He feeds his flock of seven geese with frozen fat.'

b. *ton kuuly-tõõt-pööl-mø eek̊ø wisy-kom-nø*
that smock-sleeve-half-ACC woman young-man-LAT
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Double-marking of objects cross-linguistically

topical R:
flagging: like P
indexing: like P

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Double-marking of objects cross-linguistically

Either T or R, but not both, are aligned with P in terms of both flagging and indexing, depending on topicality

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- flagging (genera)

	same	different	both
P+R	32	9	8
P+R+T	4	6	6
P+R/T	4	2	6
P+T	1	8	0
R	4	27	6

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P+R+T	3	4	8	0
P+R/T	7	0	2	0
P+T	1	0	1	7
R	13	11	13	4

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