Seminar "Current Topics in Uralic Studies and Linguistic Typology",
Ludwig-Maximilians-Universität München, 13 May 2024

Differential double-marking of objects: Uralic and beyond

Peter Arkadiev

Freiburg Institute for Advanced Studies

alpgurev@gmail.com

FRIAS

FREIBURG INSTITUTE
FOR ADVANCED STUDIES
ALBERT-LUDWIGS-
UNIVERSITÄT FREIBURG

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Double-marking of objects in Uralic

- Some Uralic languages display verbal morphology sensitive to the properties of the direct object (traditionally called “objective conjugation”)

Eastern Khanty (Filchenko 2007: 265)

(1) a. *mä* *wajaɣ-ət* *wel-s-əm*
1SG animal-PL kill-PST-1SG
‘I killed some animals.’

b. *mä* *wajaɣ-ət* *wel-s-əlam*
1SG animal-PL kill-PST-1SG>PL
‘I killed the animals.’

Double-marking of objects in Uralic

- Some Uralic languages display verbal morphology sensitive to the properties of the direct object (traditionally called "objective conjugation")

Eastern Khanty (Filchenko 2007: 265)

(1) a. *mä* *wajaɣ-ət* *wel-s-əm*
1SG animal-PL kill-PST-1SG
'I killed some animals.'

b. *mä* *wajaɣ-ət* *wel-s-ələm*
1SG animal-PL kill-PST-1SG>PL
'I killed the animals.'

Double-marking of objects in Uralic

- Some Uralic languages display verbal morphology sensitive to the properties of the direct object (traditionally called "objective conjugation")

Eastern Khanty (Filchenko 2007: 265)

(1) a. *mä* *wajaɣ-ət* *wel-s-əm*
1SG animal-PL kill-PST-1SG
'I killed some animals.'

b. *mä* *wajaɣ-ət* *wel-s-ələm*
1SG animal-PL kill-PST-1SG>PL
'I killed the animals.'

Indefinite object: subjective conjugation

Double-marking of objects in Uralic

- Some Uralic languages display verbal morphology sensitive to the properties of the direct object (traditionally called "objective conjugation")

Eastern Khanty (Filchenko 2007: 265)

(1) a. *mä* *wajaɣ-ət* *wel-s-əm*
1SG animal-PL kill-PST-1SG
'I killed some animals.'

b. *mä* *wajaɣ-ət* *wel-s-əlam*
1SG animal-PL kill-PST-1SG>PL
'I killed the animals.'

Definite object: objective conjugation

Double-marking of objects in Uralic

- Object indexing in Uralic (Janda et al. 2022: 896-7):
  - Attested in Samoyedic, Ugric and Mordvin
  - In most languages, only indexes the number of 3rd person objects; indexing of object person only in Mordvin
  - Is sensitive to definiteness and topicality (e.g. Nikolaeva 1999, 2001; Klumpp & Skribnik 2022: 1026-8)
    → Differential Object Indexing (DOI), term proposed in Iemmolo (2011)

Double-marking of objects in Uralic

- Object indexing in Uralic (Janda et al. 2022: 896-7):
  - Attested in Samoyedic, Ugric and Mordvin
  - In most languages, only indexes the number of 3rd person objects; indexing of object person only in Mordvin
  - Is sensitive to definiteness and topicality (e.g. Nikolaeva 1999, 2001; Klumpp & Skribnik 2022: 1026-8)
    → Differential Object Indexing (DOI), term proposed in Iemmolo (2011)

Double-marking of objects in Uralic

- Object indexing in Uralic (Janda et al. 2022: 896-7):
  - Attested in Samoyedic, Ugric and Mordvin
  - In most languages, only indexes the number of 3rd person objects; indexing of object person only in Mordvin
  - Is sensitive to definiteness and topicality (e.g. Nikolaeva 1999, 2001; Klumpp & Skribnik 2022: 1026-8)
    → Differential Object Indexing (DOI), term proposed in Iemmolo (2011)

Double-marking of objects in Uralic

- Object indexing in Uralic (Janda et al. 2022: 896-7):
  - Attested in Samoyedic, Ugric and Mordvin
  - In most languages, only indexes the number of 3rd person objects; indexing of object person only in Mordvin
  - Is sensitive to definiteness and topicality (e.g. Nikolaeva 1999, 2001; Klumpp & Skribnik 2022: 1026-8; de Smit & Janda 2023: 998-1001)

    → Differential Object Indexing (DOI), term proposed in Iemmolo (2011)

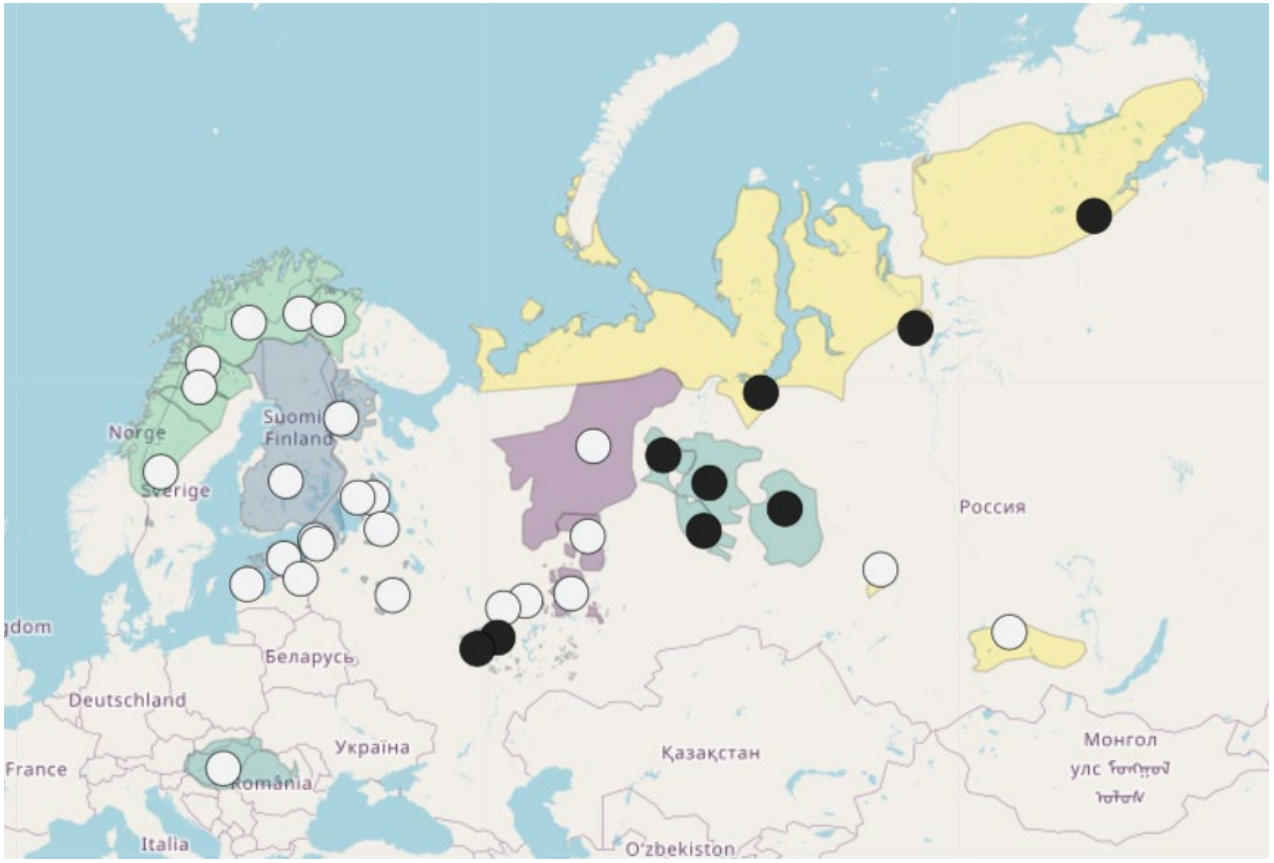
Double-marking of objects in Uralic

- Object indexing in Uralic (Janda et al. 2022: 896-7):
  - Attested in Samoyedic, Ugric and Mordvin
  - In most languages, only indexes the number of 3rd person objects; indexing of object person only in Mordvin
  - Is sensitive to definiteness and topicality (e.g. Nikolaeva 1999, 2001; Klumpp & Skribnik 2022: 1026-8; de Smit & Janda 2023: 998-1001)
    → Differential Object Indexing (DOI), term proposed in Iemmolo (2011)

Double-marking of objects in Uralic

Uralic Areal Typology Online https://uralic.clld.org/

- O-agreement in number (feature UT003)



Double-marking of objects in Uralic

- Most Uralic languages, unlike Khanty, have overt case-marking (flagging) on direct objects:

Tundra Nenets (Nikolaeva 2014: 206, 208)

(2) a. *Wera-m ladə˚.*
Wera-ACC hit.3SG
[Whom did he hit?] ‘He hit Wera.’

b. *Wera-m xīb’a ladə˚-da?*
Wera-ACC who hit-3SG>SG
‘Who hit Wera?’

- Both indexing and case-marking (flagging) → double-marking

Double-marking of objects in Uralic

- Most Uralic languages, unlike Khanty, have overt case-marking (flagging) on direct objects:

Tundra Nenets (Nikolaeva 2014: 206, 208)

(2) a. *Wera-m* *ladə^{o}*.
Wera-ACC hit.3SG
[Whom did he hit?] ‘He hit Wera.’

b. *Wera-m* *xīb’a* *ladə^{o}-da?*
Wera-ACC who hit-3SG>SG
‘Who hit Wera?’

- Both indexing and case-marking (flagging) → double-marking

Double-marking of objects in Uralic

- Most Uralic languages, unlike Khanty, have overt case-marking (flagging) on direct objects:

Tundra Nenets (Nikolaeva 2014: 206, 208)

(2) a. *Wera-m* *ladəᵒ*.
Wera-ACC hit.3SG
[Whom did he hit?] 'He hit Wera.'

b. *Wera-m* *xīb'a* *ladəᵒ-da?*
Wera-ACC who hit-3SG>SG
'Who hit Wera?'

- Both indexing and case-marking (flagging) → double-marking

Double-marking of objects in Uralic

- Most Uralic languages, unlike Khanty, have overt case-marking (flagging) on direct objects:

Tundra Nenets (Nikolaeva 2014: 206, 208)

(2) a. *Wera-m* *ladəº*.
Wera-ACC hit.3SG
[Whom did he hit?] 'He hit Wera.'

b. *Wera-m* *xīb'a* *ladəº-da?*
Wera-ACC who hit-3SG>SG
'Who hit Wera?'

Focal object:
subjective conjugation

- Both indexing and case-marking (flagging)
→ double-marking

Double-marking of objects in Uralic

- Most Uralic languages, unlike Khanty, have overt case-marking (flagging) on direct objects:

Tundra Nenets (Nikolaeva 2014: 206, 208)

(2) a. *Wera-m* *ladəᵒ*.
Wera-ACC hit.3SG
[Whom did he hit?] 'He hit Wera.'

b. *Wera-m* *xīb'a* *ladəᵒ-da?*
Wera-ACC who hit-3SG>SG
'Who hit Wera?'

Topical object: objective conjugation

- Both indexing and case-marking → double-marking or bilocal marking (M. Haspelmath, p.c.)

Double-marking of objects in Uralic

- Most Uralic languages, unlike Khanty, have overt case-marking (flagging) on direct objects:

Tundra Nenets (Nikolaeva 2014: 206, 208)

(2) a. *Wera-m* *ladəᵒ*.
Wera-ACC hit.3SG
[Whom did he hit?] 'He hit Wera.'

b. *Wera-m* *xīb'a* *ladəᵒ-da?*
Wera-ACC who hit-3SG>SG
'Who hit Wera?'

Topical object: objective conjugation

- Both indexing and case-marking → double-marking or bilocal marking (M. Haspelmath, p.c.)

Double-marking of objects in Uralic

- Some Uralic languages show the typologically well-known phenomenon of Differential Object Marking (DOM, Kittilä et al. 2022: 883-5; Klumpp & Skribnik 2022: 1022-4):
  - only animate/definite/topical direct objects are overtly case-marked;
  - inanimate/indefinite/focal direct objects remain unmarked and are formally indistinguishable from subjects

Comrie 1977, Serdobolskaya & Toldova 2012,
de Smit & Janda 2023: 993-998 etc.

Double-marking of objects in Uralic

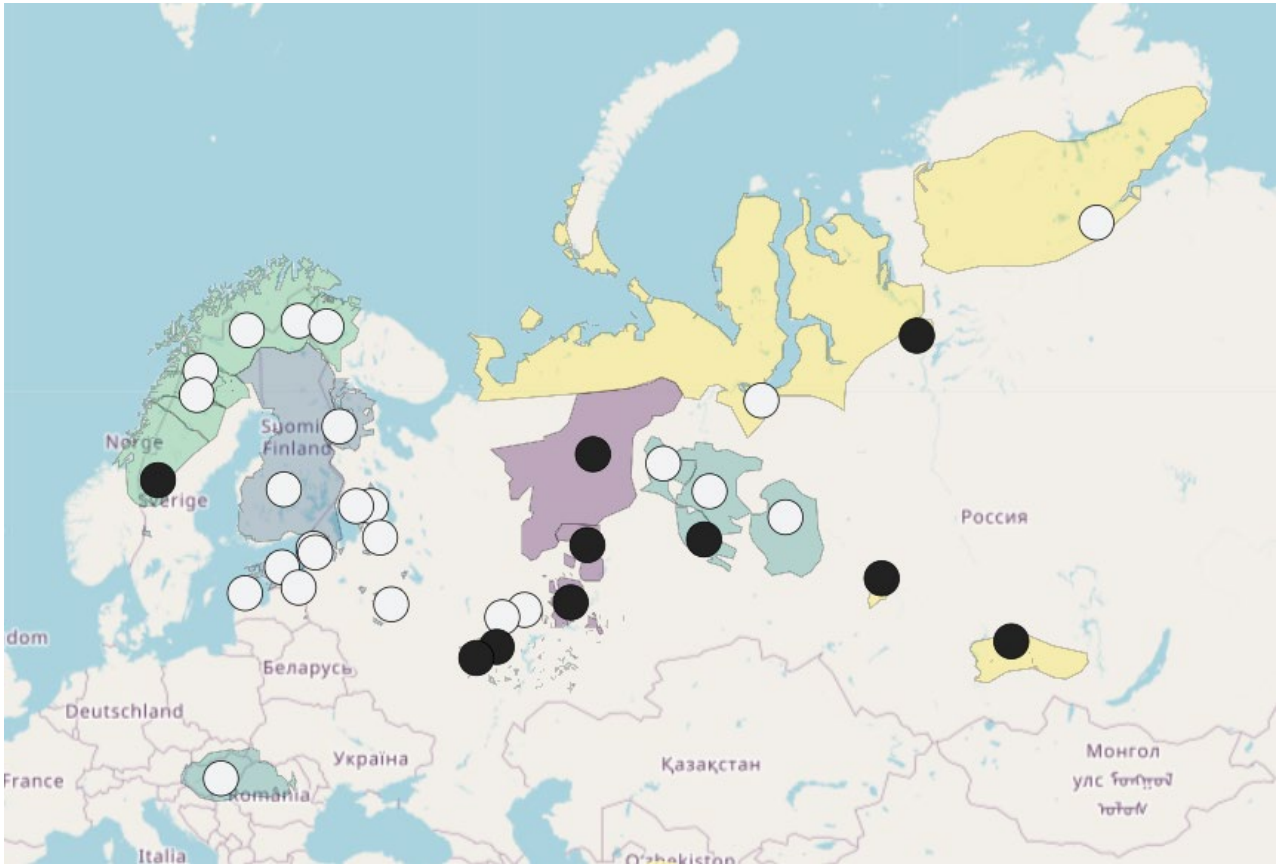
- Some Uralic languages show the typologically well-known phenomenon of Differential Object Marking (DOM, Kittilä et al. 2022: 883-5; Klumpp & Skribnik 2022: 1022-4):
  - only animate/definite/topical direct objects are overtly case-marked;
  - inanimate/indefinite/focal direct objects remain unmarked and are formally indistinguishable from subjects

Comrie 1977, Serdobolskaya & Toldova 2012,
de Smit & Janda 2023: 993-998 etc.

Double-marking of objects in Uralic

Uralic Areal Typology Online https://uralic.clld.org/

- DOM (feature UT010)



Double-marking of objects in Uralic

- Some languages (e.g. Enets, Mansi and Mordvin) feature both DOI and DOM.
- Their domains of application significantly overlap.

Moksha (Toldova et al. 2018: 575)

(3) a. *Vas'ɛ* *ker'-s'* *šuftə*
Vasya cut-PST.3SG tree
'Vasya cut a tree.'

b. *Vas'ɛ* *ker'-əz'ə* *šuft-t'*
Vasya cut-PST.3SG>3SG tree-DEF.SG.GEN
'Vasya cut the tree.'

Double-marking of objects in Uralic

- Some languages (e.g. Enets, Mansi and Mordvin) feature both DOI and DOM.
- Their domains of application significantly overlap.

Moksha (Toldova et al. 2018: 575)

(3) a. *Vas'ɛ* *ker'-s'* *šuftə*
Vasya cut-PST.3SG tree
'Vasya cut a tree.'

b. *Vas'ɛ* *ker'-əz'ə* *šuft-t'*
Vasya cut-PST.3SG>3SG tree-DEF.SG.GEN
'Vasya cut the tree.'

Double-marking of objects in Uralic

- Some languages (e.g. Enets, Mansi and Mordvin) feature both DOI and DOM.
- Their domains of application significantly overlap.

Moksha (Toldova et al. 2018: 575)

(3) a. *Vas'ɛ* *ker'-s'* *šuftə*
Vasya cut-PST.3SG tree
'Vasya cut a tree.'

b. *Vas'ɛ* *ker'-əz'ə* *šuft-t'*
Vasya cut-PST.3SG>3SG tree-DEF.SG.GEN
'Vasya cut the tree.'

Double-marking of objects in Uralic

- Some languages (e.g. Enets, Mansi and Mordvin) feature both DOI and DOM.
- Their domains of application significantly overlap.

Moksha (Toldova et al. 2018: 575)

(3) a. *Vas'ɛ* *ker'-s'* *šuftə*
Vasya cut-PST.3SG tree
'Vasya cut a tree.'

indefinite object:
flagging: no
indexing: no

b. *Vas'ɛ* *ker'-əz'ə* *šuft-t'*
Vasya cut-PST.3SG>3SG tree-DEF.SG.GEN
'Vasya cut the tree.'

Double-marking of objects in Uralic

- Some languages (e.g. Enets, Mansi and Mordvin) feature both DOI and DOM.
- Their domains of application significantly overlap.

Moksha (Toldova et al. 2018: 575)

(3) a. *Vas'ɛ* *ker'-s'* *šuftə*
Vasya cut-PST.3SG tree
'Vasya cut a tree.'

b. *Vas'ɛ* *ker'-əz'ə* *šuft-t'*
Vasya cut-PST.3SG>3SG tree-DEF.SG.GEN
'Vasya cut the tree.'

definite object:
flagging: yes
indexing: yes

Double-marking of objects in Uralic

An important feature of Uralic DOI often taken for granted:

- it 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’.

Moksha (Toldova et al. 2018: 601; 201)

(4) a. *maks-k* *monʼ-dʼejə-n* *tʼɛ* *uzʼərʼ-tʼ*
give-IMP.SG>3SG 1SG.OBL-DAT-1SG.PR this axe-DEF.SG.GEN
‘Give me this axe!’

b. *uč-əmak* *tozʼinʼə*
wait-IMP.SG>1SG a.little
‘Wait for me for a while.’

Double-marking of objects in Uralic

An important feature of Uralic DOI often taken for granted:

- DOI 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’.

Moksha (Toldova et al. 2018: 601; 201)

(4) a. *maks-k* *monʹ-dʹejə-n* *tʹɛ* *uzʹərʹ-tʹ*
give-IMP.SG>3SG 1SG.OBL-DAT-1SG.PR this axe-DEF.SG.GEN
‘Give me this axe!’

b. *uč-əmak* *tozʹinʹə*
wait-IMP.SG>1SG a.little
‘Wait for me for a while.’

Double-marking of objects in Uralic

An important feature of Uralic DOI often taken for granted:

- DOI 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’.

Moksha (Toldova et al. 2018: 601; 201)

(4) a. *maks-k* *mon’-d’ejə-n* *t’ɛ* *uz’ər’-t’*
give-IMP.SG>3SG 1SG.OBL-DAT-1SG.PR this axe-DEF.SG.GEN
‘Give me this axe!’

b. *uč-əmak* *toz’in’ə*
wait-IMP.SG>1SG a.little
‘Wait for me for a while.’

Double-marking of objects in Uralic

An important feature of Uralic DOI often taken for granted:

- DOI 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’.

Moksha (Toldova et al. 2018: 601; 201)

(4) a. *maks-k* *mon’-d’ejə-n* *t’ɛ* *uz’ər’-t’*
give-IMP.SG>3SG 1SG.OBL-DAT-1SG.PR this axe-DEF.SG.GEN
‘Give me this axe!’

b. *uč-əmak* *toz’in’ə*
wait-IMP.SG>1SG a.little
‘Wait for me for a while.’

Double-marking of objects in Uralic

- The semantic role of R can be indexed only if a construction is available where R is encoded like a direct object (P) of a monotransitive verb (the so-called “dative shift”, Klumpp & Skribnik 2022: 1031-2).

Tundra Nenets (Nikolaeva 2014: 214, 236)

(5) a. *xasawa ti-m n’e-x˚nta m’iŋqa-da*
man reindeer-ACC woman-DAT.3SG give-3SG>SG
‘The man gave the reindeer to his wife.’

b. *t’uku˚ n’enec’ə-m kniga-xəna m’iqŋa-w˚*
this person-ACC book-LOC give-1SG>SG
‘I provided this man with the book.’

Double-marking of objects in Uralic

- The semantic role of R can be indexed only if a construction is available where R is encoded like a direct object (P) of a monotransitive verb (the so-called “dative shift”, Klumpp & Skribnik 2022: 1031-2).

Tundra Nenets (Nikolaeva 2014: 214, 236)

(5) a. *xasawa* *ti-m* *n’e-xᵒnta* *m’iŋqa-da*
man reindeer-ACC woman-DAT.3SG give-3SG>SG
‘The man gave the reindeer to his wife.’

b. *t’ukuᵒ* *n’enec’ə-m* *kniga-xəna* *m’iqŋa-wᵒ*
this person-ACC book-LOC give-1SG>SG
‘I provided this man with the book.’

theme object

Double-marking of objects in Uralic

- The semantic role of R can be indexed only if a construction is available where R is encoded like a direct object (P) of a monotransitive verb (the so-called “dative shift”, Klumpp & Skribnik 2022: 1031-2).

Tundra Nenets (Nikolaeva 2014: 214, 236)

(5) a. *xasawa* *ti-m* *n’e-x^{o}nta* *m’iŋqa-da*
man reindeer-ACC woman-DAT.3SG give-3SG>SG
‘The man gave the reindeer to his wife.’

b. *t’uku^{o}* *n’enec’ə-m* *kniga-xəna* *m’iqŋa-w^{o}*
this person-ACC book-LOC give-1SG>SG
‘I provided this man with the book.’

recipient object

Double-marking of objects in Uralic

- Remarkably, the restriction of object indexing to direct objects is valid even for West Mansi, where, according to Klumpp (2023), it is the dative-lative case, and not the accusative, which is employed for DOM.

West Mansi (Klumpp 2023: 310)

(6) a. *sʲæ:sʲ-əm-nə* *ta:t-ən!*
father-1SG-DLAT bring-IMP.2SG
'Bring [it] to my father!'

b. *mɑn-s* *tuləmt-əs-tə* *isʲoɒ̯-nə* *je:k-əɣ*
go-PST steal-PST-3SG>SG girl-DLAT wife-TRSL
'He went and stole the girl for his wife.'

Double-marking of objects in Uralic

- Remarkably, the restriction of object indexing to direct objects is valid even for West Mansi, where, according to Klumpp (2023), it is the dative-lative case, and not the accusative, which is employed for DOM.

West Mansi (Klumpp 2023: 310)

(6) a. *sʲæ:sʲ-əm-nə* *tɑ:t-ən!*
father-1SG-DLAT bring-IMP.2SG
'Bring [it] to my father!'

b. *mɑn-s* *tuləmt-əs-tə* *isʲoɲ-nə* *je:k-əɣ*
go-PST steal-PST-3SG>SG girl-DLAT wife-TRSL
'He went and stole the girl for his wife.'

Double-marking of objects in Uralic

- Remarkably, the restriction of object indexing to direct objects is valid even for West Mansi, where, according to Klumpp (2023), it is the dative-lative case, and not the accusative, which is employed for DOM.

West Mansi (Klumpp 2023: 310)

(6) a. *sʲæ:sʲ-əm-nə* *tɑ:t-ən!*
father-1SG-DLAT bring-IMP.2SG
'Bring [it] to my father!'

b. *mɑn-s* *tuləmt-əs-tə* *isʲoɲ-nə* *je:k-əɣ*
go-PST steal-PST-3SG>SG girl-DLAT wife-TRSL
'He went and stole the girl for his wife.'

R:
flagging: DLAT
indexing: no

Double-marking of objects in Uralic

- Remarkably, the restriction of object indexing to direct objects is valid even for West Mansi, where, according to Klumpp (2023), it is the dative-lative case, and not the accusative, which is employed for DOM.

West Mansi (Klumpp 2023: 310)

(6) a. *sʲæ:sʲ-əm-nə* *tɑ:t-ən!*
father-1SG-DLAT bring-IMP.2SG
'Bring [it] to my father!'

b. *mɑn-s* *tuləmt-əs-tə* *isʲoɲ-nə* *je:k-əɣ*
go-PST steal-PST-3SG>SG girl-DLAT wife-TRSL
'He went and stole the girl for his wife.'

P:
flagging: DLAT
indexing: yes

Double-marking of objects in Uralic

- The interplay of DOI with (differential) case-marking of objects gives rise to various patterns of differential double-marking.
- Double-marking has not been sufficiently investigated from a typological perspective (e.g. Bakker & Siewierska 2009).
- On a cross-linguistic background, the tendency observed in Uralic to exclude indirect objects/recipients from the domain of application of indexing resp. double-marking is actually surprising.

Double-marking of objects in Uralic

- The interplay of DOI with (differential) case-marking of objects gives rise to various patterns of differential double-marking.
- Double-marking has not been sufficiently investigated from a typological perspective (e.g. Bakker & Siewierska 2009).
- On a cross-linguistic background, the tendency observed in Uralic to exclude indirect objects/recipients from the domain of application of indexing resp. double-marking is actually surprising.

Double-marking of objects in Uralic

- The interplay of DOI with (differential) case-marking of objects gives rise to various patterns of differential double-marking.
- Double-marking has not been sufficiently investigated from a typological perspective (e.g. Bakker & Siewierska 2009).
- On a cross-linguistic background, the tendency observed in Uralic to exclude indirect objects/recipients from the domain of application of indexing resp. double-marking is actually surprising.

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

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.
- See my talk at the Linguistics Colloquium on May 15.
- Some results have already been presented and published (Arkadiev 2013, 2016), but still work in progress.
- Some overlap with Bárány (2021, 2022)

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.
- See my talk at the Linguistics Colloquium on May 15.
- Some results have already been presented and published (Arkadiev 2013, 2016), but still work in progress.
- Some overlap with Bárány (2021, 2022)

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’)
    - where relevant, also beneficiaries (e.g. in applicative constructions)

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’)
    - where relevant, also beneficiaries (e.g. in applicative constructions)

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

- 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

- 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.):

(6) a. 1,2 person > 3 person > human > animate > inanimate

b. definite > indefinite specific > non-specific

c. primary topic > secondary topic > focus

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

- 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

  c. primary topic > secondary topic > focus

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;
  - currently 128 languages from 54 families and 77 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

- Language sample:
  - a representative convenience sample only including languages possessing the relevant phenomena;
  - currently 128 languages from 54 families and 77 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

- Language sample:
  - a representative convenience sample only including languages possessing the relevant phenomena;
  - currently 128 languages from 54 families and 77 genera (including isolates), but aiming at 150 or more;
  - 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

- Language sample:
  - a representative convenience sample only including languages possessing the relevant phenomena;
  - currently 128 languages from 54 families and 77 genera (including isolates), but aiming at 150 or more;
  - 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).

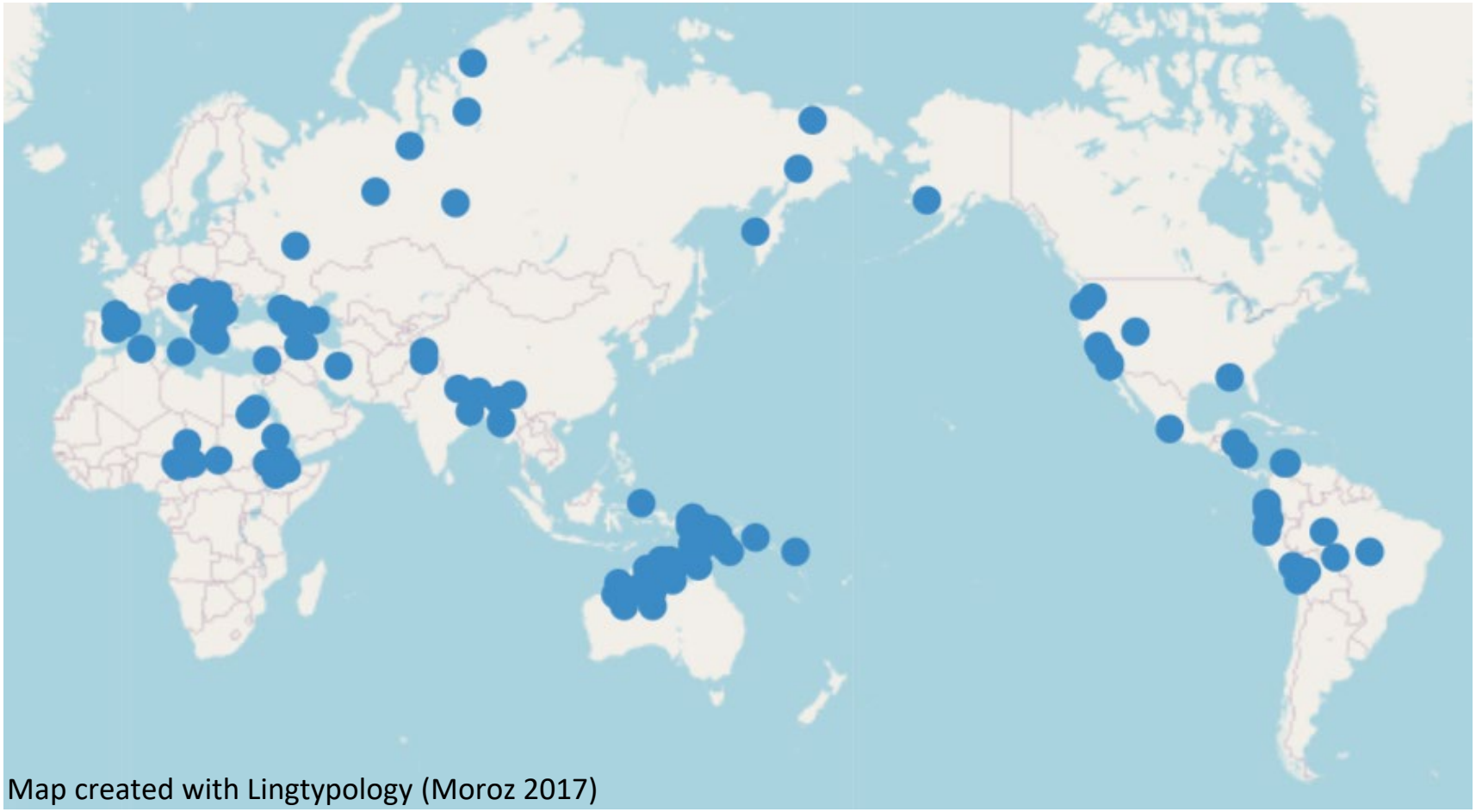
My study

- Language sample:
  - a representative convenience sample only including languages possessing the relevant phenomena;
  - currently 128 languages from 54 families and 77 genera (including isolates), but aiming at 150 or more;
  - the sample in purposefully not genealogically stratified, in order to capture family-internal variation;
  - includes 7 Uralic languages: Hungarian, Moksha, Eastern Mansi, Tundra Nenets, Enets, Nganasan, Selkup;
  - for statistical purposes, families and genera will be counted (as many times as many types they represent).

My study

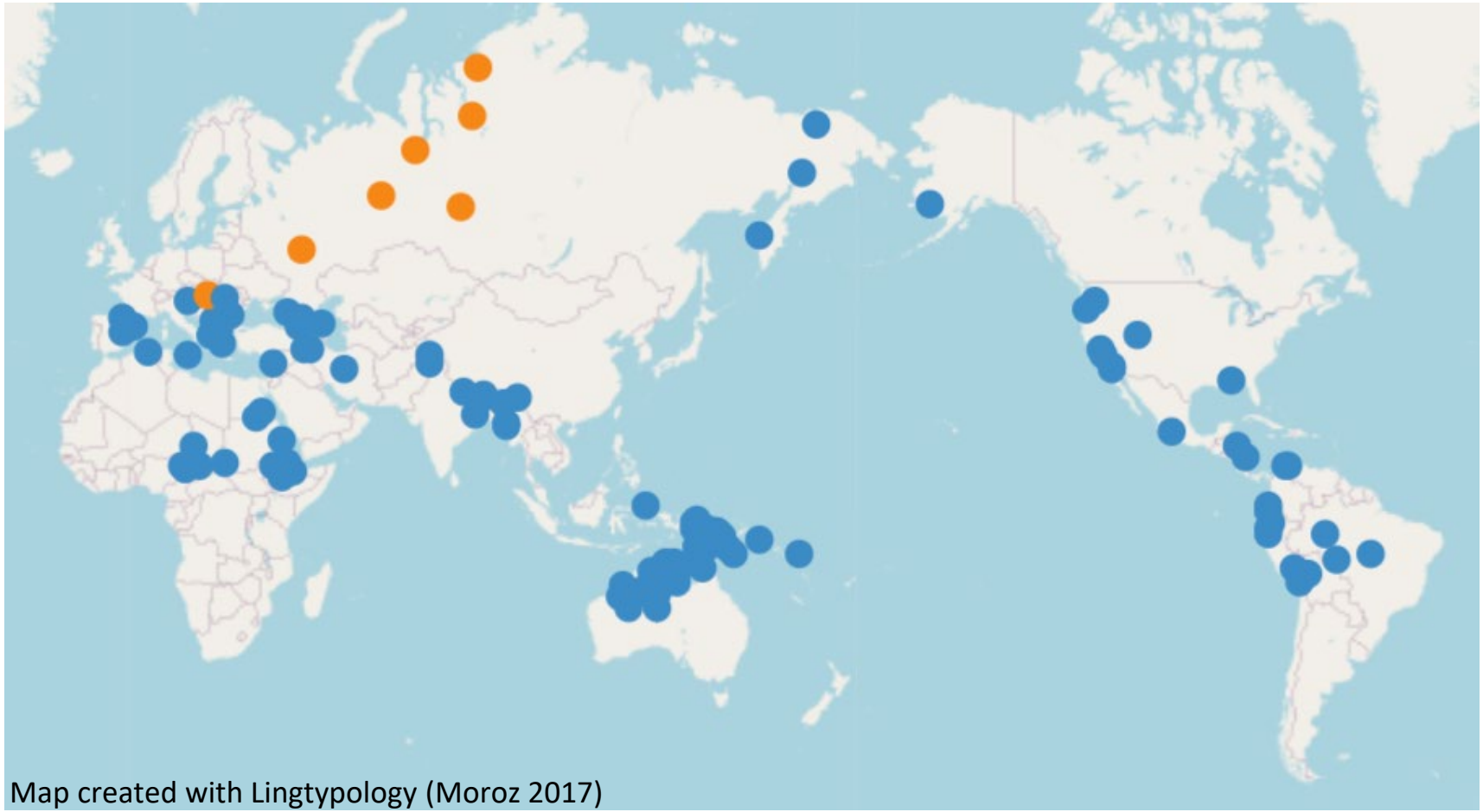
- Language sample:
  - a representative convenience sample only including languages possessing the relevant phenomena;
  - currently 128 languages from 54 families and 77 genera (including isolates), but aiming at 150 or more;
  - the sample in purposefully not genealogically stratified, in order to capture family-internal variation;
  - includes 7 Uralic languages: Hungarian, Moksha, Eastern Mansi, Tundra Nenets, Enets, Nganasan, Selkup;
  - for statistical purposes, families and genera will be counted (as many times as many types they represent).

My study



Map created with Lingtypology (Moroz 2017)

My study



Map created with Lingtypology (Moroz 2017)

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Double-marking of objects cross-linguistically

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

Double-marking of objects cross-linguistically

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

Double-marking of objects cross-linguistically

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

Double-marking of objects cross-linguistically

- 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.

Double-marking of objects cross-linguistically

- 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.

Double-marking of objects cross-linguistically

- 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.

Double-marking of objects cross-linguistically

- 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.

Double-marking of objects cross-linguistically

- 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.

Double-marking of objects cross-linguistically

- Double-marking of P+R

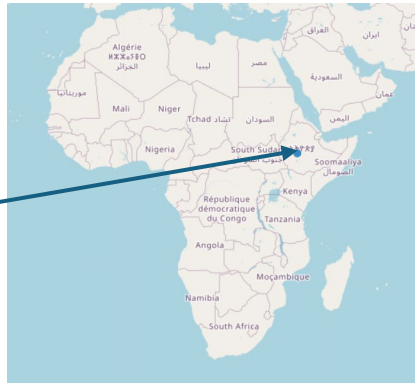
Ezha (Afroasiatic > Semitic, Ethiopia; Assefa 2018: 262)

(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-nɑ-m*
Desta OBJ-girl-DEF hit.PFV-3SG.M.SBJ-3SG.F.OBJ-DCL
'Desta hit the girl.'

Double-marking of objects cross-linguistically



- Double-marking of P+R

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

(7) a. *dəsta ʒəbb k'ət't'ər-ə-m*
Desta lion kill.PFV-3SG.M.S-DCL
'Desta killed a lion.'

b. *dəsta ʒəbb-ɨwe k'ʷət't'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 cross-linguistically

- 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.'

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

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 cross-linguistically

- 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.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.'

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

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

Double-marking of objects cross-linguistically

- 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.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.S-3SG.F.O-DCL
'Desta hit the girl.'

human definite P:
flagging: yes
indexing: yes

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

Double-marking of objects cross-linguistically

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

- Double-marking of P+R

Ezha (Afroasiatic > Semitic, Ethiopia)

(8) *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.' (Assefa 2018: 268)

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

Double-marking of objects cross-linguistically

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

- Double-marking of P+R

Ezha (Afroasiatic > Semitic, Ethiopia)

(8) *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.' (Assefa 2018: 268)

(9) *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.' (ibid.:129)

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

Double-marking of objects cross-linguistically

human definite T:
flagging: yes
indexing: no

- Double-marking of P+R

Ezha (Afroasiatic > Semitic, Ethiopia)

(8) *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.' (Assefa 2018: 268)

(9) *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.' (ibid.:129)

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

Double-marking of objects cross-linguistically

- 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 cross-linguistically

- 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 cross-linguistically

- 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.)
    - languages differ as to whether they allow the same (or any at all) marker to occur on the T

Double-marking of objects cross-linguistically

- 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.)
    - languages differ as to whether they allow the same (or any at all) marker to occur on T.

Double-marking of objects cross-linguistically

- Double-marking of P+T+R

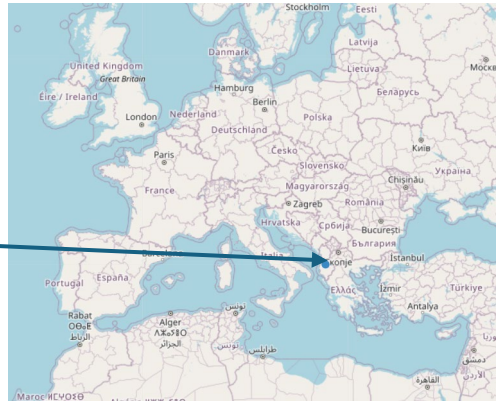
Albanian (Indo-European > Albanian)

(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 cross-linguistically



- 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 cross-linguistically

indefinite P:
flagging: no
indexing: no

- 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)

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

Double-marking of objects cross-linguistically

inanimate definite P:
flagging: yes
indexing: optional

- 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.DO=)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

Double-marking of objects cross-linguistically

animate definite P:
flagging: yes
indexing: yes

- 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.DO=)read.AOR.3SG book-ACC.SG.DEF
'Ana read the book.' (ibid.: 311)

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

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

Double-marking of objects cross-linguistically

(animate) R:
flagging: yes
indexing: yes

- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(11) a. *Ben-i* *i=dërgoi* *një* *vajz-e* *lule.*
Ben-NOM.SG 3SG.IO=send.AOR.3SG INDF girl-DAT flower.PL
'Ben sent flowers to a girl.' (Kalluli 2000: 212)

b. *I-a* *dhashë* *libr-in* *Agim-it.*
3SG.IO-3SG.O give.AOR.1SG book-ACC.SG.DEF Agim-DAT.SG
'I did give the book to Agim.'

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

Double-marking of objects cross-linguistically

(animate) R:
flagging: yes
indexing: yes

- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(11) a. *Ben-i* *i=dërgoi* *një* *vajz-e* *lule.*
Ben-NOM.SG 3SG.IO=send.AOR.3SG INDF girl-DAT flower.PL
'Ben sent flowers to a girl.' (Kalluli 2000: 212)

b. *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)

definite T:
flagging: yes
indexing: yes

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

Double-marking of objects cross-linguistically

- Double-marking of P+T+R

Albanian (Indo-European > Albanian)

(11) a. *Ben-i* *i=dërgoi* *një* *vajz-e* *lule.*
Ben-NOM.SG 3SG.IO=send.AOR.3SG INDF girl-DAT flower.PL
'Ben sent flowers to a girl.' (Kalluli 2000: 212)

b. *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)

(animate) R:
flagging: yes
indexing: yes

definite T:
flagging: yes
indexing: yes

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

Double-marking of objects cross-linguistically

- Contast Albanian with Ezha:

(12) *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)

(13) *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 cross-linguistically

- Contast Albanian with Ezha:

(12) *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)

(13) *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: 129)

Both R and T can be flagged in both languages

Double-marking of objects cross-linguistically

In Albanian, both R and T can be indexed

- Contast Albanian with E[illegible]

(12) *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)

(13) *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: 129)

Both R and T can be flagged in both languages

Double-marking of objects cross-linguistically

- Contast Albanian with E[illegible]

In Albanian, both R and T can be indexed

(12) *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)

(13) *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 cross-linguistically

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)

Double-marking of objects cross-linguistically

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)

Double-marking of objects cross-linguistically

A further type:

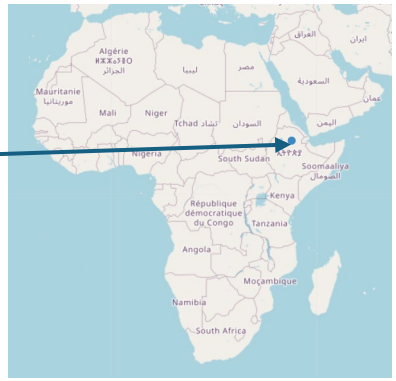
- Double-marking of P+T/R: either T or R can be double-marked, but not simultaneously
  - Subtype 1: T and R can both be flagged but compete for indexing (Amharic, Koryak etc.)
  - Subtype 2: T and R can both be indexed but compete for flagging (so far unattested)
  - Subtype 3: T and R both compete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

Double-marking of objects cross-linguistically

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)

Double-marking of objects cross-linguistically



- 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 cross-linguistically

indefinite P:
flagging: no
indexing: no

- 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 cross-linguistically

definite P:
flagging: yes
indexing: optional

- 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 cross-linguistically

definite T:
flagging: yes
indexing: possible

- Double-marking of P+T/R

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

(15) 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 cross-linguistically

definite R:
flagging: yes
indexing: possible

- Double-marking of P+T/R

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

(15) 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 cross-linguistically

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

- Double-marking of P+T/R

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

(15) 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 cross-linguistically

- 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 cross-linguistically

P:
flagging: overt with some nouns
indexing: obligatory

- 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)

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

Double-marking of objects cross-linguistically

R with “secundative” verbs:
flagging: like P
indexing: like P

- 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-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 cross-linguistically

T with “indirective” verbs:
flagging: like P
indexing: like P

- 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-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 cross-linguistically

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

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-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 cross-linguistically

- Double-marking of P+T/R

Eastern Mansi (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 eekø wisy-kom-nø*
that smock-sleeve-half-ACC woman young-man-LAT
kuuly-tågl-ii junt-øs-tø
smock-full-TRNSL sew-PST-3SG>SG
'The woman resewed the one sleeve of the smock into a full smock for her son.'

Double-marking of objects cross-linguistically

topical R:
flagging: like P
indexing: like P

- Double-marking of P+T/R

Eastern Mansi (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 eek̮ø wisy-kom-nø*
that smock-sleeve-half-ACC woman young-man-LAT
kuuly-tågl-ii junt-øs-tø
smock-full-TRNSL sew-PST-3SG>SG
'The woman resewed the one sleeve of the smock into a full smock for her son.'

Double-marking of objects cross-linguistically

topical T:
flagging: like P
indexing: like P

- Double-marking of P+T/R

Eastern Mansi (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 eek˚ø wisy-kom-nø*
that smock-sleeve-half-ACC woman young-man-LAT
kuuly-tågl-ii junt-øs-tø
smock-full-TRNSL sew-PST-3SG>SG
'The woman resewed the one sleeve of the smock into a full smock for her son.'

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

- Double-marking of P+T/R

Eastern Mansi (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 eek˚ø wisy-kom-nø*
that smock-sleeve-half-ACC woman young-man-LAT
kuuly-tågl-ii junt-øs-tø
smock-full-TRNSL sew-PST-3SG>SG
'The woman resewed the one sleeve of the smock into a full smock for her son.'

Double-marking of objects cross-linguistically

“Dative shift” (cf. Klumpp & Skribnik 2022: 1031-2):

- Eastern Mansi seems to be the only Uralic language consistently showing this pattern (cf. also Tundra Nenets above, where the construction with R=P is apparently marginal).
- But cf. Northern Mansi (Skribnik 2001; Bíró & Sipőcz 2017) and Khanty (Filchenko 2007: 349-355; see also Gulyás 2018; Sipőcz 2015), which differ only in lacking an overt accusative on nouns.

Double-marking of objects cross-linguistically

“Dative shift” (cf. Klumpp & Skribnik 2022: 1031-2):

- Eastern Mansi seems to be the only Uralic language consistently showing this pattern (cf. also Tundra Nenets above, where the construction with R=P is apparently marginal).
- But cf. Northern Mansi (Skribnik 2001; Bíró & Sipőcz 2017) and Khanty (Filchenko 2007: 349-355; see also Gulyás 2018; Sipőcz 2015), which differ only in lacking an overt accusative on nouns.

Double-marking of objects cross-linguistically

- 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.'

Double-marking of objects cross-linguistically

- 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.'

Double-marking of objects cross-linguistically

non-human P:
flagging: no
indexing: no

- 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.'

Double-marking of objects cross-linguistically

human P:
flagging: no
indexing: yes

- 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.'

Double-marking of objects cross-linguistically

human R:
flagging: yes
indexing: yes

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

Double-marking of objects cross-linguistically

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.

Double-marking of objects cross-linguistically

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.

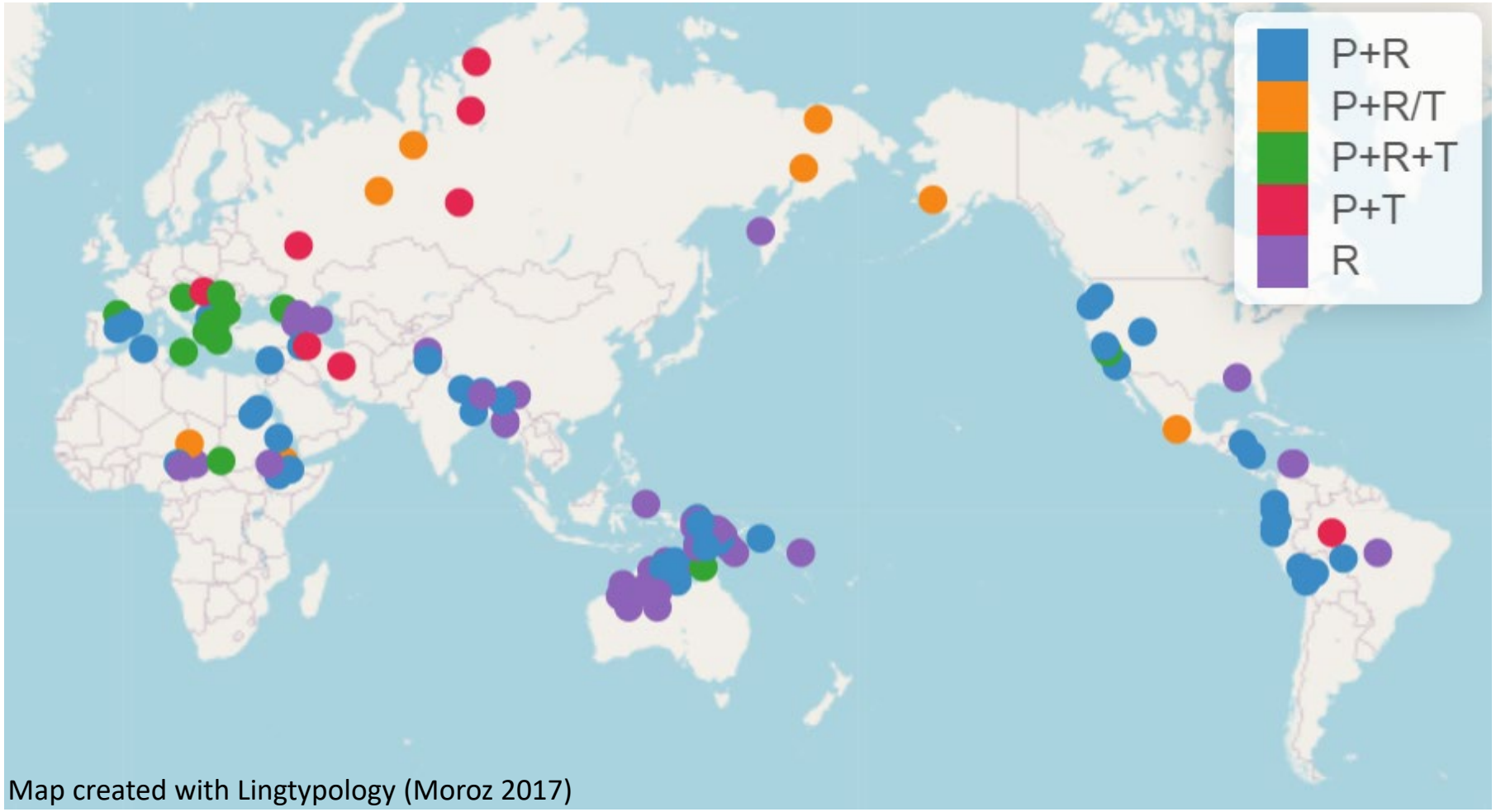
Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Roadmap

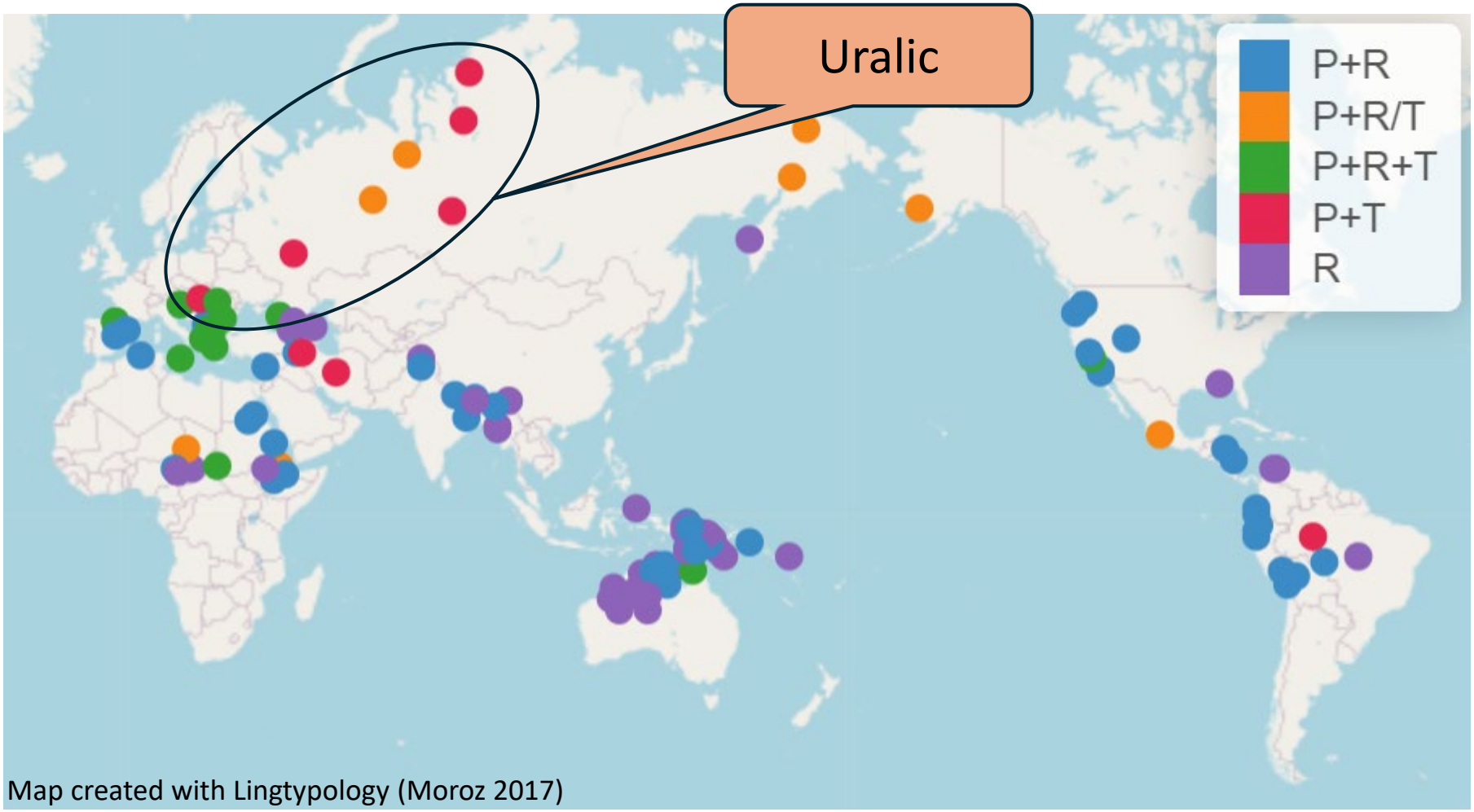
- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Areal and genealogical patterns



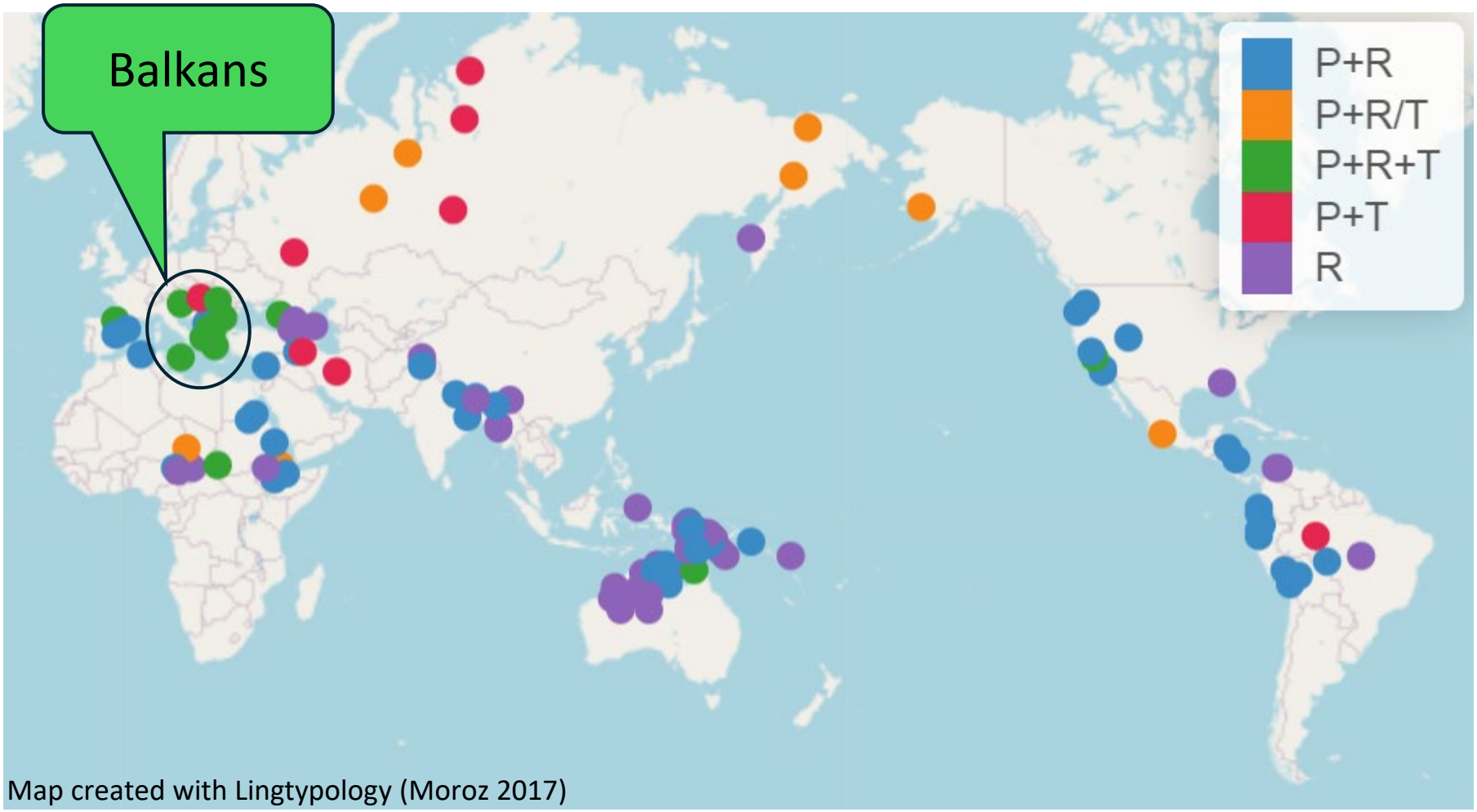
Map created with Lingtypology (Moroz 2017)

Areal and genealogical patterns



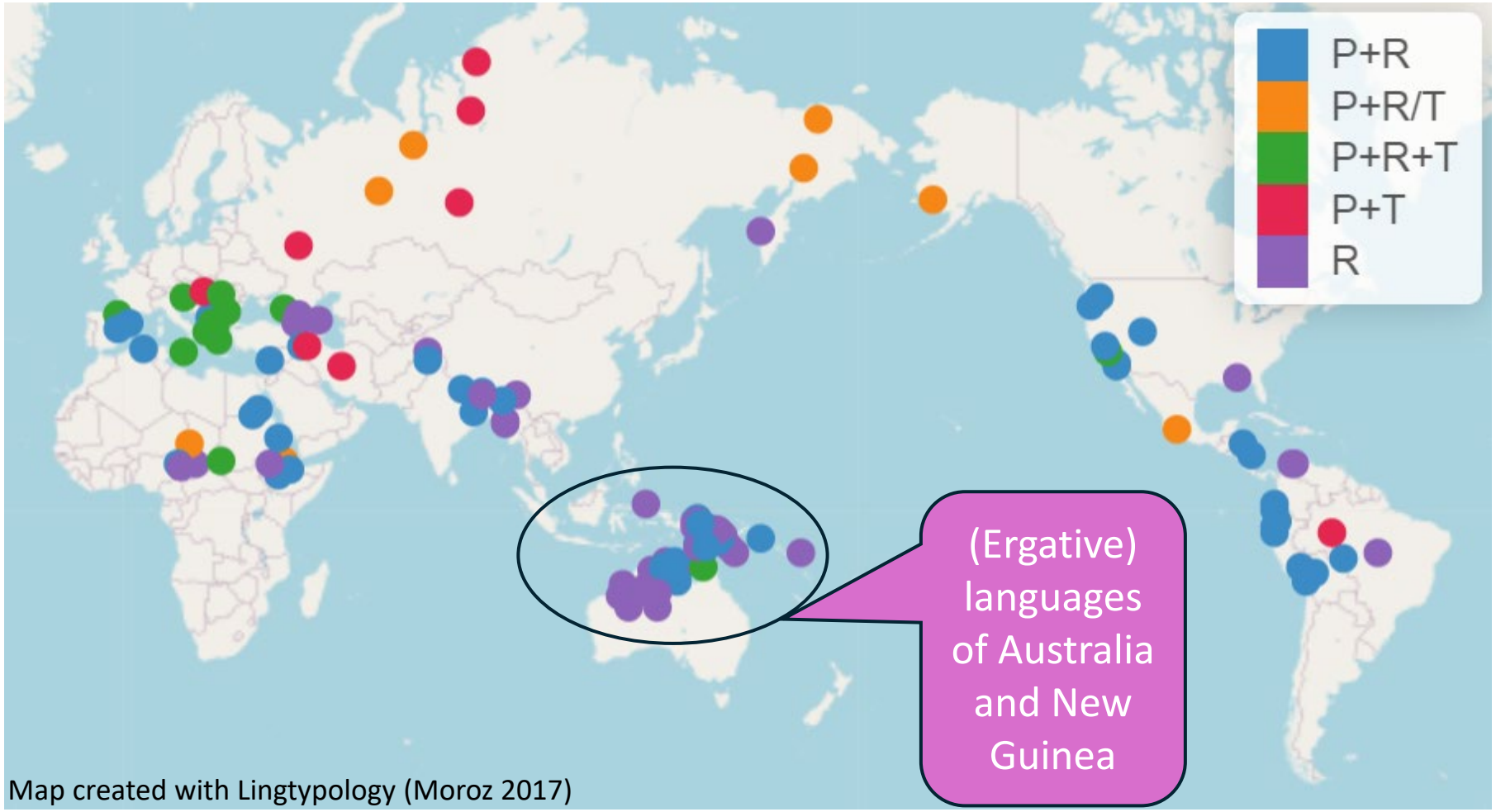
Map created with Lingtypology (Moroz 2017)

Areal and genealogical patterns



Map created with Lingtypology (Moroz 2017)

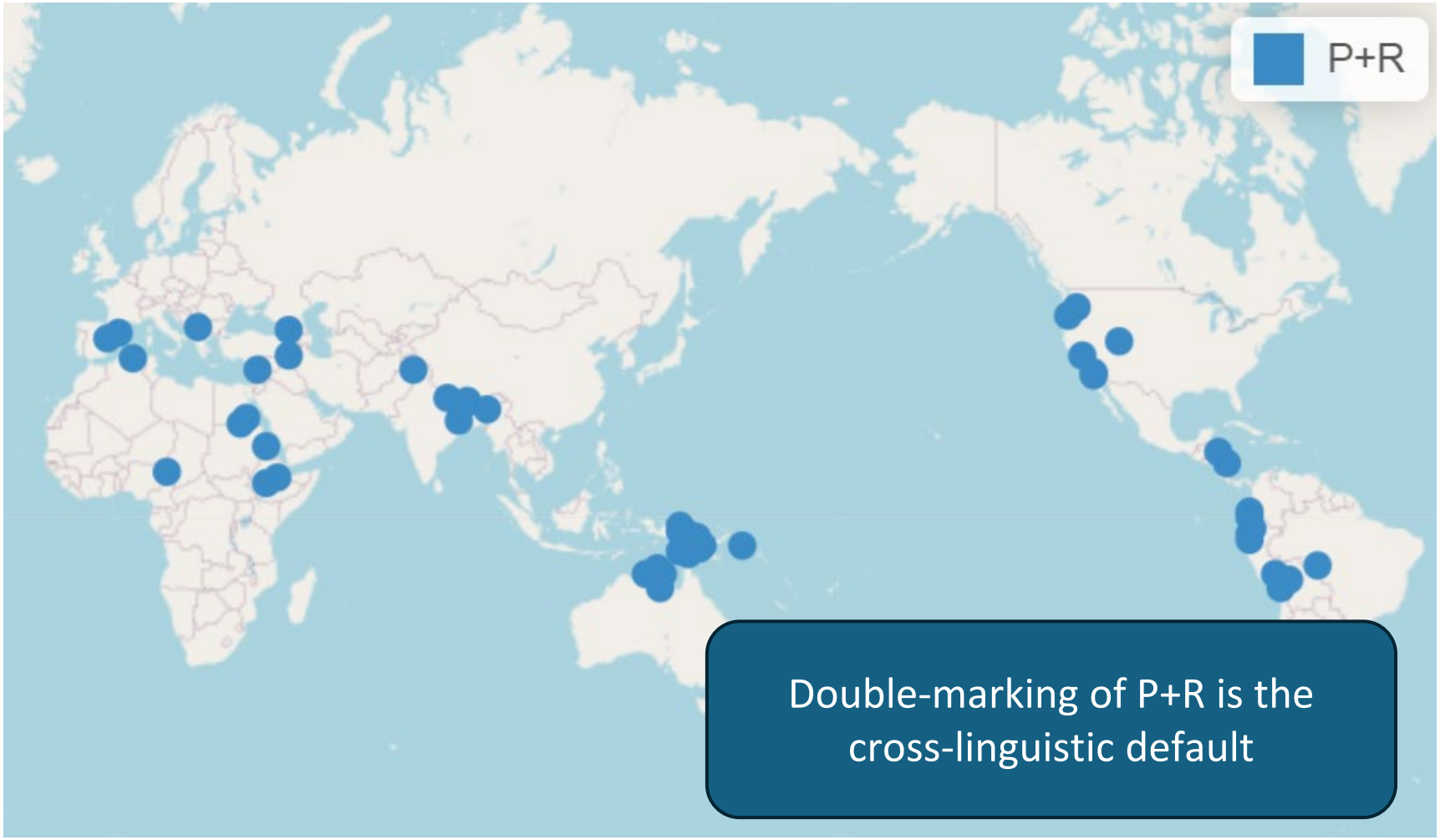
Areal and genealogical patterns



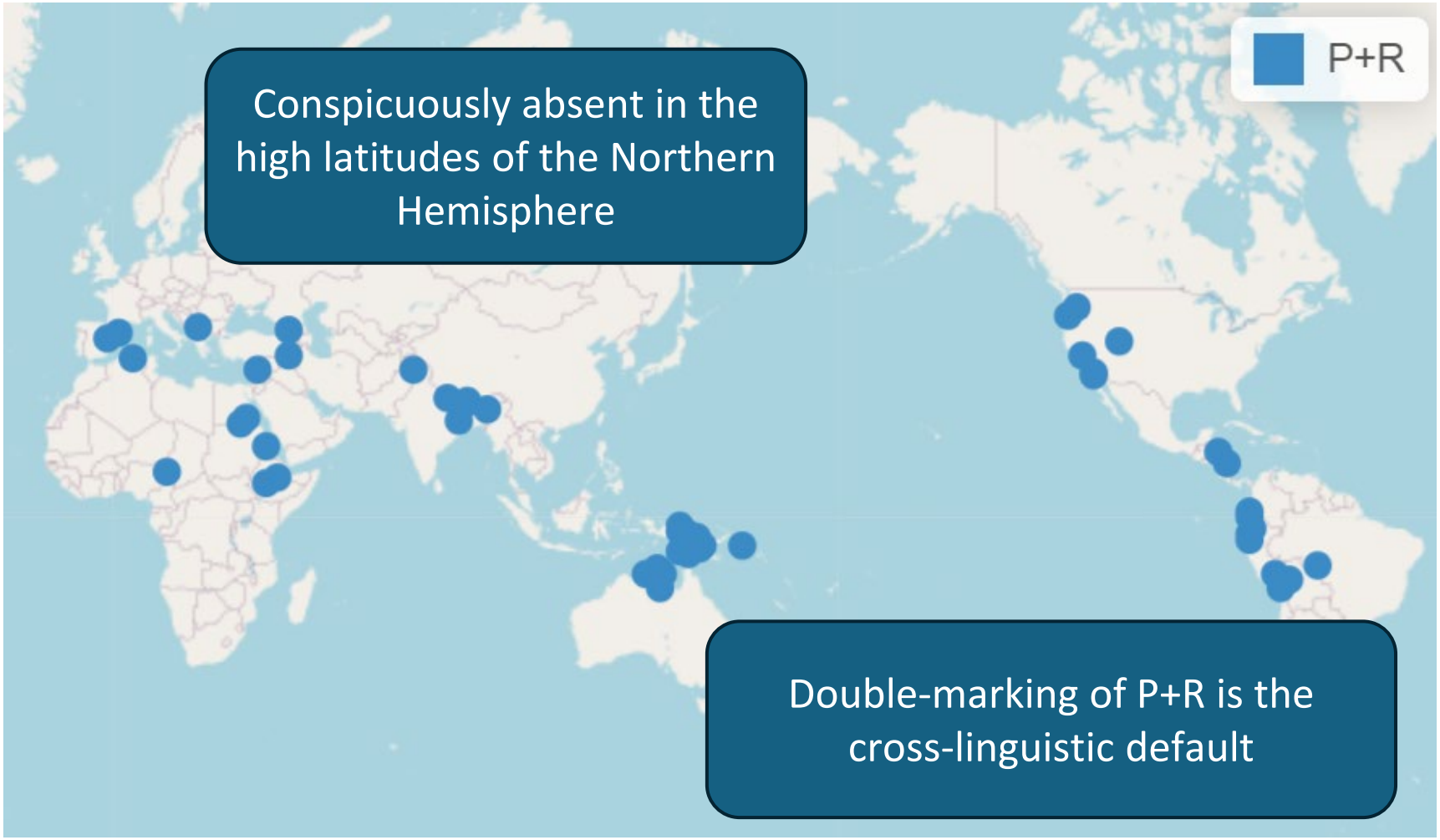
Map created with Lingtypology (Moroz 2017)

Areal and genealogical patterns

Areal and genealogical patterns

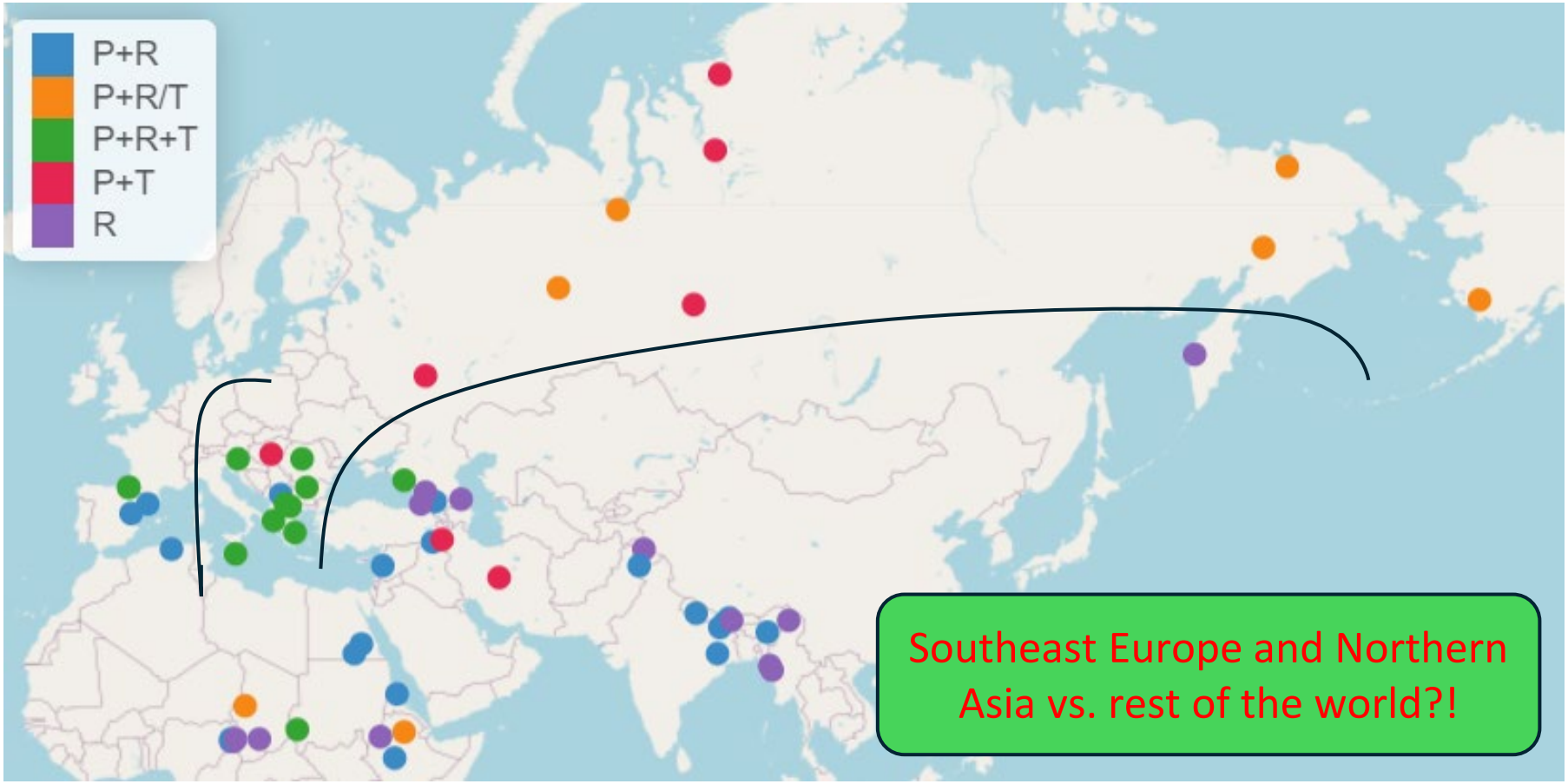


Areal and genealogical patterns

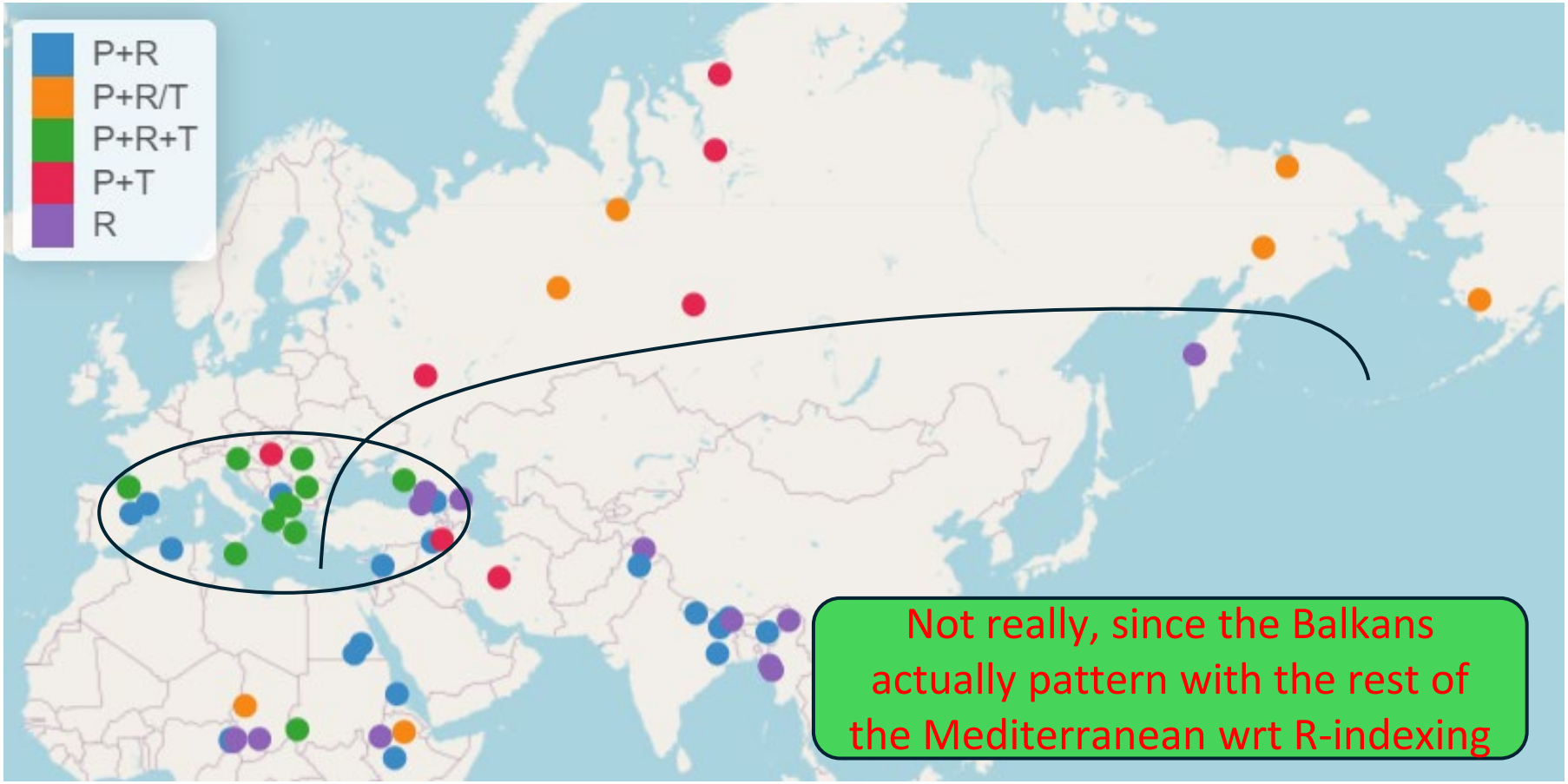


Areal and genealogical patterns

Areal and genealogical patterns



Areal and genealogical patterns



Areal and genealogical patterns

- Uralic

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Some quantitative observations

- Distribution of types

Type	Languages	Genera	Families
P+R	52	37	30
P+R+T	14	10	7
P+R/T	8	7	6
P+T	8	6	4
R	46	31	24

Some quantitative observations

- Distribution of types

Type	Languages	Genera	Families
P+R	52	37	30
P+R+T	14	10	7
P+R/T	8	7	6
P+T	8	6	4
R	46	31	24

Some quantitative observations

- Distribution of types

Type	Languages	Genera	Families
P+R	52	37	30
P+R+T	14	10	7
P+R/T	8	7	6
P+T	8	6	4
R	46	31	24

Uralic
Indo-European (colloquial Persian)
Afroasiatic (Urmi Neo-Aramaic)
Arawan (Paumari)

Some quantitative observations

- Areal breakdown (languages)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	7	1	2	0	5
Asia	10	0	4	5	8
Australia	4	1	0	0	13
Europe	3	11	0	2	1
N.America	8	1	1	0	1
S.America	9	0	1	1	3
Oceania	11	0	0	0	15

Some quantitative observations

- Areal breakdown (languages)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	7	1	2	0	5
Asia	10	0	4	5	8
Australia	4	1	0	0	13
Europe	3	11	0	2	1
N.America		1	1	0	1
S.America		0	1	1	3
Oceania		0	0	0	15

The dominant P+R type is underrepresented in Europe

Some quantitative observations

- Areal breakdown (languages)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	7	1	2	0	5
Asia	10	0	4	5	8
Australia	4	1	0	0	13
Europe	3	11	0	2	1
N.America	8		1	0	1
S.America	9		1	1	3
Oceania	11		0	0	15

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

Some quantitative observations

- Areal breakdown (languages)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	7	1	2	0	5
Asia	10	0	4	5	8
Australia	4	1	0	0	13
Europe	3	11	0	2	1
N.America	8	1	1	0	1
S.America	9	0	1	1	3
Oceania	11	0	0	0	15

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

Some quantitative observations

- Areal breakdown (languages)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	7	1	2	0	5
Asia	10	0	4	5	8
Australia	4	1	0	0	13
Europe	3	11	0	2	1
N.America	8	1	1	0	1
S.America	9	0	1	1	3
Oceania	11	0	0		15

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

Some quantitative observations

- Areal breakdown (genera)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	5	1	2	0	2
Asia	6	0	3	3	7
Australia	3	1	0	0	6
Europe	2	7	0	2	1
N.America	5	1	1	0	1
S.America	8	0	1	1	2
Oceania	10	0	0	0	12

Some quantitative observations

- Areal breakdown (families)

Area	P+R	P+R+T	P+R/T	P+T	R
Africa	2	1	2	0	2
Asia	5	0	2	3	4
Australia	3	1	0	0	6
Europe	1	4	0	1	1
N.America	5	1	1	0	1
S.America	6	0	1	1	2
Oceania	10	0	0	0	8

Some quantitative observations

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.

Some quantitative observations

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.

Some quantitative observations

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.

Some quantitative observations

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

Some quantitative observations

A fairly straightforward diachronic explanation:

- 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).

Some quantitative observations

A fairly straightforward diachronic explanation:

- 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).

Some quantitative observations

A fairly straightforward diachronic explanation:

- 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).

Some quantitative observations

A fairly straightforward diachronic explanation:

- 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).

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Roadmap

- Double-marking of objects in Uralic
- My study
- Double-marking of objects cross-linguistically
- Areal and genealogical patterns
- Some quantitative observations
- Discussion

Discussion

Is Uralic special, and why?

- double-marking of P+T without R is cross-linguistically rare;
- complete lack of R-indexing is cross-linguistically rare (Haspelmath 2005, 100-language sample: 10 languages with only P+T but no R indexing vs. 32 with P+R or P+T+R indexing).

Discussion

Is Uralic special, and why?

- double-marking of P+T without R is cross-linguistically rare;
- complete lack of R-indexing is cross-linguistically rare (Haspelmath 2005, 100-language sample: 10 languages with only P+T but no R indexing vs. 32 with P+R or P+T+R indexing).

Discussion

Is Uralic special, and why?

- double-marking of P+T without R is cross-linguistically rare;
- complete lack of R-indexing is cross-linguistically rare (Haspelmath 2005, 100-language sample: 10 languages with only P+T but no R indexing vs. 32 with P+R or P+T+R indexing).

Discussion

- On the other hand, Uralic somehow falls within a much larger “areal-like” pattern including Chukotkan and Eskimoan.

Discussion

Possible explanations – only highly speculative:

- In Uralic, R (unless aligned with P, as is possible in Khanty, Mansi and Somoyedic) is always treated distinctly from P/T in syntax, on a par with obliques;
- but indexing of obliques is cross-linguistically attested;
- moreover, datives often arise from oblique markers with spatial semantics.

Discussion

Possible explanations – only highly speculative:

- In Uralic, R (unless aligned with P, as is possible in Khanty, Mansi and Somoyedic) is always treated distinctly from P/T in syntax, on a par with obliques.
- but indexing of obliques is cross-linguistically attested;
- moreover, datives often arise from oblique markers with spatial semantics.

Discussion

Possible explanations – only highly speculative:

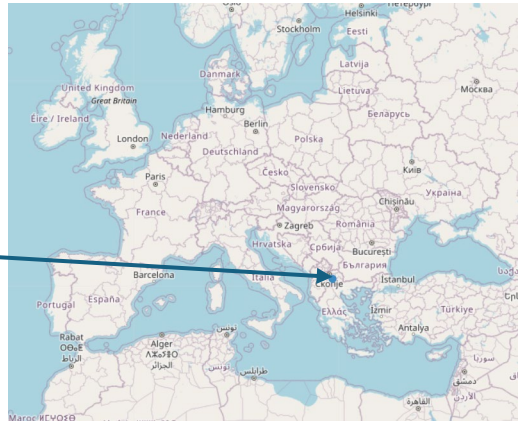
- In Uralic, R (unless aligned with P, as is possible in Khanty, Mansi and Somoyedic) is always treated distinctly from P/T in syntax, on a par with obliques.
- But indexing of obliques is cross-linguistically attested.
- moreover, datives often arise from oblique markers with spatial semantics.

Discussion

Possible explanations – only highly speculative:

- In Uralic, R (unless aligned with P, as is possible in Khanty, Mansi and Somoyedic) is always treated distinctly from P/T in syntax, on a par with obliques.
- But indexing of obliques is cross-linguistically attested.
- Moreover, datives often arise from oblique markers with spatial semantics.

Discussion



- From spatial marker to R-marker:

Macedonian (Indo-European > Slavic; Koneski 1967: 519-20)

(20) a. *Koga id-eše Projčo na grad-a Stambul-a*
when go-IPF.3SG Projcho to city-OBJ Stambul-OBJ
'When Projcho was going to Stambul.'

b. *Mu=reko-v na čovek-ot.*
3SG.M.IO=say-AOR.1SG to man-DEF
'I told the man.'

Discussion

- From spatial marker to R-marker:

Macedonian (Indo-European > Slavic; Koneski 1967: 519-20)

(20) a. *Koga* *id-eše* *Projčo* *na* *grad-a* *Stambul-a*
when go-IPF.3SG Projcho to city-OBJ Stambul-OBJ
'When Projcho was going to Stambul.'

b. *Mu=reko-v* *na čovek-ot.*
3SG.M.IO=say-AOR.1SG to man-DEF
'I told the man.'

Discussion

- From spatial marker to R-marker:

Macedonian (Indo-European > Slavic; Koneski 1967: 519-20)

(20) a. *Koga* *id-eše* *Projčo* *na* *grad-a* *Stambul-a*
when go-IPF.3SG Projcho to city-OBJ Stambul-OBJ
'When Projcho was going to Stambul.'

b. *Mu=reko-v* *na* *čovek-ot.*
3SG.M.IO=say-AOR.1SG to man-DEF
'I told the man.'

Discussion

- West Mansi, where the lative case has extended not just to R-marking, but also to P-marking (see Klumpp 2023: 331-2 for a discussion of the possible diachronic scenarios), still robustly keeps the indirect object (R) apart from the direct object (P/T) in terms of indexing, in full accordance with the general Uralic trend.

Discussion

- Bárány (2022: 7): indexing of dative/lative Rs is precluded by their low topicality.
- Indeed, the “dative shift” operative in Ob-Ugric is employed precisely to promote highly topical R to direct object thus making it eligible for indexing (e.g. Sipőcz 2015: 140).
- This logic, however, does not account for those languages that lack “dative shift”, e.g. Moksha.

Discussion

- Bárány (2022: 7): indexing of dative/lative Rs is precluded by their low topicality.
- Indeed, the “dative shift” operative in Ob-Ugric is employed precisely to promote highly topical R to direct object thus making it eligible for indexing (e.g. Sipőcz 2015: 140).
- This logic, however, does not account for those languages that lack “dative shift”, e.g. Moksha.

Discussion

- Bárány (2022: 7): indexing of dative/lative Rs is precluded by their low topicality.
- Indeed, the “dative shift” operative in Ob-Ugric is employed precisely to promote highly topical R to direct object thus making it eligible for indexing (e.g. Sipőcz 2015: 140).
- This logic, however, does not account for those languages that lack “dative shift”, e.g. Moksha.

Discussion

Possible explanations – only highly speculative:

- morphologically, object indexing in Uralic is special: often portmanteau markers, empoverished feature structures (e.g. restricted to 3rd person; sensitive to number, not to person)
- similar to possessive suffixes on nouns (e.g. Collinder 1960: 308; Aikio 2022: 18; Janda et al. 2022: 898);
- diachronic origins in non-finite/nominalised forms?
- What do Uralists think?

Discussion

Possible explanations – only highly speculative:

- morphologically, object indexing in Uralic is special: often portmanteau markers, empoverished feature structures (e.g. restricted to 3rd person; sensitive to number, not to person)
- similar to possessive suffixes on nouns (e.g. Collinder 1960: 308; Aikio 2022: 18; Janda et al. 2022: 898);
- diachronic origins in non-finite/nominalised forms?
- What do Uralists think?

Discussion

Possible explanations – only highly speculative:

- morphologically, object indexing in Uralic is special: often portmanteau markers, empoverished feature structures (e.g. restricted to 3rd person; sensitive to number, not to person)
- similar to possessive suffixes on nouns (e.g. Collinder 1960: 308; Aikio 2022: 18; Janda et al. 2022: 898);
- diachronic origins in non-finite/nominalised forms (de Smit & Janda 2023: 1001)?
- What do Uralists think?

Discussion

Possible explanations – only highly speculative:

- morphologically, object indexing in Uralic is special: often portmanteau markers, empoverished feature structures (e.g. restricted to 3rd person; sensitive to number, not to person)
- similar to possessive suffixes on nouns (e.g. Collinder 1960: 308; Aikio 2022: 18; Janda et al. 2022: 898);
- diachronic origins in non-finite/nominalised forms (de Smit & Janda 2023: 1001)?
- What do Uralists think?


Thank you for your attention!
Danke für Ihre Aufmerksamkeit!

References

Aikio A. 2022. Proto-Uralic. In: M. Bakró-Nagy, J. Laakso & E. Skribnik (eds.), *The Oxford Guide to the Uralic Languages*, 3–27. Oxford: Oxford University Press.

Aissen J. 2003. Differential object marking: Iconicity vs. economy. *Natural Language and Linguistic Theory* 21/3, 435–483.

Amberber M. 2005. Differential subject marking in Amharic. In: M. Amberber, H. de Hoop (eds.), *Competition and Variation in Natural Languages: The Case for Case*, 295–319. Amsterdam: Elsevier.

Arkadiev P. 2013. Double-marking of prominent objects: a cross-linguistic typology. Talk at the *10th Biennial Meeting of the Association for Linguistic Typology*, Leipzig, 15–18 August 2013.

Arkadiev P. 2016. Роли, иерархии и двойное маркирование объектов [Roles, hierarchies and the double-marking of objects]. *Vorposy jazykoznanija*, 5, 7–48.

Assefa E. 2018. *Descriptive Grammar of Ezha: A Central West Gurage Language, Ethio-Semitic*. PhD Dissertation, University of Addis Abeba.

Bakker D. & A. Siewierska. 2009. Case and alternative strategies: Word order and agreement marking. In: A. Malchukov & A. Spencer (eds.), *The Oxford Handbook of Case*, 290–303. Oxford: Oxford University Press.

Bárány A. 2021. A typological gap in ditransitive constructions: No secundative case and indirective agreement. In: *Proceedings of the 38th West Coast Conference on Formal Linguistics*, 43–53. Somerville, MA: Cascadilla Proceedings Project.

References

Bárány A. 2022. Case and agreement alignment in ditransitives in Uralic and beyond. Handout of the talk at *Congressus XIII Internationalis Fenno-Ugristarum*, Vienna, 22 August 2022.

Bíró B. & K. Sipőcz. 2017. The Mansi ditransitive constructions. *Finno-Ugric Languages and Linguistics* 6/1, 41–55.

Collinder B. 1960. *Comparative Grammar of the Uralic Languages*. Stockholm: Almqvist & Wiksell.

Comrie B. 1977. Subjects and direct objects in Uralic languages: A functional explanation of case-marking systems. *Études Finno-Ougriennes* 12, 5–17.

de Smit M. & Gw. E. Janda. 2023. Definiteness in Uralic. In: D. Abondolo & R.-L. Valijärvi (.eds), *The Uralic Languages*, 979–1006. 2nd ed. London, New York: Routledge.

Dryer M. S. 1986. Primary objects, secondary objects, and antidative. *Language* 62/4, 808–845.

Filchenko A. 2007. *A Grammar of Eastern Khanty*. PhD Thesis, Rice University.

Givón T. 1976. Topic, pronoun, and grammatical agreement. In: Ch. Li (ed.), *Subject and Topic*, 149–188. New York: Academic Press.

Gulyás N. F. 2018. Ditransitive constructions in Surgut Khanty. Presentation at the *51st Annual Meeting of the Societas Linguistica Europaea*, 1 September 2018, Tallin.

References

Haspelmath M. 2005. Argument marking in ditransitive alignment types. *Linguistic Discovery* 3(1), 1–21.

Iemmolo G. 2011. *Towards a Typological Study of Differential Object Marking and Differential Object Indexation*. Tesi di dottorato, Università degli studi di Pavia.

Janda Gw. E., J. Laakso & H. Metslang. 2022. Person marking. In: M. Bakró-Nagy, J. Laakso & E. Skribnik (eds.), *The Oxford Guide to the Uralic Languages*, 894–903. Oxford: Oxford University Press.

Kalluli D. 2000. Direct object clitic doubling in Albanian and Greek. In: F. Beukema & M. den Dikken (eds.), *Clitic Phenomena in European Languages*, 209–248. Amsterdam, Philadelphia: John Benjamins.

Kittilä S. 2006. Object-, animacy- and role-based strategies: A typology of object marking. *Studies in Language* 30/1, 1—32.

Kittilä S., J. Laakso & J. Ylikoski. 2022. Case. In: M. Bakró-Nagy, J. Laakso & E. Skribnik (eds.), *The Oxford Guide to the Uralic Languages*, 879–893. Oxford: Oxford University Press.

Klumpp G. 2023. On dative-lative encoded direct objects in West Mansi. *Linguistica Uralica* 59/4, 307–338.

Klumpp G. & E. Skribnik. 2022. Information structuring. In: M. Bakró-Nagy, J. Laakso & E. Skribnik (eds.), *The Oxford Guide to the Uralic Languages*, 1018–1036. Oxford: Oxford University Press.

References

Koneski B. 1967. *Граматика на македонскиот литературен јазик. Дел I и II* [Grammar of Macedonian Literary Language, Part I & II]. Skopje: Kultura.

Leslau W. 1995. *A Reference Grammar of Amharic*. Wiesbaden: Harrassowitz.

Malchukov A., M. Haspelmath & B. Comrie. 2010. Ditransitive constructions: A typological overview. In: A. Malchukov, M. Haspelmath & B. Comrie (eds.), *Studies in Ditransitive Constructions. A Comparative Handbook*, 1–64. Berlin, New York: Mouton de Gruyter.

Mišeska-Tomić O. 2006. *Balkan Sprachbund Morphosyntactic Features*. Dordrecht: Springer.

Miyaoka O. 2012. *A Grammar of Central Alaskan Yupik (CAY)*. Berlin, Boston: Mouton de Gruyter.

Moroz G. 2017. lingtypology: easy mapping for Linguistic Typology. https://CRAN.R-project.org/package=lingtypology

Munshi S. 2019. *Srinagar Burushaski. A Descriptive and Comparative Account with Analyzed Texts*. Leiden, Boston: Brill.

Nikolaeva I. 1999. Object agreement, grammatical relations and information structure. *Studies in Language* 23/2, 331–376.

Nikolaeva I. 2001. Secondary topic as a relation in information structure. *Linguistics* 39/1, 1–49.

Nikolaeva I. 2014. *Tundra Nenets*. Berlin, Boston: De Gruyter Mouton.

References

Serdobolskaya N. & S. Toldova. 2012. Дифференцированное маркирование прямого дополнения в финно-угорских языках [Differential object marking in the Finno-Ugric languages]. In: N. Sersdobolskaya et al. (eds.), *Финно-угорские языки: фрагменты грамматического описания. Формальный и функциональный подходы* [The Finno-Ugric Languages: Fragments of Grammatical Description. Formal and Functional Approaches]. Moscow: LRC, 59–142.

Siewierska A. 2003. Person agreement and the determination of alignment. *Transactions of the Philological Society* 101/2, 339–370.

Silverstein M. 1976. Hierarchy of features and ergativity. In: R. M. W. Dixon (ed.), *Grammatical Categories in Australian Languages*, 112–171. Canberra: Australian Institute of Aboriginal Studies.

Sipőcz K. 2015. Ditransitivity in the Ob-Ugric languages. In: H. Mantila et al. (eds.), *Congressus Duodecimus Internationalis Fenno-Ugristarum, Uolu 2015. Plenary Papers*, 133–157. Uolu: University of Uolu.

Skribnik E. 2001. Pragmatic structuring in Northern Mansi. In: T. Seilenthal (ed.), *Congressus Nonus Internationalis Fenno-ugristarum*. 2. Pars VI. *Dissertationes sectionum: Linguistica III*, 222–239. Tartu.

Toldova S. et al. (eds.) 2018. *Элементы мокшанского языка в типологическом освещении* [Elements of Moksha in a typological perspective]. Moscow: Buki-Vedi.

Virtanen S. 2012. Variation in three-participant constructions in Eastern Mansi. *Linguistica Uralica* 48/2, 120–130.