

## DOUBLE-MARKING OF PROMINENT OBJECTS: A CROSS-LINGUISTIC TYPOLOGY

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### 1. Introduction

Double marking — “formal marking of both head and dependent” (Nichols 1986: 65)

– **flagging** = dependent marking by morphological case or adposition

– **indexing** = head marking by bound pronouns (not necessarily bound to the verb, i.e. 2<sup>nd</sup> position clitics included)

⇒ double marking = simultaneous flagging and indexing of the same participant

BASQUE (isolate, Spain, France): consistent double marking on the clause level for three core arguments

(1) *ni-k<sub>1</sub> aita-ri<sub>2</sub> diru-a<sub>3</sub> eska-tu d<sub>3</sub>-io<sub>2</sub>-t<sub>1</sub>.*  
1SG-ERG father-DAT money-ABS.SG ask-PRF 3.ABS-3SG.DAT-1SG.ERG  
‘I have asked father for (some) money.’ (Saltarelli 1988: 238)

What is known about double marking in typology?

⇒ Not really much, since the phenomenon has always been treated as a minor pattern “subordinate” to the more prominent “pure” head-marking and dependent-marking types.

⇒ Siewierska (1997): a study of the distribution of overt and zero flagging and indexing across major alignment types; pp. 196–198: the issue of complementarity between head and dependent marking — “complementarity-in-marking hypothesis is not borne out. Only a quarter (27%) of the 88 languages manifest no overlap in the overt marking of any of the participants” (197); “a tendency to limit the amount of double marking can be discerned from the fact that the instances of double marking of three participants are considerably lower than that of two, and these are lower than that of one ... 5% < 28% < 41%” (198).

⇒ Bakker & Siewierska (2009): interaction of case with other argument-coding strategies “the likelihood of an argument exhibiting both overt agreement and case marking conforms to the hierarchy in [2], with overlap in marking declining as we proceed from left to right” (300)

(2) A(gent) > P(atient) > R(ecipient)  
66% > 32% > 7%

Goals of this study:

⇒ to look more closely on languages exhibiting double marking of P and R (“objects”), especially on those exhibiting **differential double-marking** determined by the familiar prominence hierarchies;

⇒ to show that **language internally** double marking of R is often more consistent than double-marking of P;

⇒ to determine to what extent double marking is a grammatical mechanism on its own, and not just a epiphenomenon of the combination of head- and dependent-marking.

Data:

a convenience sample of ca. 40 languages from different parts of the world; NB no genetic stratification applied (see Appendix for details).

## 2. Some well-known cases

SPANISH (Castilian; Indo-European > Romance)

– differential flagging of [+animate, +specific] P of transitive verbs by means of the “dative” preposition *a* (Leonetti 2004, 2008, Iemmolo 2010, and much earlier literature)

– optional differential indexing of [+animate, +specific], especially [+pronominal] P by means of personal clitics (Suñer 1988, Bossong 1998, Leonetti 2008 etc.)

- (3) a. *A mí<sub>1</sub> me<sub>1</sub> respet-an.*  
 OBJ me 1SG.OBJ.CL respect-PRS.3PL.SBJ  
 ‘They respect me.’ (Melis & Flores 2009: 284)
- b. *A él<sub>1</sub> no lo<sub>1</sub> conoc-en.*  
 OBJ he.ACC NEG 3SG.M.ACC.CL know-PRS.3PL.SBJ  
 ‘They don’t know him.’ (ibid.)

– obligatory flagging of (usually animate) R of ditransitive constructions by the preposition *a* regularly coupled with indexing, cf. the contrast between the double marking of the ditransitive R in (4a) and mere flagging of the monotransitive P in (4b)

- (4) a. *Verónica le<sub>1</sub> dio un regalo a Tito<sub>1</sub>.*  
 Veronica 3SG.DAT.CL give:AOR.3SG.SBJ a present OBJ Tito  
 ‘Veronica gave a present to Tito.’ (Melis & Flores 2009: 299)
- b. *Conozco a su hermana.*  
 know:PRS.1SG.SBJ OBJ 3SG.PR sister  
 ‘I know his/her sister.’ (ibid.)

⇒ double-marking more consistent with R than with P.

Cf. South American Spanish, where indexing has been extended to inanimate (thus non-case-marked) Ps (Leonetti 2008: 40–41):

- (5) *Lo<sub>1</sub> vio el libro<sub>1</sub>.*  
 3SG.M.ACC.CL see:AOR.3SG.SBJ the book  
 ‘S/he saw the book.’

ROMANIAN (Indo European > Romance, von Heusinger & Onea 2008)

– differential flagging of [+definite, +animate] Ps by the preposition *pe*;

– differential indexing of [+definite, +animate] Ps by verbal proclitics (ibid.)

- (6) a. *L-am văzut pe profesor-ul tău.*  
 3SG.M.ACC.CL-AUX.1SG.SBJ seen OBJ professor-DEF.SG.M your  
 ‘I have seen your professor.’ (von Heusinger & Onea 2008: 69)
- b. *(\*L-)am văzut (\*pe) autobuz-ul tău.*  
 (\*3SG.M.ACC.CL-)AUX.1SG.SBJ seen (\*OBJ) bus-DEF.SG.M your  
 ‘I have seen your bus.’ (ibid.)

– R (not necessarily animate) obligatorily case-marked and indexed when specific and non-focused; indexing is obligatory for topicalized preverbal Rs (7b) (Mišeska Tomić 2006: 287–288)

- (7) a. *Petru (i<sub>1</sub>)-a dat fet-ei<sub>1</sub> o floare.*  
 Petru 3SG.DAT.CL-AUX.3SG.SBJ given girl-DAT.SG.DEF.F INDEF.F.SG flower  
 ‘Petru gave the girl a flower.’ (Mišeska Tomić 2006: 287)
- b. *Mes-ei<sub>1</sub> i<sub>1</sub>-am pus un picior.*  
 table-DAT.SG.DEF.F 3SG.DAT.CL-AUX.1SG.SBJ put INDEF.M.SG leg  
 ‘I fixed a leg in the table.’ (ibid.)

AMHARIC (Afroasiatic > Semitic, Ethiopia)

– differential flagging and optional differential indexing of [+ definite] Ps

- (8) 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. *lämma and ṭärmus säbbär-ä-(\*w)*.  
 Lemma one bottle break:PST-3SG.M.SBJ-(\*3SG.M.OBJ)  
 ‘Lemma broke one bottle.’ (ibid.)

– obligatory flagging of R by either Accusative clitic or Dative preposition coupled with optional indexing; note that definite T is also flagged (cf. Neo-Aramaic below).

- (9) a. *lämma aster-ən<sub>1</sub> hišan-u-n asayy-at<sub>1</sub>*.  
 Lemma[M] Aster[F]-ACC baby-DEF-ACC show(PST.3SG.M.SBJ)-3SG.F.OBJ  
 ‘Lemma showed Aster the baby.’ (Baker 2012: 258)
- b. *l-aster<sub>1</sub> laḡ-u-n asayy-äh<sup>w</sup>-at<sub>1</sub>*.  
 DAT-Aster[F] child-DEF-ACC show-PST.1SG.SBJ-3SG.F.OBJ  
 ‘I showed Aster the child.’ (ibid.: 259)

⇒ Parallels between Romance and Semitic differential flagging and differential indexing have already been pointed out by Bossong (1991, 1998).

### 3. Some more parallels to Spanish

NEO-ARAMAIC (Telkepe dialect; Afroasiatic > Semitic, Iraq; Coghill 2010, 2013+)

– differential flagging and indexing of [+ definite/+ topical] monotransitive Ps by means of preposition *ta* and object bound pronominals (10a,b);

– the same preposition obligatorily marks ditransitive Rs; of R and T, the one which is definite (or neither) is indexed on the verb (11a–c), and if both are definite, the either but not both (12), can be indexed, and T can never be flagged by *ta*, even if definite (11c), in contrast to Amharic (9).

- (10) a. *b-qātəl-lə ta gorp*.  
 FUT-he.kill-3SG.M.OBJ OBJ man  
 ‘He will kill the man.’ (Coghill 2010: 230)
- b. *b-qātəl gorp*.  
 FUT-he.kill man  
 ‘He will kill a man’ (ibid.)
- (11) a. *wəl-lə pāṛə ta xa-məskənp*.  
 gave-he money OBJ INDEF-poor.person  
 ‘He gave money to a (certain) poor person’ (ibid.: 226)
- b. *kəm-yāwəl-lə<sub>1</sub> ta ʔaxone<sub>1</sub> pāṛə*.  
 PST-he.give-3SG.M.OBJ OBJ brother:his money  
 ‘He gave his brother some money.’ (ibid.: 231)
- c. *kəm-yāwi-lə<sub>1</sub> (\*ta) kθāwp<sub>1</sub> ta ḡḏa-baxtw*.  
 PST-they.give-3SG.M.OBJ (\*OBJ) book OBJ INDEF-woman  
 ‘They gave the book to a certain woman.’ (ibid.)
- (12) a. *kəm-yāwəl-lə<sub>1</sub> kθāwp<sub>1</sub> ta xāθe*.  
 PST-he.give-3SG.M.OBJ book OBJ sister:his  
 ‘He gave the book to his sister.’ (ibid.: 232)
- b. *kəm-qāre-lw<sub>1</sub>(\*ilə<sub>2</sub>) ta xāθe<sub>1</sub> kθāwp rābw<sub>2</sub>*.  
 PST-he.read-3SG.F.OBJ-3SG.M.OBJ OBJ sister:his book big:M.SG  
 ‘He read to his sister a/the big book’ (ibid.)

MAITHILI (Indo-European > Indo-Aryan, India); a fairly complicated system of indexing, see Bickel et al. (1999) for details.

– differential flagging of (roughly) [+animate, +definite] Ps

– differential indexing of [+human] Ps

- (13) a. *həm jibəch kē dekh-əl-iəinh.*  
I Jibach OBJ see-PST-1 > 3H  
'I saw Jibach.' (Yadav 1996: 74)
- b. *həm gai kē bec-l-əhū*  
I cow OBJ sell-PST-1SG  
'I sold the cow.' (Yadav 1996: 79)
- c. *əhā nokər tək-əit ch-i?*  
you(H) servant search-IPF AUX-PRS(2H)  
'Are you looking for a servant?' (Yadav 1996: 75)

– with certain determiners even inanimate Ps are flagged, but still only human Ps are indexed

- (14) a. *həm ohi kitab kē pərh-l-əhū.*  
I that book OBJ read-PST-1SG  
'I read the book.' (Yadav 1996: 81)
- b. *u ehi maugi kē puch-əl-kəik.*  
he(NH) this woman OBJ ask-PST-3NH > 3NH  
'He asked the woman.' (Yadav 1996: 81)

– R is obligatorily flagged by the same postposition and indexed on the verb regardless of animacy or definiteness

- (15) a. *əhā jən<sub>1</sub> kē jəlkhəi de-l-iəik<sub>1</sub>.*  
you(H) laborer OBJ breakfast give-PST-2H > 3NH  
'You gave the laborer breakfast.' (Yadav 1996: 82)
- b. *o ek-ṭa nokər<sub>1</sub> kē pāc rupəiya de-l-khinh<sub>1</sub>.*  
he(H) one-CLAS servant OBJ five rupees give-PST-3H > 3NH  
'He gave a servant five rupees.' (Yadav 1996: 82)
- c. *kuli səb sərək<sub>1</sub> kē pic kə rəhəl əich<sub>1</sub>.*  
coolie PL road OBJ pitch do PROG AUX.PRS.3NH > 3NH  
'The coolies are blacktopping the road'. (Yadav 1996: 82)

⇒ again, double marking of R is more consistent than that of P

THULUNG RAI (Sino-Tibetan > Himalayan, Nepal)

– obligatory indexing of all monotransitive Ps and ditransitive Rs;

– differential flagging of animate Ps by the (Nepali-origin) marker *-lai*

- (16) a. *go ama-mam\*(-lai) hapa mim-pu.*  
I my-mother-DAT much think-1SG > 3SG  
'I think of my mother a lot.' (Lahaussis 2002: 69)
- b. *gu-ka gari(\*-lai) thur-y.*  
3SG-ERG car(\*-DAT) drive-3SG > 3SG  
'He drives the car' (ibid.)

– double marking of ditransitive R vs. no marking of T regardless of animacy

- (17) a. *mam-ka u-tsu-tsi-lai<sub>1</sub> pomuṭhok gwak-ty<sub>1</sub>.*  
mother-ERG her-children-DU-OBJ food give-PST:3SG > 3SG  
'The mother gave her two children food.' (Lahaussis 2002: 65)
- b. *go a-mam-lai<sub>1</sub> tsutsuu gwak-tomi<sub>1</sub>.*  
I my-mother-OBJ child give- PST:1SG > 3SG  
'I gave the child to my mother.' (ibid.)

Possible generalizations:

- double marking of P is triggered by animacy/definiteness/specificity/topicality;
- double marking of R is more consistent, at least in that Rs are often obligatorily flagged and are more eligible for indexing.

#### 4. A more comprehensive typology

##### ❶ Which arguments exhibit double marking?

Type	No. languages	Languages
P only	2	Hungarian, Nenets
R only	17	Bulgarian, Georgian, Laz, Svan, Adyghe, Burushaski, Itelmen, Gaagudju, Jaminjung, Murrinh-Patha, Yawuru, Djaru, Ngalakan, Pintupi, Walmatjari, Usan, Fore
P + R (“primary object” only)	18	Spanish, Maltese, Amharic, Ge’ez, Maithili, Neo-Aramaic, Thulung-Rai, Kera’ Mundari, Ngandi, Menggwa Dla, Yade, Kwomtari, Menya, Manambu, Molalla, Ulwa, Yakima Sahaptin, Leko
P + R + T	4	Albanian, Romanian, Modern Greek, Macedonian

➤ Probably an artifact of sampling, but languages with double marking only of prominent P are clearly in the minority (note that Hungarian and Nenets represent just **one** independent case).

TUNDRA NENETS (Uralic > Samoyedic, Northern Russia)

– obligatory flagging of P

– differential indexing of [+ topical] P (Dalrymple & Nikolaeva 2011: 127–132)

(18) a. *Wanya Pyetya-m ladaʔ/\*ladaʔda.*  
 John Peter-ACC hit:3SG.SBJ /\*hit:3SG.SBJ.OBJ  
 ‘[Whom did John hit?] John hit Peter.’ (ibid.: 128)

b. *xasawa ti-m xadaʔda / xadaʔ.*  
 man reindeer-ACC kill:3SG.SBJ.OBJ /\*kill:3SG.SBJ  
 ‘[What did a/the man do to a/the reindeer?] A/the man killed a/the reindeer.’

– R always flagged and never indexed, behaving like non-core arguments.

(19) *Pyetya Maša-nʔh ti-m<sub>1</sub> myiqqa(da<sub>1</sub>).*  
 Peter Mary-DAT reindeer-ACC give:3SG.SBJ(OBJ)  
 ‘Peter gave Mary a/the reindeer.’ (ibid.: 132)

➤ Languages with double marking of R only are predominantly ergative (with no overt flagging of P), and are mostly concentrated in (northern) Australia (note different families: Daly, Gunwingguan, Mirndi, Nyulnyulan, and Pama-Nyungan) + Itelmen and Burushaski. Note, however, that in the ergative Adyghe and Kartvelian languages the lack of double marking of P is rather due to the zero indexing of 3<sup>rd</sup> person P.

BURUSHASKI (isolate, Pakistan, Afghanistan)

– no flagging of P and differential indexing of [+ animate] P

(20) a. *salim-e huma mu-ye:c-imi.*  
 Salim[M]-ERG Huma[F](ABS) 3SG.F.OBJ-see-PST.3SG.M.SBJ  
 ‘Salim saw Huma.’ (Munshi 2006: 135)

- b. *mi: p<sup>h</sup>iti ši-uman.*  
 1PL.ERG bread(ABS) eat-PST.1PL.SBJ  
 ‘We ate bread.’ (Munshi 2006: 136)

– flagging and indexing of [+animate] R

- (21) *in-e in-e-re kiṭa:b-an e:-ć-umo.*  
 3SG-ERG 3SG-GEN-DAT book-INDEF 3SG.M.OBJ-give-PST.3SG.F.SBJ  
 ‘She gave him a book.’ (Munshi 2006: 139)

BULGARIAN (Indo-European > Slavic)

– no flagging of P, obligatory flagging of R by preposition *na*

– differential indexing of [+topical] P/T and R by pronominal clitics (see e.g. Leafgren 2002 on discourse conditions of clitic-doubling in Bulgarian)

- (22) a. *Ivan (gi) ostav-i tezi pari.*  
 Ivan 3PL.ACC.CL leave-AOR.3SG.SBJ these money  
 ‘As for that money, Ivan left it.’ (Mišeska Tomić 2006: 267)

- b. *Dad-ox mu<sub>1</sub> go<sub>2</sub> az učebnik-a<sub>2</sub> na Stojan<sub>2</sub>.*  
 give-AOR.1SG.SBJ 3SG.M.DAT.CL 3SG.M.ACC.CL I textbook-DEF to Stojan  
 ‘As for me, the book and Stojan, I gave the book to him.’ (ibid.)

➔ A special case: languages where only applied (mostly benefactive) arguments trigger double-marking: Murrinh-Patha, Ngalkan, Yawuru, Usan, Laz.

USAN (Madang, New Guinea, Reesink 1987)

– no flagging of P (no data on R), and differential indexing of [+animate] P

– in constructions with the benefactive applicative, Rben can optionally exhibit double-marking (Reesink 1987: 154–155)

- (23) *narau ininou munon bânâm wuri-t bâg-âtar ig-unei.*  
 betelnut our man friend them-OBL put-3PL.BEN be-1PL.REMPST  
 ‘We were putting betelnut for our friends.’

LAZ, Arxavi dialect (Kartvelian, Turkey, Lacroix 2009):

– no flagging of P, and only [+locutor] Ps are indexed;

– flagging of [+3<sup>rd</sup> person] “indirect objects”, and indexing thereof, both with intransitive (24a) and transitive (24b) verbs.

- (24) a. *bozo-k bee-s<sub>1</sub> u<sub>1</sub>-cox-om-s.*  
 girl-ERG child-DAT 3.IO(BEN)-call-TH-PRS.3SG.SBJ  
 ‘The girl is calling the child.’ (Lacroix 2009: 674)

- b. *hemu-k Xasani-s<sub>1</sub> oxoi u<sub>1</sub>-k’od-um-s.*  
 DEM-ERG Hasan-DAT house 3.IO(BEN)-build-TH-PRS.3SG.SBJ  
 ‘He is building a house for Hasan.’ (ibid.)

➔ The type most evenly distributed across geographical areas is the one showing double marking of prominent P and R (“primary object”), and this seems to naturally fall out of the well-known universal preferences for both flagging and indexing (see e.g. Bakker & Siewierska 2009). As already been mentioned, in many languages double-marking of R seems to be more grammaticalized (e.g. obligatory, independent of discourse factors) than that of P.

ALBANIAN (Indo-European > Albanian, Mišeska Tomić 2006: 310–315)

– differential flagging of [+definite] P/T and obligatory flagging of R;

– differential indexing of [+specific, +topical] P/T and (almost) obligatory indexing of any kind of R;

– in ditransitive constructions, both T and R can be indexed simultaneously (26).

- (25) a. *E pashë libr-in tënd të ri.*  
 3SG.ACC.CL see:AOR.1SG.SBJ book-DEF.ACC.SG your:ACC ACC.AGR.CL new  
 ‘I saw your new book.’ (Mišeska Tomić 2006: 311)
- b. *Agim-i (\*e) theu një pjatë.*  
 Agim-DEF.SG (\*3SG.ACC.CL) break:AOR.3SG.SBJ INDEF plate  
 ‘[What happened?] Agim broke a plate.’ (ibid.: 312)
- (26) *I<sub>1</sub>-a<sub>2</sub> DHASHË libr-in<sub>2</sub> Agim-it<sub>1</sub>.*  
 3SG.DAT.CL-3SG.ACC.CL give:AOR.1SG.SBJ book-DEF.ACC.SG Agim-DEF.DAT.SG  
 ‘I did give the book to Agim.’ (ibid.)

MALTESE (Afroasiatic > Semitic): in ditransitive constructions, both R and T can be indexed simultaneously when topical, but only R is flagged:

- (27) *Pietru kitib-hie<sub>1</sub>-lu<sub>2</sub> l-ittra<sub>1</sub> lil hu-h<sub>2</sub>.*  
 Peter write:PRF:3SG.M-3SG.F.OBJ-3SG.M.IO DEF-letter to brother-3SG.PR  
 ‘Peter did in fact write a letter to his brother’ (Borg & Azzopardi-Alexander 1997: 56)

Cf. Neo-Aramaic (12), where indexing of two objects is banned.

② Identical or different marking of P and R (languages showing similar patterns in flagging and indexing boldfaced)

	flagging	indexing
P=R	12 (Spanish, <b>Neo-Aramaic</b> , <b>Maithili</b> , Kera’ Mundari, <b>Thulung Rai</b> , <b>Ngandi</b> , <b>Kwomtari</b> , <b>Menya</b> , Yade, Menggwa Dla, <b>Molalla</b> , <b>Ulwa</b> )	15 (Amharic, Ge’ez, <b>Neo-Aramaic</b> , <b>Maithili</b> , Burushaski, <b>Thulung Rai</b> , <b>Ngandi</b> , Manambu, Fore, <b>Kwomtari</b> , <b>Menya</b> , Yakima Sahaptin, <b>Molalla</b> , <b>Ulwa</b> , Leko)
P≠R	17 ( <b>Albanian</b> , <b>Modern Greek</b> , <b>Romanian</b> , <b>Macedonian</b> , <b>Bulgarian</b> , <b>Adyghe</b> , <b>Itelmen</b> , Burushaski, Tundra Nenets, Hungarian, <b>Murrinh-Patha</b> , <b>Gaagudju</b> , <b>Djaru</b> , Pintupi, Manambu, Fore, Usan)	13 (Spanish, <b>Albanian</b> , <b>Modern Greek</b> , <b>Romanian</b> , <b>Macedonian</b> , <b>Bulgarian</b> , Maltese, <b>Adyghe</b> , <b>Itelmen</b> , <b>Murrinh-Patha</b> , <b>Gaagudju</b> , <b>Djaru</b> , Walmatjari)
both options	10 (Amharic, Ge’ez, Maltese, <b>Georgian</b> , <b>Laz</b> , <b>Svan</b> , <b>Ngalakan</b> , Walmatjari, Yakima Sahaptin, Leko)	7 ( <b>Georgian</b> , <b>Laz</b> , <b>Svan</b> , <b>Ngalakan</b> , Pintupi, Usan, Dera)

↷ languages with identical marking of P and R in flagging or indexing or both are more or less evenly geographically distributed;

↷ languages showing different flagging and/or indexing of P and R tend to cluster in Europe and Australia;

↷ languages tend to show similar/different marking of P and R in both flagging and indexing (18 out of 29)

③ Features triggering and blocking flagging and indexing.

↷ Familiar hierarchy-based features such as humanness, animacy, definiteness, specificity and topicality (Dalrymple & Nikolaeva 2011). Grammatical descriptions are often vague or incomplete wrt the exact conditions triggering overt flagging and/or indexing.

↷ Special cases:

- Only definite/specific **common** nouns get flagging in **both** P and R functions in Adyghe.
- Only 3<sup>rd</sup> person nominals get flagging in both P and R functions in the Kartvelian languages.
- Only non-singular objects get indexed in Djaru, Kera’ Mundari, Molalla and Ngalakan.

– Lexical/morphological restrictions on object flagging in Menggwa Dla.

④ Mismatches between flagging and indexing.

Perfect match between head- and dependent-marking (i.e., “pure” double marking) is rarely attested. Usually, languages exhibit different conditions on flagging and indexing resulting in (more or less systematic) cases when the two mechanisms do not co-occur.

Logically possible types:

(i) domain of indexing  $\subset$  domain of flagging: only a subset of objects eligible for flagging can be indexed, but all indexed objects are flagged;

(ii) domain of flagging  $\subset$  domain of indexing: only a subset of objects eligible for indexing can be flagged, but all flagged objects are indexed;

(iii) domain of flagging  $\cap$  domain of indexing: both [+flagging, –indexing] and [–flagging, +indexing] occur.

– In general, marking of R tends to fall into type (i), since Rs are most often flagged as such, independently of animacy/definiteness/topicality. Notable exceptions are Adyghe (and Kabardian) and Svan with consistent indexing but differential flagging of Rs.

KABARDIAN, Besleney dialect (NW Caucasian, Russia, own fieldwork)

– differential flagging of [+3<sup>rd</sup> pers, +specific] Rs (as well as of other roles)

- (28) a. *s-jə-ž'em*      *çax<sup>w</sup>-ʔje-m<sub>1</sub>*      *je<sub>1</sub>-s-š'e-ne-qəm*.  
 1SG.PR-POSS-COW    man-bad-OBL    3SG.IO-1SG.ERG-sell-FUT-NEG  
 ‘I won’t sell my cow to (a particular) bad man.’
- b. *s-jə-ž'em*      *çax<sup>w</sup>-ʔje<sub>1</sub>*      *je<sub>1</sub>-s-š'e-ne-qəm*.  
 1SG.PR-POSS-COW    man-bad      3SG.IO-1SG.ERG-sell-FUT-NEG  
 ‘I won’t sell my cow to (any) bad man.’

– To type (i) for P-marking belong languages with consistent flagging of P: Modern Greek, Hungarian, Tundra Nenets, Kwomtari.

– To type (ii) for P-marking belong languages with consistent indexing of **all** Ps coupled with differential P-flagging: Thulung Rai, Ngandi, Yakima Sahaptin, Yade, Menya. In this type also falls Macedonian with indexing of all definite Ps and flagging restricted to proper names and kinship terms (Lunt 1952: 33–34; Mišeska Tomić 2006: 52–55).

– In general, marking of P most often falls into type (iii).

MENGGWA DLA (Senagi, New Guinea): conditions on P flagging not entirely clear; de Sousa (2006: 213) claims that the “object case clitic ... is seldom used when the cross-reference suffixes are sufficient in determining the grammatical relationships, or when the semantic roles of the arguments are unambiguous”.

– indexing without flagging (when the verb requires P indexing and object case marker not used)

- (29) *wi imbu*      *aftafefi-ya-pu-hwa*.  
 child two      bathe-3SG.SBJ-N1DU.OBJ-PST  
 ‘S/he bathed the two children.’ (de Sousa 2006: 213)

– flagging without indexing (when the verb does not allow P indexing and the object case marker is used)

- (30) *yari = mbo*      *ser-o-mbo...*  
 sago = OBJ      eat-3SG.F.SBJ-DEP  
 ‘She ate sago, and...’ (de Sousa 2006: 301)



MANAMBU (Sepik > Ndu, New Guinea)

– P indexed (topical), but not flagged (for reasons unclear)

(31) *a yawi kusə-tuə-l.*  
 that.F work finish-1SG.SBJ-3SG.F.TOP

‘I finished that work.’ (Aikhenvald 2008: 62)

– P flagged (topical), but not indexed (because “the focus is on the activity”)

(32) *bap-a:m vya-kə-na-dəwun.*  
 moon-ACC hit-FUT-ACT.FOC-1SG.M.TOP

‘I will kill the moon.’ (Aikhenvald 2008: 68)

A special case:

GE’EZ (Afroasiatic > Semitic, Ethiopia, 1<sup>st</sup> millennium AD): differential P marking opposes not lack of overt marking to its presence but rather two kinds of overt marking, one of which is never, and the other is always, accompanied by indexing.

– P marked by the accusative case suffix, no indexing possible

(33) a. *ba = qadāmi gabr-a ʔəgziʔabəher samāy-a wa = mədr-a.*  
 in-first make:PRF-3SG.M.SBJ God heaven-ACC and = earth-ACC

‘In the beginning, God created heaven and earth’ (Gen. 1,1; Weniger 1999: 38)

b. *ʔamṣəʔ-u ʔabe-hu kʷəlo dəwuy-ān-a ...*  
 brought-3PL.M.SBJ to-3SG.M.OBJ all sick-PL-ACC

‘they brought to him the ill...’ (Mk 1,32; Schneider 1959: 22)

– P (mostly topical) marked by the dative preposition and indexing on the verb

(34) *rakab-omu la-səmfon wa-la-ʔəndəryās.*  
 found-3SG.M.SBJ + 3PL.M.OBJ DAT-Simon and-to-Andrew

‘He found Simon and Andrew’ (Mk. 1, 16; Weniger 1999: 39)

MODERN GREEK (Indo-European > Greek):

A “mirror-image” case with R-marking: R can be flagged either by the Genitive case or by the combination of a preposition and Accusative case, and only the first allows (optional) indexing (Mackridge 1985: 61–64; Mišeska Tomić 2006: 324).

(35) a. *(Tu) eghrapsa tu Jorgh-u.*  
 3SG.M.GEN.CL write:AOR.1SG.SBJ DEF.GEN.SG.M George-GEN.SG

b. *(\*Tu) eghrapsa s-to Jorgh-o.*  
 3SG.M.GEN.CL write:AOR.1SG.SBJ to-DEF.ACC.SG.M George-ACC.SG

‘I wrote to George.’ (Mišeska Tomić 2006: 324)

## Conclusions

➤ The phenomenon of double-marking of object relations (P and R) is quite widespread cross-linguistically, and seems to be especially common in situations of differential marking based on well-known prominence hierarchies relating to person, animacy and referentiality.

➤ The claim that double-marking of R is less common than that of P does not seem to hold both on a cross-linguistic and intra-linguistic basis:

– languages with double marking of just P are infrequent in contrast to languages with double marking of just R;

– double-marking of R often tends to be more grammaticalized (obligatory, extended in its scope, less dependent on discourse conditions) than that of P;

– thus, contra Bakker & Siewierska (2009), the following implicational universal can be proposed:

(36) double marking of P  $\subset$  double marking of R

⇒ Double marking is not a grammatical mechanism on its own, but rather a combination of independent mechanisms of flagging (dependent-marking) and indexing (head-marking):

- strict correlations between flagging and indexing are attested only rarely;
- various mismatches testify that principles underlying the two mechanisms are different, though, as it has been claimed elsewhere (e.g. Arkadiev 2010), it is premature to propose that these differences between head- and dependent-marking are uniform cross-linguistically.

**Appendix: languages of the study**

Language name	ISO 639-3	Region	Genetic info	Sources	Double-marking
Amharic	amh	Africa	Afroasiatic > Semitic	Leslau 1995, Amberber 2005, Baker 2012	P + R
Ge'ez	gez	Africa	Afroasiatic > Semitic	Schneider 1959, Weniger 1999	P + R
Itelmen	itl	Asia	Chukotko-Kamchatkan	Bobaljik & Wurmbrand 2002	R
Maithili	mai	Asia	Indo-European > Indo-Aryan	Yadav 1996	P + R
Burushaski	bsk	Asia	isolate	Munshi 2006	R
Georgian	kat	Asia	Kartvelian	Vogt 1971, Harris 1981	R
Laz (Arhavi)	lzz	Asia	Kartvelian	Lacroix 2009	R
Svan	sva	Asia	Kartvelian	Schmidt 1991, Tuite 1997	R
Kera' Mundari	unr	Asia	Austro-Asiatic > Munda	Kobayashi & Murmu 2008	P + R
Neo-Aramaic (Telkepe)	cld	Asia	Afroasiatic > Semitic	Coghill 2011, 2013 +	P + R
Thulung Rai	tdh	Asia	Sino-Tibetan > Himalayan	Lahaussais 2002	P + R
Tundra Nenets	yрк	Europe/ Asia	Uralic > Samoyedic	Dalrymple & Nikolaeva 2011	P
Hungarian	hun	Europe	Uralic > Finno-Ugric	Szende & Kassai 2007	P
Albanian (Tosk)	als	Europe	Indo-European > Albanian	Mišeska Tomić 2006	P + R + T
Modern Greek	ell	Europe	Indo-European > Greek	Mišeska Tomić 2006	P + R + T
Romanian	ron	Europe	Indo-European > Romance	Mišeska Tomić 2006, von Heusinger & Onea 2008	P + R + T
Spanish	spa	Europe	Indo-European > Romance	Leonetti 2004, 2008	P + R
Bulgarian	bul	Europe	Indo-European > Slavic	Mišeska Tomić 2006	R
Macedonian	mkd	Europe	Indo-European > Slavic	Lunt 1952, Mišeska Tomić 2006	P + R + T
Adyghe	ady	Europe	North-West Caucasian	own fieldwork	R
Maltese	mlt	Europe	Afroasiatic > Semitic	Borg & Comrie 1984; Borg & Azzopardi-Alexander 1997	P + R
Murrinh-Patha	mwf	Australia	Daly	Walsh 1976	R
Ngandi	nid	Australia	Gunwingguan	Heath 1978	P + R
Gaagudju	gbu	Australia	Gunwingguan	Harvey 2002	R
Ngalakan	nig	Australia	Gunwingguan	Merlan 1983	R
Jaminjung	djd	Australia	Mirndi	Schulze-Berndt 2000	R
Yawuru	ywr	Australia	Nyulnyulan	Hosokawa 1991	R
Djaru	ddj	Australia	Pama-Nyungan > South-West	Tsunoda 1981	R
Pintupi	piu	Australia	Pama-Nyungan > South-West	Hansen & Hansen 1975	R
Walmartjari	wmt	Australia	Pama-Nyungan > South-West	Hudson 1978	R
Yakima Sahaptin	yak	N. America	Sahaptian	Jansen 2010	P + R
Molalla	mbe	N. America	isolate	Pharris 2006	P + R
Ulwa	ulw	N. America	Misumalpan	Green 1999	P + R
Leko	lec	S. America	isolate	van de Kerke 1998, 2000	P + R
Menya	mcr	Oceania	Angan	Whitehead 2004	P + R
Kwomtari	kwo	Oceania	Kwomtari	Honsberger et al. 2008	P + R
Fore	for	Oceania	Kainantu-Goroka > Gorokan	Scott 1978	R
Yade	nce	Oceania	isolate	Campbell, Campbell 1987	P + R

Usan	wnu	Oceania	Madang	Reesink 1987	R
Menggwa Dla	kbv	Oceania	Senagi	de Sousa 2006	P + R
Manambu	mle	Oceania	Sepik > Ndu	Aikhenvald 2008	P + R

### Abbreviations

1 – 1<sup>st</sup> person, 2 – 2<sup>nd</sup> person, 3 – 3<sup>rd</sup> person, ABS – absolutive, ACC – accusative, ACT.FOC – action focus, AGR.CL – agreeing clitic, AOR – aorist, AUX – auxiliary, BEN – benefactive, CL – clitic, CLAS – classifier, DAT – dative, DEF – definite, DEM – demonstrative, DEP – dependent, DU – dual, ERG – ergative, F – feminine, FUT – future, GEN – genitive, H – honorific, INDEF – indefinite, IO – indirect object, IPF – imperfective, M – masculine, N1 – non-1<sup>st</sup> person, NEG – negation, NH – non-honorific, OBJ – object marker/index, OBL – oblique, PL – plural, POSS – possessive marker, PR – possessor, PRF – perfect(ive), PROG – progressive, PRS – present, PST – past, REM PST – remote past, SBJ – subject marker/index, SG – singular, SS – same-subject, TH – “thematic suffix”, TOP – topic

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