Case and agreement alignment in ditransitives in Uralic and beyond

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Contents

1 Introduction

What are we looking at?

NOM–ACC and ERG–ABS alignment describe intransitive and transitive sentences

(1) Kewa, ERG–ABS case, NOM–ACC agreement (Franklin 1971: 70, 71)

a. [$_S$ ***ní***] *pír**a**-**wa***
I sit-1SG.PST
'I sat down.'

b. [$_A$ ***né-mé***] [$_P$ ***irikai***] *tá-**wa***
I-ERG dog hit-1SG.PST
'I hit the dog.'

❓ What case do arguments have? — A is ERG, **S** and **P** are ABS

❓ Which of these control agreement? — A and **S**

💡 We can ask the same questions for **ditransitive constructions**

Alignment in ditransitives

Ditransitive alignment

Ditransitive alignment refers to the grouping of the single object of a monotransitive clause (P), the **recipient (R)** object of a ditransitive clause, and the **theme (T)** object of a ditransitive clause (Dryer 1986, Haspelmath 2005, Malchukov et al. 2010).

This grouping can refer to …

- **case-marking**: ∅, ACC, DAT, ALL, ABS, …
- **controlling (object) agreement**: does R or T control agreement?

An example

In West Greenlandic, ditransitives can appear with different case alignment

- This correlates with a change in agreement alignment
- Whether DP_R or DP_T, the verb must agree with the ABS object

(2) West Greenlandic (Fortescue 1984: 88, 89)

a. DP_R ABS — DP_T INS

[$_R$ *Niisi*] [$_T$ *aningaasa-nik*]
Niisi money-INS.PL

tuni-vaa
give-3SG.SBJ>3SG.OBJ.INDIC

'He gave money to Niisi.'

b. DP_R ALL — DP_T ABS

[$_T$ *aningaasa-t*] [$_R$ *Niisi-mut*]
money-PL Niisi-ALL

tunni-up-pai
give-APPL-3SG.SBJ>3PL.OBJ.INDIC

'He gave the money to Niisi.'

Research questions addressed in this talk

Are case and agreement alignment combined freely?

No, while case and agreement alignment vary across languages, not all combinations are possible. I show this based on a sample of 124 languages. The absence of certain types is **not an accident** but can be explained.

Which patterns do we find in Uralic languages and why?

Object agreement in Uralic languages appears to be restricted to morphologically unmarked ('NOM') and ACC objects. Therefore, there is no indirective case and secundative agreement (ICSA) alignment in Uralic languages.

2 Ditransitive alignment types

Hungarian: indirective case and agreement (ICIA)

(3) Hungarian

a. *Lát-**ja*** [$_{P}$ ***a*** ***kutyá-t***].
see-3SG.SBJ>**3.OBJ** the dog-ACC

'S/he sees **the dog**.'

b. [$_{R}$ *Neked*] *ad-**ja*** [$_{T}$ ***a*** ***kutyá-t***].
you.SG.DAT give-3SG.SBJ>**3.OBJ** the dog-ACC

'S/he gives you **the dog**.'

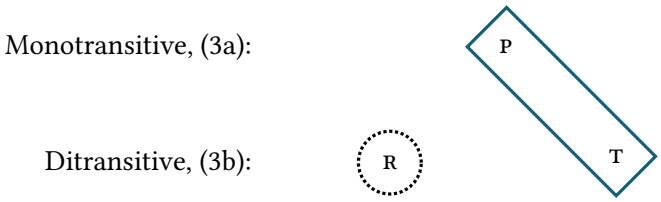

Figure 1: Indirective (or direct object) alignment: P = T ≠ R

Nez Perce: secundative case and agreement (SCSA)

(4) Nez Perce (Deal 2013: 396, 2019: 393)

a. *Ciq'aamqal-nim* ***pee**-tw'ehke'yk-se-Ø* [$_{P}$ ***picpic-ne***].
dog-ERG 3/3-chase-IPFV-PRS cat-ACC
'The dog is chasing the cat.'

b. *Beth-nim* *hi-**neec**-'ni-Ø-ye* [$_{R}$ ***lepit***
Beth-ERG 3.SBJ-**OBJ.PL**-give-PFV-REM.PST two
picaloo-na] [$_{T}$ *hipt*].
kitten-ACC food.NOM
'Beth gave **the two kittens** food.'

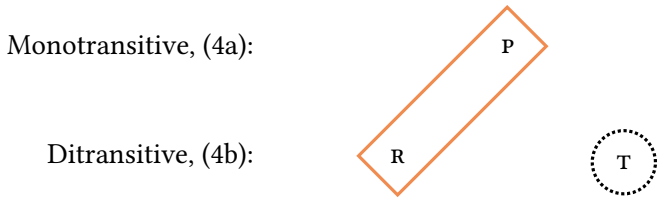

Figure 2: Secundative (or primary object) alignment: P = R ≠ T

Amharic: Indirective case and secundative agreement (ICSA)

(5) Amharic (Baker 2012: 261, 258, 261)

a. *Ləmma* [$_{P}$ ***gənzəb-u-n***] *sərrək'-ə-**w**.*
Lemma.M money.M-DEF-ACC rob-3.M.SBJ-3.M.OBJ
'Lemma stole **the money**.'

b. *Ləmma* [$_{R}$ ***l-Almaz***] [$_{T}$ ***tarik-u-n***]
Lemma.M DAT-Almaz.F story.M-DEF-ACC
*nəggər-**at**.*
tell.3.M.SBJ-3.F.OBJ
'Lemma told Almaz the story.'

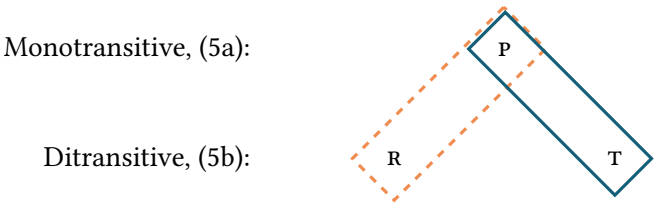

Figure 3: Indirective case-marking and secundative agreement

Amharic: Neutral case and secundative agreement (NCSA)

(6) Amharic (Baker 2012: 261, 258, 261)

a. *Ləmma* [$_{P}$ ***gənzəb-u-n***] *sərrək'-ə-**w**.*
Lemma.M money.M-DEF-ACC rob-3.M.SBJ-3.M.OBJ
'Lemma stole **the money**.'

b. *Ləmma* [$_{R}$ ***Aster-in***] [$_{T}$ *his'an-u-n*]
Lemma.M Aster.F-ACC baby-DEF-ACC
*asaj-**at**.*
show.3.M.SBJ-**3.F.OBJ**
'Lemma showed **Aster** the baby.'

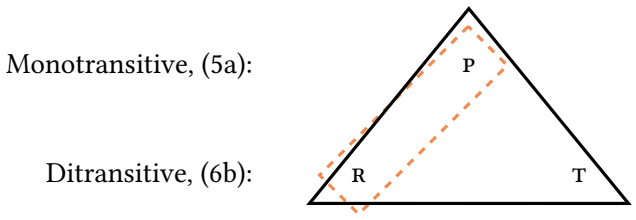

Figure 4: Neutral case-marking (P = R = T) and secundative agreement

3 Uralic languages

Case and agreement alignment in Uralic

Indirective case and agreement (ICIA) and **secundative (or neutral) case and agreement** (SCSA/NCSA) are found in Uralic: there is object agreement with NOM/ACC objects. Indirective case and secundative agreement (ICSA) is not found in Uralic because there is no (verbal) agreement with DAT or ALL objects.

Uralic languages with object agreement include …

- Mordvinic: Erzya and Moksha
- Ugric: **Hungarian**, **Khanty** and Mansi
- Samoyedic: **Nenets**, Enets, **Selkup**, Nganasan, …

The Ugric Typological Database (`https://utdb.elte.hu/`) is a great resource for finding ditransitive data in Ugric languages, among other things.

Ugric: Hungarian

- P and T (direct object) marked ACC
- R (indirect object) marked DAT
- Object agreement with (roughly) definite direct objects

(7) Monotransitive with object agreement

*Lát-**ja*** [$_{P}$ ***a*** ***kutyá-t***].
see-3SG>OBJ the dog-ACC

'S/he see the dog.'

(8) Indirective case and **indirective agreement**

[$_{R}$ *Neked*] *ad-**ja*** [$_{T}$ ***a*** ***kutyá-t***].
you.SG.DAT give-3SG.SBJ>OBJ the dog-ACC

'S/he gives you the dog.'

Ob-Ugric: Northern Khanty

- P marked ACC/NOM in monotransitives
- Either T or R can be **ACC/NOM** (direct and primary O, resp.)
- Object agreement with (roughly) topical ACC/NOM objects

(9) Monotransitive with object agreement (Nikolaeva 1999: 334)

[P **tam kalaŋ**] *weːl-sə-**ŋil-am***
this reindeer kill-PST-DU.OBJ-1SG.SBJ

'I killed these two reindeer.'

(10) ICIA (Dalrymple & Nikolaeva 2011: 148)

ma [T ***aːn***] [R *Peːtra eːlti*] *ma-s-**eːm**.*
I cup Peter to give-PST-1SG.SBJ>SG.OBJ

'I gave a/the cup to Peter.'

(11) NCSA/SCSA (Dalrymple & Nikolaeva 2011: 148)

ma [R ***Peːtra***] [T *aːn-na*] *ma-s-**eːm**.*
I Peter cup-LOC give-PST-1SG.SBJ>SG.OBJ

'I gave a/the cup to Peter.', cf. 'I provided P. with a cup.'

Samoyedic: Tundra Nenets

- P marked ACC in monotransitives
- Either T or R can be **ACC** (direct and primary O, resp.)
- Object agreement with topical ACC objects

(12) Monotransitive with object agreement (Nikolaeva 2014: 209)

[P ***śiďa ti-m***] *xadaŋa-**xˀyu**-da*
two reindeer-ACC kill-DU.OBJ-3SG

'He killed two reindeer.'

(13) Indirective case, no object agreement (Nikolaeva 2014: 236)

[R *ťuku˚ ńenećə-nˀh*] *mə́ńˀ* [T *kniga-m*] *ḿiqŋa-dˀm*
this person-DAT I book-ACC give-1SG

'I gave the book to this man.'

(14) SCSA (Nikolaeva 2014: 236)

[R ***ťuku˚ ńenećə-m***] [T *kniga-xəna*] *ḿiqŋa-**w˚***
this person-ACC book-LOC give-1SG>SG.OBJ

'I provided this man with the book.'

Samoyedic: Selkup

- P marked ACC in monotransitives
- Either T or R can be **ACC** (direct and primary O, resp.)
- Object agreement with topical ACC objects

(15) Monotransitive with object agreement (Helimski 1998: 575)

[$_P$ ***poč^{j}ka*** ***ütï-m***] *ii-sa-**p***
cask water-ACC take-PST-1SG>OBJ

'I took a cask of water.'

(16) SCSA (Wagner-Nagy & Szeverényi 2013: 34)

… [$_R$ pro] [$_T$ *apsi-sä*] *mi-sa-p*
food-INS give-PST-1SG>OBJ

'… I gave them some food.'

Interim summary

Case and agreement in Uralic ditransitives

Object agreement in Khanty, Mansi, Selkup, Nenets, …

- with ACC themes is differential,
- with ACC recipients is very common to obligatory.
- **No agreement** with DAT/LAT/… recipients,
- or LOC/INS/… themes.

Why is there no agreement with DAT or LAT?

The indirective/secundative split in case and agreement is arguably determined by information structure in Uralic. Secundative alignment is associated with **non-topical themes**, or **topical recipients** (cf. Dalrymple & Nikolaeva 2011).

4 Beyond Uralic: The larger sample

My sample consists of languages with **two instances of agreement**

- Agreement with the subject and **one** object
- ? The question is **which object** in a ditransitive controls agreement

The sample consists of **124 languages** from **97 genera** (70 families), see Figure 5

- From all linguistic macroareas
- Languages with non-doubling object markers are (mostly) excluded
- Sources are grammars, other literature, consultation
- Data and sources available at `https://osf.io/k386x/` (Bárány & Classe 2022)

Areal distribution

Figure 5: Languages in the sample

5 The distribution of alignment

Combinations of alignment types

Several combinations of case and agreement alignment types are attested

- In IC, the ditransitive **theme** has 'regular' object case (ACC/ABS)
- In IA, the ditransitive **theme** controls agreement
- In SA, the ditransitive **recipient** controls agreement
- In SC and NC, the ditransitive **recipient** has 'regular' object case (ACC/ABS)

A reminder: DP_P is the single object of a monotransitive clause, DP_R the recipient and DP_T the theme in a ditransitive clause.

	Secundative/neutral case	Indirective case
Secundative agreement	✔ (90, e.g. Nez Perce)	✔ (25, e.g. Amharic)
Indirective agreement	✘	✔ (9, e.g. Hungarian)

Table 1: Distribution of languages per alignment type (N = 124)

I am not aware of languages with secundative or neutral case-marking and only indirective agreement alignment. There is a **typological gap**.

Note that *neutral* agreement would involve either no agreement at all or all three types of objects agreeing in the same way — both properties disqualify such languages from my sample.

Analysis

This gap can be explained using the following assumptions

1. The agreeing head, e.g. *v*, c-commands both DP_R and DP_T
2. DP_R c-commands DP_T, cf. (17) and (18) (e.g. Barss & Lasnik 1986, Harley 2002, Bruening 2010, Stegovec 2020)

If you're not a fan of defining argument relations in terms of structural relations, an alternative way to state assumptions 1 and 2 relies on grammatical functions. The primary (or direct) object controls agreement (assumption 1), and the primary (or direct) object is more prominent than the secondary (or indirect) in terms of WCO and binding. Different alignment types differ in which semantic roles are mapped onto which grammatical function.

(17) WCO effect due to movement of T over R (Amharic, Baker 2012: 266)

?* *Nərs-wa* [$_T$ ***hɨs'an***] [$_R$ ***lə-innat-u***] t_T
nurse-DEF.F baby DAT-mother-3.M.POSS
*t-asaj-**at**-all-ətʃtʃ.*
3.F.SBJ-show-3.F.OBJ-AUX-3.F.SBJ
'The nurse showed a baby$_i$ to its$_i$ mother (e.g., shortly after the delivery).'

(18) R binding pronoun in T (Nez Perce, Deal 2013: 397)
P.-nim$_i$ ***pee**-kiwyek-Ø-e* [$_R$ ***Elwit'et-ne$_j$***] [$_T$
P.-ERG 3/3-feed-PFV-REM.PST Elwit'et-ACC
'ip-nim$_{i/j}$ hipt].
3SG-GEN food.NOM
'Pinooc$_i$ fed Elwit'et$_j$ her$_i$/his$_j$ food.'

3. Interaction of m-case and agreement follows the case hierarchy

- In IC, if the verb cannot agree with DAT object: **indirective agreement**
- If the verb can agree with DAT object: **secundative agreement** (Table 2)

→ **Case hierarchy**: NOM/ABS > **ACC**/ERG > **DAT** > OBL > …

(cf. Blake 2001, Caha 2009, Smith et al. 2019, Zompì 2019)

	Secundative/neutral case	**Indirective case**
Secundative agreement		✔ (Amharic)
Indirective agreement		✔ (Hungarian)

Table 2: Variation in accessibility of DP$_R$'s m-case in indirective case alignment

- In SC/NC, ABS/ACC **must** be accessible: **secundative agreement** (Table 3)

→ **Case hierarchy**: NOM/**ABS** > **ACC**/ERG > DAT > OBL > …

→ Indirective agreement, i.e. with DP$_T$, should be impossible (due to locality)

	Secundative/neutral case	Indirective case
Secundative agreement	✔ (Khanty)	✔ (Amharic)
Indirective agreement	✘	✔ (Hungarian)

Table 3: No variation in accessibility of DP$_R$'s m-case in secundative and neutral case alignment

Ruling out secundative case and indirective agreement

- ✔ These assumptions rule out secundative case and indirective agreement, see Figure 6

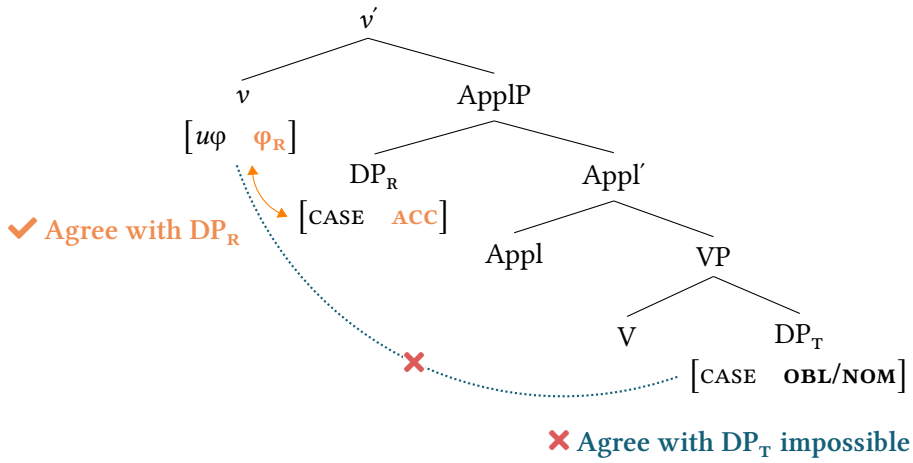

Figure 6: Indirective agreement is ruled out with secundative case

No secundative/neutral case and indirective agreement

In my sample, **no language with secundative or neutral case alignment allows only indirective agreement**. This typological gap follows from the structure of ditransitives and the interaction of case and agreement. In a nutshell: in secundative or neutral case alignment, only a **non-local agreement relation** could derive indirective agreement, **violating locality**.

6 Conclusions

- ✔ Case and agreement in ditransitives do not vary freely
- ✔ With secundative or neutral case, **secundative agreement is always possible**
- ✔ Person, information structure can cause agreement alternations (Bárány 2021)
- ✔ Robust empirical evidence for a typological gap in ditransitive alignment

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Abbreviations

1 = first person, 3 = third person, A = agent-like argument of a canonical transitive verb, ABS = absolutive, ACC = accusative, ALL = allative, APPL = applicative, AUX = auxiliary, DAT = dative, DEF = definite, DU = dual, ERG = ergative, F = feminine, GEN = genitive, IA = indirective agreement, IC = indirective case, INDIC = indicative, INS = instrumental, IPFV = imperfective, LAT = lative, LOC = locative, M = masculine, NC = neutral case, NOM = nominative, OBJ = object, OBL = oblique, P = patient-like argument of a canonical transitive verb, PFV = perfective, PL = plural, POSS = possessive, PRS = present, PST = past, R = recipient-like argument of a ditransitive verb, REM = remote, S = single argument of a canonical intransitive verb, SA = secundative agreement, SBJ = subject, SC = secundative case, SG = singular, T = theme- or patient-like argument of a ditransitive verb, WCO = weak crossover.

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