Object agreement in ditransitive constructions

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Multiple Agreement across Domains
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Introduction: Alignment in ditransitives
Indirective alignment

(1) a. I give \([p \text{ the book }].\)

   b. I give \([t \text{ the book }][r \text{ to the woman }].\)

(2) **Indirective alignment** — \(P\) and \(T\) identical (direct object)

See e.g. Dryer (1986), Haspelmath (2005), Malchukov, Haspelmath & Comrie (2010)
Secundative alignment

(3) a. I equip \([p \text{ the woman }]\).

b. I equip \([r \text{ the woman }][t \text{ with a book }].\)

(4) **Secundative alignment** — \(p\) and \(r\) identical (primary object)
Alignment in case and agreement I

Object agreement with one object (or “indexing”) also shows both types:

(5) Indirective case and indirective agreement, i.e. with $T$  

\[
\begin{array}{l}
[\text{R}] \text{Neked} \quad [\text{T}] \text{a kutyá-t}.
\end{array}
\]

\[
\begin{array}{l}
\text{you.SG.DAT} \quad \text{give-3SG.SBJ>OBJ} \quad \text{the dog-ACC}
\end{array}
\]

‘S/he gives you the dog.’

(6) Indirective case and secundative agreement, i.e. with $R$

\[
\begin{array}{l}
\text{Lemma} \quad [\text{R}] \text{l-Almaz} \quad [\text{T}] \text{tarik-u-n} \quad nəggər-at.
\end{array}
\]

\[
\begin{array}{l}
\text{Lemma.M} \quad \text{DAT-Almaz.F} \quad \text{story.M-DEF-ACC} \quad \text{tell.3.M.SBJ-3.F.OBJ}
\end{array}
\]

‘Lemma told Almaz the story.’

(Baker 2012: 261)
Alignment in case and agreement II

- **Four logical ways** of combining secundative and indirective case and agreement alignment in languages with one instance of object agreement
- Three types are found all over the world
- One type is missing

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<tr>
<th></th>
<th>Secundative case</th>
<th>Indirective case</th>
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<tr>
<td>Secundative agreement</td>
<td>✔️ (Nez Perce)</td>
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<tr>
<td>Indirective agreement</td>
<td>✗</td>
<td>✔️ (Hungarian)</td>
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Today’s talk

Case and agreement alignment in ditransitives

The attested types differ in whether the theme or the recipient is the primary object and whether the verb can agree with DAT objects or not.

A typological gap: No secundative case and indirective agreement

The gap in ditransitive constructions is not accidental: it follows from hierarchical syntactic structure and the case hierarchy.

Counterexamples?

Languages with symmetric objects (in some respects) pose a challenge: information structure and φ-features seem to allow violations of locality. These can be explained by a version multiple agreement.
Alignment patterns
Indirective case and indirective agreement: Hungarian

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

(7) a. Monotransitive with object agreement

\[ Lát-ja \quad [p \quad a \quad kutyá-t \quad \text{.]}. \]
see-3SG.SBJ>OBJ the dog-ACC
‘S/he sees the dog.’

b. Indirective case and \textbf{indirective agreement}

\[ [r \quad \textbf{Neked} \quad] \quad \text{ad-ja} \quad [t \quad a \quad kutyá-t \quad \text{.}}. \]
you.SG.DAT give-3SG.SBJ>OBJ the dog-ACC
‘S/he gives you the dog.’
Indirective case and indirective agreement

In languages like Hungarian, the verb can only agree with Acc objects

→ Agreement can skip the recipient R and agree with the theme T
Indirective case and secundative agreement: Amharic

• P and T marked ACC (direct object)
• R is DAT (indirect object)
• The verb can agree with the DAT R

(8) a. Monotransitive with object agreement

\[ Ləmma \quad [_{P} \, gənzəb-u-n \quad ] \, sərrək’-a-w. \]


‘Lemma stole the money.’

b. Indirective case and secundative agreement

\[ Ləmma \quad [_{R} \, l-Almaz \quad ] \quad [_{T} \, tarik-u-n \quad ] \, nəggər-at. \]


‘Lemma told Almaz the story.’

(Baker 2012: 261)
Indirective case and secundative agreement

If DAT arguments can control agreement, the verb will agree with R rather than T

→ Agreement with T is ruled out by locality

\[\text{Agree with } R \quad \text{Agree with } T \text{ impossible}\]
Secundative case and secundative agreement: Nez Perce

- P marked ACC in monotransitives
- R marked ACC (primary O), T marked NOM

(9) a. Monotransitive with object agreement

\[ Ciq’aamqal-nim \text{ } pee-tw’ehke’yk-se-Ø \ [p \text{ picpic-ne }] \]
\[ \text{dog-ERG} \quad 3/3-\text{chase-IPFV-PRS} \quad \text{cat-ACC} \]
‘The dog is chasing the cat.’

(Deal 2013: 396)

b. Secundative case and secundative agreement

\[ P.-nim_i \text{ } pee-kiwyek-Ø-e \ [R \text{ Elwit’et-ne}_j ] \ [T \ ‘ip-nim_{i/j} \text{ } hipt ] \]
\[ P.-\text{ERG} \quad 3/3-\text{feed-PFV-REM.PST} \quad \text{Elwit’et-ACC} \quad 3\text{SG-GEN} \quad \text{food.NOM} \]
‘Pinooc_i fed Elwit’et_j her_{i/his_j} food.’

(Deal 2013: 397)
Secundative case and secundative agreement

Nez Perce assigns the $R$ the same case as the monotransitive object $P$

→ Since the monotransitive object $P$ can control agreement, so must the $R$

→ Agreement with $T$ is ruled out by locality
Explaining the gap
Agreement patterns with indirective case

In indirective case-marking, i.e. when R is marked DAT:

- If verb cannot agree with DAT object: indirective agreement
- If verb can agree with DAT object: secundative agreement


- Languages differ in which (morphological) cases are accessible for agreement

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Agreement patterns with secundative case

In secundative case-marking, i.e. when R is marked ABS/ACC:

- In languages with object agreement, ...
- ... ABS/ACC can always control agreement: secundative agreement

→ Case hierarchy: NOM/ABS > ACC/ERG > DAT > OBL > ...
→ Agreement with τ, i.e. indirective agreement, should be impossible

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Ruling out secundative case and indirective agreement

Assumptions:

- The verb can agree with \( R \) — **true by definition**,  
- the agreeing verb c-commands both \( R \) and \( T \),  
- and \( R \) c-commands \( T \) (cf. Nez Perce, (9b)).
Is this on the right track?

- Structural explanation makes the right predictions
- Ditransitives in around 40 languages with object agreement (from Dryer 1986, Haspelmath 2005, Malchukov, Haspelmath & Comrie 2010):

→ Secundative or neutral case do not occur only with directive agreement
- Functional explanations only capture part of what is going on...

"Since IO’s vary for person, while DO’s in ditransitive clauses generally do not, it makes more sense functionally for the verb in a ditransitive clause to code the person of the IO rather than the person of the DO ... (Dryer 1986: 841f.)"
Apparent exceptions
Skipping accessible goals

So far, I suggested that an accessible $R$ will always control agreement.

In some languages, $R$ is skipped under certain conditions and the verb agrees with $T$ — even though $R$’s case is accessible for agreement.

- This happens both in languages with both case alignment types
- **Competition** between objects in person and/or information structure

→ **Multiple agreement** can derive these patterns
Person determining agreement alignment

Chukchi and Alutor (Chukotko-Kamchatkan) have indirective case alignment

- P and T marked ABS (direct object) — R marked DAT (indirect object)
- The verb agrees with a first or second person R/T or with a third person T

(10) a. **Secundative agreement** with 1PL R

\[
\text{ne-}jəl-mək \quad \text{atr’ec} [\text{T } kante-t]
\]

INV-give-1PL.OBJ only lollies-3PL.ABS

‘They only gave us lollies.’

b. **Indirective agreement** with 3SG T

\[
\text{... [T } yamya-taqo ] [R } yamya-ramkəl’-eta ] n-ə-jəl-qin
\]

EMPH-food.3SG.ABS EMPH-guest-DAT HAB-EP-give-3PL.SBJ>3SG.OBJ

‘They only gave [this] special food to special guests.’ (Dunn 1999: 207)
Modelling Chukchi agreement with 1st/2nd person

Agreement cannot just be sensitive to locality, it must be sensitive to person.

• Assumption: 1st/2nd person value a probe right away, 3rd person does not.

→ If \( v \) encounters a 3rd person argument, it will continue to probe (cf. Deal 2015)

\[
\begin{align*}
\text{Agree with } R & \quad \checkmark \\
\text{Agree with } T & \quad \times \text{ impossible: } v \text{ already valued}
\end{align*}
\]
Modelling Chukchi agreement with 3rd person

Agreement cannot just be sensitive to locality, it must be sensitive to person

- Assumption: 1st/2nd person value a probe right away, 3rd person does not

→ If \( v \) encounters a 3rd person argument, it will continue to probe (cf. Deal 2015)

\[
\begin{array}{c}
\text{vP} \\
\text{v} \\
\begin{bmatrix}
\text{uφ} \\
3\text{SG}
\end{bmatrix} \\
\text{RECIPIENT} \\
\begin{bmatrix}
\text{CASE} \\
\varphi \\
3\text{PL}
\end{bmatrix} \\
\text{VP} \\
\text{V'} \\
\text{V} \\
\begin{bmatrix}
\varphi \\
3\text{SG}
\end{bmatrix} \\
\text{THEME} \\
\begin{bmatrix}
\text{CASE} \\
\text{ABS}
\end{bmatrix}
\end{array}
\]

\( \times \) 3pl R does not value \( v \)

\( \times \) 3sg T does not value \( v \) at first

\( \checkmark \) 3sg T values as \( v \) final accessible goal
Information structure determining agreement

Itelmen (Chukotko-Kamchatkan) has indirective case alignment as well

- P and T marked ABS (direct object) — R marked DAT (indirect object)
- The verb agrees with R or T based on salience (Bobaljik & Wurmbrand 2002)

(11) a. **Secundative agreement** with 1SG R

\[
\text{isx-enk } n-zəl-aɬ-um [T kza ] [R kama-nk ]? \\
\text{father-LOC IMPRS-give-FUT-1SG.OBJ you me-DAT}
\]

‘Will father give you to me?’

b. **Indirective agreement** with 2SG T

\[
\text{isx-enk } n-zəl-aɬ-in [T kza ] [R kama-nk ]? \\
\text{father-LOC IMPRS-give-FUT-2SG.OBJ you me-DAT}
\]

‘Will father give you to me?’

(Bobaljik & Wurmbrand 2002: 15)
Modelling Itelmen agreement with salient object

Agreement in Itelmen is sensitive information structure

- Assumption: the probe on $v$ is discourse-sensitive

→ A $\delta$-probe is looking for a salient DP (cf. Miyagawa 2010, 2017, Hamilton 2017)
Symmetrical alternations

Some languages have symmetrical ditransitive constructions in which

- both internal arguments can agree with the verb, or passivise, ...
- These usually involve identical, often null case morphology (**neutral alignment**)

(12) a. **Secundative agreement** with class 2 ṣ

\[ \text{twa-}ba-h-ile \quad [\text{T} \ bokyo] \]
1PL-2.OM-give-PST 14.money
‘We gave **them** money.’ (batu ‘the people’)  
(Iorio 2015: 106)

b. **Indirective agreement** with class 14 ṣ

\[ \text{twa-}bo-h-ile \quad [\text{R} \ batu] \]
1PL-14.OM-give-PST 2.person
‘We gave **it** to people.’ (bokyo ‘the money’)  
(Iorio 2015: 105)
Whence (a)symmetry?

But are such patterns really symmetrical?

- van der Wal (to appear) argues that information structure influences which object controls agreement in several Bantu languages.
- Languages can be symmetrical in some respects but not others (Holmberg, Sheehan & van der Wal 2018, Haddican & Holmberg 2018).
- Jerro (2018) shows that the lexical semantics of verb classes also influence their symmetry in Lubukusu (also Bantu).
- Alternations are associated with particular entailments (Oehrle 1976, Beck & Johnson 2004).

→ Not only structure and case-marking introduce asymmetries.
“Apparent” exceptions

Why are these only apparent exceptions?

- In Chukotko-Kamchatkan, Bembe, and others non-local agreement is an option
- When $r$ is accessible (through its case), it is a kind of default
- Agreement with $t$ across $r$ requires something additional

→ No language only allows agreement with $t$ across an accessible $r$

Does Case play a primary role?
Analogues in monotransitives
A gap in monotransitives

Moravcsik (1978), Bobaljik (2008) point out an analogous gap in monotransitives

- In ERG-ABS languages, not all ERG subjects can agree
- In NOM-ACC languages, the subject always agrees

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<tr>
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<th>Accusative case</th>
<th>Ergative case</th>
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<tbody>
<tr>
<td>Accusative agreement</td>
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<tr>
<td>Ergative agreement</td>
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<td>✓ (Tsez, Hindi)</td>
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</table>

Bobaljik (2008) provides a structural explanation involving a case hierarchy

Do we find apparent exceptions to the monotransitive generalisation?
Exceptions to the monotransitive generalisation?

- In Algonquin, T agrees with subj or obj, based on their person (Oxford 2018)
- In Dzamba theme inversion, the verb agrees with a topical obj, see (13)

(13) a. **Agreement with A**, SVO order

\[
[A \text{ Omwana }] a\text{-tom-aki} [P \text{ imukanda }].
\]

1.child 1.sm-send-PFV 5.letter

‘The child sent a letter’

b. **Agreement with P**, OVS order

\[
[P \text{ Imukanda }] mu\text{-tom-aki} [A \text{ omwana }].
\]

5.letter 5.sm-send-PFV 5.child

‘The letter, the child sent it.’

(Henderson 2011: 743)
Conclusions
Conclusions

• Case and agreement in ditransitives do not vary freely
• Only certain types are attested
  → With secundative (or neutral) case, secundative agreement is always possible
  → Case, person, and information structure determine controllers

• Analogous gap: *ACC case/ERG agreement (Moravcsik 1978, Bobaljik 2008)
  → Striking parallelisms between higher (T) and lower (v) agreement domains
  → We find similar “exceptions” to the generalisations
Thank you!

Acknowledgements I want to thank Jenneke van der Wal for many insightful discussions of and comments on this material. I am grateful to my (other) former colleagues at ReCoS, in particular Theresa Biberauer, Ian Roberts and Michelle Sheehan, and to Eleanor Ridge.

Abbreviations 1 = first person, 2 = second person, 3 = third person, A = agent-like argument of a canonical transitive verb, ABS = absolutive, ACC = accusative, DAT = dative, DEF = definite, EMPH = emphatic, EP = epenthetic vowel, ERG = ergative, F = feminine, FUT = future, GEN = genitive, HAB = habitual aspect, IMPRS = impersonal, INV = inverse, IPFV = imperfective, LOC = locative, M = masculine, NOM = nominative, OBJ = object, OBL = oblique, OM = object marker, P = patient-like argument of a canonical transitive verb, PFV = perfective, PL = plural, PRS = present, PST = past, R = recipient-like internal argument of a ditransitive verb, REM = remote, SBJ = subject, SG = singular, SM = subject marker, T = theme- or patient-like internal argument of a ditransitive verb, TOP = topic.
References


References II

## Language breakdown I

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### Table 1

Case/agreement alignment in languages with one instance of object agreement from Dryer (1986), Haspelmath (2005), Malchukov, Haspelmath & Comrie (2010)

### Fisher's Exact Test for Count Data

- **data:** unchecked
- **p-value:** 2.874e-06
- **alternative hypothesis:** true odds ratio is not equal to 1
- **95 percent confidence interval:**
  - 7.956302 to Inf
- **sample estimates:**
  - **odds ratio**: Inf

### Listing 1

Fisher’s exact test on data from Table 1
### Language breakdown II

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*Table 2* Languages I checked for case and agreement alignment