Leipzig Spring School on Linguistic Diversity

Competing Motivations and the Typology of Case-Marking

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Transitivity parameters and transitivity alternations

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### Hopper and Thompson’s (1980) Transitivity Parameters

<table>
<thead>
<tr>
<th></th>
<th>HIGH</th>
<th>LOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Participants</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>b) Kinesis</td>
<td>action</td>
<td>non-action</td>
</tr>
<tr>
<td>c) Aspect</td>
<td>telic</td>
<td>atelic</td>
</tr>
<tr>
<td>d) Punctuality</td>
<td>punctual</td>
<td>non-punctual</td>
</tr>
<tr>
<td>e) Volitionality</td>
<td>volitional</td>
<td>non-volitional</td>
</tr>
<tr>
<td>f) Affirmation</td>
<td>affirmative</td>
<td>negative</td>
</tr>
<tr>
<td>g) Mode</td>
<td>realis</td>
<td>irrealis</td>
</tr>
<tr>
<td>h) Agency</td>
<td>A high in potency</td>
<td>A low in potency</td>
</tr>
<tr>
<td>i) Affectedness of O</td>
<td>O totally affected</td>
<td>O not (totally) affected</td>
</tr>
<tr>
<td>j) O individuation</td>
<td>O highly individuated</td>
<td>O non-individuated</td>
</tr>
</tbody>
</table>
Transitivity parameters: some examples

- **Volitionality (and kinesis)**
  - On some non-agentive verbs (of feeling, perception, etc) in Estonian take O in PART (instead of ACC=GEN)

  \( Ta \ kuulis \ nende \ kõnet \)
  
  he heard their talk(PART)

  ‘He heard their talk’

- **Affectedness**
  - Use of partitive instead of GEN=ACC in Estonian (H&T, 264):

  \( Me \ peame \ kohe \ bensiini \ vôtma \)
  
  We AUX at.once petrol.PART take

  ‘We’ll have to take some petrol right away’
Aspect

Actancy split in Georgian:

- **NOM-DAT pattern in Series I (present, etc),**
  - Šina.ber.a jagl-s jval-s mi-ø-s-c-em-s
    spinster(NOM)dog-DAT bone-DAT Prev-(it)-it-give-TH-she
    ‘The spinster will give a bone to the dog’

- **ERG-NOM pattern in Series II (aorist, etc),**
  - šina.ber.a-m jagl-s jval-i mi-ø-s-c-a
    spinster_ERG dog-DAT bone-NOM Prev-(it)-it-give- she.AOR
    ‘The spinster gave a bone to the dog’

- **DAT-NOM pattern in series III (perfect, etc)**
  - šina.ber.a-s jagl-is=tvis jval-i mi-ø-u-c-i-a
    spinster-DAT dog-GEN=for bone-NOM Prev-(she)-OV-give-PF-it
    ‘The spinster apparently has given a bone to the dog’
Negation and Mode

- **Negation:**
  - GEN Object under negation in Russian:
    
    On ne ljubit obeshchanij
    He not like promise.GEN.PL
    ‘He does not like promises’

- **Mode:**
  - In Yukulta (H&T, 277) in irrealis (non past) clauses O is cross-referenced by the oblique rather than absolutive AGR.
    
    Kurita-pa-ka-ø
    See.DES-2SG.OBL-1SG.ABS-PRES.INTR
    ‘I’d like to see you’
**O-individuation I**

- Animacy (and definiteness)
  Animate O in Hindi in ACC; inanimate in ACC only if definite (Mohanan 1994):

  *Ilaa-ne bacce-ko (*baccaa) uTaayaa*
  Ila-ERG child-ACC (*NOM) lift-PERF
  ‘Ila lifted a/the child’

  *Ilaa-ne haar uTaayaa*
  Ila-ERG necklace lift-PERF
  ‘Ila lifted a/the necklace’

  *Ilaa-ne haar-ko uTaayaa*
  Ila-ERG necklace-ACC lift-PERF
  ‘Ila lifted the necklace’
O-individuation II

- Definiteness and Specificity
  Antipassive and incorporation in Eskimo (West Greenlandic); (Fortescue 1984: 86)

  *Tuttu taku-aa*
  caribou.ABS see-IND.3s->3s
  ‘He saw the caribou’

  *Tuttu-mik tuku-nnip-puq*
  caribou-INSTR see-AP-IND.3s
  ‘He saw a caribou’ (indefinite-referential)

  *Tuttu-si-vuq*
  caribou-see-IND.3s
  ‘He saw a caribou’ (non-referential)
**Formal encoding of transitivity alternations**

- case-marking of an actant (Hindi, Estonian, Russian)
- agreement (as in Yukulta)
- actancy split, i.e. change of case-marking of both arguments (Georgian)
- diathetic shift, involving antipassive (Eskimo)
- incorporation (Eskimo)

> Given a large number of transitivity parameters and a variety in encoding of transitivity alternations, the question is:

**Are there any constraints on co-variation between transitivity parameters and transitivity alternations?**
Transitivity parameters as a scale

**Are all parameters intrinsically semantically related?**

No, some of them are, e.g. aspect and (total) affectedness, or volitionality and agency/animacy, some are not: e.g., volitionality and affectedness (cf. Tsunoda 1985; Lazard 1998).

The list of *Transitivity Parameters* can be transformed into the following scale in order to explicate mutual semantic affinities between particular parameters:

<table>
<thead>
<tr>
<th>A-features</th>
<th>V-features</th>
<th>O-features</th>
</tr>
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<tbody>
<tr>
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<td>Volitional.</td>
<td>Kinesis</td>
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<td></td>
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<td>Factivity</td>
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<td></td>
<td></td>
<td>Tense/Aspect</td>
</tr>
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<td></td>
<td></td>
<td>Affected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individ.</td>
</tr>
</tbody>
</table>
Relevance Principle

The Scale can be used to predict the locus of Transitivity Alternation, if we assume the following hypothesis

- **Relevance Principle (RelP)**

  *Mark the Transitivity Parameter on the relevant constituent (i.e. on the constituent to which the parameter pertains)*

- predicts that all other things being equal
  - A features should be encoded on A (exclusively or not-exclusively),
  - O features should be encoded on O,
  - V features (TAM, negation, etc) should be encoded on V (alone) or on V plus its arguments (diathetic shift or actancy split)
Evidence for the Relevance Principle I

I. Split ergative languages with the NP-based split

Cf. “mixed” (NOM-ABS and ERG-ACC) pattern in Dyirbal:

ŋada bayi yaRa balgan
I.NOM DET.ABS man hit.NFUT
‘I am hitting the man’

ŋayguna bāŋgul yaRa-ŋgu balgan
I.ACC DET.ERG man.ERG hit.NFUT
‘The man is hitting me’
Evidence for the Relevance Principle II

II. Languages with “independent” (semantically motivated) case alternations

Cf. “independent” case alternations on A/S (motivated by volitionality) and O (motivated by animacy and definiteness) in Hindi:

*Vah cillaaya*
He.NOM shout/scream-PERF
‘He screamed’

*Us-ne cillaaya*
He.ERG shout/scream-PERF
‘He shouted (deliberately)’

More generally languages with role-domination, including languages with an active/stative (split-S) system.
Evidence for the Relevance Principle III

III. Differential Object Marking (DOM)

Evidence for the Relevance Principle IV

IV. “Differential Subject Marking”?

“Differential Subject marking”, where case-marking of A changes depending on semantic/pragmatic characteristics of A.
Differential Subject Marking: Animacy

- different ERG cases for animate/inanimate A in Tsakhur or Chukchi.
- ERG/OBL alternation in Archi and Samoan

*Na tapuni e le matagi le faitoto’a*

PAST close ERG ART wind ART door
‘The wind closed the door’

*Na tapuni i le matagi le faitoto’a*

PAST close LOC ART wind ART door
‘The wind closed the door’

(K, 235 from Mosel & Hovdhaugen 1992: 423)
Differential Subject Marking: volitionality

- DSM triggered by *volitionality*:
  - Cf. Tibetan (ERG -> ABS) or Lezgian (ERG-> OBL)
    - *Ajal-di get’e xa-na*
      - Child-ERG pot(ABS) break-AOR
      - ‘The child broke the pot’
    
    *Zamiira.di-waj get’e xa-na*
    - Zamira-AdEl pot(ABS) break-AOR
    - ‘Zamira broke the pot (accidentally)’ (Haspelmath 1993: 292)

- Compare also AGRa to AGRio demotion in (non-)potential and non-volitional forms in Abkhaz:
  - *ye-š-s-àmxa-qa’-co*
    - 3SG.O-that-1SG.IO-UNW-PREV-do.NFIN
    - ‘that I am doing it unwillingly’(Hewitt 1979: 195)
Differential case marking and Relevance Principle: conclusion

RelP as a constraint on differential case marking:

- “Differential Subject Marking” is used to encode the features of A
- “Differential Object Marking” is used to encode features of O.
Counterexamples to Relevance Principle I

- An A-feature (volitionality) encoded on O in Russian:

  *On krutil rulj/ruljom*
  he rotate wheel.ACC/wheel-INSTR
  ‘He rotated the wheel (consciously)/unconsciously’
Counterexamples to Relevance Principle II

- An O-feature (animacy) encoded on A in Pitjantjatjara:

  *Ilyatjari-lu pony tati-nu*
  Ilyatjari-ERG pony climb-PAST
  ‘Ilyatjari mounted the pony’

  *Nyantju wala winki puli tati-nu*
  Horse very quickly hill climb-PAST
  ‘The horse climbed the hill flat out’
Differential case marking and alignment

- Generally, examples of the case marking targeting the “wrong” actant are rare

- But more importantly, why “differential object marking” is normally found in accusative languages (cf. Bossong 1985b), while “differential subject marking” is usually found in ergative languages (cf. Drossard 1991)?
Primary Actant Immunity Principle

“Primary Actant Immunity Principle” (PAIP)
(cf. Tsunoda (1981), Lazard (1994); Kittilä (2002)):

**PAIP: Avoid manipulation on the case-marking of the ‘primary’ actant exclusively**

Demotion of a primary (i.e. unmarked, S-like) actant normally results in a diathetic shift:
- passivization in case of nominative A/S demotion
- antipassivization in case of absolutive O demotion

Cf. the “demotional” analysis of these voice alternations (Shibatani 1985; Cooreman 1994; Givon 2000) which defines the main function of passive and antipassive as A-defocusing and O-defocusing, respectively
Evidence for PAIP I: O-related alternations

- Differences in expression of A-related and O-related parameters in accusative and ergative languages
  
  1) O-related alternations (affectedness, etc) in accusative languages
  
  - In accusative languages need to express O-related alternation leads to DOM effects
  
  - Even V (or rather O/V) related features such as aspect can be encoded on O; Cf. ACC/PART alternations used to encode aspectual distinctions in Estonian (and Finnish)

  *Mu sõber pakkis oma asju*
  
  My friend pack his thing(PART)
  
  ‘My friend was packing his things’ (Imperfective)
Evidence for PAIP I: ergative languages

1) ...

2) O-related alternations in **ergative** languages

- In ergative languages need to express O-related alternation leads to antipassivization (in a broad sense, with or without antipassive morphology)
  - Antipassive construction is used when:
    - O is **indefinite/non-specific**, as in Eskimo
    - or **partially affected**, as in Tongan (H&T 1980)

  *Nu’e kai-i ’a e ika ’e he tomasi’i*

  PAST eat-TR ABS DEF fish ERG the boy
  ‘The boy ate the fish’

  *Nu’e kai ’a e tomasi’i ’i he ika*

  PAST eat ABS DEF boy OBL the boy
  ‘The boy ate some of the fish’
Antipassive functions (continued)

- Antipassive construction is used when:
  - O is indefinite/non-specific, as in Eskimo
  - or partially affected, as in Tongan (H&T 1980)

- or with an **aspectual** (continuous/progressive/conative) function

**Warrungu (Tsunoda 1985):**

*Pama-ngku yuri nyaka-n*
Man-ERG kangasroo-ABS see-NF
‘A man saw (found) a kangaroo’

*Pama yuri-wa nyaka-kali-n*
Man.ABS kangasroo-DAT see-APASS-NF
‘A man was (is) looking for a kangaroo’
PAIP effects in O-related alternations

The same *O*-related features (animacy/definiteness/affectedness/continuous) that trigger O demotion in accusative languages, cause the diathetic shift (antipassive) in ergative languages (cf. Lazard 1998)
Evidence for PAIP II: A-related alternations

1) ...
2) ...
3) A-related alternations (volitionality, etc) in ergative languages

- In Ergative languages change in A-related parameters (agency, volitionality, etc) can affect form of A exclusively (see examples from Samoan, Lezgian and Abkhaz above).
- Also V-related features (TAM) can induce A-alternations.

Cf. ERG/GEN alternation in Perfect in Manipuri:

<< Manipuri >> (Bhat & Ningomba 1997, 130)

*TombaE-nE/gi kophi thEk-e*

Tomba-ERG/GEN coffee drink-PERF

‘Tomba has drunk coffee’
4) A-related alternations in accusative languages normally lead to a passivization.

   - Passive construction is used when:

   **A indefinite [-specific/important]**

   It is the most typical function of a passive; omission of (indefinite) A always possible, for some languages obligatory (see Siewierska 1984; Shibatani 1985; Keenan 1985; Givon 2000 on agentless passives).

   In ergative languages it often suffices to omit A in such cases (see Dixon 1994).
Passive/anticausative (continued)

- A is non-volitional
  - Cf. the “involitive passive” forms in Sinhala:
    \[\text{MamE ee wacane kiwwa}\]
    I.NOM that word say.PAST
    ‘I said that word’

    \[\text{MatE ee wacane kiyEwuna}\]
    I.DAT that word say.PASS.PAST
    ‘I blurted that word out’ (Gair & Paolillo 1997: 38)

- More common are “Experimenter-anticausative construction” with nonvolitional As:
  - **Russian:** \[U \text{menja slomalsja zub}\] (To-me broke-REFL tooth)
  - **German:** \[\text{Mir ist ein Zahn abgebrochen}\]
PAIP effects in A-related alternations

The same A-related features (volitionality/definiteness) that trigger A omission/demotion in ergative languages, cause the diathetic shift (passive/anticausative) in accusative languages.

Also animacy distinctions (cf. differential marking of passive agents for animacy, such as *von/durch* alternations in German; Drossard 1991)
Counterexamples to PAIP I

- a) Nominative A demotion in impertsonal constructions
- Cf. alternation between NOM and INSTR case for inanimate A in Russian:

\[ \text{Lodku uneslo techenie/techeniem} \]
Boat-ACC drove-away current.NOM/current-INSTR
‘The boat was driven away by the current’

- Cf. also “deagentive” constructions for non-volitional As in New Indo-Arian languages (Masica 1991: 346-350), such as the GEN-Subject construction in Bengali.
Counterexamples to PAIP II

- b) Absolutive O-demotion in ergative languages

Cf. O-demotion in Warlpiri and Djaru (Tsunoda 1985)
<<Warlpiri>> (Hale 1973)

*Njuntulu-lu npa-tju ŋatju*
2SG-ERG 2SG-1SG spear-PAST 1SG.ABS
‘You speared me’

*Njuntulu-lu npa-tju-la ŋatju-ku*
2SG-ERG 2SG-1SG-la spear-PAST 1SG-DAT
‘You speared at me’/‘You tried to spear me’

- Note that these languages are “surface” ergative (syntactically accusative). In Warlpiri already agreement system accusative.
RelP and PAIP: harmonic cases

“Harmonic” cases: both principles reinforce each other.

- Both principles predict that O-related features should be encoded on O in accusative languages (DOM)
- Both principles predict that A-related features should be encoded on A in ergative languages (DSM)
- The latter tendency is however weakened for many “surface ergative” languages (such as Warlpiri), where A competes with O for the primary actant status
Conflicting principles I

1) RelP (outranks) > PAIP
   a) Results in A-demotion in an accusative language (cf. impersonal constructions in Russian and Bengali)
   b) Results in O-demotion in an ergative language (cf. the ERG-OBL pattern in Warlpiri and Djaru)

NB the mentioned exceptions to PAIP are due to RelP.
Conflicting principles II

2) PAIP outranks > RelP
   a) A-feature encoded on O (cf. the alternation between ACC and INSTR cases in Russian constructions of the type on krutil rulj/rul’om ‘he rotated the wheel’)
   b) O-feature encoded on A (cf. Pitjantjantjara where in case of inanimate O A changes its ERG case to ABS)

NB the mentioned exceptions to RelP are due to PAIP.
   De Hoop & Malchukov (2008) suggest in these cases PAIP outranks a specific constraint such as Identify (A/erg) which universally outranks a more general version of Identify (cf. Woolford 2001 on the universal ranking of (more) specific over (more ) general Faithfullness constraints).
Conflicting principles III: a compromise

• One way to satisfy both RelP and PAIP is the diathetic shift (the relevant constituent will be marked, and the primary actant available in the resultant structure, due to promotion of another actant to that position)

• Passive applies when there is need to encode (a low transitivity value for) A-features (A is non-specific, non-volitional, etc)

• Antipassive applies when there is need to encode (a low transitivity value for) for O features (an indefinite/non-specific and/non-affected O, incomplete V, etc)
**Generalized tableau I: Marking O-features in an accusative language**

<table>
<thead>
<tr>
<th></th>
<th>RelP</th>
<th>PAIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-marking</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>O-marking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prediction:** marking of A-features in an accusative language will always favor O-marking irrespective of the ranking of PAIP and RelP.
**Generalized tableau I: Marking A-features in an ergative language**

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</tr>
</tbody>
</table>

- Prediction: marking of A-features in an ergative language will favor A-marking irrespective of the ranking of PAIP and RelP: hence the attested DSM phenomena
- Qualification is needed though for “surface ergative” (syntactically accusative) languages.
### Generalized tableau II: Marking A-features in an accusative language

<table>
<thead>
<tr>
<th></th>
<th>RelP</th>
<th>PAIP</th>
<th>...</th>
<th>DIATH</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-marking</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-marking</td>
<td>*</td>
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<tr>
<td>D-marking</td>
<td></td>
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- **Prediction**: marking of A-features in accusative languages will show less consistency cross-linguistically, although a diathetic shift (to passive) will be the preferred option as a way to satisfy the higher ranking RelP and PAIP constraints
### Generalized tableau II: Marking O-features in an ergative language

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<td>*</td>
<td></td>
<td></td>
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<tr>
<td>O-marking</td>
<td></td>
<td>*</td>
<td></td>
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<tr>
<td>D-marking (antipassive)</td>
<td></td>
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<td>(*)</td>
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</tbody>
</table>

- **Marking of O-features in ergative languages will show less consistency cross-linguistically as compared to marking of A-features, although a diathetic shift (to antipassive) will be the preferred option as a way to satisfy the higher ranking RelP and PAIP constraints.**
Transitivity scale as a semantic map

Given that Transitivity Scale is designed to reflect semantic affinities between individual parameters, it can be viewed as a “semantic map” which can be used to constrain and predict polysemy patterns for multifunctional transitivity alternation markers.
## Transitivity scale constraining polysemy

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- **Estonian** PART-O construction: indefinite/partitive/imperfective/under negation/also with (some) inactive Vs (feeling, perception)

- **Russian** GEN-O construction: indefinite/partitive/under negation (continuous currently lost, but still retained in Old Russian)

- **Eskimo Antipassive construction**: non-specific/ indefinite/ partitive/ habitual

- **Yidiny Antipassive construction**: non-referential/ imperfective (continuous)/occasional event / inanimate agent.
Conclusions on polysemy

- Although there are some violations of the contiguity requirement, imposed by the semantic map, it still holds:

If a form/construction can express (some of the) A- and O-related parameters, it could also be used to encode some of the V-related parameters, pertaining to (non)-realization of the event.