Workshop on Objects positions

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Asymmetries in differential case marking and case marking strategies

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Differential Object Marking: basic facts

- In many languages marking of Os depends on animacy and definiteness: Os higher on Animacy Hierarchy are marked those lower may be not (Bossong 1985, Lazard 1998, Aissen 2003)
  - Hindi (Mohanan 1990: 104): only animates are (obligatorily) marked:

*Ilaa-ne bacce-ko (*baccaa) uTaayaa*

Ila-ERG child-ACC (*NOM) lift-PERF

'Ila lifted a/the child'

Differential Object Marking

- Hindi (Mohanan 1990: 104): Inanimates are marked only if definite:

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'

Explanation for DOM

- **Explanation of DOM in terms of markedness (Silverstein 1976; Comrie 1981)**
  - In the canonical transitive construction, O is lower than A in animacy/definiteness, hence deviation form this scenario (e.g. when O is animate/definite) should be (Case-)marked.
- **Aissen's (2003) optimality-theoretic account of DOM:**
  - Interaction of harmonic alignment hierarchies with economy constraints; cf. a Hindi pattern (simplified)
    - …*Oj/Hum & Øc >> *Case >>….>> *Oj/Inan & Øc…

Differential Subject Marking: markedness

- Does the markedness explanation carry over to Differential Subject Marking (DSM)?
- Markedness prediction for DSM: inanimate/indefinite As which deviate form the prototype preferably marked(by the ergative case)
  - **Cf. Qiang (Lapolla 2003, 125), where A in a transitive causative clause does not take Agentive Case unless inanimate:**

MoVu-wu qa da-tuə-Z
wind-AGT 1sg DIR-fall.over-CAUS
'The wind knocked me down'

Differential Subject marking

- More evidence for the markedness pattern in DSM (Silverstein's generalization):
  - More frequently markedness conditions a noun/pronoun split:
    - in many split-ergative languages with an NP-split (Dyirbal and many other Australian languages, some Tibetan and Caucasian), pronouns, which are highest on Animacy Hierarchy, lack ERG case.

DSM: markedness violations

- **In other ergative languages, however, DSM is not related to markedness.**
  - Hindi: DSM due to aspect, and in some cases volitionality (Mohanan 1990: 94):

Vah *cillaaya*
he.NOM shout/scream-PERF
'He screamed'
Us-ne cillaaya
he.ERG shout/scream-PERF
'He shouted (deliberately)'

  - NB here ERG only on volitional (hence animate nouns) contrary to markedness predictions

DSM: markedness violations

- In Samoan (Mosel & Hovdhaugen 1992: 423), Agents when inanimate may be demoted from ERG to OBL:

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'

- Also this case incompatible with the markedness predictions

DSM controversy

- Woolford (2001/2004) contra Aissen's (2003) Markedness explanation of differential case marking:
  - Differential Case Marking is not a uniform phenomenon
  - DSM effects cannot be always reduced to markedness, but are due to (variation in) argument structure and syntactic patterns
  - Markedness effects in DSM are superficial: a (morphonological) PF phenomenon

- **NB but then Silverstein's generalization is lost. Clearly, markedness plays a role (cf. Aissen), but is not the only factor (cf. Woolford)**

Case marking: functions and strategies

- **Functions of case marking (Comrie 1981, Kibrik 1985, Mallinson & Blake 1981, Song 2000):**
  - differentiating (to distinguish between arguments)
  - indexing semantic roles (or macro-roles – Actor/Undergoer)
- NB markedness is primarily related to Diff: can be understood as local, generalized, or context independent distinguishability

Case marking strategies as constraints

- From an optimality-theoretic perspective, these case marking strategies can be conceived as two general constraints (or rather, constraint families); (De Hoop & Malchukov 2006)
  - Diff: The arguments (A and P) must be distinguishable.
  - Index: Encode semantic roles (A and P).

Case marking strategies and asymmetries in DCM patterns

- These functions of case marking can also explain asymmetries between DOM and DSM patterns (De Hoop & Malchukov 2006; cf. De Hoop & Narasimhan 2005, De Swart 2003)
  - DOM, marking prominent (animate) O is consistent with both functions:
    - mark [animate] O, to distinguish from A
    - mark [animate] O, as it is more prominent.

Asymmetries in DCM

- **With regard to DSM conflicting predictions:**
  - indexing: only prominent (animate) subjects should be case-marked (by ERG)
  - markedness: only non-prominent (inanimate) subjects should be case-marked
- **This leads to a cross-linguistic variation resulting from a different ranking of Index and Diff constraints**
  - Hindi: only prominent subjects take ERG
    - Index-A >> Econ >> {Index-a, Diff-a, Diff-A}
  - Dyirbal: most prominent subjects (1,2 pronouns) cannot take ERG
    - Diff-a >> Econ >> {Diff-A, Index-A, Index-a }

Asymmetries in DCM patterns: DOM

Marking of prominent (P) and non-prominent (p) Objects

	Diff	**Index**
P-marking		
p-marking	*	*

DOM is cross linguistically consistent as the two constraints favor the same pattern with high prominent Ps marked.

Asymmetries in DCM patterns: DSM

Marking of prominent (*A*) and non-prominent (*a*) subjects

	Diff	Index
A-marking	*	
a-marking		*

This can account for less cross-linguistic consistence of DSM as compared to DOM, as in the former case the two constraints are in conflict

Animacy effects in DOM: Indexing

- **Do we need Index (in addition to Diff) to account for DOM?**
  - gives a better explanation for definiteness (unlike animacy, definiteness per se does not help to distinguish arguments)
  - can explain animacy effects in DOM which extend to an S argument

Animacy effects in DOM: Indexing

- DOM in Central Pomo (Mithun 1991: 521): OBJ case only on human Ps:

M'u·tu/ Mu·l ʔa·hk'úm

3sg.OBJ/3sg.NOM killed

'I killed him/it'

- And human patientive subjects:

Q'alá·w m'u·tu

died he.PAT

'He died'

- Mithun's conclusion: OBJ marking on O/S is driven by affectedness. NB relation between affectedness and animacy/prominence.

Indexing strategies

- Thus DCM pattern for both subjects and objects in Pomo can be accounted through a single constraint ranking:
  - Index-P >> Econ > Index-p
- The same is true for "role-dominated languages" (Van Valin & Lapolla 1997), where case marking is determined by Indexing:
  - Manipuri (Bhat & Ningomba 1997)
    - Only agentive subjects take the NOM (-*nə*) marker
    - Only patientive objects take the ACC (-*pu*) marker

Differentiating strategy and Animacy effects

- **Radical differentiating languages**
  - In Awtuw (Feldman 1986: 110) ACC is obligatorily used if O equals or is higher than A on Animacy Hierarchy:

tey tale-re yaw d-æl-i

3FS woman-ACC pig FA-bite-P

'The pig bit the woman'

  - Cf.

tey tale yaw d-æl-i

3FS woman pig FA-bite-P

'The woman bit the pig'

Differentiating strategy and Animacy effects

- In Fore ERG (Scott 1978: 116) is used if O is higher on Animacy Hierarchy than A:

Yagaa-wama wá aegúye

pig-ERG man 3sg.hit.3sg

'The pig hits the man'

Cf.

Yagaa wá aegúye

pig man 3sg.hit.3sg

'The man hits (or kills) the pig'

Differentiating strategy

- Clearly differential case-marking in Awtuw and Fore follows the Diff function:
  - E.g. DOM in Awtuw can be accounted by the following constraint ranking where Diff ranks high while Index ranks low:

Diff-P >> Econ >> {Diff-p, Index–P, Index-p}.

  - NB in Papuan languages animacy effects are 'global' (relative animacy of A and O) and not 'local' as in classic cases of the markedness effects in DOM

Conclusions on Animacy effects and case-marking strategies

- Animacy effects more directly related to Differentiating function:
  - may be local (cf. classical cases of DOM)
  - or global (as in Papuan)
- Indexing conditions animacy effects only indirectly, exploiting a correlation with volitionality and affectedness.
  - Explanation: from an indexing perspective marking animacy *per se* is redundant.

Definiteness effects in DCM

- **DOM: in accordance with the markedness pattern more prominent (definite and/or specific) Ps are preferentially marked (Bossong 1985)**
- **But do we find definiteness effects in DSM as well?**
  - NB. Comrie (1981) reports no cases where only indefinite As appear in the ergative case, as expected under the markedness approach.

Definiteness effects in DSM: markedness

- **Cf., however, Ika (Frank 1985), where we find exactly this pattern: new, indefinite As take the ergative case, while given/definite As do not:**
- Ika (Frank 1985: 149)

Ikı gäža kua ikı-se gäža?

man eat.MED or man-ERG eat.MED

'They eat people or people eat them?'

Focal ergativity

- Similar patterns of "focal ergativity" are attested in a number of other languages where ERG marking appears on emphatic, new or contrastive As:
- **Newari (Givón 1984: 154)**

Wō manu-nã̄ ihya tajua-na co-na

the man-ERG window break-AUX be –AUX

'The man is breaking the window'

Wō manu ihya tajua-na co-na

the man window break-AUX be –AUX

'The man is breaking the window'

- Cf. McGregor (1992; 1998) on emphatic ergatives in Australia and elsewhere.

Definiteness in DSM: markedness violations

- **However, the opposite pattern where the ergative case is missing on low-prominent/ non-referential As is attested as well.**

Semelai (Kruspe 1999:253)

CO *jəl* *jkOs*

dog.DIR bark.at porcupine.DIR

'Dogs bark at porcupines'

JkOs *ki-jəl* *la-cO*

porcupine.DIR 3SG-bark.at ERG-dog

'The dogs barks at the porcupine'

Definiteness effects in DCM: conclusions

- Thus, asymmetries between DOM and DSM, in the domain of definiteness/topicality are parallel to those observed in the domain of animacy.
  - Preferential ERG marking of referential subjects (strong *A*s) in Semelai can be attributed to Index:
    - Index-A >> Econ >> {Index-a, Diff-a, Diff-A}
  - Preferential marking of non-topical, new, indefinite subjects (weak *a*s) as in Ika can be attributed to Diff, as given/topical arguments are likely to be construed as As otherwise:
    - Diff-a >> Econ >> {Diff-A, Index-A, Index-a}).

Animacy and distinguishability in ditransitives

- **Extending a DOM pattern to ditransitives may cause a problem for distinguishability of direct and Indirect Objects (both marked by ACC=DAT), in case when O is animate (cf. Kittilä 2006):**

Korku (Nagaraja 1999: 46)

raja ra:ma-ke sita-ke ji-kne-nec

king.NOM Ram-OBJ Sita-OBJ give-PAST-PERS

'The king gave Sita to Ram'

- **NB here DOM preserved, but Diff(o/io) violated**

Ditransitives II

- **Diff wins: DOM suspended in ditransitives:**

Awa Pit (Curnow 1997: 72)

santos-ta-na pyan-a-ma-t
Santos-ACC-TOP hit-PL-COMP-PF
'They beat up Santos'

na-na santos-ta pashu mIla-ta-w
I-TOP Santos-ACC daughter give-PAST-AGR
'I gave my daughter to Santos'

Ditransitives III

- Diff causes IO demotion:

Kikuyu (Blansitt 1973:11)

mUthuri UriA *mukUrU* *nIanengerire* *mUtumIa ihUa*

man ? old gave woman flower

'The old man gave the woman the flower'

mUtumIa nIanengerire mwarI wakegwIkahII

woman gave daughter-her to-boy

'The woman gave her daughter to the boy'

- NB here global distinguishability effects: animacy of O causes OBL marking of IO

Marking of objects (themes) in ditransitives

Marking of inanimate objects (themes) in ditransitives

	Index-P	**Diff**
p + case		*
p - case		

- **A prediction: given Diff (as well as Economy considerations) if inanimate (low-prominent) objects/themes are unmarked in a monotransitive construction, they will remain unmarked in a ditransitive construction as well.**

Marking of objects (themes) in ditransitives

Marking of animate objects (themes) in ditransitives

	Index-P	Diff
p + case		*
p - case	*	

- **If Index-P outranks Diff, the DOM pattern is extended to ditransitives (as in Korku or Hindi),**
- **under the opposite ranking (Diff >> Index-P), the DOM pattern will be suspended in ditransitives (as is the case in A and Spanish).**

Case marking strategies and formal types of DCM

- **Formal types of DCM:**
  - asymmetrical: (overt) case (ACC, ERG) alternates with zero
  - symmetrical: alternation of two (overt) cases (ERG ~ OBL, ACC ~ OBL)
- **NB only the former can be related to Differentiating function (and Economy); the latter due to the Indexing strategy.**

An illustration: 3-way DOM in Finnish

- **DOM1: O ACC -> NOM, if A is missing (in impersonal, imperative)**

nainen näk-i poja-n
woman.NOM see-3SG.PAST boy-ACC
'The woman saw the boy'
hae poika
fetch.IMPER boy.NOM
'Fetch the boy'

- **DOM2: ACC=GEN -> PART to indicate less affected/indefinite O or imperfective aspect (i.e. related to affectedness)**
- **NB Both types completely independent. As predicted DOM1 triggered by Diff, while DOM2 by Indexing**

Case marking strategies and formal types in DSM

- DSM 1 (asymmetrical), can be related to Diff/Economy, hence Animacy Effects possible
- DSM2 is normally related to volitionality/control.
  - Cf. ERG -> OBL alternation in Involuntary Agent Constructions in Lezgian (Haspelmath 1993: 292):

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/involuntarily)'

Case marking strategies and distributional types of DCM

- **Distributional types of DCM:**
  - 'fluid' DCM: transitivity alternation
    - (cf., e.g., Transitivity alternation in Involuntary Agent Constructions)
  - 'split' DCM: different types of nominals select different cases
    - (cf. differential marking of nouns vs. pronouns in split ergative languages)

Case marking strategies and distributional types of DCM II

- **The split type (as, e.g. in split ergative Australian languages) is due to Diff & Economy**
- **the fluid type (cf. Manipuri and other role-dominated languages) is motivated by Indexing**
  - NB semantic contrast depends on availability of paradigmatic opposition

DCM typology and animacy effects

- Symmetrical DCM of the Fluid type is due Indexing, hence no immediate Animacy Effects
- Asymmetrical DCM of the split type is due to Differentiating, hence frequent Animacy effects
- Asymmetrical fluid may be either Indexing, but may be also 'global' Differentiating (cf. global Animacy Effects in Awtuw and Fore)

Correlations between DCM parameters

DCM types and case-marking strategies

	Symmetric	Asymmetric
Fluid	**Indexing**	**Indexing / Differentiating**
Split		**Differentiating**

Conclusions: animacy effects

- **Animacy Effects on structural case are complex due to:**
  - interaction of Indexing and Differentiating strategies
  - under Indexing strategy Animacy Effects are epiphenomenal (as it is redundant to mark animacy *per se*)
  - under Differentiating strategy Animacy Effects may be obscured by availability of other disambiguating strategies (agreement; word order)
    - in Fore, case marking is dispensable in case the arguments are already disambiguated through person agreement (Foley 1986: 173).
    - In Lakhota (Foley & Van Valin 1977), when A and O are animate only AOV order possible.

Final conclusions

1) Asymmetries in differential case marking with regard to encoding animacy distinctions can be attributed to interaction of two case-marking strategies which conspire in the domain of DOM and are in conflict in the domain of DSM;
2) Definiteness effects in DCM parallel animacy effects and may be provided a similar explanation;
3) Variation in ditransitive constructions can be also explained through interaction of Index and Diff constraints;
4) The same two constraints can account for correlations between different types of animacy effects and different formal and distributional patterns of DCM.

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