#### **Leipzig Spring School on Linguistic Diversity**

#### Competing Motivations and the Typology of Case-Marking

Leipzig, March 26-29, 2008

#### "Quirky" case: rare phenomena in case-marking

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Based on: (1) "Quirky case: rare phenomena in case-marking".
Fortcoming in: Cysouw, M. et al. (eds.) *Proceedings of the Leipzig Rara conference*. (2)."Rare and exotic cases". To appear in: A. Malchukov & A. Spencer (eds.) *Handbook of case*. Oxford University Press (2008+).

## **Topics addressed:**

## Rare phenomena in case-marking:

- case marking which is exceptional in terms of distribution or function
- explanation for rare vs. common patterns: functional and diachronic factors

#### Not addressed:

 Formal aspects, where formal encoding is unusual or rare ("tonal case", case by mutation, prefixal case, etc)

## Distribution unusual I: double case marking

# A better known phenomenon: double case marking (Plank (ed.) 1995).

- NB double case marking apparently violates an iconically motivated bi-unique mapping between roles and NPs assumed in many approaches (Fillmore, GB, etc)
- Three common patterns of double case-marking:
  - a) GEN +OBL: cf. Kayardild (Evans 1995: 398)

<mark>thabuju-**karra-nguni** mijil-**nguni**</mark>

brother-GEN-INSTR net-INSTR

'with brother's net'

 Co-occurrence not surprising - may be two different categories: governed vs. concordial case (Mel'čuk 1986)

## double case marking

- b) Compound cases
  - "Daghestanian case hoax" (Comrie & Polinsky 1998): 53
     cases (mostly spatial) in Tsez are composed of 7 cases + 8
     orientation markers. Agul (Daniel & Ganenkov 2008)

xul-a-q-as
house-obl-post-el
from behind the house

- Again two different categories: "orientation" (Kibrik's 'localization') + case
- c) Case "layering". Cf. OBL + POSTP in Hindi: bacce=ne bacce=ko child.OBL=ERG child.OBL=ACC
- Explanation: residual + emergent case

## **Double case marking**

Less usual is multiple case-stacking: Kayardild (Evans 1995, 115)

Maku yalawu-yarra yakuri-na dangka-karra-nguni-na mijil-nguni-na woman catch-PST fish-mABL man-GEN-INSTR-mABL net-INSTR-mABL 'The woman caught some fish with the man's net'

- Partial explanation:
  - "Total concord" principle (Evans 1995): consistent case-percolation/copying from heads to dependents.

#### Distribution unusual II: "distributed case"

 In Koasati, the order of syntactic and spatial cases is different, importantly both can co-occur (Kimball 1984):

```
Koasati (Kimball 1984, 348, ex. (57))

l·iyá:li-fa-kitt-on (hí:ca-l)

stepping-LOC-ART-ACC.FOC (see.1SG)

'I see its footprints (lit. place where he stepped)'
```

- NB order: N-LOC-ART vs. N-ART-NOM
  - Explanation: syntactic cases have discourse-related functions
    - NB They have special focus forms, and are incompatible with other discourse markers)

## Distribution unusual III: head-marking case

- Common: dependent-marking (case) vs. head-marking (AGR); Nichols 1986.
  - NB functional equivalence is imperfect though.
- Less usual:
  - Head-marking case in Sumerian and Abkhaz, where same case markers appear alternatively on N (as case) and V (in an applicative-like fashion)

## **Head-marking case: Abkhaz**

In Abkhaz some (oblique) case markers (benefactive -zə, instrumental -la) can appear as either postpositons or "intraverbal relational particles":

```
<<Abkhaz>>(Hewitt 1979: 113)
Axra yə-zə yə-qá-s-c'e-yt'
Axra him-for it-PREV-I-do-FIN
'I did it for Axra'
```

```
Axra ø-yə-zə-qá-s-c'e-yt'
Axra (it)-him-for-PREV-I-do-FIN
'I did it for Axra'
```

## **Head-marking case: Sumerian**

 In Sumerian, same or similar (adverbial) case markers function as case suffixes (enclitics) or verbal "dimensional" prefixes:

```
<<Sumerian>> (Hayes 1997: 22)
mu-na-ra-ni-e-eš
CP-DAT-ABL-LOC-go-PL
'They came out from there for him'
```

NB. Unlike in Abkhaz bound pronouns "hosting" case-markers are (usually) missing.

## **Head-marking case**

### Explanation:

- In both Sumerian and Abkhaz loose morphology with unclear distinction between clitics and affixes; as well as free and bound pronouns;
- In both languages, head-marking case developed from case-markers on incorporated bound pronouns, with subsequent partial reanalysis to applicatives;
- reanalysis is more advanced in Sumerian, where "dimensional" prefixes can stand on their own (without a pronominal host).

## Distribution unusual IV: "misplaced" case

- In Iraqw, case enclitics attach to the noun in preverbal position.
  - Strikingly, the noun "is not necessarily the object of case relation" (Mous 1992, 102, 246):

```
Iraqw (Mous 1992, 246)
inós i hhar-tá hhawat=i hanmiis
3SG S.3 stick-F.CON man=DIR give
'He is giving a stick to the man'
```

```
inós i hhawatú hhart=i hanmiis
3SG S.3 man.CON stick=DIR give
'He is giving a stick to the man'
```

## "Misplaced" case in Iraqw

- The pattern is unusual because it yields an iconicity violation: mark a feature/relation on the constituent to which the feature pertains
  - In OT terms: iconicity violation is incurred by a phonetic constraint Align(Clitic) outranking the Relevance/Iconicity constraint.
- Explanation: conspiracy of 3 factors:
  - cases are clitics
  - clitics appear in a dedicated (preverbal) position
  - word order of arguments pragmatically determined.

## Function unusual I: pragmatic cases

- "Presentational" case in Samoan
  - In Samoan, among 15 prepositional case-markers the "presentational" case in 'o:

```
<<Samoan>>( Mosel & Hovdhaugen 1992, 143, 772)
```

'O le maile saa fasi e le teine PRES ART dog PAST hit ERG ART girl

'The dog was hit by the girl'

- Semantic/syntactic function not clear: PRES used to introduce a clause, with nominal predicates, or with fronted NPs (then contrastive/new topics).
- NB basic function is pragmatic, even though it is paradigmatic with other cases.

#### Function unusual II: "old" cases

- The functions of OBLique case in Kayardild (Evans 1995, 149):
  - OBL has some dative-like uses (purpose, object of middle verbs), but otherwise semantically disparate, and the semantic core/general meaning is not clear.
    - Explanation (Evans 1995: 148-9): OBL is an old DATive case (preserved in Yukulta), but replaced in central (BEN, ADR) functions by other ("verbal") cases.
- NB diachronic explanation: residual function non-transparent

#### Function unusual III: "modal case"

In Kayardild case marking on nouns can express TAM features ("modal case"):

```
<<Kayardild>>(Evans 1995: 108)
ngada warra-ja ngarn-kiring-ku
I.NOM go-ACT beach-ALL-mPROP
'I will go to the beach'
ngada warra-ja ngarn-kiring-kina
I.NOM go-ACT beach-ALL-mABL
'I went to the beach'
```

Here 'modal proprietive' expresses future, and 'modal ablative' expresses past.

## **Modal case in Kayardild**

- Diachronic scenario for the rise of modal cases (Dench & Evans 1988; Evans 1995):
  - originally case marked subordinate forms in complement function;
  - percolation of case from the subordinate verb head to its arguments;
  - "insubordination", use of erstwhile subordinates as main clauses;
  - grammaticalization of case forms on the verb ->
     (potential) disagreement between case forms on NPs and the verb.
- NB apart from consistent percolation of case from head to its dependents (conditioned by the rule of "total concord"), other processes commonplace.

## Restricted use of genitive in Yakut

In Yakut, unlike other Turkic languages, GEN in (-TIN) is restricted to stacked possessors:

```
<<Yakut>> (Stachovsky &Menz 1998: 428)
učuutal jie-te
teacher house-3SG.POS
'teacher's house'
```

```
kini aγa-tin χara- γin uuta
s/he father-tin eye-tin water-3SG.POS
'his/her father's tears'
```

## Restricted use of genitive in Yakut

- Explanation again diachronic:
  - remnant of a Turkic GEN, elsewhere GEN in Yakut is lost (under influence of language contact with Tungusic?)
  - NB GEN is retained where it is non-redundant (not supported by POS marking on the head)
- Restricted uses of cases may be indicative of incipient/residual cases

#### Function unusual V: function-form mismatches

- "Designative" case in Even (Tungusic)
  - Performs a double function (in violation of the "θ-criterion"): marks P, simultaneously assigning BEN to its possessor:

```
Bej turki-ga-n emurem
man slade-DES-3SG brought
'I brought the slade for the man'
Cf.
Bej turki-va-n emurem
man slade-ACC-3SG brought
'I brought the man's slade (slade from the man?)'
```

Possible explanation: DES –ga- originates from ga-'take', inheriting its argument structure?

## Function unusual V: "quirky" case

- Common motivation for the rise of idiosyncratic ("quirky") cases: pattern inheritance/pattern unification
  - Ingush 'listen' takes exceptionally the ERG-Oble pattern; since historically ladieG ← la+dieG 'ear+put' (Nichols 1994: 119).
  - Look'-verbs can exceptionally take an inverse inverse (DAT-NOM/ABS) pattern if polysemous with 'see' cf. (Malchukov 2005) on Lezgian.

## Case in a word class changing function

Common: case as a nominalizercomplementizer:

```
<<Nahali>>(Kuiper 1962: 34)
Ara-ye-kon
see-PAST-ABL
'from having seen'
```

- NB any nominal category can be a nominalizer (cf. Malchukov 2004): CLASS in Bantu, DET in many Amerindian, etc
- Uncommon: Case as a verbalizer

#### Case as a verbalizer

- "Verbal case" with a verbalizing function is exceptional: found only in Kayardild (and some other Tangkic languages).
- Verbal cases in Kayardild (Evans 1995) are like case
  - in function (allative, dative, ablative, etc)
  - syntactically (percolate as normal cases),
  - but have a verbalizing effect (take verbal inflections):

## **Verbal cases in Kayardild**

```
Kayardild (Evans 1995, 163)

Ngada warra-jarra dathin-kiiwa-tharra ngilirr-iiwa-tharr

I.NOM go-PST that-vAll-PST cave-vALL-PST

'I went to that cave',

Ngada warra-ju dathin-kiiwa-thu ngilirr-iiwa-thu

I.NOM go-POT that-vAll-POT cave-vALL-POT

'I will go to that cave'
```

NB verbal cases mostly have verbal origin (verbal dative ← marutha 'put', verbal ablative ← bula.tha 'remove', etc); (Evans 1995: 166-8; 182-3).

## **Verbal cases in Kayardild**

- Origin complex (Evans 1995: 182-3):
  - extensive case-percolation ("total concord")
  - old cases increasingly acquire modal function ("modal cases")
  - recruitment of new cases from of N-V compounds/serial-verb construction (hence verb inflecting)
  - analogical processes modeling verbal case on nominal.
- NB all processes in isolation (apart from the two first) are widespread cross-linguistically.
- Also usual morphology (verbal inflections retained) lags after functional reanalysis

# Unusual alignment patterns I: marked NOM and ABS

In Koasati, marked NOM (and also ACC) contrast with the unmarked "autonomous" case for DAT, GEN functions.

```
<<Koasati>> (Kimball 1985, 331)
ifá-k ifá-n ifá-ø
dog-NOM dog-ACC dog-AUT
```

- Explanation: NOM has a discourse-pragmatic functions.
- NB. topic/definiteness markers are usual sources of marked NOM elsewhere (Cushitic, Berber); C. König (2005).

## **Unusual patterns II: Pronominal ergatives**

- Languages where only pronouns have ergative case are exceptional: counterexamples to Silverstein's generalization.
- Diachronic explanation for this exceptional pattern.
  - In Wakhi (Iranian) (Filimonova 2005/Plank 1985), ERG retained on pronouns as they are more conservative under the ergative to accusative shift
    - NB A frequency effect: pronominal inflection is more conservative as pronouns are more frequent than nouns (cf. Haspelmath 2006 on the role of frequency).

## **Pronominal ergatives**

- In Mande languages pronominal ERG derive historically from portmanteau pronouns
  - (even though cannot be considered as contracted synchronically; Vydrin 2006):

```
<<Guro>>(Vydrin 2006)
maa blee Blaaá
1SG.ERG dog beat.PFV
'I beat a dog'
```

NB only the most frequent "direct" pattern
 (1->3) of portmanteau pronouns has been
 grammaticalized (again a frequency effect!)

## Unusual patterns III: double oblique

Double-Oblique patterns as found in Iranian languages (Payne 1980; Bossong 1985; Arkadjev 2005):

- NB. A → Obl in the past; O -> Obl if prominent
- NB. Unlike A and P, S is in DIRect case

## **Double oblique pattern**

- OBL-OBL is rare, as violates all functional principles behind case marking:
  - Distinguishability (of A and P arguments)
  - Economy
  - Indexing (encoding of semantic roles).
  - NB Indexing is violated as well, results in a discontinuous pattern on Croft's (2001) semantic map (OBL arguments marked)

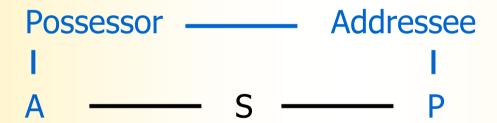
A ---- S ----- P

## **Double oblique pattern**

- Explanation diachronic (Arkadjev 2005 -> Rastorgueva & Kerimova 1975):
  - A/Obl O/Obl pattern is a result of meaning extensions of the DAT/GEN case:
    - DAT/GEN → ERG (in past tense)
    - DAT/GEN → ACC'(prominent object)

## **Double oblique pattern**

- This pattern is due to a polysemy chain, with individual polysemy patterns well-attested elsewhere:
  - If ERG=GEN, GEN = DAT, DAT = ACC, then ERG=ACC → A=P≠S
- NB there is no contiguity violation of the semantic map; rather the "shortest link" violation.



## **Asymmetries** in DCM

- Explanation of asymmetry between DOM and DSM in terms of competing motivations/ conflicting constraints (de Hoop & Malchukov 2006)
  - in DOM Index and Diff converge → more crosslinguistic consistency;
  - in DSM Index and Diff are in conflict → less crosslinguistic consistency.

#### **Iconicity violations and structural constraints**

Shipibo-Conibo (Valenzuela 1997): A must be marked by the ergative case only when P is referential:

```
e-n-ra yapa-ø pi-kas-ai
I-ERG-AS fish-ABS eat-DES-INCOMPL
'I want to eat fish (referential only)'
ea-ø-ra yapa-ø pi-kas-ai
I-ABS-AS fish-ABS eat-DES-INCOMPL
'I want to eat fish (referential or non-referential)'
```

#### Possible explanations:

- Maximal Semantic Distinguishability of A and P (Næss 2004)
- A side effect of object incorporation
- A consequence of a higher ranking structural constraint Primary Argument Immunity Principle (Malchukov 2006).

## **Iconicity violations and diachronic factors**

In Chepang, O is case-marked, only if A is intentional (Næss 2004):

#### **Chepang>> (Caughley 1982, 68)**

```
hEw-kay pu?-nis-?I sat-?a-thEy
brother-OBJ O.Brother-DL-AG kill-PT-AGRo
'The two older brothers killed the younger brother'
pu?-nis-?I sat-?a-c-u hEw
O.Brother-DL-AG kill-PT-DL-AGRa Y.Brother
"The two older brothers killed the younger brother (unintentionally)"
```

Næss 2004: a violation of Maximal Semantic Distinguishability of A and P

## **Iconicity/Relevance violations**

 Note that otherwise the DOM-pattern in Chepang is reminiscent of Hindi: ACC=DAT on prominent Os, but also on indirect objects.

<<Chepang>> (de Lancey 1981)

Ngaa-?i waa? saag?-na-ng
I-ERG bird PRES-1SG
'I hear a bird'
Ngaa-?i waa?-kaay? saag?-na-ng
I-ERG bird-OBJ PRES-1SG
'I listen to a bird'

 Explanation of the case dependency in Chepang may be historical: intentionality is a left-over of the 'attempted action' use of DAT.

#### Rare patterns and language specific constraints

# In Kambera (Klamer 1998), both (definite) O and IO are cross-referenced by bound pronouns;

 Unexpectedly, in ditransitives both O (theme) and IO are cross-referenced by DAT clitics:

Kambera (Klamer 1998: 203)

Na-wua-ngga-nya

3sNOM-give-1sDAT-3sDAT

'He gives it to me'

- Explanation: double DAT here is due to clitic cluster restrictions second clitic in a clitic cluster must be DAT (Klamer 1998): V-DAT-ACC → V-DAT-DAT.
  - In OT terms: a morphological constraint (CL2/DAT\_)
     outranking a FaithRole constraint.

#### **Conclusions**

- 1) Common vs. rare patterns: common patterns arise when several functional motivations converge, variation is found when they in conflict (cf. subject/object asymmetries in differential case marking)
  - NB competing motivations/functional OT approach
- 2) Rare patterns dependent on co-occurrence of several different factors (cf. Harris, this workshop), cf. conditions under which case displacement in Iraqw arises;
- 3) A rare pattern may result from interaction between a grammaticalization path and a conflicting functional constraint (cf., e.g., grammaticalization of topics to subject in conflict with an economy constraint against marked NOM)

#### **Conclusions**

- 4) Rare patterns can arise from interaction of grammaticalization paths with a language specific rule (e.g. rise of modal and verbal cases in Kayardild, depends on extensive case-percolation)
- 5) An exceptional patterns may be due to interaction of general factors with a language specific constraint, especially on a cross-modular basis (cf. interaction of syntactic vs. phonological rules in Kambera); cf. Newmeyer 2008).
- 6) Functionally deviant cases frequently result from incomplete grammaticalization cycles (pragmatic cases, not fully reanalyzed, remnant or emergent cases).

## General conclusions: functional typology and OT

- Preferential patterns in case-marking arise through functional motivations/ conflicting constraints.
- My approach combines functional-typological approach with the functional OT.
  - Like other work in the functional tradition the competing motivations are functional and general (eschewing language particular constraints as sometimes practiced in OT)
  - Like in OT, sets out to determine the outcome of interaction of the assumed constraints under the different constraint ranking ('factorial typology')

## General conclusions: functional typology and OT

- Commonalities between functional typology and functional OT:
  - Both regard grammatical patterns as arising from functional constraints
  - Different weighting/ranking of the constraints yields crosslinguistic variation
- Conceptual differences: are constraints linguistic or extralinguistic, do they belong to grammar or are usage based (Bresnan and Aissen vs. Haspelmath)
  - NB, however, that from an evolutionary perspective constraints arise through diachronic adaptation and may get conventionalized

## General conclusions: functional typology and OT

#### Further convergent tendencies

- Increased role of statistic information and corpus studies in both fields; discussion of frequency effects in typology (Haspelmath) and stochastic OT (Bresnan, Jäger)
- Evolutionary approaches; functional factors constraint diachronic processes (Haspemath's diachronic adaptation scenario; Blevins' evolutionary phonology; Jäger's 'evolutionary game theory')
- Increased appreciation of the functional basis of grammar beyond the functionalist tradition ('Hard constraints mirror soft constraints' (Bresnan); Performance-Grammar Correspondence Hypothesis (Hawkins))