Conditions on ergative case in Manang Gurung

Oliver Bond, Kristine Hildebrandt and Dubi Nanda Dhakal
University of Surrey, SIUE and Tribhuvan University
In some dependent-marking languages of the Tibeto-Burman area, case is \(\textit{probabilistically determinable}\) based on variable characteristics of the \textit{governor} and its \textit{governee} rather than a more straightforward mapping between the argument structure/case frame of a verb and its dependent NPs.

In such instances, the presence of a particular case is not strictly determined by morphosyntactic feature structures, but is subject to other (formal) \textit{conditions}.
Case profile of Manang Gurung

Figure 1. Schematic demonstrating the mapping of core case marking to macro functions in Manang Gurung.
Conditions in elicited structures

- Variability in case-marking is typically described as **Differential Subject Marking (DSM)** (de Hoop & de Swart 2008, Malchukov 2008) or **Differential Object Marking (DOM)** (Bossong 1985, Aissen 2003, Dalrymple and Nikolaeva 2011). DSM in Manang Gurung is exemplified in (1).

(1)  

a. tela ɲa-i/*ɲa po-ri hon ta-i  
    yesterday 1SG-ERG/1SG[ABS] ground-LOC hole dig-PST  
    ‘Yesterday I dug a hole in the ground.’

b. nagai ɲa-i/ɲa po-ri hon ta-mu  
    tomorrow 1SG-ERG/1SG[ABS] ground-LOC hole dig-NPST  
    ‘Tomorrow I will dig a hole in the ground.’

In elicited utterances, ergative is favoured when the agent is high on the animacy hierarchy and the patient is low on the same scale.
Variation in spontaneous speech data

- Gurung text data demonstrates that agentive subjects are frequently morphologically unmarked for case.

(2) sorə sətra bərsa umere ɲi tshatapaedukha jo-pa
sixteen seventeen year age.LOC 1.PL[ABS] like.this pain get-NMLZR
‘For sixteen, seventeen years, we received hardships.’

(3) tini tiro ɲə mrũ-e ko tsə-mo
today one.day 1.SG[ABS] king-GEN blood eat-NPST
‘...I will suck the blood of a king today.’

(4) tjarkja ɲi məno khə-pə kjā bəne-mu
from.now.on 1.PL[ABS] Manang come-NMLZR road make-NPST
‘Now we have constructed a road to Manang.’
Probabilistic case and information structure

- While some distributional properties of case are consistent, we use the term **probabilistic case** to refer to instances of case marking where (i) the presence of case cannot be strictly determined by grammatical rules, and (ii) there are non-syntactic factors involved in determining its realization.

- Specifically, we are interested in the distribution of case marking that aligns with grammatical parameters commonly associated with **topicality and reference tracking**.

- Our ultimate aim is to construct **statistical models** to account for observed behaviour, namely, variation in the distribution of case marking in spontaneous speech data.
Variables associated with DEM

**Verbal/clausal properties**
- predicate valence
- clause polarity
- aspect/tense

**Agent properties**
- person
- number
- animacy
- humanness
- definiteness
- specificity
- referentiality
- agent volition
- agent control

**Information structure**
- contrastive focus
- switch in agent

**Subjectivity**
- subjective judgment of speaker
- socially unexpected actions
- speech predicates

**NP properties**
- ‘heavy’ NPs

Based on variables discussed in Chelliah and Hyslop (2011)
# Data overview

<table>
<thead>
<tr>
<th>Manang Gurung (6 texts)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total verb forms</strong></td>
</tr>
<tr>
<td>Verbs with covert A/S</td>
</tr>
<tr>
<td>Verbs with overt A/S</td>
</tr>
<tr>
<td>Intransitive</td>
</tr>
<tr>
<td>With covert S</td>
</tr>
<tr>
<td>With overt S</td>
</tr>
<tr>
<td>Complement-taking</td>
</tr>
<tr>
<td>With covert A</td>
</tr>
<tr>
<td>With overt A</td>
</tr>
<tr>
<td>Zero-predication</td>
</tr>
<tr>
<td>With covert S</td>
</tr>
<tr>
<td>With overt S</td>
</tr>
</tbody>
</table>

ERG: 32  NON-ERG: 94
ERG: 1  NON-ERG: 62
ERG: 31  NON-ERG: 24
NON-ERG: 8
Distribution of case with different tenses

Ergative subjects of transitives by tense (31 cases)

Number of cases

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmarked</td>
<td>20</td>
<td>64.5%</td>
</tr>
<tr>
<td>Past</td>
<td>8</td>
<td>26%</td>
</tr>
<tr>
<td>Non-past</td>
<td>3</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Absolutive subjects of transitives by tense (24 cases)

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmarked</td>
<td>11</td>
<td>46%</td>
</tr>
<tr>
<td>Past</td>
<td>8</td>
<td>33%</td>
</tr>
<tr>
<td>Non-past</td>
<td>5</td>
<td>21%</td>
</tr>
</tbody>
</table>
Distribution of case with different polarities

Ergative subjects of transitives by polarity (31 cases)

- Affirmative verb: 97%
- Negative verb: 3%

Absolutive subjects of transitives by polarity (24 cases)

- Affirmative verb: 83%
- Negative verb: 17%
Multiple correspondence analysis

- Multiple correspondence analysis (MCA) is an exploratory data analysis technique for nominal categorical data, used to detect and represent underlying structures in a data set.
- It is performed by applying the correspondence analysis algorithm to an indicator matrix where the rows represent individuals and the columns are dummy variables representing categories of the variables.
- Structure is revealed visually by representing data as points in a low-dimensional Euclidean space.
Joint plot of four subject variables
Distribution of subjects in biplot (excl. case)
Distribution of subjects in biplot (incl. case)
Ergative inanimate subjects

- All examples of inanimate subjects are the noun *kətha=i* ‘story’, as a citation of a source of evidence for a world view.

- The speech predicate may be responsible for its realization.

\[(5)\]

a. tsu kətha=i ta pi-l məe-pə pi-sja
   this story=ERG what say-PURP search-NMLZR say-COND
   ‘This story is telling us that...’

b. tsu kətha=e pi-l məe-pə
   this story=ERG say-PURP search-NMLZR
   ‘This is what the story is trying to tell us.’
Absolutive second-person subjects

Absolutive second-person subjects are all in quoted speech.

(6)  

a. kjõ ko tsə-sjã ŋjo satõ se mo
     ‘If you suck the blood they all will kill us.’

b. ţi ţi na kjõ mui tiro tsõi
     stay stay PRTCL 2SG[ABS] night one.day PRTCL
     ‘You may stay here for one night.’

The only deviation from this pattern is an ergative marked subject of a verb of speech.
Distribution of case with speech predicates

- Peterson (2011), Lidz (2011), Morey (2011) all note that the distribution of agentive marking is associated with speech predicates.

![Graph showing distribution of cases with speech and non-speech verbs]

- Ergative subjects of transitives by speech verb (31 cases):
  - Speech verb: 42%
  - Non-speech verb: 58%

- Absolutive subjects of transitives by speech verb (24 cases):
  - Speech verb: 12.5%
  - Non-speech verb: 87.5%
Absolutive subjects of speech predicates

- While there is a strong tendency for speech predicate to have an ergative marked subject, this is **not categorical**.

- A number of different factors may be at play including the **position/status** of the subject and **pragmatic parameters**.

(7) tini tiro mrû-e ko tsə-l pi-no pi-i the
today one.day king-GEN blood eat-PURP give-IMP say-PST 3[SG.ABS]
‘He said, “Allow me to suck the blood of a king one day”.’

(8) mrû ro-l a-ŋe-mne məi the ta pi
king[ABS] sleep-PURP NEG-agree-CVB COP.PST 3[SG.ABS] what say
‘What did he say when the king did not agree to sleep?’
(speaker thinking out loud while narrating)
Conclusion

- We have highlighted the **methodological challenges** for investigating a complex distributional problem in the discourse of an under-described variety.

- Like many other Tibeto-Burman languages, Manang Gurung shows evidence for the **interaction of several different parameters** affecting DSM that could not be determined strictly through elicitation.

- **Multiple correspondence analyses** allow us to explore our data set, but it is still instructive to look closely at individual tokens to interpret which dimensions will be fruitful for revealing **structure in the “mess”**.
Thanks

We are thankful for the support of all Manang Gurung speakers who dedicated their time and effort to making this research possible. Special thanks go to EkMaya Gurung, Pushpa Gurung, Sasi Gurung and Lhakpa Lama.

We gratefully acknowledge support for this research from the British Academy and the National Science Foundation.


