



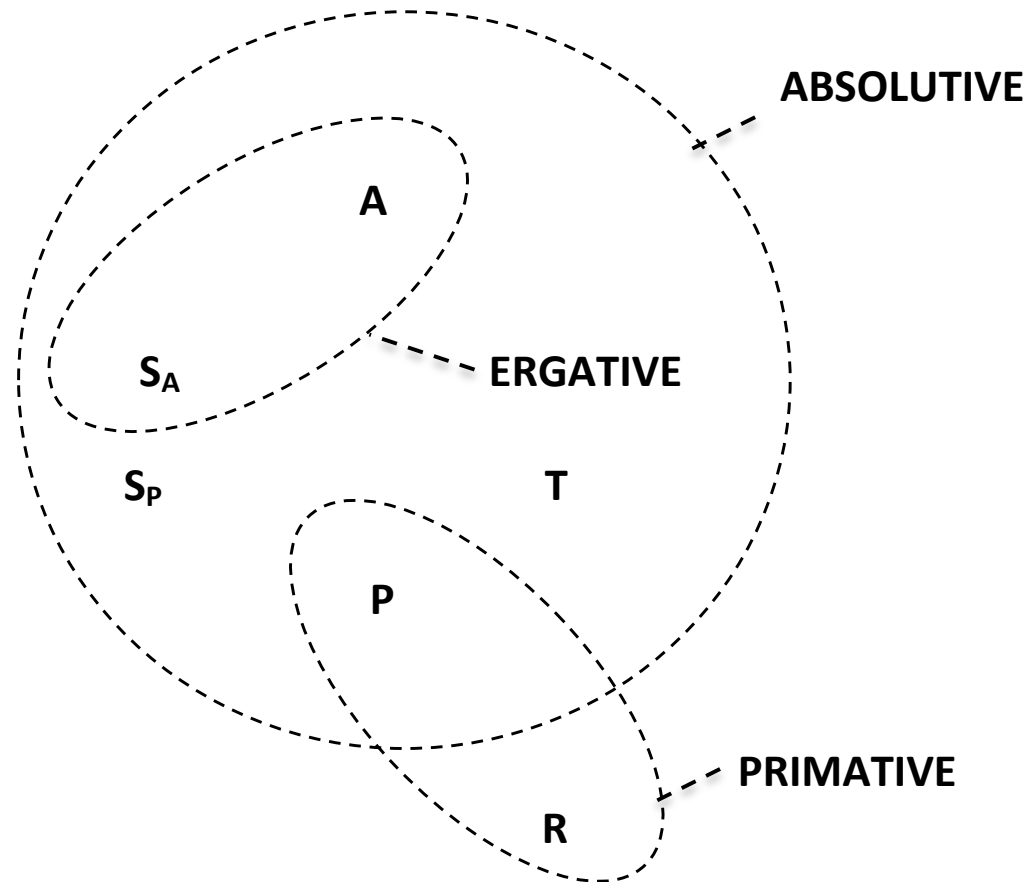
Conditions on ergative case in Manang Gurung

Oliver Bond, Kristine Hildebrandt and Dubi Nanda Dhakal
University of Surrey, SIUE and Tribhuvan University

Issue

- In some dependent-marking languages of the Tibeto-Burman area, case is **(probabilistically) determinable** based on variable characteristics of the **governor** and its **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) **conditions**.

Case profile of 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 **ŋa-i/*ŋa** 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 **ŋa-i/ŋa** 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 sətṛə bərsə umere **ŋi** tshətəpædukḥə 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 **ŋə** 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 **ŋi** mənə khə-pə kjã 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

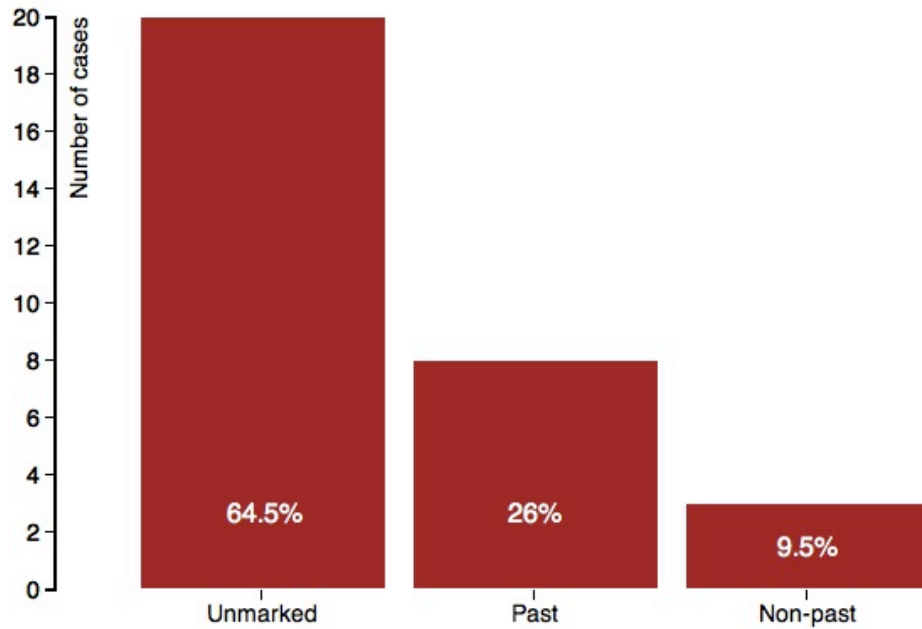
Based on variables discussed in
Chelliah and Hyslop (2011)

Data overview

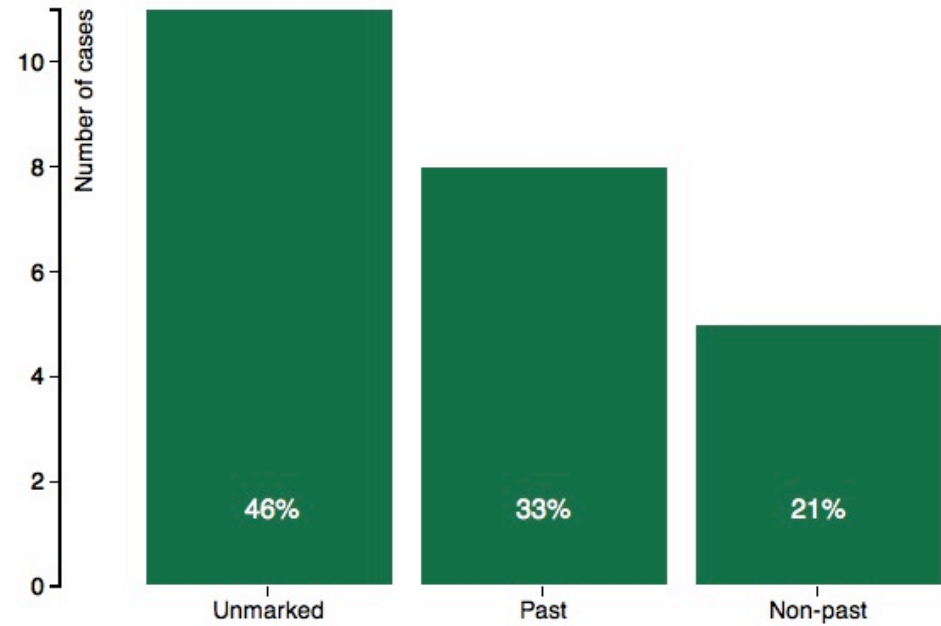
Manang Gurung (6 texts)			
Total verb forms	470	100%	
Verbs with covert A/S	344	73.2%	
Verbs with overt A/S	126	26.8%	ERG: 32
			NON-ERG: 94
Intransitive	230	48.9%	
With covert S	167	35.5%	
With overt S	63	13.4%	ERG: 1
			NON-ERG: 62
Complement-taking	232	49.4%	
With covert A	177	37.7%	
With overt A	55	11.7%	ERG: 31
			NON-ERG: 24
Zero-predication	8	1.7%	
With covert S	0	0%	
With overt S	8	1.7%	NON-ERG: 8

Distribution of case with different tenses

Ergative subjects of transitives by tense (31 cases)

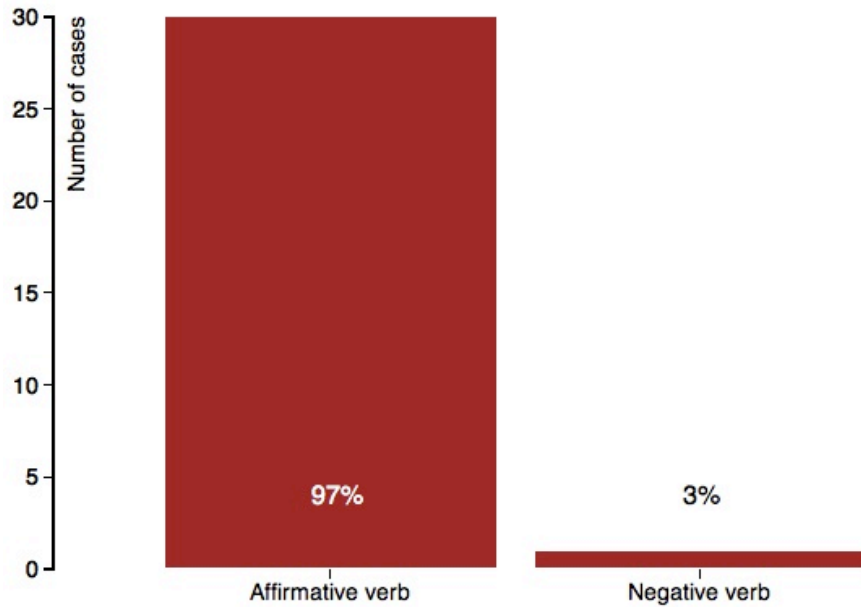


Absolutive subjects of transitives by tense (24 cases)

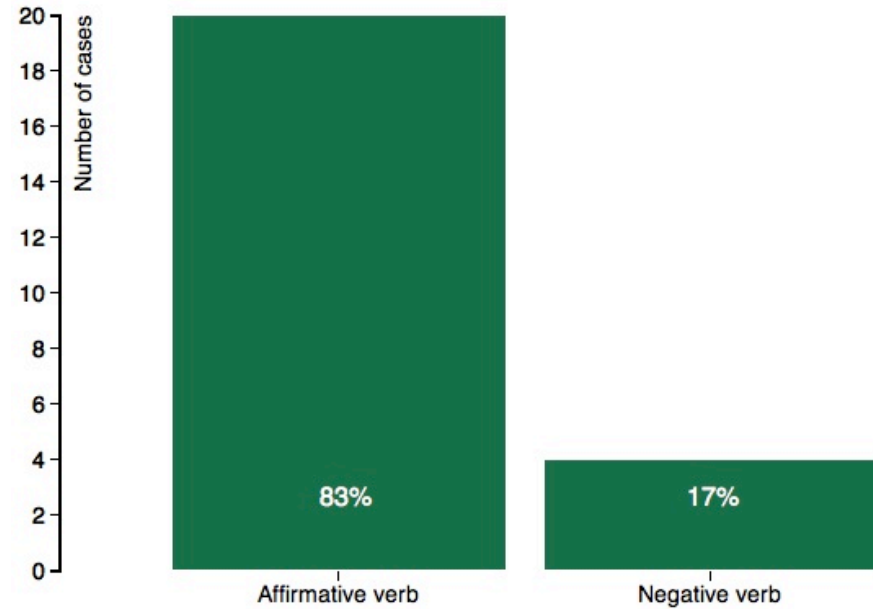


Distribution of case with different polarities

Ergative subjects of transitives by polarity (31 cases)



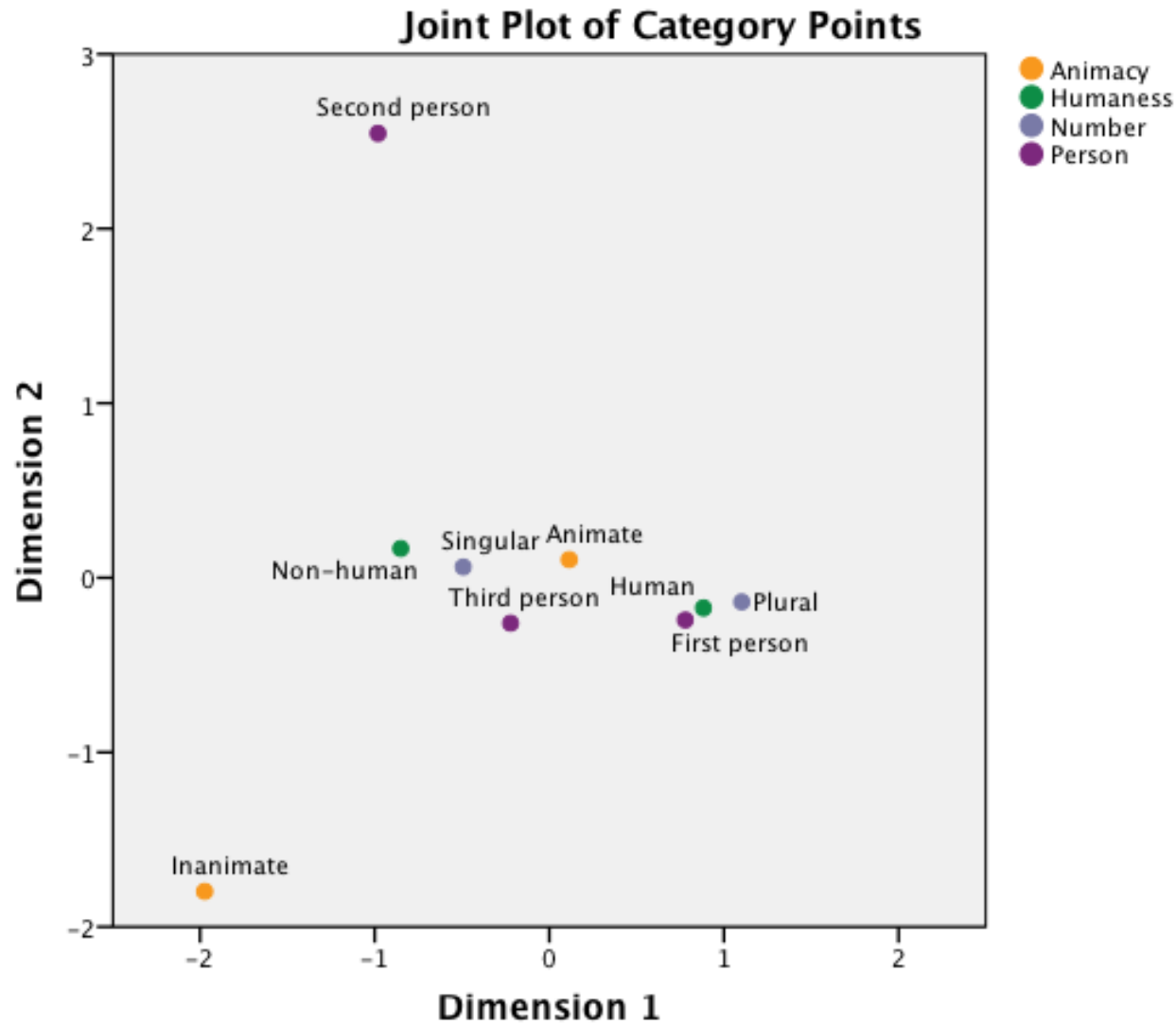
Absolute subjects of transitives by polarity (24 cases)



Multiple correspondence analysis

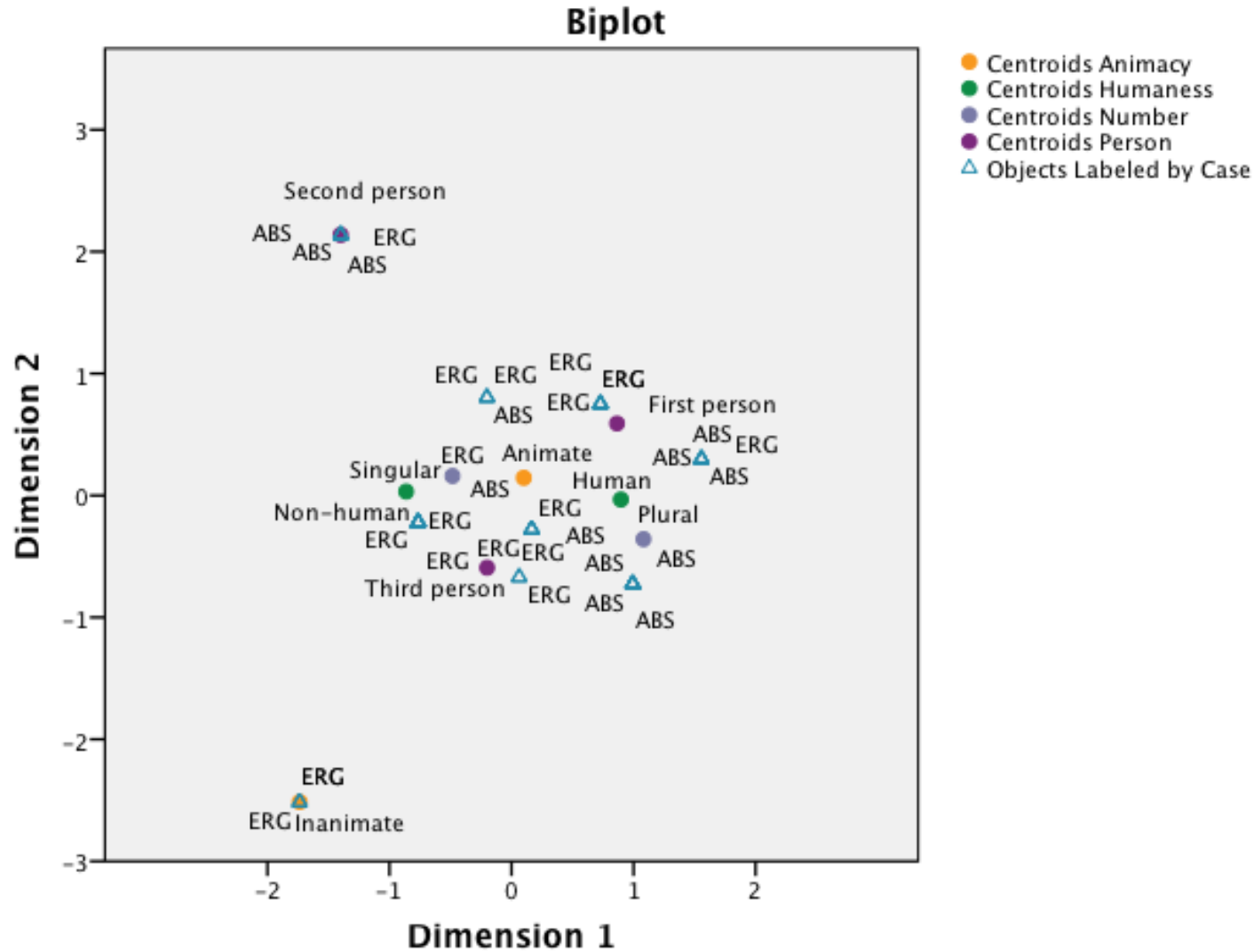
- Multiple correspondence analysis (MCA) is an **exploratory data analysis technique** for nominal categorical data, used to detect and represent underlying structures in a data set.
- It is performed by applying the **correspondence analysis algorithm** to an indicator matrix where the rows represent 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



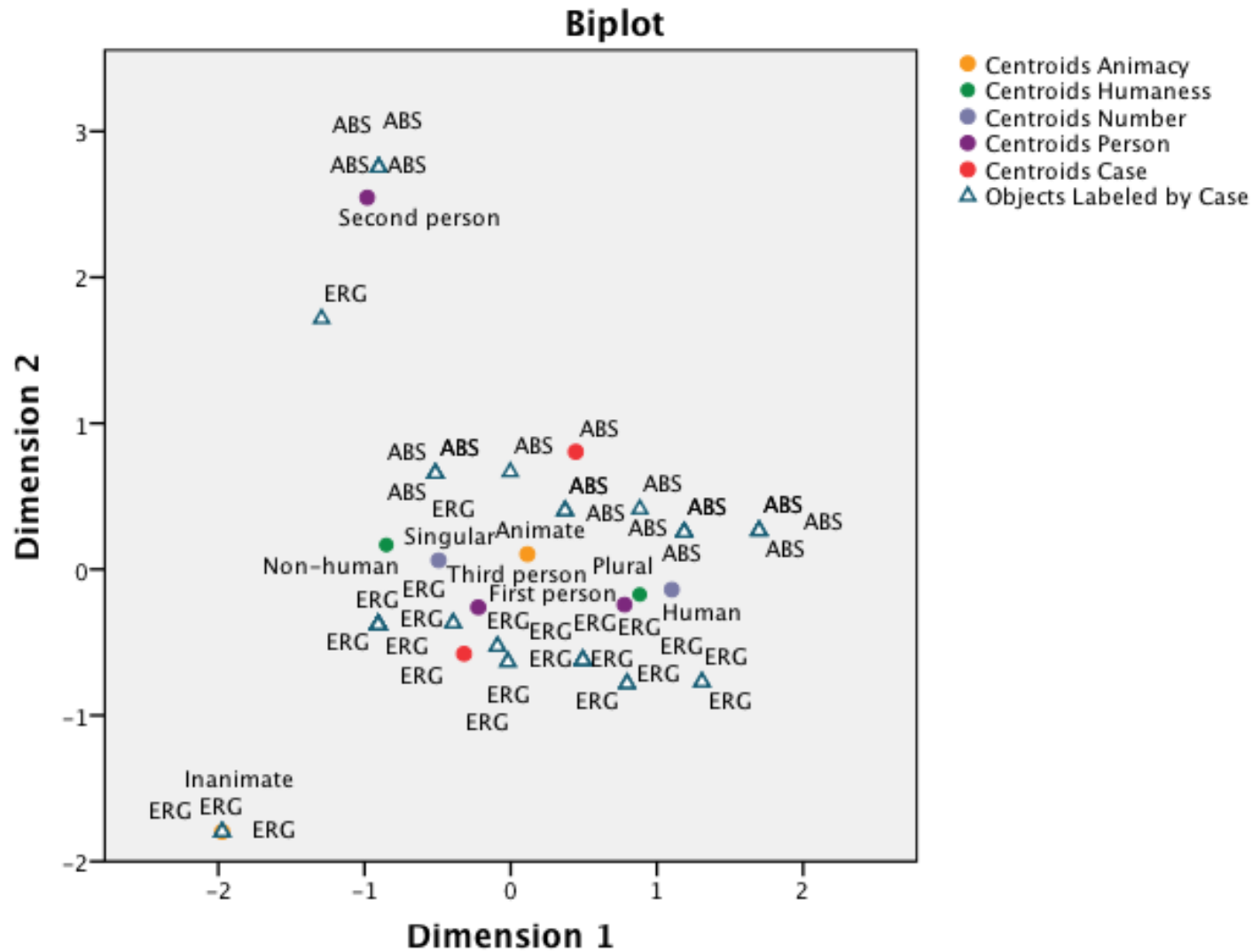
Variable Principal Normalization.

Distribution of subjects in biplot (excl. case)



Variable Principal Normalization.

Distribution of subjects in biplot (incl. case)



Variable Principal Normalization.

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 ηjo satõ se mo
2SG[ABS] blood eat-COND 1.PL all[ABS] kill COP.NPST
'If you suck the blood they all will kill us.'

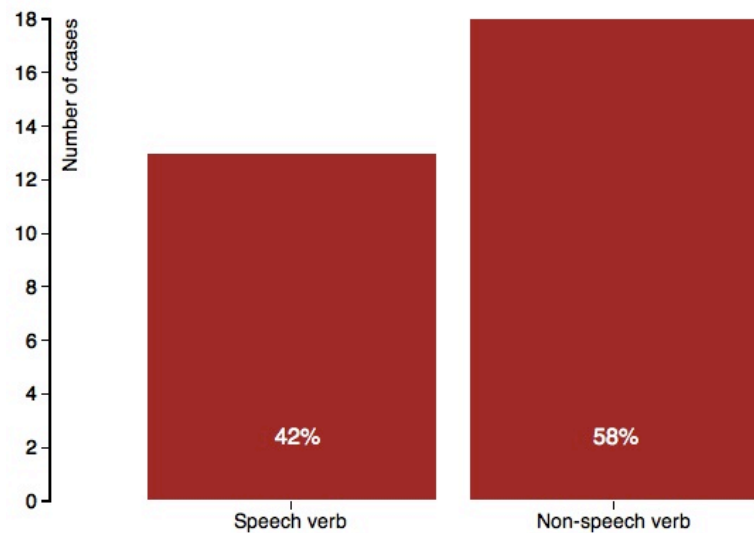
b. ʈi ʈi na **kjõ** mui tiro tsãi
stay stay PRTCL 2SG[ABS] night one.day PRTCL
'You may stay here for one night.'

- The only deviation from this pattern is an ergative marked subject of a **verb of speech**.

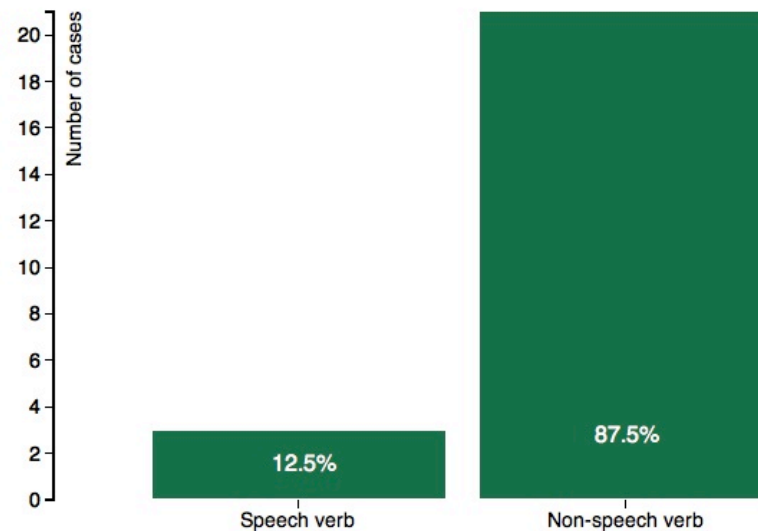
Distribution of case with speech predicates

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

Ergative subjects of transitives by speech verb (31 cases)



Abslutive subjects of transitives by speech verb (24 cases)



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 mrũ-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) mrũ ro-l a-ŋe-mne mæi **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**.



References

- Judith Aissen. 2003. Differential object marking: iconicity vs. economy. *Natural Language and Linguistic Theory*, 21: 435–483.
- Bosson, Georg. 1985. *Differentielle Objektmarkierung in den neuiranischen Sprachen*. Tübingen: Gunter Narr Verlag.
- Chelliah, Shobhana and Gwendolyn Hyslop. 2011. Introduction to Special Issue on Optional Case Marking in Tibeto-Burman. *Linguistics of the Tibeto-Burman Area*, 34.2: 1-7
- Dalrymple, Mary and Irina Nikolaeva. 2011. *Objects and information structure: Agreement, casemarking and grammatical function*. Cambridge: Cambridge University Press.
- Foley, W.A., 2000. The languages of New Guinea. *Annual Review of Anthropology* 29, 357–404.
- de Hoop, Helen and Peter de Swart (eds.). 2008. *Differential Subject Marking*. Dordrecht: Springer.
- Lidz, Liberty A. 2011. Agentive marking in Yongning Na (Mosuo). In Chelliah, Shobhana and Gwendolyn Hyslop (eds), Special Issue on Optional Case Marking in Tibeto-Burman. *Linguistics of the Tibeto-Burman Area*, 34.2: 49-72.
- Malchukov, Andrej L. 2008. Animacy and asymmetries in Differential Case Marking. Special issue on Animacy (M. J. A. Lamers and P. de Swart, (eds.)). *Lingua*, 118: 203-21.

Morey, Stephen. 2012. The Singpho agentive – functions and meanings. In Chelliah, Shobhana and Gwendolyn Hyslop (eds), Special Issue on Optional Case Marking in Tibeto-Burman. *Linguistics of the Tibeto-Burman Area*, 35.1: 1-14.

Peterson, David A. 2011. Core participant marking in Khumi. In Chelliah, Shobhana and Gwendolyn Hyslop (eds), Special Issue on Optional Case Marking in Tibeto-Burman. *Linguistics of the Tibeto-Burman Area*, 34.2: 1-14.