

Case in conflict

Workshop: Case, Word Order and Prominence in Argument Structure
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1. Introduction

First, we present a particular instance of case alternation on subjects of embedded clauses in Mongolian. Then we present the results of a grammaticality judgements questionnaire.

Claim: Case marking preferences of embedded subjects which are adjacent to matrix subjects depend on the interaction between two distinguishability principles.

2. Preface to Mongolian

Mongolian is an Altaic language (along with Turkic and Mandji-Tungusic languages and possibly with Japanese and Korean) and it is spoken in Mongolia, Burjatia and in Inner Mongolia (China).

Among the typological characteristics of Mongolian are vowel harmony, agglutinated morphology, SOV word order, use of demonstratives to indicate definiteness, and use of the numeral *neg* (one) to indicate indefiniteness.

A simple sentence illustrated in (1):

- (1) *Bold enenom-ig unsh-san.*
Bold this book-ACC read-PST
'Bold read this book.'

Embedded clauses occur before the matrix verb, either before or after the matrix subject. The matrix subject must be in the nominative form:

- (2) a. **Tuja(*-g)** [*Bold enenom-ig unsh-san gej*] *med-ne.*
Tuja-ACC Bold this book-ACC read-PST that know-PRS
'I know that Bold read this book'
b. [*Bold enenom-ig unsh-san gej*] **Tuja(*-g)** *med-ne.*
Bold this book-ACC read-PST that **Tuja-ACC** know-PRS
'I know that Bold read this book'

Mongolian exhibits differential object marking (DOM), which depends both on the definiteness and animacy of the direct object. The direct objects are accusative case marked, if they are realised as personal pronouns, proper nouns, definite

NPs and specific indefinite NPs, whereas the other direct objects are overtly unmarked if they are realised by non-specific indefinite or incorporated NPs, as shown by examples in (3)-(5). (we refer to this form as the NOM)

- (3) *Bi Goethe*(-g) unsh-san.* proper noun
 I Goethe-ACC read-PST ⇒ obligatory
 'I read Goethe.'
- (4) *Bi neg nom-(ig) unsh-san.* indefinite NP
 I a book-ACC read-PST ⇒ optional, depending on
 specificity
 'I read a book.'
- (5) *Bi nom(*-ig) unsh-san.* incorporated
 I book-ACC read-PST ⇒ ungrammatical
 'I did book-reading.'

3. Case marking of embedded subjects

While matrix subjects must always be overtly unmarked (NOM), subjects of embedded clauses may be realized in different cases. The particular case alternations vary with the type of embedded clause. For example subjects of relative clauses can be either in the nominative, genitive or ablative form (6), while subjects of (some) temporal clauses can be either in the genitive or accusative form, as illustrated in (7).

- (6) *Bi jerunhiilegch/-in/-ees bich-sen zahia-g unsh-san.*
 I president.NOM/-GEN/-ABL write-PST letter-ACC read-PST
 'I read the letter which the president wrote.'
- (7) *Minii/namaig бага bai-h-ad, Mongol kommunist uls bai-san.*
 I.GEN/ACC small be-INF-DAT Mongolia communist country be-PST
 'When I was child, Mongolia was a communist country.'

We will focus on object subclauses, where the subject may be either in the nominative or the accusative form.

- (8) [*Bold(-ig) ir-sen-ig*] *bi med-ne.*
 Bold-ACC come-PST-ACC I know-PRS
 'I know that Bold came.'
- (9) *Bi [Bold(-ig) ir-sen-ig] med-ne.*
 I Bold-ACC come-PST-ACC know-PRS
 'I know that Bold came.'

If the embedded subject occurs before the matrix subject (as in sentence (8)), there seems to be no preference for NOM or ACC. If, however, the embedded subject occurs immediately after the matrix subject (as in (9)), then there is a

preference for either ACC or NOM, depending on the position of the matrix and embedded subjects on the definiteness scale (Aissen 2003):

- (10) Pron. > Name > Def./Dem. > Indef. Spec. > Indef. Non-specific.

As illustrated in (11) and (12), if the embedded subject is higher on the referentiality scale than the matrix subject, then there seems to be a preference for marking the embedded subject as ACC.

- (11) a. ? *Ene bagsh [Tuya ire-h-ig] hus-ej bai-na.*
 this teacher Tuya come-INF-ACC want-KNV be-PRS
 'This teacher wants Tuya to come.'
- b. √ *Ene bagsh [Tuya-g ire-h-ig] hus-ej bai-na.*
 this teacher Tuya-ACC come-INF-ACC want-KNV be-PRS
 'This teacher wants Tuya to come.'

- (12) a. ? *Ene bagsh [bi ire-h-ig] hus-ej bai-na.*
 this teacher I come-INF-ACC want-KNV be-PRS
 'This teacher wants me to come.'
- b. √ *Ene bagsh [namaig ire-h-ig] hus-ej bai-na.*
 this teacher me come-INF-ACC want-KNV be-PRS
 'This teacher wants me to come.'

If, on the other hand, the embedded subject is lower on the referentiality scale than the matrix subject, then there seems to be a preference for an overtly unmarked embedded subject.

- (13) a. √ *Bi [ene bagsh ire-h-ig] hus-ej bai-na.*
 I this teacher come-INF-ACC want-KNV be-PRS
 'I want this teacher to come.'
- b. ? *Bi [ene bagsh-ig ire-h-ig] hus-ej bai-na.*
 I this teacher-ACC come-INF-ACC want-KNV be-PRS
 'I want this teacher to come.'
- (14) a. √ *Bi [neg bagsh ire-h-ig] hus-ej bai-na.*
 I a teacher come-INF-ACC want-KNV be-PRS
 'I want a teacher to come.'
- b. ? *Bi [neg bagsh-ig ire-h-ig] hus-ej bai-na.*
 I a teacher-ACC come-INF-ACC want-KNV be-PRS
 'I want a teacher to come.'

To account for these preferences we suggest:

Principle A:

If two subjects are adjacent, then distinguish them (by ACC on the embedded subject) if and only if the embedded subject is higher on the referentiality scale than the matrix subject.

These preferences also hold in the following cases, where the embedded verb is transitive.

- (15) a. ✓ *Bi [Tuya ene bagsh-ig magta-h-ig] hus-ej*
bai-na.
 I Tuya this teacher-ACC praise-INF-ACC want-KNV
 be-PRS
 ‘I want Tuya to praise this teacher.’
- b. ? *Bi [Tuya-g ene bagsh-ig magta-h-ig] hus-ej*
bai-na.
 I Tuya-ACC this teacher-ACC praise-INF-ACC want-KNV be-
 PRS
 ‘I want Tuya to praise this teacher.’
- (16) a. ? *Tuya [bi ene bagsh-ig magta-h-ig] hus-ej*
bai-na.
 Tuya I this teacher-ACC praise-INF-ACC want-KNV
 be-PRS
 ‘Tuya wants me to praise this teacher.’
- b. ✓ *Tuya [namaig ene bagsh-ig magta-h-ig] hus-ej bai-*
na.
 Tuya me this teacher-ACC praise-INF-ACC want-KNV be-
 PRS
 ‘Tuya wants me to praise this teacher.’

In addition, there seems to be a preference for NOM on the embedded subject, if the embedded direct object is higher on the referentiality scale than the embedded subject.

- (17) a. ✓ *Ene bagsh [Tuya namaig magta-h-ig] hus-ej*
bai-na.
 this teacher Tuya me praise-INF-ACC want-KNV
 be-PRS
 ‘This teacher wants Tuya to praise me.’
- b. ? *Ene bagsh [Tuya-g namaig magta-h-ig] hus-ej bai-*
na.
 this teacher Tuya-ACC me praise-INF-ACC want-KNV be-
 PRS
 ‘This teacher wants Tuya to praise me.’

To account for this we proposed that principle A is overruled by a second principle B:

Principle B:

Prefer NOM on embedded subject, if it is lower on the referentiality scale than the object.

In order to test the prediction of these preferences, which we arrived at on the basis of introspection, we constructed and performed the following questionnaire.

4. Questionnaire and results

T1: Intransitive embedded verb, $S_M > S_{E-NOM/ACC}$

T2: Intransitive embedded verb, $S_M < S_{E-NOM/ACC}$

T3: Transitive: $S_M < S_{E-NOM/ACC} > O_{E-ACC}$

T4: Transitive: $S_M < S_{E-NOM/ACC} < O_{E-ACC}$

T5: Transitive: $S_M > S_{E-NOM/ACC} > O_{E-ACC}$

T6: Transitive: $S_M > S_{E-NOM/ACC} < O_{E-ACC}$

18 test sentences plus 32 filler/control sentences per questionnaire. Informants never saw both the NOM and the ACC version of one sentence. 75 judgements per sentence. Informants had to judge how good the sentences sound on a scale from 1 (very bad) to 6 (very good).

4.1. Intransitive embedded clauses

Tables 1, 2 and 3 display the results for sentences with intransitive embedded verbs and embedded subjects higher on the referentiality scale than matrix subjects.

There is a significant preference for the ACC marking of embedded subjects of intransitive verbs, if the embedded subject is higher on the referentiality scale than the matrix subject. These results predicted by the first part of principle A.

Table 1:

	PN - PRO		DEF - PRO		INDF - PRO	
	NO	ACC	NOM	ACC	NOM	ACC
M						
MEAN	2,5	3,5	1,9	3,1	1,6	3,5
TTEST		p<0.0 1		p<0.01		p<0.01

Table 2:

	DEF - PN		INDF - PN	
	NO	ACC	NOM	ACC
M				
MEAN	2,4	3,5	2,1	3,8
TTEST		p<0.0		p<0.01

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Table 3:

	INDF - DEF	
	NOM	ACC
MEAN	2,3	3,2
TTEST		p<0.0 1

The next tables display the results for sentences with intransitive verbs where the embedded subject is lower on the referentiality scale than the matrix subject.

Contrary to the second part of principle A, there is no preference for NOM on embedded subjects of intransitive verbs. Instead, in two cases there is a significant preference for ACC marking of the embedded subject. These results clearly disconfirm the second part of the principle A.

Table 4

	Pro-Name		Pro-DEF		Pro-INDF	
	NOM	ACC	NOM	ACC	NOM	ACC
MEAN	2,5	3,6	2,8	3,3	3,0	3,4
TTEST	p<0.01		p=0,07		p=0,0 8	

Table 5:

	Name-DEF		Name-INDF	
	NOM	ACC	NOM	ACC
MEAN	2,8	3,5	3,3	3,4
TTEST	p<0.01		p=0,6 8	

Table 6:

	DEF-INDF	
	NOM	ACC
MEAN	3,0	3,3
TTEST	p=0,1 7	

4.2. Transitive embedded clauses

If (i) the embedded verb is transitive, (ii) the embedded subject is higher_{RS} than the matrix subject and (iii) the direct object is ACC and higher_{RS} than the embedded subject then we observe a **neutralisation** of the preference for ACC on the embedded subject.

Table 7:

	DEF - PN		DEF - PN - PRO(ACC)	
	NO	ACC	NOM	ACC
	M			
MEAN	2,4	3,5	2,7	2,7
TTEST		p<0.0 1		p=0.75

Table 8:

	INDF - PN		INDF - PN-PRO(ACC)	
	NO	ACC	NOM	ACC
	M			
MEAN	2,1	3.8	2,5	3.0
TTEST		p<0.0 1		p=0.06

Table 9:

	INDF - DEF		INDF -DEF-PRO	
	NO	ACC	NOM	ACC
	M			
MEAN	2,3	3.2	2,3	2.7
TTEST		p<0.0 1		p=0.17

However, we also observed a neutralization of the ACC preference if the embedded subject is higher_{RS} than the embedded direct object. Note, however, that in all these cases the object is ACC:

Table : 10

	DEF - PN		DEF - PN - INDEF(ACC)	
	NO	ACC	NOM	ACC
	M			
MEAN	2,4	3,5	2,7	2,7

TTEST		p<0.0 1		p=0.75
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Table: 11

	INDEF - PN		INDEF - PN - DEF(ACC)	
	NO	ACC	NOM	ACC
	M			
MEAN	2.1	3.8	2,7	2,9
TTEST		p<0.0 1		p=0.50

Table: 12

	INDEF - PRO		INDEF - PRO - DEF(ACC)	
	NO	ACC	NOM	ACC
	M			
MEAN	1.6	3.5	2.9	3.3
TTEST		p<0.0 1		p=0.12

We conclude that the neutralization of the preference for ACC on embedded subjects is due not to the object being higher on the ref. scale, but to the object being ACC marked.

de Hoop & Narasimhan (2005) propose two functions of differential object markers: they either distinguish an object from a subject if the object is similar to a prototypical subject, or they identify an object as strong.

If DOM in Mongolian has the distinguishing function, we would expect an interaction between this function and the Principle A when the embedded subject is higher on the ref. scale than the matrix subject and the direct object is ACC, since in this case Principle A prefers the embedded subject to be ACC, whereas the distinguishing function of DOM would prefer NOM on the embedded subject.

If, on the other hand, the function of DOM is to identify a direct object as being a strong argument, then we would not expect an interaction between Principle A and the identifying function of DOM.

However, as the table below shows, if the embedded subject is a pronoun the preference for ACC marking is not always neutralized.

Table: 13

	NAME – PRO		NAME-PRO-DEF(ACC)		NAME-PRO-INDEF(ACC)	
	NOM	ACC	NOM	ACC	NOM	ACC
MEAN	2.5	3.5	3.5	3.7	3.4	3.2
TTEST		p<0.0 1		p=0.41		p=0.43

Table 14:

	INDEF – PRO		INDEF-PRO-NAME(ACC)		INDEF-PRO-DEF(ACC)	
	NOM	ACC	NOM	ACC	NOM	ACC
MEAN	1.6	3.5	2.2	3.3	2.9	3.3
TTEST		p<0.0 1		p<0.01		p=0.12

4. Conclusion

- In Mongolian there is a preference for marking an embedded subject (of object clauses) as ACC, not only when the embedded subject is higher_{RS} than the adjacent matrix subject, but also in some cases where it is lower.
- This preference for ACC marking on the embedded subject is neutralised if the embedded object is ACC, except in some cases where the embedded subject is a personal pronoun.
- The neutralization follows if the preference for distinguishing S and O is stronger than the preference for distinguishing adjacent matrix and embedded subjects.

5. References

de Hoop, H. & Narasimhan, B. (2005): Differential Case-Marking in Hindi. In: M. Amberber & H. de Hoop (Eds) *Competition and Variation in Natural Languages: The Case for Case*. Amsterdam, Boston, etc.: Elsevier, 321-346

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