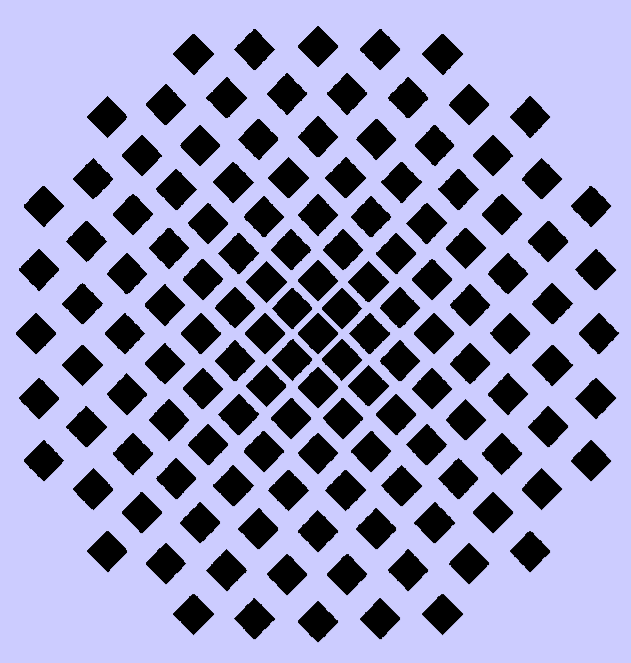


# Embedded subjects and processing preferences in Mongolian: some experimental evidence



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## 1. Preface to Mongolian

**Language Family:** Altaic language, spoken in Mongolia, Inner Mongolia, Burjatia  
**Typological characteristics:** vowel harmony, agglutinated morphology, SOV word order, no article system: use of demonstratives for definiteness, and use of the numeral *neg* (‘one’) for indefiniteness. A **simple** sentence illustrated in (1):

- (1) *Bold ene nom-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. *Tuya(\*-g) [Bold ene nom-ig unsh-san ge] med-ne.*  
 Tuya-ACC Bold this book-ACC read-PST that know-PRS  
 ‘I know that Bold read this book.’  
 b. *[Bold ene nom-ig unsh-san ge] Tuya(\*-g) med-ne.*  
 Bold this book-ACC read-PST that Tuya-ACC know-PRS  
 ‘I know that Bold read this book.’

## 2. Case marking of embedded subjects

Subjects of relative clauses can be either in the nominative, genitive or ablative form (3), while subjects of (some) temporal clauses can be either in the genitive or accusative form, as illustrated in (4).

- (3) *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.’  
 (4) *Minii/namaig бага бай-а-а, Монгол коммунист улс бай-сан.*  
 I.GEN/ACC small be-INF-DAT Mongolia communist country be-PST  
 ‘When I was child, Mongolia was a communist country.’

In object clauses the embedded subject can be either accusative or nominative.

- (5) *[Bold(-ig) ir-sen-ig] bi med-ne.*  
 Bold-ACC come-PST-ACC I know-PRS  
 ‘I know that Bold came.’  
 (6) *Bi [Bold(-ig) ir-sen-ig] med-ne.*  
 I Bold-ACC come-PST-ACC know-PRS  
 ‘I know that Bold came.’

## 3. The questionnaire

The questionnaire was performed in Mongolia (Ulaanbaatar).



- 320 participants
- we elicited judgements on “how good the sentences sound” on a scale from 1 (very bad) to 6 (very good)
- 80 judgements per sentence type
- 3 different lexicalisations per sentence type
- 18 test sentences plus 32 filler/control sentences per questionnaire.

## 4. Case alternation in embedded object clauses

If the embedded subject is higher on the referentiality scale than the adjacent matrix subject, then there seems to be a preference for marking it as ACC.

- (7) a. ? *Ene bagsh [bi ir-h-ig] hus-ej bai-na.*  
 this teacher I come-INF-ACC want-CVB be-PRS  
 ‘This teacher wants me to come.’  
 b. ✓ *Ene bagsh [namaig ir-h-ig] hus-ej bai-na.*  
 this teacher me come-INF-ACC want-CVB 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 NOM marking:

- (8) a. ✓ *Bi [neg bagsh ir-h-ig] hus-ej bai-na.*  
 I a teacher come-INF-ACC want-CVB be-PRS  
 ‘I want a teacher to come.’  
 b. ? *Bi [neg bagsh-ig ir-h-ig] hus-ej bai-na.*  
 I a teacher-ACC come-INF-ACC want-CVB be-PRS  
 ‘I want a teacher to come.’

If the embedded subject is followed by an ACC marked direct object which is higher in definiteness than the embedded subject, then there seems to be a preference for NOM marking on the embedded subject:

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

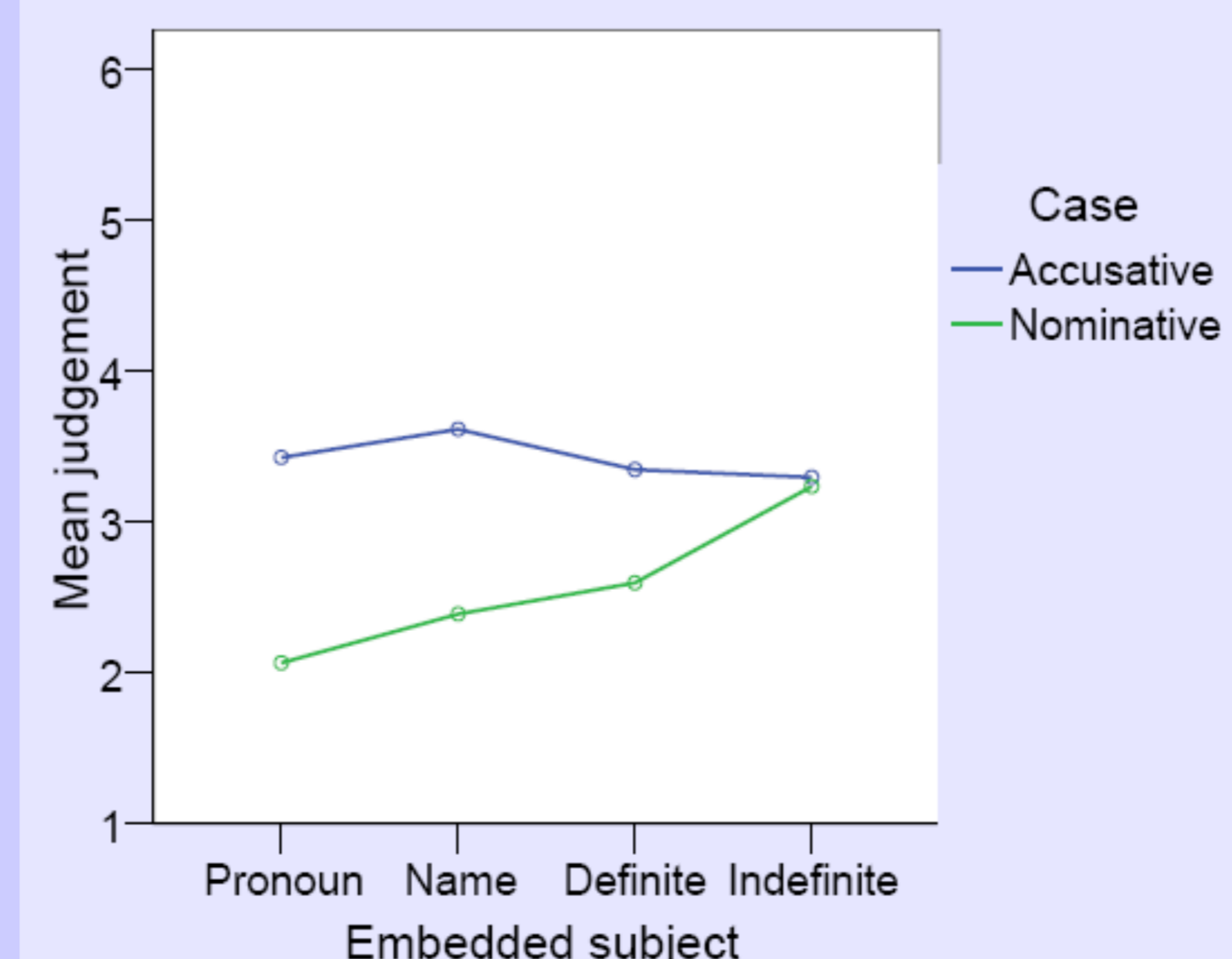
### Principle A:

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.

### Principle B:

Prefer distinguishable subject and object, if the object is ACC marked and higher on the referentiality scale.

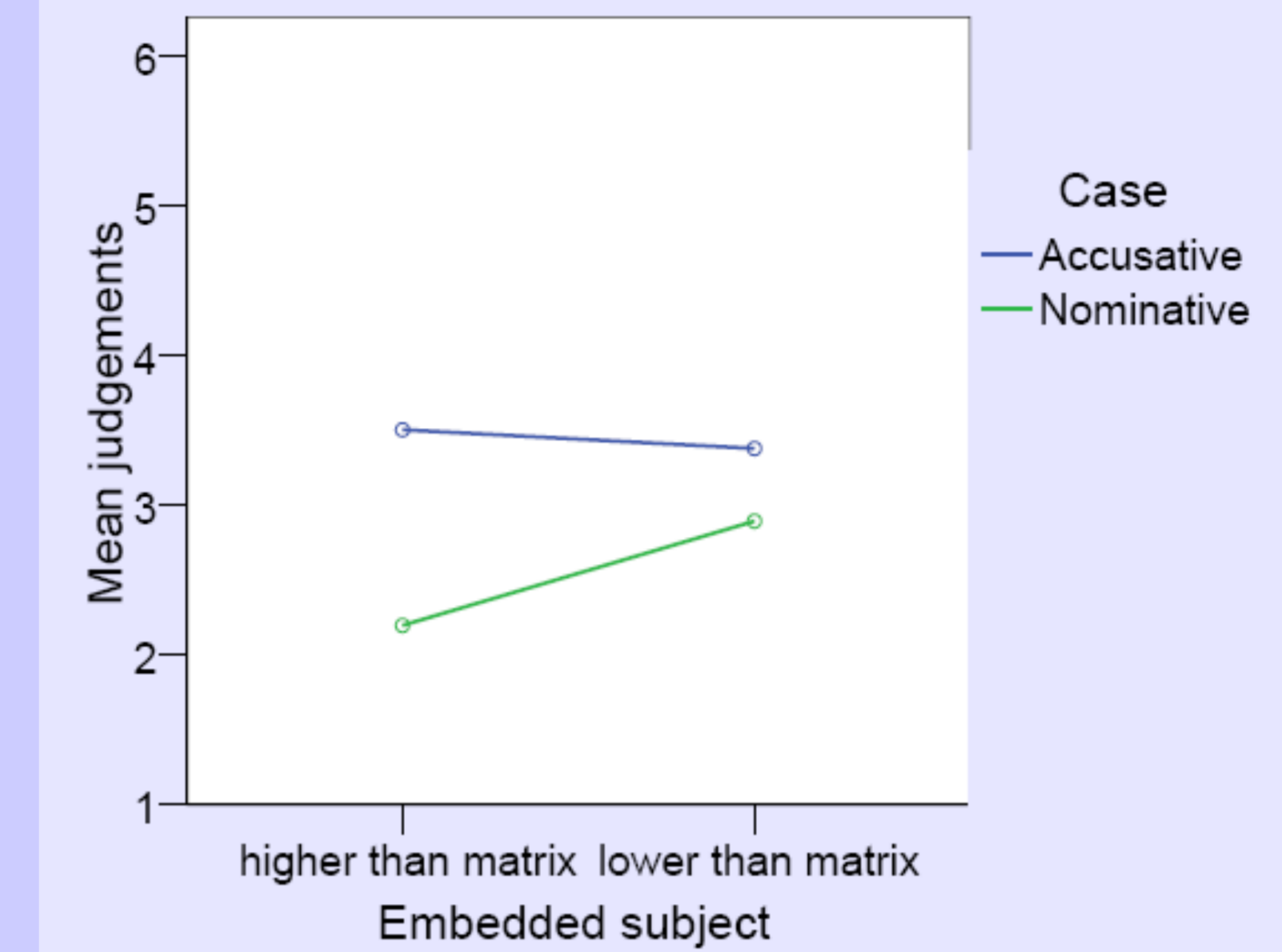
## 5. Results of questionnaire



Interaction between definiteness of embedded subject and case (intransitive verb):

$$F(3,1460) = 3.42; p < 0.05$$

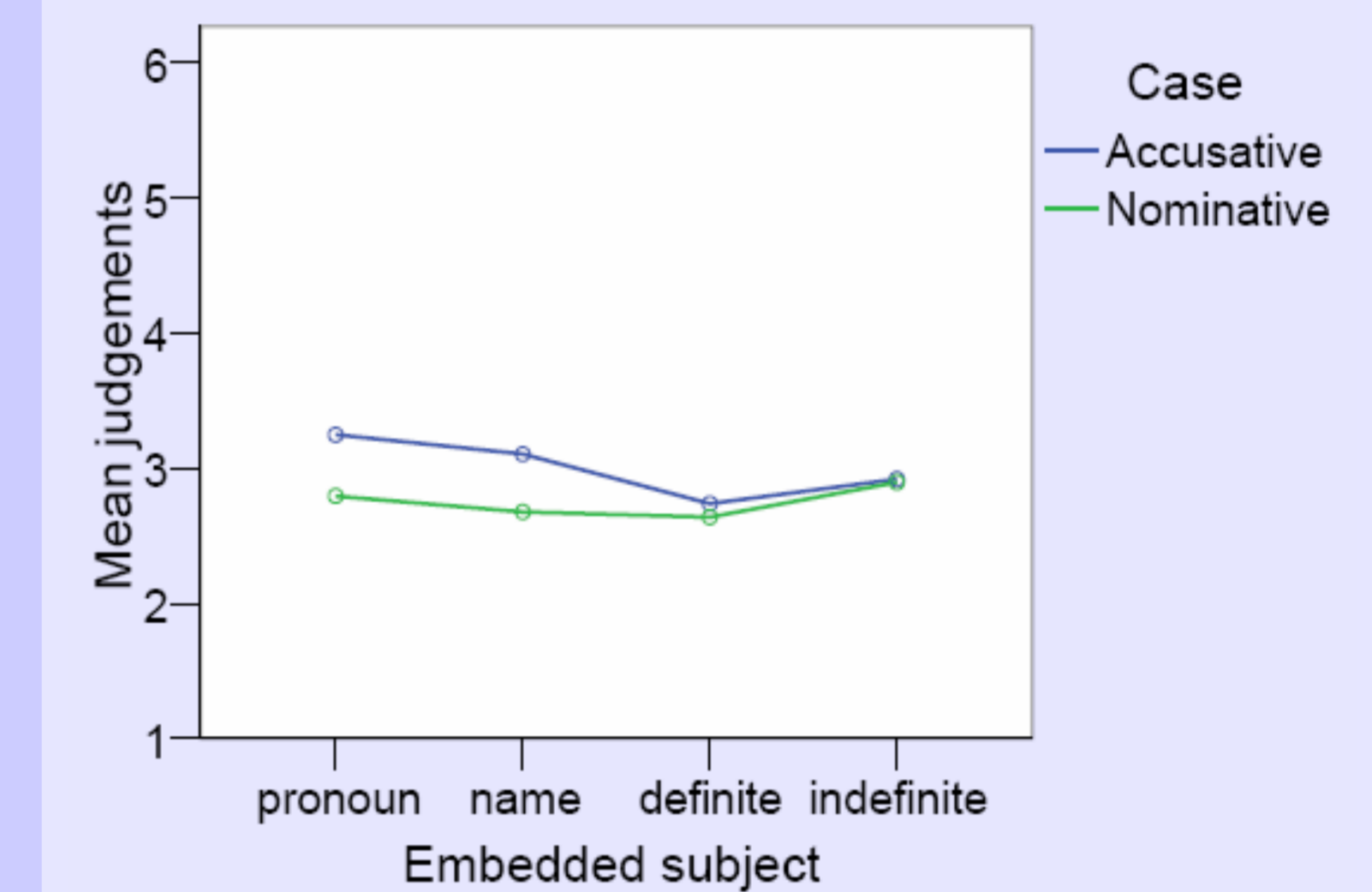
The ACC marking of embedded subjects which are high on the referentiality scale is preferred, but the judgements of NOM marking increase if the definiteness of the embedded subject decreases. For indefinite embedded subjects both markings are equally judged.



Interaction between relative definiteness and case:

$$F(1,1460) = 7.66; p < 0.05$$

If the embedded subject is higher on the referentiality scale than the matrix subject, then there is a clear preference for ACC marking of embedded subjects. This preference decreases, when the embedded subject is lower on the referentiality scale than the matrix subject.



No interaction between definiteness of embedded subject and case, if embedded subject is followed by ACC marked direct object.

The preference for ACC marked embedded subjects is neutralised, if the matrix and embedded subjects are followed by an ACC marked direct object.

## 6. Conclusion

- Principle A has been confirmed – there is a preference for distinguishing embedded subjects of object clauses from adjacent matrix subjects, if the embedded subject is higher on the referentiality scale. This preference decreases with decreasing definiteness of the embedded subject.
- Principle B has been confirmed – the preference for distinguishing subject from object explains the neutralisation of the preference for distinguishing matrix from embedded subject.
- More generally: This type of case alternation is determined by processing preferences which refer both to adjacency and to the referentiality scale.

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