## **Three Case Alternation Mysteries in Modern Mongolian**

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This paper points out three case alternation mysteries in Modern Mongolian (Mongolian, hereafter), and investigates the mechanisms behind them. First, Mongolian allows the accusative subject in an adjunct clause, as shown in (1), but the predicate must not be an adjective, as shown in (2).

- (1) Öcügedür Ulagan-ø/-i surgaguli-du ire-gsen ügüi ucir-ece yesterday Ulagan-Nom/-Acc school-to come-past.ADN not because 'Because Ulagan did not come to school yesterday'
- (2) Neliyed baising-ø/\*-i aguzim uqir-ece very room-Nom/-Acc large because 'Because the room is very large'

Note that the accusative subject is impossible in the matrix clause, as (3) shows.

(3) Ulagan-ø/\*-i uhila-zai. Batu-Nom/-Acc cry-past 'Ulagan cried.'

Second, Mongolian shows case alternation among three candidates in some cases, but only between two candidates in others. (4) shows the former, while (5-6) the latter.

- Yagaru ber Ulagan-ø/-i/-nu surgaguli-du ire-gsen edür tu hastily Ulagan-Nom/-Acc/-Gen school-to come-past.ADN day on 'on the day when Ulagan came to school hastily'
- (5) öcügedür Ulagan-ø/\*-i/-nu ungsi-gsan nom yesterday Ulagan-Nom/-Acc/-Gen read-past.ADN book 'the book which Ulagan read yesterday'
- (6) Öcügedür Ulagan-ø/-i/\*-nu surgaguli-du ire-gsen ucir-ece yesterday Ulagan-Nom/-Acc/-Gen school-to come-past.ADN because 'Because Ulagan came to school yesterday'

Third, the "deep genitive" in Mongolian shows an argument/adjunct asymmetry, as shown by the contrast between (7) and (8).

- (7) bi- $\phi$  öcügedür Ulagan- $\phi$ /-nu  $e_i$  bici-gsen gezü bodu-gsan nom $_i$  I-Nom yesterday Ulagan-Nom/-Gen write-past.ADN that think-past book 'the book which I thought that Ulagan wrote yesterday'
- (8) bi-ø yagaru ber Ulagan-ø/\*-nu  $e_i$  ire-gsen gezü bodu-gsan I-Nom hastily Ulagan-Nom/-Gen come-past.ADN that think-past.ADN edür<sub>i</sub> day 'the day when I thought that Ulagan came hastily'

Below, we will consider the mechanisms behind these mysteries. Let us start with the first mystery. According to Maki et al. (2010a), the generalization about the distribution of the accusative subject in Mongolian is (9).

(9) Generalization about the Distribution of the Accusative Subject in Mongolian The accusative subject may appear in adjunct clauses whose heads are not genuinely nominal in nature.

Maki et al. (2010a) report that in Old Japanese, the accusative subject appears in reason clauses headed by *mi* 'because,' and the predicates are all adjectives. Consider the example in (10).

(10) Aki-no ta-no kariho-no io-no toma-o autumn-Gen rice field-Gen temporary-Gen cabin-Gen roof-Acc *ara-mi*, ...

large mesh-because

'In the harvest of autumn rice field, because the roof of the temporary cabin has large mesh, ...'

(Tenji Tennoo (626-671) in *Hyakuninisshu* (early 13th century to early 14th century) translated into modern Japanese by Ariyoshi (1983))

Therefore, the examples from Mongolian and Old Japanese seem to suggest that Universal Grammar in principle allows the accusative subject in limited environments, and that there are further language-particular conditions on the predicates compatible with the accusative subject.

Next, let us consider the second mystery. (5) indicates that the accusative subject is not permitted in a relative clause, and (6) shows that the genitive subject is disallowed in an adjunct clause whose head is not nominal. However, (4), which seems to be a relative clause, allows the subject with any of the three case markers. The prediction is that the accusative subject should not be allowed. However, a closer examination of relative clauses headed by a time expression reveals that the accusative subject is impossible, as shown in (11).

(11) Bi-ø [yagaru ber Ulagan-ø/\*-i/-nu surgaguli-du ire-gsen]
I-Nom hastily Ulagan-Nom/-Acc/-Gen school-to come-past.ADN
cag-i cegezilezu-baina.
day-Acc remember-be
'I remember the day when Ulagan came to school hastily.'

In (11), the head noun of the relative clause is *cag* 'day,' and the NP is an argument of the verb *cegezilezu-baina* 'remember-be.' Therefore, in this case, the head noun is truly a nominal element, so that the accusative subject inside the relative clause is disallowed. If this is the case, then, the expression *edür tu* 'day on' has two functions: (i) *edür* 'day' is a noun and a relative head, and (ii) the complex *edür tu* 'day on' functions as the head of the adjunct clause. Therefore, in Mongolian, case alternation does not actually take place among three candidates, but only between two candidates.

Finally, let us address the third mystery. Maki et al. (2010b) claim, based on the grammaticality of (7) with the genitive subject, that feature percolation from  $e_i$  to the head noun *nom* 'book' saves the 'deep' genitive subject. They did not discuss example (8). Now, what distinguishes (8) from (7) is that in (8), while the category of the head of the relative clause *edür* 'day' is clearly a noun, the corresponding resumptive pronoun is not nominal, but a PP corresponding to "on the day." We claim that this categorical mismatch prevents feature percolation from the PP resumptive pronoun to the nominal relative head noun in (8), which

leads to the ungrammaticality of (8) with the genitive subject, hence, results in the argument/adjunct asymmetry between (7) and (8).