## The Negation Markers in Modern Inner Mongolian

Lina Bao, Megumi Hasebe, and Hideki Maki

Osaka University, Yokohama National University, and Gifu University

## 1. Introduction

This paper investigates the properties of the negation markers in modern Inner Mongolian (Mongolian, hereafter), and points out that there are two types of languages in the world in marking the scope of negation: (i) in languages like Mongolian, the type of the negation marker determines the scope relation between negation and a quantifier, not the LF position of the quantifier or the negation marker, and (ii) in languages like Japanese, the LF position of the quantifier seems to determine the scope relation between negation and a quantifier, not the type of the negation marker, as there seems to exist only one negation marker in Japanese, for example. If this is correct, LF movement of quantifiers is totally irrelevant to quantifier interactions in Mongolian. It is further argued that there is another case in Mongolian where the LF positions of quantifiers are irrelevant to scope interactions (pair-list readings) between an existential quantifier and a universal quantifier. In this case again, a particular element plays a crucial role rather than the quantifiers themselves.

## 2. Data

Mongolian has two distinct elements for negation: *ügei* 'not' and *biši* 'not.' The former is used for total negation, and the latter for partial negation. Consider the examples in (1)-(2).

- (1) a. Öcügedür Ulayan-ø jübken miqa-ø ide-gsen ügei yesterday Ulagan-Nom only meat-Acc eat-past.Adn not 'Yesterday, Ulagan did not eat only meat.'

  Total negation (only meat > not)
  - b. Öcügedür Ulayan-ø jübken miqa-ø ide-gsen biši. yesterday Ulagan-Nom only meat-Acc eat-past.Adn not 'Yesterday, Ulagan did not eat only meat.'
    Partial negation (not > only meat)
- (2) a. Öcügedür jübken Ulayan-ø miqa-ø ide-gsen ügei. yesterday only Ulagan-Nom meat-Acc eat-past.Adn not 'Yesterday, only Ulagan did not eat meat.'

  Total negation (only Ulagan > not)
  - b. Öcügedür jübken Ulayan-ø miqa-ø ide-gsen biši. yesterday only Ulagan-Nom meat-Acc eat-past.Adn not 'Yesterday, only Ulagan did not eat meat.'
    Partial negation (not > only Ulagan)

In (1), the quantifier with  $j\ddot{u}bken$  'only'  $j\ddot{u}bken$  miqa- $\emptyset$  'only meat-Acc' is in the object position, and in (2), the quantifier with  $j\ddot{u}bken$  'only'  $j\ddot{u}bken$  Ulayan- $\emptyset$  'only Ulagan' is in the subject position. In the a-examples in (1)-(2), the negation marker is  $\ddot{u}gei$  'not,' and in the b-examples in (1)-(2), it is  $bi\ddot{s}i$  'not.' The positions of the object and the subject are identical in the a- and the b-examples, so are the positions of the negation markers (at the right periphery of the sentences), yet, the quantifier with  $j\ddot{u}bken$  'only' takes scope over negation in the a-examples, and negation takes scope over the quantifier with  $j\ddot{u}bken$  'only' in the b-examples.

If this is correct, LF movement of quantifiers is totally irrelevant to quantifier interactions in Mongolian.

Note here that Japanese, for instance, has only one type of negation marker nai 'not,' and only has the interpretations in the a-examples in (1)-(2), where the quantifiers with 'only' take scope over negation, which seems to indicate that the quantifiers should raise to the position higher than the negation marker at LF in Japanese.

## 3. An Extension

Interestingly enough, there is another case in Mongolian where the LF positions of quantifiers are irrelevant to scope interactions. Mongolian has the reflexive pronoun *yen*, which plays a crucial role in the pair-list reading between an existential quantifier (EQ) and a universal quantifier (UQ). Consider the examples in (3).

- (3) a. Tere rali du, yamar nige kümün-ø kümün bükün**-i** qara-jai. (\*pair list) that rally at someone-Nom everyone-Acc see-past.CON 'Someone saw everyone at the rally.'
  - b. Tere rali du, yamar nige kümün-ø kümün bükün**-yen** qara-jai. (<sup>OK</sup>pair list) that rally at someone-Nom everyone-RP see-past.CON
  - c. Tere rali du, kümün bükün**-i** yamar nige kümün-ø t qara-jai. (\*pair list) that rally at everyone-Acc someone-Nom see-past.CON

In (3a), the EQ yamar nige kümün 'someone' c-commands the UQ kümün bükün 'everyone.' The pair list reading of the UQ is impossible in (1a), where the UQ is followed by the accusative case marker *i*, but is possible in (3b), where the UQ is followed by the reflexive pronoun yen. The pair list reading of the UQ is also impossible in (1c), where the UQ is moved across the EQ by scrambling, and the UQ c-commands the EQ at S-Structure. Based on these and other data, we argue that the reflexive pronoun in Mongolian moves to the closest universal quantifier at LF, and functions as a distributor of the universal quantifier, not the universal quantifier itself. Therefore, c-command is irrelevant to scope determination at the "S-Structure" representation in Mongolian. Also, LF movement of quantifiers is irrelevant to quantifier interactions in Mongolian.

Note here that Japanese, for instance, does not have a reflexive pronoun that corresponds to the reflexive pronoun *yen* in Mongolian, and has the pair-list reading only in the structure in (3c), where the UQ c-commands the EQ at S-Structure (and at LF).