The Nominative/Genitive Alternation in Modern Inner Mongolian Relative Clauses: A Statistical Perspective*

Su-ying Hsiao (Academia Sinica)

Hsiao, Su-ying. 2012. The Nominative/Genitive Alternation in Modern Inner Mongolian Relative Clauses: A Statistical Perspective. Linguistic Research 29(2), 351-380. This paper investigates the nominative/genitive alternation in Modern Inner Mongolian from a statistical perspective, and accounts for the different preferences of nominative or genitive subjects in relative clauses between Mongolian and Japanese from a synchronic point of view. It is proposed that finiteness of relative clauses accounts for the subject Case marking alternation. Nominal subject occurs in a finite relative clause, and genitive subject occurs in a non-finite, nominal relative clause. Our statistical study shows that nominative subjects are less preferred than their genitive counterparts in Modern Inner Mongolian. Compared to Mongolian nominative/genitive alternation, nominative subjects are more common in Japanese. It is claimed that the developments of verbal noun aspectual suffixes to finite indicative suffixes also occurred in the history of Japanese, and Japanese goes faster than Mongolian does. Aspectual suffixes have evolved into indicative suffixes in Japanese, while in Inner Mongolian it is an ongoing development. (Academia Sinica)

Keywords nominative/genitive alternation, relative clause, Mongolian

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1. Introduction

This paper investigates the nominative/genitive alternation in Modern Inner Mongolian from a statistical perspective, and accounts for the different preferences of nominative or genitive subjects in relative clauses between Mongolian and Japanese from a synchronic point of view.

Subjects in relative clauses and nominal complements are generally marked genitive in Middle Mongolian, but Modern Mongolian exhibits the nominative/genitive alternation. Our statistical study shows that nominative subjects are less preferred than their genitive counterparts in Modern Inner Mongolian. It is proposed that finiteness of relative clauses accounts for the subject Case marking alternation. Nominal subject occurs in a finite relative clause, and genitive subject occurs in a non-finite, nominal relative clause. Mongolian relative clauses exhibit nominal characteristics and subjects in relative clauses and nominal complements are in most cases marked genitive in the past. Alongside the recent development of reanalyzing verbal noun suffixes as indicative suffixes, verbal nouns may take the predicative position in matrix clauses as well. By analogy, relative clauses are reanalysed as a finite clause and nominative subject in a relative clause is also possible for some Mongolian speakers.

Compared to Mongolian nominative/genitive alternation, nominative subjects are more common in Japanese. It is claimed that the developments of verbal noun aspectual suffixes to finite indicative suffixes also occurred in the history of Japanese and Japanese goes faster than Mongolian. Verbal noun aspectual suffixes have evolved into indicative suffixes in Japanese, while in Inner Mongolian it is an ongoing development.

This paper is organized as follows. Section 2 gives background information about Mongolian in general and Mongolian relative clauses in particular. Section 3 reports the results of a statistical study of the nominative/genitive alternation in Modern Inner Mongolian relative clauses. Section 4 discusses finiteness of clauses and the nominative/genitive alternation, and compares Inner Mongolian and Japanese from a diachronic point of view. Concluding remarks follow in Section 5.

2. Basic Characteristics of Mongolian Relative Clauses

Mongolian is an agglutinative language, in which verbs are marked by suffixes for the imperative, indicative, verbal noun and converb forms. Roles of nouns are marked by a system of grammatical Cases including nominative, accusative, genitive, dative, locative, ablative, instrumental, and comitative. The canonical word order is subject-object-predicate. Mongolian has vowel harmony. Masculine (a, o, u) and feminine (e, ö, ü) vowels don't co-occur in a non-compound word, and neutral vowel (i) is free from the constraint.²

- (1) a. Önödör dörbedüger kičiyel suru-na. fourth lesson ACC study-IND.NONPST today "(We) will study Lesson four today."
 - b. Ta Mongyol kele mede-n e uu? 2PL.NOM Mongol language know-IND.NONPST Q "Do you know Mongolian?"
- (2) a. Bi öčügedür Batu yi ol-ĭu üje-be. 1SG.NOM yesterday Batu ACC meet-CVB.IMPFV see-IND.PST "I met Batu yesterday."
 - b. Önödör Batu nigen kituy_a ab-u-ba. today Batu.NOM knife take-FILL-IND.PST one "Batu bought a knife today."

¹ Mongolian nominative Case form is ZERO, and accusative Case marker is usually omitted. Besides, dative and locative Cases share the same form.

² The Mongolian examples in this paper are transliterations of written forms used in Inner Mongolia. "" links alphabets in a word but written separately according to the orthography. A hyphen is inserted by the author to show the boundary of the verbal stem and a suffix. List of abbreviations used in glosses in this article: ABL, ablative Case; ACC, accusative Case; AGR, agreement; CAUSE, causative morpheme; COND, conditional; COOP, cooperative; CVB, converb; DAT, dative Case; DPST, direct past; FILL, a vowel filled between a stem ending with a consonant and a suffix starting with a consonant.; FTR, future; GEN, genitive Case; HAB, imperfective habitual; IMP, imperative; IMPFV, imperfective; IND, indicative form; IDPST, indirect past; LOC, locative Case; NEG, negation; NOM, nominative Case; NONPST, non-past; NSR, non-subject relative; PART, particle; PASS, passive morpheme; PFV, perfective; PL, plural; POSS, possessive; PST, past; Q, question particle; QUOTE, quotation marker; RECP, reciprocal; REFL, reflexive; SG, singular; SR, subject relative; TERM, terminal; TOP, topic marker; VN, verbal noun; VOL, volition.

Indicative suffixes contain not only temporal but also modal or aspectual meanings. For example, the verbal suffix "-la" might express a past event or a present perfective situation which the speaker witnesses, as shown in (3)a and (3)b, or an event which the speaker has the confidence that it will take place in no time. See (3)c.

- (3) a. Kejiy e ire-be? Önödör ire-l e. come-IND.PST today come-IND.DPST when "When did (you) come? (I) came yesterday." b. Ende yurban čay sayu-l a. here three time sit-IND.DPST "(I) have been siting here for three hours."
 - c. Qoyula jayusi belen bol-u-l_a.food snack ready become-FILL-IND.DPST."The meal will be ready soon."

Verbal nouns contain aspectual informations and possess characteristics of both verbs and nouns. Besides of assigning Cases to their own arguments in the embedded clauses, the verbal nouns üje-gsen "see-VN.PFV" and *ide-kü* "eat-VN.FTR" in (4) nominalize the clauses they head and make them legitimate to host Case markers.

(4) [[Temegen, üker, morin, moyai, noqai, ünegen, arsalan, kümün] camel cow horse snake dog fox lion person i bi [bür luy a] yi ni qadaya-ju ACC 1SG.NOM COM ACC PART sting-CVB.IMPFV all [kümün ü üje-gsen] dü migan ide-kii person GEN meat.ACC eat-VN.FTR see-VN.PFV DAT sayiqan bayi-n a. (Choijinjab et al eds. 1987: 265)³ dü ilegüü be-IND.NONPST DAT much well "Having checked out by stinging camels, cows, horses, snakes, dogs, foxes, lions and men, eating men's meat is superfluously good."

³ Glosses and the English translation are mine.

The contrast between (5a) and (5b) shows that the clause headed by verbal noun is nominal since the negative predicate *iigei* only negates a nominal.

(5) a. Bi sayiqan ungsi-ju čida-qu 1SG.NOM well read-CVB.IMPFV be_capable-VN.FTR ügei. be.NEG "I can't read well." b. *Bi sayiqan ungsi-ju čida-n a 1SG.NOM well read-CVB.IMPFV be capable-IND.NONPST ügei. be.NEG "I can't read well."

Converbs are non-finite and used for connecting verbs or clauses.

- (6) a. Kedün bol-ju bayi-n a? čay become-CVB.IMPFV be-IND.NONPST how many time "What time is it?" b. *Kedün bol-ju? čay how many time become-CVB.IMPFV
- (7) a. Namayi kümün eri-bel, uda-qu ügei 1SG.ACC find-CVB.COND be late-VN.FTR be.NEG person ire-n e ge-rei. come-IND.NONPST say-2IMP

"If someone look for me, please say that (I) will come back soon."

eri-bel. b. *Namayi kümün 1SG.ACC find-CVB.COND person "*If someone look for me."

Intended reading "What time is it?"

Nouns and adjectives can play as predicates without a copula in Mongolian. They are negated by a negative copula. See (8) and (9).

- (8) a. Bi suruyči.

 1SG.NOM student
 "I am a student."
 - b. Ta *Mong yol kümün* üü?

 2PL.NOM Monggol person Q

 "Are you a Mongolian?"
 - c. Bida *ma yu kümün bisi*.

 2PL.NOM bad person be.NEG
 "We are not bad guys."
- (9) a. Minü ger **bay_a**.

 1SG.GEN house small

 "My house is small."

 b. Minü ger **bay a** üs
 - b. Minü ger **bay_a iigei**.

 1SG.GEN house small NEG
 "My house is not small."

Verbal nouns with the imperfective habitual suffixes "-day/-deg", like nouns and adjectives, might occur as matrix predicates. See (10).

(10) a. Bi kituy a bar noyuy a tere kerči-deg. 1SG.NOM that knife INS vegetable cut-VN.HAB "I cut vegetables with that knife." b. Ta abu, eji tei ben qamtu COM REFL.POSS 2PL.NOM father mother together

sa yu-da y uu? sit-VN.HAB O

"Do you live with your parents?"

Spoken data show that verbal nouns with the perfective suffixes "-ysan/-gsen" and future suffixes "-qu/-kü" can also occur as matrix predicates without a copula in

The suffixes transliterated as "-ysan/-gsen" are pronounced as "-san/-sen" and sometimes written as such in texts containing colloquial features like Mongolian Laoqida. Mongolian Laoqida, a conversation textbook used for learning Mongolian in the Office of Interpreters in Korea, was translated from a Chinese version in 1741 and revised in 1776 and 1790. Many words in Mongolian Laoqita were spelt according to their spoken forms.

affirmative and interrogative sentences.⁵ See (11) and (12).

ago)."

- (11) a. dolon sar a yin arban dolon edür vin bars seven month GEN ten seven day GEN tiger törü-sen. (Mongolian Laoqida Vol.8, 19b) čay tu time DAT be born-VN.PFV "(I) was born at the Tiger's time (3-5 o'clock in the morning) on the 17th day of the seventh month (in the cow's year forty years
 - b. činü te jige-sen mori üü ger te 2SG.GEN horse.NOM house LOC raise.VN.PFV Q ijaur ab-u- ysan originally buy-FILL-VN.PFV uu? (Mongolian Laoqida Vol. 5, 19a-b)

"Are your horses the ones raised at home or originally bought (from the animal market)?"

- c. bida ür yin kirayan du baqan 1PL.NOM dawn GEN dusk before dawn DAT somewhat id-ed buda odu üdesi bol-tal a rice.ACC eat-CVB.PFV now evening become-CVB.TERM buda ügei. (Mongolian Laoqida Vol.3, 20b) ide-sen rice.ACC eat-VN.PFV NEG "Now it's evening. We haven't eaten meals since we ate some rice at dawn."
- (12) a. bi tende eči-jü ed i 1SG.NOM there.DAT go-CVB.IMPFV thing ACC ire-kü. (Mongolian Laoqida Vol.8, 1b) gudald-ad tedü sell-CVB.PFV immediately come-VN.FTR "I will come (back) immediately after I go there and sell goods." b. nige degel i ki-jü kür-kü do-CVB.IMPFV reach-VN.FTR one gown ACC

Mongolian verbal noun suffixes are on the way to become indicative suffixes. See Hsiao (2007, 2009, 2011) and Section 4 for further discussions.

üü? (Mongolian Laoqida Vol.6, 10b)
Q
"Is it enough to make a gown?"
c. ...mön_kü ayu-qu
this_very_one be_afraid-VN.FTR
ügei. (Mongolian Laoqida Vol.1, 9b)
be.NEG
"These same ones are not afraid."

Most of Mongolian relative clauses are pre-nominal. They might be classified into three types, i. e. relative clauses proper, gapless relative clauses and headless relative clauses.

Relative clauses proper are gapped relative clauses with head nouns. There are no explicit marking such as a relative pronoun between a relative clause and the head noun in Mongolian as shown in (13).

(13) [xödege xoni xariɣul-ju bayi-ɣsan] minü countryside sheep tend-CVB.IMPFV exist-VN.PFV 1SG.GEN ökin degüü girl younger_sibling "my younger sister who was tending sheep in the countryside"

Subject, object, Dative/Locative, Instrument and Ablative can be relativized but no resumptive pronouns are allowed to fill the gaps.

(14) a. Batu ĭoχus nayad-day. Batu.NOM money.ACC play-VN.HAB "Batu gambles." b. [joyus nayad-day] kümün play-VN.HAB money.ACC person "people who gamble" Batu yi (15) a. Bi öčügedür ol-ju 1SG.NOM yesterday Batu ACC meet-CVB.IMPFV

üje-be.

see-IND.PST

"I met Batu yesterday."

- b. [minü öčügedür ol-ju üje-gsen] 1SG.GEN yesterday GEN meet-CVB.IMPFV see-VN.PFV kümün person "the man I met yesterday"
- (16) a. öčögedür süm e oči-ba. bi dü DAT go-IND.PST yesterday 1SG.NOM temple "I went to a temple yesterday."
 - b. [činü öčügedür ün oči-ysan] süm e 2SG.GEN yesterday GEN go-VN.PFV temple "the temple you went to yesterday"
 - c. *[činü öčügedür tende ün oči-ysan] 2SG.GEN yesterday there.DAT go-VN.PFV GEN süm e temple

Intended reading "the temple you went there yesterday"

- tere kituy a bar kerči-deg. (17) a. Bi noyuy a cut-VN.HAB 1SG.NOM that knife INS vegetable.ACC "I cut vegetables with that knife."
 - b. [minü noyuy a kerči-deg] kituy a 1SG.GEN vegetable.ACC cut-VN.HAB knife "the knife which I cut vegetable with"
 - c. *[minü tegün iyer noyuy a kerči-deg] 1SG.GEN 3SG **INS** vegetable.ACC cut-VN.HAB kituy a knife

Intended reading "the knife which I cut vegetable with it"

- (18) a. Batu nada ača nige aq a. 1SG ABL one Batu.NOM older "Batu is one year older than me."
 - b. [Batu yin nige aq a] kümün Batu **GEN** older person one

"the person who Batu is one year older than"

c. *[Batu yin tegün eče nige aq_a] kümün

Batu GEN 3SG ABL one older person

Intended reading "the person who Batu is one year older than him/her"

Gapless relative clauses are headed by abstract nouns such as *ači* "merit", *jarliy* "edict" and *yosun* "maner, rule".

(19) a. tan i tejige-gsen hači (SHM6 Vol. 9, Sec. 214)

2PL ACC feed-VN.PFV merit

"the merit that (my mother) raised you up"

jarliy (SHM Vol.12, Sec. 269)

b. [Činggis qayan u nereid-ü-gsen] mön

Chinggis emperor GEN name-FILL-VN.PFV the_very_same

edict

"the very same edict in which Chinggis Khaan named (Ögödei as his successor)"

ökin c. [Qori-tümed Qorilartai-mergen ü ün GEN Qorilartai-mergen GEN daughter Qori-tümed Ariy-usun a töre-(g)sen Alan-yo'a: yi Ariy-usun LOC be born-VN.PFV Alan-yo'a: ACC tende Dobun-mergen ü yuyu:-ju there.DAT ask-CVB.IMPFV Dobun-mergen GEN abu-ysan] vosun teyi:mü. (SHM Vol.1, Sec.9) take-VN.PFV manner like that "So that is how (Duwa-soqor) requested Alan-yo'a: (as his wife), who was born at Ariy-usun by Qori-tümed's Qorilartai-mergen's daughter, there and Dobun-mergen took (her as his wife)."

Headless relative clauses are gapped relative clauses without overt head nouns.

⁶ SHM stands for Mongyol-un niyuca tobčiyan "the Secret History of the Mongols".

(20) [öber ün ol-u-ysan jöge-gsen] iyer self GEN get.FILL-VN.PFV gather-VN.PFV INS iyen (SHM Vol.9, Sec. 212) **REFL.POSS** "with (the people) who you have found and gathered by yourself"

Mongolian exhibits the Nominative/Genitive alternation, a phenomenon called Ga/No Conversion shown in (21) in the Japanese literature (Harada 1971, among others), in marking agents in embedded clauses. See (22).

- (21) a. Taguchi ga/*no kai-ta. hon 0 Taguchi NOM/GEN bookACC write-PST "Taguchi wrote the book."
 - b. [Taguchi ga/no kai-ta] hon Taguchi NOM/GEN write-PST book "the book which Taguchi wrote"
- (22) a. Bi/*Minü öčügedür Batu yi 1SG.NOM/1SG.GEN yesterday Batu **ACC** ol-ju üie-be. meet-CVB.IMPFV see-IND.PST "I met Batu yesterday."
 - b. [Bi/Minü öčügedür ol-ju ün 1SG.NOM/1SG.GEN yesterday GEN meet-CVB.IMPFV tere kümün čini üje-gsen] Batu bayi-n a. see-VN.PFV that person 2SG.POSS Batu exist-IND.NONPST "The person who I met yesterday is Batu."

However, Nominative/Genitive alternation in marking agent subjects in relative clauses is rare in Middle Mongolian. Example (23) is the only case in Secret History of the Mongols that agent in a relative clause is marked as nominative.

(23) edő'e: Naya: da ča asay-tala qaha:n Naya DAT **ABL** ask-CVB.TERM now emperor soyurqa-'a:su jaya'(a:) a:r [ečige tengiri yin

allow-CVB.COND heaven GEN destiny INS father

eke töre-'ü:l-ü-gsen] mariya:n

mother.NOM be_born-CAUSE-FILL-VN.PFV muscle.REFL.POSS

ača asayu:'a:su! (SHM Vol.7, 197)

ABL ask.CAUSE.1SG.Vol

"Now while asking Navaa if the Khaan allows please ask my ow

"Now while asking Nayaa, if the Khaan allows, please ask my own body to which (my) father and mother gave birth with the destiny of Heaven!"

The following section examines the distributions of nominative and genitive Cases in Inner Mongolian relative clauses from a statistical perspective.

3. A Statistical Study

In a statistical research conducted in June of 2010, 100 Mongolian native speakers were recruited from under and graduate students of Inner Mongolia University to grade sentences on a 1-4 scale in a questionnaire. Score (1) means perfect sentences, (2) means grammatical but unnatural sentences, (3) means sentences with doubts, and (4) means definitely bad sentences. Sentences with a mean score smaller than 2 are classified as grammatical ones in our analysis.

The questionnaires were distributed to the participants and collected when done by 5 student assistants. All of the participants are native speakers of Mongolian and Mongolian-Chinese bilingual, with some knowledge in English (and/or Japanese). Background information about the participants' gender, age, education, hometown and language skills is also collected for reference and further analysis.

The questionnaire contains the instruction with samples and 64 sentences, including 25 filler sentences, 5 Nom/Gen pairs, and sentences including those dealing with the issues of word order, targets of relativization, resumptive pronouns and simple sentences served for baseline comparison. Sentences were arranged in a randomized order.

Filler sentences are presumptively perfect sentences taken from a textbook. They are meant to control the quality of the answers of the participants. (24a-d) exemplify some of the filler sentences.

- (24) a. Ta bayi-n a sayin uu? exist-IND.NONPST 2PL.NOM good O "How are you?"
 - b. Ta jalayu yeke qara-yda-ju watch-PASS-CVB.IMPFV 2PL.NOM very young bayi-n a. exist-IND.NONPST

"You look very young."

- c. Bi baysi yin ajil tei. 1SG.NOM teacher **GEN** work COM "I am a teacher." Literally "I am with a teacher's work."
- d. Ta tani-lča-yul-u-y a. qoyar i 2PL ACC know-RECP-CAUSE-FILL-1.Vol "Let's introduce you two to know each other!"

The nominative/genitive pairs used in our questionnaire are listed below.

- (25) a. [öčügedür Ba yatur Batu du qudaldu-ju sell-CVB.IMPFV yesterday Bayatur.NOM Batu DAT ög-ü-gsen] mori yeke sayin. tere give-FILL-VN.PFV that horse very good "The horse which Bayatur sold to Batu yesterday is very good."
 - b. [öčügedür Ba yatur un Batu qudaldu-ju du sell-CVB.IMPFV yesterday Bayatur GEN Batu DAT ög-ü-gsen] tere mori yeke sayin. give-FILL-VN.PFV that horse very good "The horse which Bayatur sold to Batu yesterday is very good."
- (26) a. [bi öčügedür ol-ju ün üje-gsen] GEN meet-CVB.IMPFV see-VN.PFV 1SG.NOM yesterday tere kümün čini Batu bayi-n a. that person 2SG.POSS Batu exist-IND.NONPST "The person who I met yesterday is Batu."
 - b. [Minii öčügedür ün ol-ju üje-gsen]

1SG.GEN yesterday GEN meet-CVB.IMPFV see-VN.PFV tere kümün čini Batu bayi-n_a. that person 2SG.POSS Batu exist-IND.NONPST "The person who I met yesterday is Batu."

- (27) a. [Bi öčügedür ol-ju üje-gsen] tere 1SG.NOM yesterday meet-CVB.IMPFV see-VN.PFV that mori unu-ysan kümün bol Batu yum. ride-VN.PFV person TOP Batu thing horse "The horseriding person I met yesterday is Batu."
 - b. [Öčügedür ün **minü** ol-ju üje-gsen]
 yesterday GEN 1SG.GEN meet-CVB.IMPFV see-VN.PFV
 tere mori unu-ysan kümün bol Batu yum.
 that horse ride-VN.PFV person TOP Batu thing
 "The horseriding person I met yesterday is Batu."
- (28) a. Bi [**Ba yatur** biči-gsen] jakiy_a yi 1SG.NOM Bayatur.NOM write-VN.IMPFV letter ACC ungsi-ba.

read-IND.PST

"I read the letter Bayatur wrote."

b. Bi [*Ba yatur un* biči-gsen] jakiy_a yi 1SG.NOM Bayatur GEN write-VN.IMPFV letter ACC ungsi-ba.

read-IND.PST

"I read the letter Bayatur wrote."

(29) a. Bayatur önödör [*bi* biči-gsen] jakiy_a
Bayatur.NOM today 1SG.NOM write-VN.IMPFV letter
yi ungsi-ba.

ACC read-IND.PST

"Today Bayatur read the letter I wrote."

b. Bayatur önödör [minü biči-gsen] jakiy_a
 Bayatur.NOM today 1SG.GEN write-VN.IMPFV letter
 yi ungsi-ba.

ACC read-IND.PST

"Today Bayatur read the letter I wrote."

Questionnaires where the mean score for the filler sentences is larger than 2 or there are more than 5 missing values were discarded. There are 91 valid subjects (M 20; F 71; Average age 23:09). We used t-Test to analyze the data. Genitive Case subject is significantly preferred. (25a) is the only sentence with a nominative subject and gets a mean score smaller than 2. See Table 1 and Figure 1.

in inner Mongolian Relative Clauses				
	N	Mean	Std. Deviation	t-value
(25a)	91	1.7033	1.00073	-2.917**
(25b)	91	1.4066	.82970	
(26a)	91	2.8242	1.21649	-11.234***
(26b)	91	1.3626	.80989	
(27a)	91	2.3956	1.17514	-7.594***
(27b)	91	1.4286	.73247	
(28a)	91	2.8132	1.13443	-14.364***
(28b)	91	1.0659	.32667	
(29a)	91	3.6374	.79406	-20.219***

.78850

1.4286

(29b)

91

Table 1. Nominative vs. Genitive Case Subjects in Inner Mongolian Relative Clauses

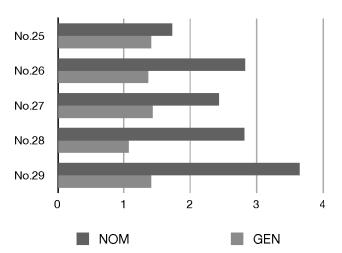


Figure 1. Comparison of Mean Scores of Nominative and Genitive Case Subjects in Inner Mongolian Relative Clauses

No participant rejects all five pairs of sentences. 5 participants accept all pairs of

sentences. 67 participants accept all sentences with genitive subjects, but only 5 participants accept all nominative subject sentences. Participants who accept all of the nominative sentences also accept their genitive counterparts. 9 participants reject all nominative subject sentences, while no participant rejects all genitive subject sentences. 6 participants accept all genitive sentences but reject all of their nominative counterparts. Table 2 shows the distributions of answers for the NOM/GEN pairs. (28b) is the only sentence that received no "definitely bad" grading.

Although they are not the preferred forms, nominative subjects are acceptable for some speakers. For every nominative subject sentence, there were some native speakers who graded it as a perfect one. For example, 51 participants out of 91 regard (25a) as perfect expressions, and 24 think it is grammatical but unnatural. Only 16 participants graded it as doubtful or bad sentences. The average score of (25a) is 1.7033, which makes it qualified to be an acceptable sentence according to our criteria.

Table 1: The Blattbatterie of Attended for the Mark Table (17 of)	Table 2. The Distributions of Answers	for the NOM/GEN Pairs (N=91)
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	1	2	3	4
	N (%)	N (%)	N (%)	N (%)
(25a)	52 (57.1)	24 (26.4)	5 (5.5)	10 (11.0)
(25b)	69 (75.8)	12 (13.2)	5 (5.5)	5 (5.5)
(26a)	18 (19.8)	22 (24.2)	9 (9.9)	42 (46.2)
(26b)	71 (78.0)	13 (14.3)	1 (1.1)	6 (6.6)
(27a)	24 (26.4)	34 (37.4)	6 (6.6)	27 (29.7)
(27b)	62 (68.1)	22 (24.2)	4 (4.4)	3 (3.3)
(28a)	12 (13.2)	32 (35.2)	8 (8.8)	39 (42.9)
(28b)	87 (95.6)	2 (2.2)	2 (2.2)	0 (0.0)
(29a)	3 (3.3)	9 (9.9)	6 (6.6)	73 (80.2)
(29b)	65 (71.4)	18 (19.8)	3 (3.3)	5 (5.5)

Table 3 and Table 4 further display the distributions in groups and show detail information about each pairs of sentences. The data demonstrate that even though there exist idiosyncratic variations in judging the sentences, the genitive ones are preferred.

There are only 7 cases in which a participant accepted a nominal subject

sentence but reject a genitive one. On the other hand, there are 198 cases that one accept the genitive subject sentence but reject its nominative counterpart. See Table 3.

Table 3. The Distributions of the Group of Answers 1 and 2 for the NOM/GEN Pairs

		Accepted	
	N	(1-2)	Note
		N (%)	
(25a)	91	76 (83.5)	NOM accepted & GEN rejected 5 (5.5);
(25b)	91	81 (89.0)	GEN accepted & NOM rejected 10 (11.0);
(200)	7.	01 (05.0)	Both accepted 71 (78.0)
(26a)	91	40 (44.0)	NOM accepted & GEN rejected 0 (0.0);
(26b)	(26b) 91	94 (02.2)	GEN accepted & NOM rejected 44 (48.4);
(200)	71	84 (92.3)	Both accepted 40 (44.0)
(27a)	91	58 (63.7)	NOM accepted & GEN rejected 2 (2.2);
(27b)	91	84 (92.3)	GEN accepted & NOM rejected 28 (30.8);
(270)	71	04 (92.3)	Both accepted 56 (61.5)
(28a)	91	44 (48.4)	NOM accepted & GEN rejected 0 (0.0);
(28b)	91	89 (97.8)	GEN accepted & NOM rejected 45 (49.5);
(200)	91		Both accepted 44 (48.4)
(29a)	91	12 (13.2)	NOM accepted & GEN rejected 0 (0.0);
(20h)	01 02 (01 2)		GEN accepted & NOM rejected 71 (78.0);
(29b)	91	83 (91.2)	Both accepted 12 (13.2)

For participants who reject at least one of the test sentences in a pair, genitive subject sentences are acceptable to many of them. See Table 4.

	N	Rejected (3-4)	Note	
	11	N (%)	Note	
(25a)	91	15 (16.5)	NOM rejected & GEN accepted 10 (11.0);	
(25b)	91	10 (11.0)	GEN rejected & NOM accepted 5 (5.5);	
(230)	(230) 91 10 (11.0		Both rejected 5 (5.5)	
(26a)	91	51 (56.0) NOM rejected & GEN accepted 44 (48.		
(26b)	91	7 (7.7)	GEN rejected & NOM accepted 0 (0.0);	
(200)	5b) 91 7 (7.7)		Both rejected 7 (7.7)	
(27a)	91	33 (36.3) NOM rejected & GEN accepted 28 (30.8)		
(27b)	91	7 (7.7)	GEN rejected & NOM accepted 2 (2.2);	
(270)	91 / (7.7)		Both rejected 5 (5.5)	
(28a)	91	47 (51.6)	NOM rejected & GEN accepted 45 (49.5);	
(28b)	91	2 (2.2)	GEN rejected & NOM accepted 0 (0.0);	
(200)	280) 91 2 (2.2)		Both rejected 2 (2.2)	
(29a)	91	79 (86.8) NOM rejected & GEN accepted 71 (78.0).		
(29b)	91	Q (Q Q)	GEN rejected & NOM accepted 0 (0.0);	
(290)	91 8 (8.8)		Both rejected 8 (8.8)	

Table 4. The Distributions of the Group of Answers 3 and 4 for the NOM/GEN Pairs

In the next section, we will first discuss the licensing of nominative and genitive Cases in relative clauses and then compare the distributions of nominative/genitive alternation in Inner Mongolian and Japanese in a diachronic view.

4. Implications

4.1 Finiteness of Clauses and the Nominative/Genitive Alternation

A finite clause contains some inflectional elements such as tense and agreement of person and/or number. In nominative-accusative languages, the subject of a finite clause takes nominative Case. We propose that the finiteness of clauses is related to subject Case marking. Nominal subjects appear in finite clauses, and genitive subjects occur in nominal clauses.

Unlike matrix clauses, Mongolian relative clauses cannot be headed by a finite indicative verb, but by a non-finite verbal noun. Compare (30) and (31).

(30) a. Batu öčügedür ire-be.

> Batu yesterday come-IND.PST

"Batu came yesterday."

b. Batu öčügedür ire-gsen bayi-n a.

Batu yesterday come-VN.PFV exist.IND.NONPST

"Batu came yesterday."

Literally "The situation that Batu came yesterday exists."

(31) a. [öčügedür(-ün) ire-gsen] kümün

yesterday(-GEN) come-VN.PFV person

"the person who came yesterday"

b. *[öčügedür *ire-be*] kümün

> yesterday come-IND.PST person

Intended reading "the person who came yesterday"

c. *[öčügedür ire-gsen bayi-n a kümün exist-IND.NONPST yesterday come-VN.PFV person

Intended reading "the person who came yesterday"

We have shown in (5), reproduced here as (32), that clauses headed by verbal nouns are nominalized clauses because the negative predicate ügei takes a nominal as its complement.

(32) a. Bi sayiqan ungsi-ju čida-qu

1SG.NOM well read-CVB.IMPFV be capable-VN.FTR

ügei.

be.NEG

"I can't read well."

*Bi sayiqan ungsi-ju čida-n a

1SG.NOM well read-CVB.IMPFV be capable-IND.NONPST

ügei.

be.NEG

"I can't read well."

Clauses headed by verbal nouns can host Case markers. See (33).

[son.NOM 3SG.POSS letter.ACC come-CAUSE-FILL-VN.PFV]

dü eke ni sanay_a amur bol-jai.

DAT mother.NOM 3SG.POSS thought easy become-IDPST

"The mother became released when her son sent a letter (back)."

(Chinggeltai 1991: 555)

Data from Turkish, also an Altaic language, support the claim that finiteness is related to Case markings. There are two types of relative clauses in Turkish. The native type, like Mongolian relatives, is pre-nominal and lacks an overt relative marker. The native relative clauses are nominalized and subjects in relative clause are genitive. See $(34)^7$. The other type, which is post-nominal and marked by a relative pronoun ki, is borrowed from Persian. The borrowed relative clauses are finite. Compare (35a) and (35b).

- (34) [bayan-ın otur-duğ-u] divan (Cagri 2005: 6, (3a)) lady-GEN sit-NSR-3SG sofa 'the sofa that the lady is sitting on'
- (35) a. [kitab-1 *al-an*] kız çanta-sı-nı kaybetti.
 book-ACC buy-SR girl bag-AGR-ACC lost
 "The girl who bought the book lost her bag."

(Cagri 2005:2, Note 3(i))

b. kız [ki kitab-ı *al-dı*,] çanta-sı-nı. kaybetti girl COMP book-ACC buy-PST bag-AGR-ACC lost "The girl, who bought the book, lost her bag."

(Cagri 2005:2, Note 3(ii))

Besides, English relative clauses are finite and the clause-internal subjects are nominative. Gerundive Nominals in English have genitive subjects. See (36) and

glosses the NSR suffix *DIK* as FN (Factive Nominalization).

According to Cagri (2005:2), Turkish native relative clause has two forms of verbal inflections, which are labeled in the literature as the Subject Relative and the Non-Subject Relative forms generally based on the grammatical function of the head noun of the relative clause plays. Cagri (2005:2-3) also notes that the SR form is sometimes licensed for non-subjects. Kornfilt (2008)

(37).

- (36) a. Who is the person [(whom) [you saw yesterday]]?
 - b. The student [whom [Jim asked to submit a paper next week]] is John.
- (37) a. John's being eager to please (Chomsky 1970: (3a))
 - b. John's refusing the offer (Chomsky 1970: (3b))
 - c. Mary's having left surprised me. (Schachter 1976: (22))

A finite clause and a nominal clause containing aspect can be expressed in terms of CP and AspP in the Chomskyan framework. It has been proposed that nominative Case is licensed by a finite T (head of a TP selected by C [+Finite]) and genitive Case by a nominal head D (Chomsky 1986: 74, 1995: 114). We will not go into the technical details of how the subject position of a finite clause gets nominative Case assigned/licensed, and how a phrase inside a nominal phrase gets genitive Case in this paper. 8 Suffice it to say that finiteness of the clause is a keypoint to Mongolian nominative/genitive alternation.

4.2 A Comparison of the Nom/Gen Alternation in Mongolian and Japanese

Although both Mongolian and Japanese show Nom/Gen alternation, the distributions of nominative and genitive Cases in relative clauses are different. In Inner Mongolian, genitive Case subject is significantly preferred. According to Maki et al.'s statistic study, nominative subjects are significantly preferred in Japanese. Maki et al. (2004:(34)) shows that the participants who accept genitive subjects also accept nominative subjects, with 86 participants accepting (38b) out of 299

⁸ For analyses in the Chomskyan framework, see Miyagawa (2011) for example. Miyagawa (2011) reviews two approaches dealing with nominative/genitive alternation, D-licensing hypothesis and C-licensing hypothesis. In the D-licensing hypothesis, nominative subject and genitive subject appear in different structures. The clause with a nominative subject is a CP, whereas the clause with a genitive subject is a smaller, reduced structure such as a TP, an AspP, or a MoodP. In the C-licensing hypothesis, both nominative subject and genitive subject appear in a CP, but the C which licenses genitive subject possesses a nominal feature. Hale (2002) proposes a D-licensing analysis of Dagur, a Mongolic language, and Kornfilt (2008) provides a C-licensing analysis of Turkish

participants who accept (38a).

(38) a. [Kinoo, <u>Taguchi ga</u> yonda] hon yesterday Taguchi NOM read.PST book "the book Taguchi read yesterday" (Maki e

(Maki et. al. 2004: Q3)

 b. [Kinoo, <u>Taguchi no</u> yonda] hon yesterday Taguchi GEN read.PST book "the book Taguchi read yesterday"

(Maki et. al. 2004: Q4)

Besides, those who accept genitive subjects judge the examples with genitive subjects worse than the counterparts with nominative subjects.

We will account for the different distributions of Mongolian and Japanese from a historical point of view. Mongolian verbal nouns are on the way to become a new set of indicative suffixes (Hsiao 2007, 2009, 2011). We have shown in (10), (11) and (12), reproduced as (39) to (41) below, that verbal nouns might take the position of indicative endings. The imperfective habitual verbal noun suffix ¬day/-deg has turned out to be also an indicative ending and may appear in affirmative, negative and interrogative contexts freely. The perfective verbal noun suffix ¬ysan/-gsen occurs in interrogative and negative sentences freely, but usually cooccur with a copula in affirmative sentences in written language though a copula is not necessary in spoken language.⁹ As for the verbal noun future suffix ¬qu/-kü, it mainly occur in interrogative and negative sentences.

(39) a. Bi kituy a bar noyuy a kerči-deg. tere 1SG.NOM that knife INS vegetable cut-VN.HAB "I cut vegetables with that knife." Ta abu, tei b. eji ben gamtu

. Ta abu, eji tei ben qamtu 2PL.NOM father mother COM REFL.POSS together

⁹ According to our field notes, the verbal noun perfective suffix is acceptable in affirmative sentences without the support of a copula in written and spoken Khalkha Mongolian. It reveals that Khalkha Mongolian goes faster than Inner Mongolian in the development of verbal noun aspectual suffixes to indicative suffixes. We leave this for further research.

uu? sa yu-da y sit-VN.HAB O

"Do you live with your parents?"

- (40) a. dolon sar a arban dolon edür yin yin bars seven month GEN ten seven day **GEN** tiger törü-sen. (Mongolian Laoqida Vol.8, 19b) čay tu time DAT be born-VN.PFV
 - "(I) was born at the Tiger's time (3-5 o'clock in the morning) on the 17th day of the seventh month (in the cow's year forty years ago)."
 - b. činü te jige-sen üü mori ger te house LOC raise.VN.PFV Q 2SG.GEN horse.NOM ijaur ab-u- xsan uu? originally buy-FILL-VN.PFV Q

(Mongolian Laoqida Vol. 5, 19a-b)

- "Are your horses the ones raised at home or originally bought (from the animal market)?"
- c. bida ür yin kirayan du baqan 1PL.NOM dawn GEN dusk before dawn DAT somewhat buda id-ed üdesi odu bol-tal a rice.ACC eat-CVB.PFV now evening become-CVB.TERM buda ügei. (Mongolian Laoqida Vol.3, 20b) ide-sen rice.ACC eat-VN.PFV NEG "Now it's evening. We haven't eaten meals since we ate some rice at dawn."
- (41) a. bi tende eči-jü ed Igudald-ad 1SG.NOM there.DAT go-CVB.IMPFV thing ACC sell-CVB.PFV ire-kü. (Mongolian Laoqida Vol.8, 1b) tedü immediately come-VN.FTR

"I will come (back) immediately after I go there and sell goods."

b. nige degel i ki-jü kür-kü do-CVB.IMPFV reach-VN.FTR gown ACC üü? (Mongolian Laoqida Vol.6, 10b) Q

```
"Is it enough to make a gown?"

c. ...mön_kü ayu-qu ügei.
this_very_one be_afraid-VN.FTR be.NEG
(Mongolian Laoqida Vol.1, 9b)
"These same ones are not afraid."
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Poppe (1955: 260-261) claims that all indicative endings are derived from verbal nouns and a zero "be" verb in Mongolian, though it is hard to trace the original meanings and usages of these verbal nouns. The development from verbal noun suffixes to indicative suffixes is a change from the analytic side to the synthetic side in an "analytic-synthetic cycle" in Mongolian historical syntax (Hsiao 2007, 2009, 2011).

A language shows analytic characteristics when a temporal meaning is expressed by verbal-nominal suffixes and a copula verb. When the copula verb is omitted, or when the verbal suffixes and the copula verb are reduced, contracted and lost their original meanings, these reduced/contracted forms are reanalyzed as indicative suffixes and the language becomes more synthetic at the stage. The change from analytic to synthetic is cyclic.

The analytic-synthetic cycle is illustrated in Figure 2.

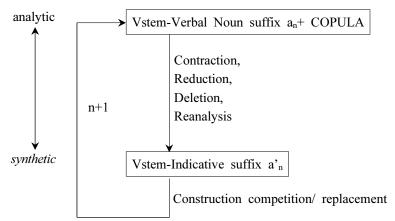


Figure 2. Substitution of Sets of Verbal Suffixes and the Analytic-Synthetic Cycle¹⁰

¹⁰ Figure 2 is adapted from Figure 4 in Hsiao 2007.

There are at lease two lines of changes in the temporal system from Middle to Modern Mongolian. One line is the emergence of non-past verbal suffixes -na/-ne, and the other is the rise of perfective suffixes -ysan/-gsen as indicative past markers and imperfective -qu/-kü non-past ones. It is the latter trend that is relevant to our discussion of the nominative/genitive alternation.

Perfective verbal suffixes -ysan/-gsen do not express past time in Middle Mongolian documents, but might express past time in texts of Late Mongolian and Modern Monglian. Hsiao (2007) demonstrates that negative adverbs ülü "NEG" and ese "NEG" gradually gave their way to negative predicate ügei "exist.NEG" or negative suffix -güi in Mongolian diachronically.11 Alongside the typological changes of negative constructions, Mongolian is getting more analytic, representing past time by perfective verbal noun *ysan/-gsen* and omissible present tensed verb of existence rather than by a synthetic inflectional verb. It is also argued that the competition between these two sets of negators sped up a series of syntactic changes in temporal system of Mongolian. Changes caused by asymmetries in one set of constructions might trigger or speed up other series of changes. Table 5 shows that readjustments to eliminate asymmetries in negative constructions introduced affirmative/negative asymmetries in the temporal system. At the reconstructed Stage I, ülü/ese and ügei were in complementary distribution and there was a verbal-nominal asymmetry in negative constructions. At Stage II, the functions of ügei and ülü/ese were overlapping. They were competing for the function of negating verbal nouns. At Stage III, ülü and ese were replaced by ügei/-güi and an affirmative-negative asymmetry in the temporal system emerged. Indicative verbs are used in affirmative sentences, but verbal nouns are used in negative sentences. At Stage IV, past affirmatives tend to be expressed by perfective verbal nouns plus omissible copula verb by analogy to their negative counterparts.

¹¹ ülü is used to negate past verbs, and ese is used for non-past verbs.

Historical Stages	Affirmative	Negative	
Stage I	V[±PST];	{\vec{ul\vec{u}/ese}} + V[\pm PST];	
Stage I	Nominals + Copula	Nominals + <i>ügei + Copula</i>	
Stage II	V[±PST];	{\vec{vil\vec{w}/ese}} + V[\pm PST]/VN[\pm PFV];	
(Middle Mongolian	2 2	VN[±PFV] + ügei+ (Copula);	
~Late Mongolian)	Nominals + (Copula)	Nominals + <i>ügei</i> + (Copula)	
Stage III			
(Late Mongolian	<i>V[±PST]</i> ;	VN[±PFV] + ügei/-güi+ (Copula);	
~Modern	Nominals + (Copula)	Nominals + ügei+ (Copula)	
Mongolian)			
Stage IV	V[-PST];	VNII+DEVI + gii+ (Conyle):	
(Modern	<i>VN</i> [+ <i>PFV</i>] + (Copula);	VN[±PFV] + -güi+ (Copula);	
Mongolian)	Nominals + (Copula)	Nominals + ügei+ (Copula)	

Table 5. Historical Changes of Negation and the Temporal System in Mongolian¹²

It is claimed that the developments of verbal noun aspectual suffixes to inflectional suffixes also occurred in the history of Japanese, and Japanese goes faster than Mongolian does. ¹³ Shibatani (1990: 123) notes that perfective suffix $\neg tari$, which became the modern perfective/past tense marker $\neg ta$ eventually, started to cover the usage of a past tense suffix at the end of Late Old Japanese period (the 8th century) and the tense suffixes $\neg ki$ and $\neg keri$ in Old Japanese disappeared during Middle Japanese period (12^{th} to 17^{th} centuries).

Verbal suffixes -ta "PFV/PST" and -ru "IMPFV/NONPST" have dual functions in Modern Japanese. They express both aspect and tense meaning and appear in both subordinate and matrix contexts. See (42) and (43).

¹² This table is a revision of Hsiao 2007, Table 7.

Note that the development from an aspect suffix plus a copula into a tense marker occurred in the history of the Korean language, too. The past tense suffix - as'/-es' in Modern Korean developed from - a/-e isi (> -a/-e is') "be in the state of" in Middle Korean (Sohn 1999:55). It is noteworthy that subject of a relative clause is marked genitive in Middle Korean and nominative in Modern Korean (Sohn 1999:52, Lee 2011: 228). These changes remind us of the analytic-synthetic cycle in Mongolian historical syntax. Whether these changes in Middle Korean are related to each other is an interesting issue to address in further research.

- iki-masu.
- go-NONPST DAT
- "I am going to enter the school Daddy graduated from."
- b. Watasi wa otooto ni okasi o age-ta.
 - candy ACC I TOP younger.brother DAT give-PST "I gave my younger brother candies."
- (43) a. Taro ga/no hasi-ru riyuu Taro NOM/GEN run-IMPFV/NONPST reason (Niimuma & Taguchi 2006: (5)a,b)

"the reason that Taro runs"

b. Watasi wa ashita benkyoo su-ru. Ι TOP do-NONPST tomorrow study "I will study tomorrow."

With regard to the nominative/genitive alternation in Japanese, Nambu and Matsuda (2007) shows that younger generations use genitive subjects less. See Figure 3.

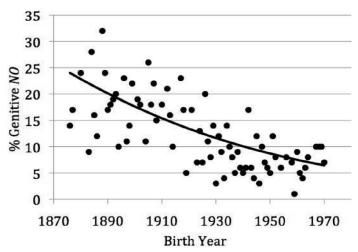


Figure 3. Scatterplot of the Rate of Genitive no in the MJD Corpus (Nambu and Matsuda 2007)

Shibatani (1990: 347-357) discusses the development of ga and no. Both of ga

and *no* are attributive markers in Old Japanese and both could mark the subject of a nominalized clause. *Ga* evolved into a nominative marker in Early Modern Japanese, and *no* remains an attributive and genitive marker. He suggests that genitive subject in Modern Japanese is a historical residue. If Shibatani's (1990) suggestion is on the right track, then it's a natural consequence that younger generations use genitive subjects less. Because alongside the development of aspectual suffixes into tense suffixes, subordinate clauses and independent clauses look no difference in the shape of predicates. Like the case in Mongolian, relative clauses can be analysed as finite clauses and have nominal subjects by analogy to their matrix counterparts.

5. Concluding Remarks

To conclude, finiteness of relative clauses accounts for the subject Case marking alternation. Nominal subjects appear in finite clauses, and genitive subjects occur in nominals. Subjects in relative clauses and nominal complements are generally marked genitive in Middle Mongolian, but Modern Mongolian exhibits the nominative/genitive alternation.

Alongside the recent development of reanalyzing verbal noun suffixes as indicative suffixes, verbal nouns may take the predicative position in matrix clauses as well. In these cases, predicates in relative clauses resemble those in matrix clauses. Therefore, relative clauses can be analysed as finite clauses and have nominal subjects by analogy to their matrix counterparts.

Our statistical study shows that nominative subjects are less preferred than their genitive counterparts in Modern Inner Mongolian. Compared to Mongolian nominative/genitive alternation, nominative subjects are more common in Japanese. It is claimed that the developments of verbal noun aspectual suffixes to inflectional suffixes also occurred in the history of Japanese, and Japanese goes faster than Mongolian does. Aspectual suffixes have developed into inflectional suffixes and replaced the original tense suffixes in Middle Japanese, while it is an ongoing development in Modern Mongolian.

References

- Cagri, Ilhan Merih. 2005. Minimality and Turkish Relative Clauses. Unpublished dissertation, University of Maryland.
- Chinggeltai, 1991. A Grammar of the Mongolian Language (in Chinese). Inner Mongolia People's Publisher.
- Choijinjab et. al. eds. 1987. Materials on the Oirat Dialect (in Mongolian). Inner Mongolia People's Publisher.
- Chomsky, Noam. 1970. Remarks on Nominalization. Reprinted in Davidson and Harman. pp. 262-289.
- Chomsky, Noam. 1986. Knowledge of Language: Its Nature, Origin, and Use. New York: Praeger.
- Chomsky, Noam. 1995. The Minimalist Program. Cambridge, MA: MIT Press.
- Davidson, D. and G. Harman. 1975. The Logic of Grammar. Dickenson.
- Hale, K., 2002. On the Dagur Object relative: some comparative notes. Journal of East Asian Linguistics 11: 109-122.
- Harada, Shin-Ichi. 1971. Ga-No Conversion and Ideolectal Variations in Japanese. Gengo Kenkyuu 60: 25-38.
- Hsiao, Su-ying. 2007. Lexical competition, asymmetries and diachronic syntactic changes: Historical changes of negative constructions and temporal systems in Mongolian (in Chinese). Language and Linguistics 8(2): 495-517.
- Hsiao, Su-ying. 2009. The analytic-synthetic cycle and Mongolian historical syntax. Kurebito, Tokusu ed. Proceedings of the Second International Conference: Past and Present of the Mongolic peoples, 353-362. Tokyo: Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies.
- Hsiao, Su-ying. 2011. A diachronic study of Mongolian grammatical temporal system. Paper presented at Workshop on the Representation of Time in Asian Languages, Oct. 26-28, 2011, Taipei.
- Kornfilt, J., 2008. Subject case and Agr in two types of Turkic RCs. In Boeckx, Cedric & Suleyman Ulutas eds. Proceedings of the 4th Workshop on Altaic Formal Linguistics (WAFL4), Cambridge, MA, 145-168.
- Lee, Ki-Moon and S. Robert Ramsey. 2011. A history of the Korean language. Cambridge University Press.
- Li, Zuida et al. eds. 1741. Mongolian Laoqida. Photocopies published in 1983 by Research Institute for Humanities, Sogang University.
- Maki, Hideki, Tamami Morishima and Jessica Dunton. 2004. A Statistical Analysis of the Nominative/Genitive Alternation in Japanese: A Preliminary Study. Bulletin of the Faculty of Regional Studies, Gifu University 14: 87-119.

- Miyagawa, Shigeru. 2011. Genitive subjects in Altaic and specification of phase. *Lingua* 121(7): 1265-1282.
- Nambu, Satoshi and Kenjiro Matsuda. 2007. Change and variation in ga/no conversion in Tokyo Japanese. In Joseph C. Salmons and Shannon Dubenion-Smith, eds., *Historical Linguistics* 2005: Selected papers from the 17th International Conference on Historical Linguistics, Madison, Wisconsin, 119 - 132, John Benjamins Publishing Company.
- Niinuma, Fumikazu and Shigeki Taguchi. 2006. The Licensing of Nominative Case in Japanese: Evidence from Ga/No Conversion. *Proceedings of the 8th Seoul International Conference on Generative Grammar*, 197-212.
- Ochi, Masao. 2001. Move F and ga/no conversion in Japanese. *Journal of East Asian Linguistics* 10: 247-286.
- Poppe, N. 1955. *Introduction to Mongolian Comparative Studies*, Helsinki: Suomalais-Ugrilainen Seura.
- Schachter, Paul. 1976. A Nontransformational Account of Gerundive Nominals in English. *Linguistic Inquiry* 7(2): 205-241.
- Shibatani, Masayoshi. 1990. The languages of Japan. Cambridge University Press.
- Sohn, Ho-Min. 1999. The Korean language. Cambridge University Press.
- Watanabe, Akira. 1996. Nominative-genitive conversion and agreement in Japanese: A cross-linguistic perspective. *Journal of East Asian Linguistics* 5: 373-410.

Su-ying Hsiao

Institute of Linguistics Academia Sinica

E-mail: suying@sinica.edu.tw

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