E-1

On the distribution of genitive subject in Kazakh*

Yu-Han Xie and Hideki Maki
Gifu University and Gifu University

This paper closely investigates the environments in which the genitive subject appears in Kazakh, and reports six facts in Kazakh. First, the genitive subject is allowed. Second, the genitive subject always co-occurs with a possessive pronoun. Third, in sentences with no overt relative head, headed by *deyin* 'until,' for example, the genitive subject co-occurs with the possessive pronoun on the predicate in the *deyin* 'until' clause. Fourth, the Transitivity Restriction does not hold. Fifth, in relative clauses with an adjective, the genitive subject appears with a possessive pronoun on the adjective, not the relative head. Sixth, and finally, the genitive subject is not allowed in embedded clauses.

1. Introduction

Harada (1971) originally discussed a nominative/genitive case marker alternation phenomenon in Japanese, called the *ga/no* conversion. Since his seminal work, the phenomenon has been discussed by many linguists, such as Miyagawa (1993, 2011, 2012, 2013), Watanabe (1996), Hiraiwa (2001), Ochi (2001), Harada (2002) and Kobayashi (2013), among many others. Maki et al. (2015, 2016) investigate the distribution of genitive subject in Mongolian, an Altaic language, and reports that the distribution of the genitive subject in Japanese and Mongolian is more or less identical, although Mongolian allows the genitive subject in slightly broader contexts. In this paper, we investigate the distribution of the genitive subject in Kazakh, a language that belongs to the Kipchak branch of the Turkic languages, and is the official language of the Republic of Kazakhstan and a minority language in the Ili Kazak Autonomous Prefecture in Xinjiang, China and in the Bayan-Ölgii Province of Mongolia. Through this survey, we found the following facts about Kazakh. First, the genitive subject is allowed. Second, the genitive subject always co-occurs with a possessive pronoun. Third, in sentences with no overt relative head, headed by *deyin* 'until,' for example, the genitive subject co-occurs with the possessive pronoun on the predicate in the *deyin* 'until' clause. Fourth, the Transitivity Restriction does not hold. Fifth, in relative clauses with an adjective, the genitive subject appears with the possessive pronoun on the adjective, not the relative head. Sixth and finally, the genitive subject is not allowed in embedded clauses.

The organization of this paper is as follows. Section 2 reviews the mechanism of genitive subject licensing in Japanese and Mongolian as background to subsequent sections. Section 3 presents Kazakh data. Section 4 discusses what the data from Kazakh might suggest for the theory of (Kazakh) grammar. Finally, Section 5 concludes this paper.

2. Background

This section reviews the mechanism of genitive subject licensing in Japanese in 2.1, and the one in Mongolian in 2.2 as background to subsequent sections.

2.1 Japanese

Harada (1971) discussed a nominative/genitive case marker alternation phenomenon in Japanese, called the *ga*/*no* conversion, as illustrated in (1).

(1)   [Doyoobi-ni tamago-ga/-no yasui] mise-wa   kono mise desu.   'The store where eggs are cheap
         Saturday-on egg-Nom/-Gen cheap store-Top   this   store be   on Saturdays is this store.'

Since his seminal work, the phenomenon has been investigated by many linguists, such as Miyagawa (1993, 2011, 2012, 2013), Watanabe (1996), Hiraiwa (2001), Ochi (2001, 2009), Harada (2002), and Kobayashi (2013), among others.

Three major approaches have been proposed in terms of what licenses genitive subjects in Japanese: (i) the D-Licensing Approach by Miyagawa (1993, 2011), Ochi (2001), Harada (2002) and Maki and Uchibori (2008), among others, (ii) the Adnominal Form-Licensing Approach by Watanabe (1996) and Hiraiwa (2001), among others, and (iii) the *v*-Licensing Approach by Miyagawa (2012, 2013).

Miyagawa (1993, 2011) proposes that D licenses genitive subjects in relative clauses such as (1). In (1), the genitive subject is preceded by an adverb phrase, which guarantees that it is within the relative clause in overt syntax.

Hiraiwa (2001) proposes the Adnominal Form-Licensing Approach to genitive subject licensing, essentially following another important previous study by Watanabe (1996). Hiraiwa argues that genitive subject licensing in Japanese depends on the adnominal form of the predicate, not D, by showing that there is a set of clauses allowing genitive subjects that do not involve a noun, such as (2). Note that *made* 'until' in (2) does not seem to be a noun.

(2)   John-wa [kanzen-ni   ame-ga/-no   yam-u]   made ofisu-ni ita.
       John-Top   completely rain-Nom/-Gen stop-Pres until office-at was
       'John was at his office until it stopped raining completely.'

Based on Chomsky's (2000) theory of Agree, Hiraiwa (2001) proposes that while the inflection with the conclusive form of the verb corresponds to the V-(*v*-)T amalgamate created via Agree in syntax, the inflection with the adnominal form of the verb results from an Agree relation of V, (*v*), T and a special type of C (C_{affix} in Hiraiwa's terms). He then proposes that genitive subjects are licensed by the V-(*v*-)T-C amalgamate, not D, while nominative subjects are licensed by the V-(*v*-)T amalgamate.

Miyagawa (2012, 2013) proposes the *v*-Licensing Approach on the basis of examples such as (2). In (2), the tense of the predicate in the *made*-clause is determined by the tense of the predicate in the matrix clause, and the predicate in the *made*-clause is unaccusative. Miyagawa (2012, 2013) calls this type of genitive a genitive of dependent tense (GDT), and argues that the genitive subject *ame-no* 'rain-Gen' is licensed by *v*. Note here that the tense of the predicate in the *made*-clause cannot be past, as shown in (3).

(3) * John-wa [ame-ga/-no   yan-da]   made ofisu-ni ita.
    John-Top rain-Nom/-Gen stop-Past until office-at was 'John was at his office until it stopped raining.'
Note also that Miyagawa (2013) assumes the D-Licensing Approach for other cases.

2.2 Mongolian

Mongolian is a head-final language that allows genitive subjects. In Mongolian, genitive subjects are disallowed in simple sentences, as shown in (4), but both nominative and genitive subjects are allowed, when they appear in relative clauses, as shown in (5).

(4)   Öčügedür Ulaɣan-ø/*-u   nom-ø   qudaldun-ab-čai.
       yesterday   Ulagan-Nom/-Gen book-Acc buy-take-Past.Con 'Ulagan bought a book yesterday.'

(5)   Öčügedür Ulaɣan-ø/-u   *t* qudaldun-abu-ɣsan/*-ab-čai   nom-bol   ene nom.
       yesterday Ulagan-Nom/-Gen   buy-take-Past.Adn/-take-Past.Con book-Top this book
       'The book which Ulagan bought yesterday is this book.'

Note that in Mongolian, while a relative clause requires the predicate to be in the adnominal form, as shown in (5), a simple clause requires the predicate to be in the conclusive form, as shown in (4).

Maki et al. (2010) report that genitive subjects are also allowed in a non-local relationship with the relative head, as shown in (6) and (7).

(6)   Baɣatur-ø   [öčügedür Ulaɣan-ø t_1 qudaldun-abu-ɣsan/-ab-čai   gejü] bodu-ɣsan nom_1-bol
       Bagatur-Nom yesterday Ulagan-Nom   buy-take-Past.Adn/-take-Past.Con that think-Past.Adn book-Top
       ene nom.
       this book   'The book which Bagatur thought [that Ulagan bought *t* yesterday] is this book.'

(7)   Baɣatur-ø   [öčügedür Ulaɣan-u t_1 qudaldun-abu-ɣsan/*-ab-čai   gejü] bodu-ɣsan nom_1-bol
       Bagatur-Nom yesterday Ulagan-Gen   buy-take-Past.Adn/-take-Past.Con that think-Past.Adn book-Top
       ene nom.
       this book   'The book which Bagatur thought [that Ulagan bought *t* yesterday] is this book.'

In (6), the subject in the embedded clause is marked nominative, and the predicate can be either in the adnominal form or the conclusive form. In (7), the subject in the embedded clause is marked genitive only when the predicate is in the adnominal from. Note that genitive subjects in embedded clauses need a relative head, as shown by (7) and (8).

(8)   Baɣatur-ø   Ulaɣan-ø/*-u   nom-ø   qudaldun-abu-ɣsan/-ab-čai   gejü bodu-jai.
       Bagatur-Nom Ulagan-Nom/-Gen book-Acc buy-take-Past.Adn/-take-Past.Con that   think-Past.Con
       'Bagatur thought [that Ulagan bought a book].'

Maki et al. (2011) further investigated examples with gapless prenominal sentential modifiers, as shown in (9) and (10).

(9)   a.   Öčügedür Ulaɣan-ø/*-u   iniye-jei.
             yesterday   Ulagan-Nom/-Gen laugh-Past.Con   'Ulagan laughed yesterday.'
       b.   Batu-ø   [öčügedür Ulaɣan-ø/-u   iniye-gsen   učir]-tu soči-jai.
             Batu-Nom   yesterday Ulagan-Nom/-Gen laugh-Past.Adn fact-at   be.surprised-Past.Con
             'Batu was surprised at [the fact that Ulagan laughed yesterday].'

(10)   a.   Baɣatur-ø   [öčügedür Ulaɣan-ø/*-u   iniye-gsen   gejü] kele-jei.
             Bagatur-Nom   yesterday Ulagan-Nom/-Gen laugh-Past.Adn that   say-Past.Con
             'Bagtur said [that Ulagan laughed yesterday].'
       b.   Batu-ø   [Baɣatur-ø   [öčügedür Ulaɣan-ø/*-u   iniye-gsen   gejü] kele-gsen   učir]-tu
             Batu-Nom Bagatur-Nom   yesterday Ulagan-Nom/-Gen laugh-Past.Adn that   say-Past.Adn fact-at
             soči-jai.
             be.surprised-Past.Con   'Batu was surprised at [the fact that Bagatur said [that Ulagan laughed yesterday]].'

(9a) is a simple sentence without a nominal head. It is grammatical with a nominative subject, but ungrammatical with a genitive subject. (9b) contains an NP with a gapless prenominal sentential modifier. It is grammatical, irrespective of whether the subject is nominative or genitive. (10a) contains a complement clause. It is grammatical when the subject in the embedded clause is nominative, but ungrammatical when it is genitive. (10b) contains an NP with a gapless prenominal sentential modifier. In contrast to (9b), it is grammatical only when the subject in the embedded clause is nominative.

In order to correctly predict the distribution of genitive subjects, Maki et al. (2011) claim that a relation is established between a relative head and its gap *t* by binding (c-commanding), in such a way that the nominal feature in the nominal head percolates down to *t*, and Maki et al. (2016) further claim that only the relevant Comp in the binding path from the relative head to its gap may host the feature [+N] inherited from the relative head, and can function as a licensor for genitive subjects, based on Rizzi's (1990) idea about feature specifications on functional categories. With these claims, Maki et al. (2016) propose (13) based on two important approaches to genitive subject licensing in Japanese, namely, Miyagawa's (1993, 2011) D-licensing approach and Watanabe's (1996)/Hiraiwa's (2001) adnominal form-licensing approach.

(11)   *Conditions on Genitive Subject Licensing in Mongolian*
       a.   A genitive subject must be c-commanded by a nominal element in a local domain.
       b.   A genitive subject must be in a local relationship with the adnominal form of a predicate.

(11a) corresponds to Miyagawa's (1993, 2011) D-licensing approach, and (11b) to Watanabe's (1996)/Hiraiwa's (2001) adnominal form-licensing approach.

Maki et al. (2016) claim that both Mongolian and Japanese obey the same conditions on genitive subject licensing in (11), and the differences between the two languages arise from the environments in which the adnominal form of a predicate may appear. Thus, the conditions in (11) precisely predict the fact that the genitive subject is disallowed in a non-local relationship with the relative head in Japanese, as shown in (12) and (13), the Japanese counterparts of (6)/(7) and (10b) in Mongolian.

(12) Taroo-ga [kinoo   Hanako-ga/*-no t_1 kat-ta   to] omot-ta   hon$_1$-wa kono hon desu.
      Taro-Nom yesterday Hanako-Nom/-Gen   buy-Past.Con that think-Past.Adn book-Top this   book be
      'The book which Taro thought [that Hanako bought t yesterday] is this book.'

(13) Masao-wa [Taroo-ga [kinoo   Hanako-ga/*-no   warat-ta   to] it-ta   koto]-ni
      Masao-Top Taro-Nom yesterday Hanako-Nom/-Gen laugh-Past.Con that say-Past.Adn fact-at
      odoroi-ta.
      be.surprised-Past.Con   'Masao was surprised at [the fact that Taro said [that Hanako laughed yesterday]].'

In (12), the verb *kat-ta* 'buy-Past.Con' in the embedded clause is not in the adnominal form in Japanese, which thus cannot license the genitive subject of the clause. In (13), as it is a gapless relative clause, there is no trace/resumptive pronoun in the embedded clause. Therefore, there will be no nominal element that c-commands the genitive subject within the embedded clause. Thus, the genitive subject in the embedded clause is not licensed.

3. Kazakh Data

Having established the particular background, let us now examine Kazakh examples. Kazakh belongs to the Kipchak branch of the Turkic languages. It is closely related to Nogai, Kyrgyz, and Karakalpak. Kazakh is the official language of the Republic of Kazakhstan and a significant minority language in the Ili Kazak Autonomous Prefecture in Xinjiang, China and in the Bayan-Ölgii Province of Mongolia. The data to be examined in this thesis is from the variety of Kazakh spoken in the Ili Kazak Autonomous Prefecture in Xinjiang, China. 3.1 provides basic sentences in Kazakh, and 3.2 presents sentences with the genitive subject.

3.1 Basic Sentences

This section provides basic properties of clausal structures and the case system in Kazakh. First, the basic word order of Kazakh is SOV. Consider the example in (14).

(14) Kexe   Aydos-ø   kitap-ø   satip-aldi.
      yesterday Aydos-Nom book-Acc buy-Past.Con   'Aydos bought a book yesterday.'

Note here that -ø indicates an element with no phonetic content. Therefore, the nominative case marker and the accusative case marker in (14) have no phonetic content in Kazakh. Note also that the accusative case marker can be -*ti* in (14), as shown in (15).

(15) Kexe   Aydos-ø   kitap-ti   satip-aldi.
      yesterday Aydos-Nom book-Acc buy-Past.Con   'Aydos bought a book yesterday.'

Attachment of the accusative case marker -*ti* is optional. However, when the object is definite, -*ti* must appear, as shown in (16).

(16) Kexe   Aydos-ø   ana kitap-ti   satip-aldi.
      yesterday Aydos-Nom that book-Acc buy-Past.Con   'Aydos bought that book yesterday.'

The same can be seen in (17).

(17) Tilek-ø   Bota-ni   mahta-di.
      Tilek-Nom Bota-Acc praise-Past.Con   'Tilek praised Bota.'

In (17), the object is a definite person called *Bota*. Therefore, the accusative case marker -*ni* must appear.

Let us turn to an example that contains a ditransitive verb that takes a direct object and an indirect object, as shown in (18).

(18) Tilek-ø   Bota-ha hat-ø   joldadi.
      Tilek-Nom Bota-to letter-Acc sent   'Tilek sent a letter to Bota.'

In (18), the direct object is indefinite, and the accusative case marker is phonetically null, which is represented by -ø '-Acc.'

Let us then take a look at a sentence with an intransitive verb, as shown in (19).

(19) Kexe   Aydos-ø   kul-di.
      yesterday Aydos-Nom laugh-Past.Con   'Aydos laughed yesterday.'

Consistently, the subject of a sentence does not have an overt nominative case marker in Kazakh.

Second, Kazakh shows subject-predicate agreement. Also, Kazakh has possessor pronouns, which are attached to the predicates depending on the subjects. These properties are shown in (20).

(20) a.   Men hat(-ti)   joldap jatir-min.
           I.Nom letter(-Acc) writing-PoP.1.Sg   'I am writing a letter.'
      b.   Sen   hat(-ti)   joldap jatir-sing   ba?
           you.Nom letter(-Acc) writing-PoP.2.Sg   Q   'Are you writing a letter?'
      c.   Ol   hat(-ti)   joldap jatir.

	he.Nom letter(-Acc) writing	'He is writing a letter.'
d.	Biz hat(-ti) joldap jatir-miz.	
	we.Nom letter(-Acc) writing-PoP.1.Pl	'We are writing a letter.'
e.	Sender hat(-ti) joldap jatir-singdar ma?	
	you.Pl.Nom letter(-Acc) writing-PoP.2.Pl Q	'Are you writing a letter?'
f.	Olar hat(-ti) joldap jatir.	
	they.Nom letter(-Acc) writing	'They are writing a letter.'

Third, Kazakh has complementizers for affirmative embedded clauses, as shown below.

(21) Aydos-ø Tilek-ø Bota-ni mahtadi dep oyladi.
Aydos-Nom Tilek-Nom Bota-Acc praised that thought   'Aydos thought that Tilek praised Bota.'

(22) Aydos-ø Tilek-ø Bota-ni mahtadi dep aytti.
Aydos-Nom Tilek-Nom Bota-Acc praised that said   'Aydos said that Tilek praised Bota.'

(23) Aydos-ø kim-ø Bota-ni mahtahan-in biledi.
Aydos-Nom who-Nom Bota-Acc praised-Acc remembered   'Aydos remembered who praised Bota.'

(24) Aydos-ø Tilek-ø kim-di mahtahan-in biledi.
Aydos-Nom Tilek-Nom who-Acc praised-Acc remembered   'Aydos remembered who Tilek praised.'

(25) Aydos-ø Tilek-ø Bota-ni mahtadi ma joh-in biledi.
Aydos-Nom Tilek-Nom Bota-Acc praised Q not-Acc remembered
'Aydos remembered whether Tilek praised Bota.'

In (21) and (22), which contain affirmative embedded clauses, the complementizer is *dep* 'that.' In (23) and (24), which contains an indirect wh-question, there is no overt complementizer. Furthermore, (24) shows that there is no overt wh-movement in Kazakh. In (25), which contains an indirect yes/no question, there is an overt complementizer *ma joh* 'whether,' whose direct translation is the question marker *ma* followed by the negation marker *joh*.

Fourth, there is a conclusive/adnominal form distinction in Kazakh, as shown by the contrast between (16) and (26).

(16) Kexe Aydos-ø ana kitap-ti satip-aldi.
yesterday Aydos-Nom that book-Acc buy-Past.Con   'Aydos bought that book yesterday.'

(26) Kexe Aydos-ø satip-<u>alhan</u> kitap osi kitap.
yesterday Aydos-Nom buy-Past.Adn book this book   'The book which Aydos bought yesterday is this book.'

In (16), which is a simple sentence, the predicate ends with the conclusive form *satip-aldi* 'buy-Past.Con.' In (26), the predicate is in the relative clause, and ends with the adnominal form *satip-alhan* 'buy-Past.Adn.' The conclusive/adnominal form distinction is seen in other predicates as well, as shown below.

(19) Kexe Aydos-ø kul-di.
yesterday Aydos-Nom laugh-Past.Con   'Aydos laughed yesterday.'

(27) kul-gen adam
laugh-Past.Adn man   'the person who laughed'

(17) Tilek-ø Bota-ni mahta-di.
Tilek-Nom Bota-Acc praise-Past.Con   'Tilek praised Bota.'

(28) Bota-ni mahta-han adam
Bota-Acc praise-Past.Adn man   'the person who praised Bota'

3.2 Sentences with the Genitive Subject

Let us now examine sentences with genitive subjects in Kazakh. Just like Japanese and Mongolian, Kazakh also allows the nominative/genitive alternation. First, in relative clauses, the subject can be marked genitive, as shown below.

(29) Kexe Aydos-ø satip-alhan kitap osi kitap.
yesterday Aydos-Nom buy-Past.Adn book this book   'The book which Aydos bought yesterday is this book.'

(30) Kexe Aydos-ting satip-alhan kitab-i osi kitap.
yesterday Aydos-Gen buy-Past.Adn book-PoP.3.Sg this book
'The book which Aydos bought yesterday is this book.'

Note here that the relative head *kitap* 'book' is followed by the 3rd person possessive pronoun *i*, which refers to the subject of the sentence, namely, *Aydos* 'Aydos.' Note also that the genitive marker *-ting* (or *-ning*) is also attached to the possessor of the nominal, and depending on the possessor, the possessive pronoun changes, as shown below.

(31) a. men-ning kitab-im
I-Gen book-PoP.1.Sg 'my book'
b. sen-ning kitab-eng.
you-Gen book-PoP.2.Sg 'your book'

Note further that the possessive pronoun appears on the relative head, whenever the subject is genitive, and irrespective of whether the subject really possesses the content of the head noun to which the possessor pronoun is attached, as shown below.

(32) Kexe Aydos-ø satip-al-ma-han kitap osi kitap.
yesterday Aydos-Nom buy-not-Past.Adn book this book
'The book which Aydos did not buy yesterday is this book.'

(33) Kexe   Aydos-ting satip-al-ma-han   kitab-i   osi kitap.
yesterday Aydos-Gen buy-not-Past.Adn   book-PoP.3.Sg this book
'The book which Aydos did not buy yesterday is this book.'

Second, in gapless prenominal sentential modifiers, the subject can be marked genitive, as shown below.

(34) Tilek-ø   kul-gen   is   bir masele.
Tilek-Nom laugh-Past.Adn fact problem   'The fact that Tilek laughed is a problem.'

(35) Tilek-ting kul-gen   is-i   bir masele.
Tilek-Gen laugh-Past.Adn is-PoP.3.Sg   problem   'The fact that Tilek laughed is a problem.'

Note that the possessive pronoun -i must be attached to the noun, as shown in (36).

(36) * Tilek-ting kul-gen   is   bir masele.
Tilek-Gen laugh-Past.Adn fact problem   'The fact that Tilek laughed is a problem.'

Third, the subject can be marked genitive in clauses which are not directly followed by a nominal element, as shown below.

(37) Aydos-ø   jangber-ø tohta-han-ha   deyin isbolmesin-de turdi.
Aydos-Nom rain-Nom stop-Past.Adn-Alt   until office-in   was
'Aydos was at his office until it stopped raining.'

(38) Aydos-ø   jangber-ding tohta-u-i-na   deyin isbolmesin-de turdi.
Aydos-Nom rain-Gen   stop-Pres.Adn-PoP.3.Sg-Alt until office-in   was
'Aydos was at his office until it stopped raining.'

Note that the possessive pronoun -i must be attached to the predicate, as shown in (39).

(39) * Aydos-ø   jangber-ding tohta-han-ha   deyin isbolmesin-de turdi.
Aydos-Nom rain-Gen   stop-Past.Adn-Alt until office-in   was
'Aydos was at his office until it stopped raining.'

This situation is exactly like Japanese, as originally pointed out by Hiraiwa (2000), as shown below.

(40) John-wa [ame-ga   yam-u   made] ofisu-ni i-ta.
John-Top rain-Nom stop-Pres until office-at be-Past   'John was at his office until it stopped raining.'

(41) John-wa [ame-no   yam-u   made] ofisu-ni i-ta.
John-Top rain-Gen   stop-Pres until office-at be-Past   'John was at his office until it stopped raining.'

Fourth, the genitive subject of a ditransitive verb within the relative clause is allowed in Kazakh, as shown below.

(42) Kexe   Aydos-ø   kitap-ti   berip tur-han   adam Tilek.
yesterday Aydos-Nom book-Acc lent-Past.Adn   man Tilek
'The man to whom Aydos lent a book yesterday is Tilek.'

(43) Kexe   Aydos-ting kitap-ti   berip tur-han adam-i   Tilek.
yesterday Aydos-Gen book-Acc lent-Past.Adn man-PoP.3.Sg Tilek
'The man to whom Aydos lent a book is Tilek.'

Note here that the nominative/genitive alternation is not possible in structure (43) in Japanese. It is well known that Japanese has a phenomenon that the genitive subject cannot co-occur with an accusative '-o' marked object. The restriction prohibiting it is called the 'transitivity restriction (hereafter, TR).' (TR is discussed by Harada 1971, Miyagawa 1993, Watanabe 1996, Hiraiwa 2001, and Ochi 2009, among others). The TR is shown below.

(44) [John-ga   hon-o   kashita] hito
John-Nom book-Acc lent   person   'the person to whom John lent a/the book'

(45) * [John-no   hon-o   kashita] hito
John-Gen book-Acc lent   person   'the person to whom John lent a/the book' (Watanabe 1996: 389, ex. 37a)

Fifth, the genitive subject can appear with an adjective when the adjective is followed by a possessor pronoun, as shown below.

(46) Senbi   de jumirtha-ning arzan-i   bar duken,   mina duken.
Satueday on egg-Gen   cheap-PoP.3.Sg be shop   this   shop
'The store where eggs are cheap on Saturdays is this store.'

(47) * Senbi   de jumirtha-ning arzan duken-i,   mina duken.
Saturday on egg-Gen   cheap shop-PoP.3.Sg this   shop
'The store where eggs are cheap on Saturdays is this store.'

Note that the possessive pronoun may attach to the subject itself, as shown below.

(48) Mina duken senbi   de jumirtha-ni   arzan.
this   shop Saturday on egg-PoP.3.Sg cheap   'Eggs are cheap at this store on Saturdays.'

(49) Senbi   de jumirtha-si   arzan duken, mina duken.
Saturday on egg-PoP.3.Sg cheap shop   this shop
'The store where eggs are cheap on Saturdays is this store.'

Sixth and finally, the subject in the embedded clause cannot be marked genitive, as shown below.

(50) Tilek-ø   kexe   Aydos-ø   kitap-ti   satip-aldi   dep oyla-di.
Tilek-Nom yesterday Aydos-Nom book-Acc buy-Past.Con that think-Past.Con

'Tilek thought that Aydos bought a book yesterday.'

(51) Tilek-ø   kexe   Aydos-ø   satip-aldi/*-alhan   dep   oyla-han   kitab osi kitap.
     Tilek-Nom yesterday Aydos-Nom buy-Past.Con/-Past.Adn   that think-Past.Adn book this book
     'The book which Tilek thought that Aydos bought is this book.'

(52)* Tilek-ø   kexe   Aydos-ting satip-aldi/-alhan   dep   oyla-han   kitab-i   osi kitap.
      Tilek-Nom yesterday Aydos-Gen buy-Past.Con/-Past.Adn   that think-Past.Adn book-PoP.3.Sg this book
      'The book which Tilek thought that Aydos bought is this book.'

4. Discussion

Let us now consider what the above findings might suggest for the theory of (Kazakh) syntax. First, in Kazakh, when a genitive subject appears, the predicate must be in the adnominal form, and at the same time, the possessor pronoun must appear, as shown in (30).

(30) Kexe   Aydos-ting satip-alhan   kitab-i   osi kitap.
     yesterday Aydos-Gen buy-Past.Adn   book-PoP.3.Sg this book
     'The book which Aydos bought yesterday is this book.'

Interestingly enough, the possessive pronoun appears on the relative head, irrespective of whether the subject really possesses the content of the head noun to which the possessor pronoun is attached, as shown in (33).

(33) Kexe   Aydos-ting satip-al-ma-han   kitab-i   osi kitap.
     yesterday Aydos-Gen buy-not-Past.Adn   book-PoP.3.Sg this book
     'The book which Aydos did not buy yesterday is this book.'

Note that in the Japanese and Mongolian counterparts, the possessor pronoun does not appear. Japanese does not possess an overt possessive pronoun. Mongolian possesses overt possessive pronouns, but they do not appear in the above examples. Therefore, Kazakh differs from Japanese and Mongolian in its usage of possessive pronouns, and this characterizes the Kazakh language.

Second, in a clause which is not directly followed by a nominal element, the genitive subject is allowed in Kazakh, when the predicate contains a possessive pronoun, as shown in (38).

(38) Aydos-ø   jangber-ding tohta-u-i-na   deyin isbolmesin-de turdi.
     Aydos-Nom rain-Gen   stop-Pres.Adn-PoP.3.Sg-Alt until office-in   was
     'Aydos was at his office until it stopped raining.'

In (38), the adjunct clause is not headed by a nominal element, yet it is grammatical with the genitive subject. This situation is exactly like Japanese, as originally pointed out by Hiraiwa (2000), and the same is true to Mongolian. However, there is a clear difference between Kazakh on one hand, and Japanese and Mongolian on the other. In (38), the genitive subject is allowed, and in this case, the predicate is followed by the possessive pronoun. This is consistent with all the other cases in Kazakh. This indicates that a genitive subject always co-occurs with a possessive pronoun in Kazakh, and this property distinguishes Kazakh from Japanese and Mongolian.

Third, in Kazakh, the Transitivity Restriction, which prohibits co-occurrence of an accusative DP with a genitive DP (Harada (1971), Miyagawa (1993, 2011), Ochi (2009) and Watanabe (1996), among others), does not hold, as shown in (43).

(43) Kexe   Aydos-ting kitap-ti   berip tur-han adam-i   Tilek.
     yesterday Aydos-Gen book-Acc lent-Past.Adn man-PoP.3.Sg Tilek
     'The man to whom Aydos lent a book is Tilek.'

Interestingly enough, the Transitivity Restriction does not hold in Mongolian, either, while it holds in Japanese. These facts indicate that in terms of the Transitivity Restriction, Kazakh goes with Mongolian, not Japanese.

Fourth, the genitive subject may also appear with an adjectival predicate. Note, however, that the sentence with an adjectival predicate is grammatical, when the possessive pronoun is attached to the adjective, as shown in (46).

(46) Senbi   de jumirtha-ning arzan-i   bar duken, mina duken.
     Satueday on egg-Gen   cheap-PoP.3.Sg be shop   this shop
     'The store where eggs are cheap on Saturdays is this store.'

Fifth, and finally, Kazakh does not allow a deep genitive subject, as shown in (52).

(52)* Tilek-ø   kexe   Aydos-ting satip-aldi/-alhan   dep   oyla-han   kitab-i   osi kitap.
      Tilek-Nom yesterday Aydos-Gen buy-Past.Con/-Past.Adn   that think-Past.Adn book-PoP.3.Sg this book
      'The book which Tilek thought that Aydos bought is this book.'

This indicates that Kazakh goes with Japanese, not Mongolian in terms of the grammaticality of a genitive subject in the embedded clause. Why is this so? This is due to the fact that while in Mongolian, a predicate that comes just in front of the Comp may take either the conclusive form or the adnominal form, the one in Japanese and Kazakh cannot.

5. Conclusion

In this paper, we closely investigated the environments in which the genitive subject appears in Kazakh. Through this survey, we found six facts in Kazakh shown in (53).

(53) a.   The genitive subject is allowed.
     b.   The genitive subject always co-occurs with a possessive pronoun.

<ol type="c" start="3">
In sentences with no overt relative head, headed by *deyin* 'until,' for example, the genitive subject co-occurs with the possessive pronoun on the predicate in the *deyin* 'until' clause.
The Transitivity Restriction does not hold.
In relative clauses with an adjective, the genitive subject appears with a possessive pronoun on the adjective, not the relative head.
The genitive subject is not allowed in embedded clauses.

Then, we compared these facts to those in Japanese and Mongolian. The results are shown in (54).

(54)　Comparison among Japanese, Mongolian and Kazakh

	genitive subject	genitive subject + possessive pronoun	no overt head + possessive pronoun	no Transitivity Restriction	adjectival predicate + possessive pronoun	deep genitive subject
Japanese	✓					
Mongolian	✓	(✓)		✓		✓
Kazakh	✓	✓	✓	✓	✓	

(54) indicates the following. First, the three languages allow the genitive subject. Second, in Kazakh, the genitive subject always co-occurs with a possessive pronoun, in Mongolian, it appears with a possessive pronoun, depending on the interpretation, and Japanese does not possess overt possessive pronouns. Third, in sentences with no overt relative head, headed by *deyin* 'until,' for example, the genitive subject may appear in the three languages, but only in Kazakh, it co-occurs with the possessive pronoun on the predicate in the *deyin* 'until' clause. Fourth, the Transitivity Restriction does not hold in Kazakh or Mongolian. Fifth, in relative clauses with an adjective, the genitive subject appears with the possessive pronoun on the adjective, not the relative head, only in Kazakh. Sixth, and finally, the genitive subject is allowed in embedded clauses only in Mongolian. These facts suggest that Kazakh is placed between Mongolian and Japanese. This is because Kazakh is similar to Mongolian in the sense that they do not show the Transitivity Restriction, and they both have possessive pronouns, and Kazakh is like Japanese in the sense that they cannot have the genitive subject in embedded clauses. The fact that Kazakh and Japanese cannot have the genitive subject in embedded clauses is also important, because the Conditions on Genitive Subject Licensing proposed by Maki et al. (2016) turned out to apply to the three languages examined in this paper. The conditions were more general than have been considered. What is special about Kazakh is the usage of possessive pronouns, which always co-occur with the genitive subject, and appear on adjectives, which is not the case in Mongolian.

References

Chomsky, Noam (2000) "Minimalist Inquiries: The Framework," *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels and Juan Uriagereka, 89–155, MIT Press, Cambridge, MA.

Hiraiwa, Ken (2001) "On Nominative-Genitive Conversion," *MIT Working Papers in*

Maki, Hideki, Lina Bao, Wurigumula Bao and Megumi Hasebe (2016) "Scrambling and Genitive Subjects in Mongolian," *English Linguistics* 33, 1–35.

Maki, Hideki, Lina Bao and Megumi Hasebe (2015) *Essays on Mongolian Syntax*, Kaitakusha, Tokyo.

Maki, Hideki, Lina Bao, Wurigumula Bao, Qing-Yu Wu, Asako Uchibori, Fumikazu Niinuma, Megumi Hasebe and Juri Yoshimura (2011) "Deep Genitive in Modern Inner Mongolian," *Proceedings of GLOW in ASIA VIII 2010 Universals and Variation*, ed. by Ming-Le Gao, 282–288, Beijing Language and Culture University Press, Beijing.

Maki, Hideki, Lina Bao, Qing-Yu Wu, Wurigumula Bao, Asako Uchibori, Fumikazu Niinuma and Kenichi Goto (2010) "The Nominative/Genitive Alternation in Modern Mongolian," *MIT Working Papers in Linguistics 61: Proceedings of the 6th Workshop on Altaic Formal Linguistics (WAFL6)*, ed. by Hiroki Maezawa and Azusa Yokogoshi, 229–245, Cambridge, MA.

Maki, Hideki and Asako Uchibori (2008) "Ga/No Conversion," *Handbook of Japanese Linguistics* ed. by Shigeru Miyagawa and Mamoru Saito, 192–216, Oxford University Press, Oxford.

Miyagawa, Shigeru (1993) "Case-Checking and Minimal Link Condition," *MIT Working Papers in Linguistics 19: Papers on Case and Agreement II*, ed. by Colin Phillips, 213–254, Cambridge, MA.

Miyagawa, Shigeru (2011) "Genitive Subjects in Altaic and Specification of Phase," *Lingua* 121, 1265–1282.

Miyagawa, Shigeru (2012) *Case, Argument Structure, and Word Order*, Routledge, New York.

Miyagawa, Shigeru (2013) "Strong Uniformity and *Ga/No* Conversion," *English Linguistics* 30, 1–24.

Ochi, Masao (2001) "Move F and *Ga/No* Conversion in Japanese," *Journal of East Asian Linguistics* 10, 247–286.

Ochi, Masao (2009) "Overt Object Shift in Japanese," *Syntax* 12, 324–362.

Watanabe, Akira (1996) "Nominative-Genitive Conversion and Agreement in Japanese: A Cross-linguistic Perspective," *Journal of East Asian Linguistics* 5, 373–410.