Genitive Subjects in Altaic[*]

Shigeru Miyagawa
Massachusetts Institute of Technology

We will compare genitive subjects in three Altaic languages, Dagur, Japanese, and Turkish. We will see that in Dagur and Turkish, which have φ-feature agreement, the φ-feature probe merges on a phase head — D in Dagur and C in Turkish. Following Hale (2002), I analyze the Dagur RC as AspP, while it is a full CP in Turkish (Kornfilt 2003). We will explore the possibility that the genitive-subject RC in Japanese is identical to Dagur in having the "reduced" AspP. As we will see, the inflection on the verb appears to mark aspect, not tense. We will see differences between "normal RC" and "gapless RC" constructions with regard to tense/aspect and also the well-known transitivity restriction.

1. Introduction

Some Altaic languages allow a genitive subject in certain environments — e.g., Dagur (Mongolian) (Hale 2002, Martin 1961), Japanese (Bedell 1972, Harada 1971), and Turkish (Kornfilt 1984).

Dagur
(1) [**mini**   au -sen]   mer^y -min^y sain.
      [**1sGen**   buy-PERF]   horse-1sGen   good
      'The horse I bought is good.'   (Hale 2002: 109)

Japanese
(2)   [**watasi-no**   katta]   uma-wa   ii.
       [**I-Gen**   bought]   horse-Top   good
       'The horse I bought is good.'

Turkish
(3)   [**ben-im** al-dığ   -ım] at   iyi-dir
       [I-Gen   buy-Factive Nominalizer-1.SG horse   good-is
       'The horse I bought is good.'   (Jaklin Kornfilt, p.c.)

In this paper, I will look at some of the similarities and differences among the genitive subject constructions in these languages. We will see that Dagur and

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Turkish differ in their clausal structure for the genitive subject. Where Dagur has the "reduced" Aspectual Phrase (AspP), Turkish has a full CP. I will explore the possibility that Japanese is like Dagur in having an AspP. An interesting consequence of this "AspP" analysis is that the verbal inflection should represent aspect, not tense, something that I will attempt to show. We will also see that there are differences between RC and the "gapless RC" in tense/aspect interpretation and also in the appearance of the transitivity restriction. I will define what I mean by "gapless RC" later in the paper.

2. Two Commonalities Among the Three Languages

Two common traits hold for genitive subjects across all three languages. First, in all three languages a genitive subject appears only in a subordinate environment. A genitive subject never shows up in the matrix clause, as shown by the following example from Japanese.

(4) Taroo-ga/*-no   waratta.   (Japanese)
     Taro-Nom/*-Gen   laughed
     'Taro laughed.'

        Second, the genitive subject construction uses the same mechanism as the normal noun phrase. In Dagur, the same nominal agreement that appears in noun phrases links the genitive subject to the nominal head. In Turkish, the nominal agreement that agrees with the genitive subject is the same agreement found in noun phrases. I am assuming that this nominal agreement in the genitive subject construction in Turkish is merged at C and inherited by T where it is pronounced (see Kornfilt 2003 and references therein for relevant discussion). I will explain this more in detail later. In both languages, the nominal agreement found in these constructions differs from the verbal agreement.

Dagur
(5) [[**mini**   au-sen]   mer^y-**min^y**]   sain.
     [[**1sGen**   buy-PERF]   horse-**1sGen**]   good
     'The horse I bought is good.'

(6) [**mini**   mer^y-**min^y**]   sain.
     [**1sGen**   horse-**1sGen**]   good
     'My horse is good.'   (Hale 2002, Martin 1961)

Turkish
(7) [**Mary-nin**   parti-ye   gel -me   -**sin**] -i
     [**Mary-Gen**   party-Dat   come-Nominalizer-**3.SG**]-Acc
     iste-mi -yor   -um.
     want-Neg-Pres.Prog.-1.SG
     'I don't want for Mary to come to the party.'

(8) [**Mary-nin** elbise -**sin**] -i   gör-dü-m
     [**Mary-Gen** dress-**3.SG**]-Acc   see-PAST-1.SG.
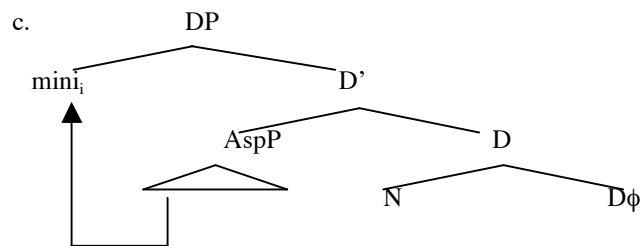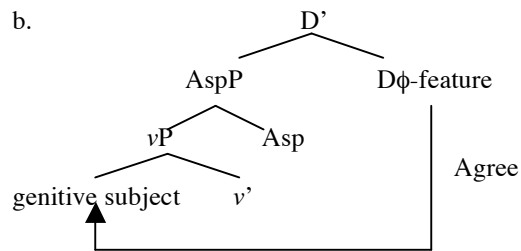   'I saw Mary's dress'   (Kornfilt 1984)

In Japanese, case marking on the genitive subject is the same genitive *no* found in noun phrases (Bedell 1972, Saito 1985).

(9) [**watasi-no**   katta]   uma-wa   ii.
     [**I-Gen**   bought]   horse-Top   good
     'The horse I bought is good.'

(10) [**watasi-no**   uma]-wa   ii.
      [**I-Gen**   horse]-Top   good
      'My horse is good.'

3. Dagur and Turkish: D-licensing vs. C-licensing

In Turkish and Dagur, we see the idea of φ-feature agreement at the phase level (Chomsky 2005a/b; see also Boeckx 2003, Carstens 2003, Kornfilt 2003, Miyagawa 2005). The two phase heads most commonly noted are C and *v*; I will also assume D to be a phase head (see, for example, Chomsky 2001 for relevant discussion). For Turkish, I will assume the analysis in Kornfilt (2003), in which the nominal agreement begins at C; it is pronounced at T due, I presume, to inheritance. On this account, in Turkish, C must occur because φ-feature agreement occurs. For Dagur, I will follow Hale (2002), who, based on Krause (2001), postulates that the Dagur RC is Asp(ectual)P, thus a reduced structure. The reason for positing Aspect instead of a full CP is that the verb does not have any agreement and it only carries aspectual marking (perfect, imperfect). The reduced nature of the RC in Dagur allows the φ-feature on D to enter into Agree with the subject in the RC. Hale further assumes that the genitive subject undergoes movement to Spec,DP. To keep the picture consistent with φ-feature at C/T in Turkish, I assume that the φ-feature at D in Dagur is inherited by N. I will, however, use Hale's representation in which the φ-feature at D enters into agreement with the genitive subject.

(11) Dagur RC (based on Hale 2002; some details changed)

     a. [[**mini**   au -sen]   mer^y -**min^y**]   sain.
         [[**1sGen** buy-PERF] horse -**1sGen**]   good
         'The horse I bought is good.'

b.

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                    D'
          AspP            Dφ-feature
      vP      Asp
genitive subject    v'              Agree
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c.

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                DP
      miniᵢ              D'
              AspP            D
                          N       Dφ
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As already mentioned, in Turkish the phase head that initially hosts the φ-feature probe is C, and this probe is inherited by T. In Dagur, the φ-feature probe merges at D, and presumably it is inherited by N. Hence, what we find in Dagur is D-licensing as opposed to C-licensing in Turkish.[1]

4. Three Differences Between Japanese and Turkish

I will now turn to a comparison of the genitive subject constructions in Japanese with Dagur and Turkish. I will explore the possibility that Japanese has the same AspP structure as Dagur when the subject is genitive. This will allow us to look closely at the inflection. As it turns out, there is evidence that in Japanese the genitive-subject RC is not associated with tense, but instead, what we find is aspect. But when the subject is nominative, the RC is a full CP, like in Turkish. An RC composed of a full CP is an adjunct, hence it does not allow D-licensing from the outside, so that the case marking on the subject when there is full CP is limited to the nominative assigned by T within the RC. I begin my discussion by looking at three differences between Japanese and Turkish — optionality in case marking, D vs. C licensing, and the presence/absence of transitivity restriction.

4.1 Optionality in Case Marking in RC

As we have seen, in the Japanese RC, the genitive subject is possible, but the nominative case may occur instead. But in Turkish only the genitive is allowed.

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[1]Hale also mentions in passing that there apparently is case alternation in the Dagur RC between the genitive and accusative case markers when the subject is pronominal (Hale 2002:112). He does not pursue this issue.

(12)   Relative clause
    a.   Japanese
       [Hanako-*no/-ga*   tukutta]   tabemono
       Hanako-*Gen/-Nom*   cooked   food
       'the food that Hanako cooked

    b.   Turkish
       [Ali-*nin/*-ϕ*   pişir –diğ –i   ]   yemek
       Ali-*Gen/-Nom*   cook-FN-3.SG   food
       'the food Ali cooked'

In Japanese, whatever operation is responsible for marking the subject as genitive appears to be optional, so that the nominative case marking can always appear instead. But in the Turkish RC, there is no such optionality and only the genitive case marking is possible.

4.2 Optionality in Case Marking in Complement Clauses

The case marking pattern within a complement clause is reverse of the pattern we observed above for RCs with regard to optionality. In Japanese a complement clause only allows a nominative subject, but in Turkish, either the genitive or the nominative is possible.

(13) Japanese
   [$_{CP}$ anata-ga/*-*no*   uti-de   tabemono-o tukuru   to]   kiita.
      you-Nom/-*Gen   home-at food-Acc   cook   C   heard
   '(I) heard that you will cook food at home.'

(14)   Turkish
    a. [Sen-*in*   ev -de   yemek pişir-eceğ –in]-i   duy-du-m
      you-*Gen* home -Loc food cook-FUT-2.SG-Acc   hear-PST-1.SG
      '(I) heard that you will cook food at home.'

    b. [Sen   ev -de yemek pişir-ecek   -sin]   (diye)
      you (Nom.) home-Loc food cook-FUT(finite)-2.SG(verbal Agr) (saying)
      duy-du-m
      hear-PST-1.SG

I will assume the standard analysis in the literature for Japanese, which requires a nominal head to license the genitive (Bedell 1972, Miyagawa 1993, Saito 1985). This is the same D-licensing we find in Dagur. Later I will discuss an interesting alternative — the C-licensing hypothesis proposal by Watanabe (1996) and Hiraiwa (2001). I will show that the crucial evidence against D-licensing that they give has other explanations that are consistent with D-licensing. For Turkish, the agreement begins at C whether the subject is genitive or nominative; if the verb is nominalized, the nominal agreement occurs while a verbal form requires a verbal agreement (Kornfilt 1984, 2003). Thus, C-licensing makes the genitive subject possible in Turkish.

4.3 Transitivity Restriction

Japanese evidences a transitivity restriction whereby the occurrence of the genitive subject blocks the accusative object in the same clause from occurring (Harada 1971). No such restriction is found in Turkish.

(15)a. Japanese
    [Taroo-*ga*/-*no Hanako-o   susumeta]   kaisya
     Taro-*Nom*/-*Gen* Hanako-Acc recommended   company
    'the company to which Taro recommended Hanako'

   b. Turkish
    [Ali-nin Oya-yı   tavsiye   et - tiğ - i   ] şirket
     Ali-Gen Oya-Acc recommendation do-Rel.Participle-3.SG   company
    'the company to which Ali recommended Oya'

Below, I will explore the possibility that these differences can be accounted for by adopting a "Dagur" analysis for Japanese.

5. *Ga*/*No* Conversion in Japanese

In the remainder of the paper I will deal with the genitive subject in Japanese. The phenomenon of the genitive subject is commonly referred to as *Ga* 'Nom'/*No* 'Gen' Conversion (Harada 1971) because either of these case markings is possible. Bedell (1972) argued that the genitive on the subject is simply the general genitive case marking in Japanese. Genitive *no* occurs on all XPs in the projection of D (or N).

(16) [$_{DP}$ Hanako-*no*   gakkai-de-*no*   Taroo-*no*   hihan]
     Hanako-*Gen* conference-at-*Gen* Taro-*Gen*   criticism
    'Hanako's criticism of Taro at the conference'

There are two major analyses for the genitive case marking on the subject, the D-licensing and the C-licensing hypotheses.

(17)   Two analyses of the genitive subject:

   (i) The D-licensing Hypothesis
      The genitive on the subject is licensed by the D associated with the nominal head (Miyagawa 1993, Ochi 2001; based on Bedell 1972, Saito 1985);

   (ii) The C-licensing Hypothesis
      The genitive is licensed by the "subjunctive" morphology of the V-C complex (Hiraiwa 2001), or the wh-agreement on C (Watanabe 1996), within the clause that contains the genitive subject.

The C-licensing hypothesis, if correct, would mean that the genitive case marking in Japanese parallels Turkish in being licensed by C.

5.1 C-licensing Hypothesis

Watanabe (1996) and Hiraiwa (2001) argue that the genitive subject can occur even if there is no nominal head.

(18) a. Comparative
   Taroo-wa [Hanako-*ga*/-*no* yonda yori]
   Taro-TOP [Hanako-*Nom*/-*Gen* read than]
   takusan-no hon-o yonda.
   many-Gen book-Acc read   (Watanabe 1996)
   'Taro read more books than Hanako did.'

  b. Adverbial
   Taroo-wa [ame-*ga*/-*no* yamu made] office-ni ita.
   Taro-Top [rain-*Nom*/-*Gen* stop until] office-at was
   'Taro was at his office until the rain stopped.'

This is the crucial evidence against D-licensing, leading Watanabe and Hiraiwa to adopt the C-licensing approach.

5.2 A Challenge to the C-licensing Hypothesis

Hiraiwa provides a number of interesting examples such as those we saw above, but his examples, and also those of Watanabe, which ostensibly do not have a nominal head, in fact can be viewed as having a phonetically null nominal head (Maki and Uchibori, to appear). (See Lees 1965 for a similar analysis for Turkish; see Kornfilt 1984 for an alternative that I am assuming in this paper for Turkish).

(19) a. Taroo-wa [Hanako-*ga*/-*no* yonda-*teido*/-*no* yori]
   Taro-Top [Hanako-*Nom*/-*Gen* read-degree/NO than]
   takusan-no hon-o yonda.
   many-Gen book-Acc read
   'Taro read more books than Hanako did.'

  b. Taroo-wa [ame-*ga*/-*no* yamu *toki*/*zikan* made] ofisu-ni ita.
   Taro-Top [rain-*Nom*/-*Gen* stop time/time until office-at was
   'Taro was at his office until the rain stopped.'

There is, then, an explanation for the evidence given for the C-licensing hypothesis that is consistent with the D-licensing hypothesis. It is important to point out that the facts noted above do not reject the C-licensing approach outright. However, given that these facts make the problematic data consistent with the D-licensing approach, I will assume the D-licensing approach.
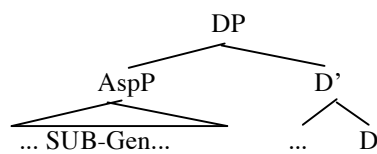   What I suggest is that, while a full CP constitutes the RC if the subject is nominative, a reduced structure — smaller than CP — makes it possible for the genitive subject to occur. I will explore the possibility that this reduced

structure is the same as Dagur, namely, AspP. (See Jaklin Kornfilt's paper in this volume for a similar idea in which a reduced structure licenses the genitive subject in some Turkic languages, although not in Turkish.)

(20)   a. full (nominative)   b. reduced (genitive)

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            DP                                    DP
         /      \                              /      \
       CP        DP                         AspP       D'
         \                               /      \      /  \
          C'                        ... SUB-Gen...  ...    D
        /    \                                    .
      TP      C
     /  \
SUB-Nom   T'
          /  \
              T
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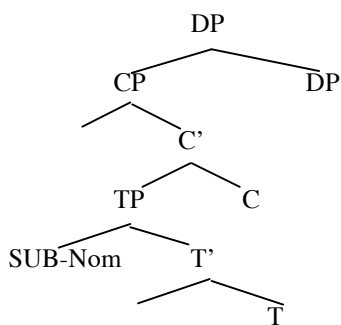
The reduced structure places the AspP within the local domain of D, making this structure akin to the ECM construction in English (Miyagawa 1993, Ochi 2001). This allows D-licensing of the genitive subject in Japanese because the clause that contains the genitive subject is not an adjunct, being that it is selected by D. Murasugi (1991) has argued that the Japanese RC is TP, and Sakai (1994:195) has pointed out that this "reduced" nature of the RC allows the genitive subject.[2] We agree with them, but to a point: RC in Japanese is a reduced structure, which I propose to be AspP instead of TP, and, more importantly, this reduced structure appears only when the subject is genitive. If the subject is nominative, I assume a full CP for the RC.

      The analysis above accounts for two of the three differences between Japanese and Turkish noted earlier. The optionality in the Japanese RC is, in fact, not that the case alternation itself is optional; the two case markers *ga* and *no* occur in different structures, CP and AspP, respectively. In the Turkish RC only the CP occurs and the verb is nominalized, so that only the nominal agreement may occur, and case marking on the subject is limited to the genitive. The second difference is that in a Japanese complement clause only the nominative subject may occur while in Turkish either the nominative or the

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[2]Sakai (1994:187) gives the following interesting contrast.

(i) Mary$_i$-no [kanozyo$_i$-ga/*-no anda]   seetaa
    Mary-Gen she-Nom/*-Gen   knitted sweater
   'Mary's sweater which she knitted'

While there is no problem with the nominative subject, when the RC subject is marked with the genitive, there is a Condition B violation. For Sakai, the ungrammaticality of the genitive subject indicates that the genitive subject has moved to the higher DP where it is in the same domain as the possessor "Mary's." However, another way to view this is that when the genitive subject occurs the RC is reduced and does not comprise a domain separate from the possessor, leading to the violation.

genitive subject can occur. The reason is that in Japanese, a genitive subject is D-licensed, and in a complement clause there is no D head, hence a genitive subject cannot occur. But in Turkish a genitive subject is C-licensed, so that it can occur in a complement clause without a nominal head. The complement clause in Turkish allows both nominalized and unnominalized forms of the verb, which accounts for the choice of genitive or nominative subject (e.g., Kornfilt 1984, 2003). Later we will turn to the third difference, the appearance of the transitivity restriction in Japanese but not in Turkish. As we will see, a similar explanation (AspP vs. CP) will also hold for this difference.

Based on this D-licensing analysis for Japanese, Bedell (1972) ("N-licensing" in the era of his analysis) argued that the genitive subject raises to Spec,DP, where the genitive case marking is licensed by D (or "N") (see also Saito 1985) (I have used "AspP" for the lower structure to be consistent with our proposal).

(21)
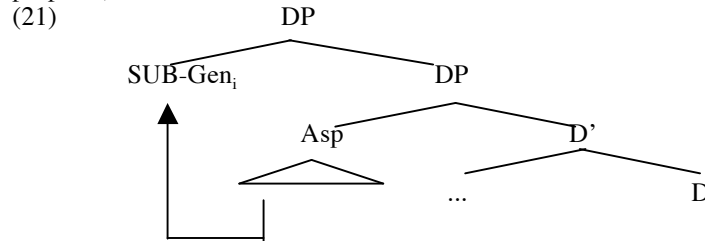
In Miyagawa (1993), I also proposed a movement analysis, but that analysis differs from Bedell's in that the movement takes place at LF. The reason why I adopted the covert movement analysis is that, as Nakai (1980) noted, it is possible for an adjunct associated with the lower clause to appear to the left of the genitive subject.

(22) [*kinoo*   Taroo-*no*   katta]   hon
         yesterday   Taro-*Gen*   bought   book
      'the book that Taro bought yesterday'

The occurrence of the adverb "yesterday," which goes with the clause that contains the genitive subject, indicates that this subject stays in its clause in the overt form and not raise overtly to Spec,DP.

Looked at from the perspective of today's minimalism, we can restate the analysis in Miyagawa (1993) as simply that the D licenses the genitive case marking on the subject solely by Agree without the need for the subject to move to Spec,DP (Ochi's (2001) proposal could also be so restated). Sakai (1994:198) had in fact already suggested this based on Miyagawa (1993). We still have D-licensing, but we can at the same time account for Nakai's fact without postulating covert movement. The fact that I assume a reduced structure (AspP) also responds to Watanabe's (1996) criticism of Miyagawa (1993) that the movement (now restated as Agree, but the issue is the same) occurs out of an adjunct clause, which should be a CED violation. As a reduced clause, AspP is part of the domain of the head D, this D presumably having selected it, hence it is not an adjunct.

5.3 Evidence For the Reduced Size of RC: "Past" –*ta*

I have assumed a reduced structure for the genitive subject construction for both Dagur and Japanese. For Dagur, Hale suggested that the reduced structure is AspP, and I have adopted this for the genitive subject RC in Japanese. In Dagur the evidence for AspP is clear: the verb has no agreement, unlike in a simple sentence, and it inflects for aspect (perfect, imperfect) as opposed to tense.

There is evidence that the "tense" marking in the genitive-subject RC in Japanese also marks aspect and not tense. This has to do with the inflection –*ta*, which is typically used for past tense. However, in RC, it can have another interpretation (e.g., Abe 1993, Kinsui 1994, Kusumoto 2001, Ogihara 2004; see Yamakido 2000 for discussion of "adjectival" use of RC in Japanese in general).

(23) [yude-ta]   tamago
      [boil-PAST]   egg
       (i) 'the egg which (I) boiled' (RC)
       (ii) 'the boiled egg' (adjectival)

Based on the work of traditional grammarians such as Teramura (1984), Abe (1993) points out that a relative clause with –*ta* may have an adjectival interpretation if the relative clause is not associated with a subject thematic role (see also Kinsui 1994 for relevant discussion; Kusumoto 2001:169 correctly notes that the relevant thematic role is "agent"). Kusumoto (2001) and Ogihara (2004) further proposes that the adjectival interpretation is due to a reduced structure. Kusumoto (2001) calls it a Participle phrase while Ogihara calls it "Modifier," both similar to our "AspP" in recognizing that the RC in these instances is somehow a reduced structure. As originally noted by Teramura (1984), an RC like the following with a nominative subject is ambiguous between a full RC and an adjectival.

(24) [kizu-ga   tui-ta]   kabe
      [scratch-Nom stick-PAST]   wall
      'the wall that was scratched' (full RC)
      'the scratched wall' (adjectival)

The fact that the "adjectival/modifier" meaning arises even with the nominative marking will have to remain a mystery in our analysis. However, what no one has noted is that if the nominative is replaced by the genitive, the strongly preferred reading is adjectival.

(25) [kizu-no   tui-ta]   kabe
      [scratch-Gen stick-PAST]   wall
      ??'the wall which was scratched' (full RC)
      'the scratched wall' (adjectival)

The fact that the reduced nature of the RC leads to an adjectival meaning suggests that the "past" -*ta* with the genitive does not function as tense. Below, we see evidence that this is in fact the case.

As noted by many who have worked on this problem, the adjectival meaning emerges only in the absence of an external argument, more precisely, an agent (Kusumoto 2001), as in (25) above. But *Ga/No* Conversion applies to transitive sentences as well where there is an agent. Is *–ta* in the transitive construction with a genitive subject simply tense? Although the judgment is delicate, I believe that there is a difference between *–ga* and *–no* even in a transitive construction when there is a tense-like or nonperfective adverbial.

(26)   [3ji-ni/itido-dake   Taroo-ga/??-no   tatai-ta]   kabe
       [3 o'clock/only.once Taro-Nom/??-Gen   hit-PAST] wall
       'the wall that Taro hit at 3 o'clock/just once'

The presence of the agent "Taro" excludes an adjectival interpretation, yet, for many speakers (although not all), there is a difference in acceptablity between *–ga* and *–no* when we force a tense/past reading with adverbs such as "3 o'clock" and "just once." There are many questions that remain. For example, why is it that some speakers find the above example with *–no* only slightly awkward at worst, and why is it that some "tense" adverbs such as *kinoo* 'yesterday' are fine with *–no*, as in (22) above that illustrated Nakai's (1980) point against Bedell's analysis. I leave these questions for future study.

6. RC vs. "Gapless " Construction and the Transitivity Restriction

Ochi (2001) argues that the genitive subject in Japanese may not raise out of an RC, but may optionally raise out of a "gapless RC."

(27) a. RC
          [$_{DP}$ [$_{CP/TP}$ subject-*no* ...] nominal head D]

                            ↑

                    cannot be extracted

      b. Gapless
          [$_{DP}$ subject-*no*   [$_{CP/TP}$ ___ ...] reason D]

                            (optional)

What I mean by "gapless" here are RC-like constructions headed by a word such as "reason." This construction does not contain a gap, as shown by the fact that the head cannot be construed long distance (see Murasugi 1991 for relevant discussion).

(28) a. [Taroo-ga [Hanako-ga   kuru   to] omotteiru] riyuu
           Taro-Nom Hanako-Nom come   C   think   reason
           (i) the reason for Taro thinking that Hanako will come
           (ii) *the reason for Hanako's coming that Taro is thinking about

b. [Taroo-ga [Hanako-ga ec$_i$ yonda to] omotteiru] hon
   Taro-Nom Hanako-Nom read C think   book
   'the book that Taro thinks Hanako read'

As shown, in the gapless construction in (28a) with "reason," this head can only be construed with the higher clause "Taro thinks," but in (28b), which is a normal RC, there is no problem in linking the head "book" to the lower object position. I will refer to the first construction as the "gapless construction" and will continue to refer to the second as "RC."

Returning to the genitive subject, another way to view the genitive subject in these two constructions that is somewhat different from Ochi's proposal is the following.

(29)   An alternative view
  (i)   RC is a <u>reduced</u> relative, and D can license the genitive on the
        subject in this reduced structure;
  (ii) The CP in the gapless construction is an argument of D, so
        the D can license the genitive on the subject without the structure
        being reduced (although a reduced structure is possible).

For the gapless construction, a reduced structure like the RC is possible, but the interesting point is that a full CP is allowed given that D selects it. This has a consequence for the transitivity restriction in these two kinds of constructions.[3]

6.1 Transitivity Restriction

Harada (1971) noted the existence of the transitivity restriction, which prohibits an accusative object from occurring in the presence of a genitive subject. As we saw earlier, such a restriction does not hold in Turkish.

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[3] It is interesting to note that in Turkish, in which only the genitive subject is allowed in a RC, a case alternation similar to Japanese shows up in the gapless construction as shown below (Kornfilt 2003).

(i) a.   Nominative
         [John   gel-diğ-i]   zaman
         [John-Nom come-Nominalizer-3.Agr]   time
         'the time that John came'

    b.   Genitive
         [John-un   gel-diğ-i]   zaman
         [John-Gen come-Nominalizer-3.Agr]   time

   I leave this issue open. Thanks to Jaklin Kornfilt for assistance with the data.

(30) a. Japanese (Harada 1971)
     [Taroo-*ga*/-*no Hanako-o   susumeta]   kaisya
     Taro-*Nom*/-*Gen* Hanako-Acc   recommended   company
     'the company to which Taro recommended Hanako'

    b. Turkish
     [Ali-nin Oya-yı   tavsiye   et - tiğ - i   ]   şirket
     Ali-Gen Oya-Acc recommendation do-Rel.Participle-3.SG company
     'the company to which Ali recommended Oya'

What is the source of this restriction in Japanese? Let us consider the notion of "dependent case" (Marantz 1991; see Aoyagi 2004 for this notion applied to Japanese). This is a notion developed for morphological case marking, thus applicable to Japanese. Following Aoyagi, let us suppose that the accusative *o* is dependent on the occurrence of the nominative *ga* (see his work for the details on how this is implemented). This accounts for the transitivity restriction. But now, let us consider the source of this "dependent" relation. Suppose that the small *v*, which is responsible for assigning accusative case, can only do so if it is selected by T (see Miyagawa 2003 for discussion that this restriction also applies to the dative case marker *ni*   but not to the "dative" postposition *ni*). If there is nothing else to add, our account amounts simply to a formal restatement of Marantz's (and Aoyagi's) account. However, as it turns out, our account makes a prediction about the transitivity restriction in the gapless construction. To set the stage, let us look at another point observed by Harada.

     In the original analysis of *Ga/No* Conversion, Harada, who discovered the transitivity restriction, noted that this restriction does not hold if the object is relativized.

(31) [Taroo-*no*   e$_i$ katta]   hon$_i$
     Taro-*Gen*   e bought   book
     'the book that Taro bought'

Let us consider two possibilities for the empty element here with regard to Case. As the first possibility, the empty element in (31) may receive Case because it is Abstract Case; Abstract Case is not a "dependent case," something that is conceivable since the notion of dependent case was developed for morphological case marking. Another possibility that is closer to what we are assuming is that the empty element simply does not receive Case because the *v* here is selected not by T but by Asp. I will assume this. What, then, is the identity of the empty element? We can postulate an empty pro (see Murasugi 1991, Hiraiwa 2001 for relevant discussion) by following Baker (1996), who suggests that an empty pro does not require Case.

     One consequence that this analysis has is that T is not required to assign nominative Case.

(32) Taroo-ga/pro   itta.
     Taro-Nom/pro   went
     'Taro/(I/you/etc.) went.'

This is a root clause and we see that the T can license a nominative subject. The fact that it also allows the empty pro suggests that the T need not assign nominative Case if Case is unnecessary. This point becomes important when we look at the gapless construction below.

6.2 No Transitivity Restriction in the Gapless Construction

Our analysis of transitivity restriction predicts that this restriction should be suspended in the gapless construction. This is because the clause within a gapless construction is selected by D/N, even if it is a CP, hence it is an argument of the head. As a result, D can "reach in" and license the genitive on the subject even if it is a full CP. Because C can occur, it selects T, and the v in turn can assign accusative Case. Following is a comparison of RC and the gapless construction.

(33)   RC
      *[Taroo-*no*   Hanako-o   susumeta]   kaisya-o   osiete.
       Taro-Gen   Hanako-Acc recommended   company-ACC   tell.me
      'Tell me the company that Taro recommended Hanako to.'

(34)   Gapless construction
      (?) [Taroo-*no*   Hanako-o   susumeta]   riyuu-o   osiete.
       Taro-Gen   Hanako-Acc recommend   reason-Acc   tell.me
      'Tell me the reasons why Taro recommended Hanako.'

The transitivity restriction appears in the RC as expected, but in the gapless construction the restriction is suspended. The gapless construction here contains a full CP instead of the reduced AspP; the reduced structure is always an option, but not in this case in which the transitivity restriction is avoided. It is important here to recall that although there is T, having been selected by C, it need not assign nominative Case as we saw earlier. This frees the subject to have genitive case marking that is licensed by D.

      Finally, what we observed about the transitivity restriction in RC and the gapless construction is paralleled in tense/aspect interpretation.

(35) a. [itido-dake   Taroo-ga/??-no   odotta]   tango-o   sitteiru.
       only.once   Taro-Nom/??-Gen   danced   tango-Acc know
       'I know the tango that Taro danced just once.'

    b. [itido-dake   Taroo-ga/-no   odotta]   riyuu-o   sitteiru.
       only.once   Taro-Nom/-Gen   danced   reason-Acc know
       'I know the reason why Taro danced just once.'

(35a) is an RC, and because of the genitive subject, it is necessarily an AspP, so that –*ta* here is limited to an aspectual interpretation. (35b) is a gapless construction, so that the clause may be a full CP despite the occurrence of the genitive subject, and this allows T to be selected by C, which allows a "tense" interpretation for –*ta*.

7. A Note on Scope Asymmetry

There is a scope asymmetry between the gapless construction and the RC (Miyagawa 1993; see also Ochi 2001).

(36) Gapless construction

    a. [[Taroo-ka Hanako]-ga kuru] riyuu-o osiete.
       Taro-or Hanako-Nom come reason-Acc tell.me
      'Tell me the reason why either Taro or Hanako will come.'
      reason > Taro or Hanako, *Taro or Hanako > reason

    b. [[Taroo-ka Hanako]-no kuru] riyuu-o osiete.
       Taro-or Hanako-Gen come reason-Acc tell.me
      'Tell me the reason why Taro or Hanako will come.'
      reason > Taro or Hanako, Taro or Hanako > reason

In (36a), which is a gapless construction with a nominative subject, the speaker assumes that either Taro or Hanako, but not both, will come, and s/he wants to know the reason. This is the interpretation in which the head "reason" takes scope over the nominative subject. (36b) also has this interpretation, but the genitive subject makes available another interpretation in which the subject takes scope over the head noun. In this interpretation the speaker is asking for the reason why Taro will come *or* the reason why Hanako will come. In contrast, in the RC, both interpretations are possible regardless of whether the subject is nominative or genitive.

(37) [[Taroo-ka Hanako]-ga/-no e_i yonda] hon]-o misete.
     Taro-or Hanako-Nom/-Gen read book-Acc show.me
    'Show me the book(s) that Taro or Hanako read.'
    book > Taro or Hanako, Taro or Hanako > book

In the first interpretation (book > Taro or Hanako), the speaker assumes that there is/are book/books that Taro or Hanako, but not both, read, and the speaker wants to see such book(s). In the second interpretation, the speaker simply wants to see the book(s) that Taro read or the book(s) that Hanako read (the two (sets) need not be mutually exclusive).
       The analysis I have given in this paper leads to a different account for the pattern of scope possibilities than in Miyagawa (1993). It is closer to Ochi (2001). The principle at work here is that QR is local; hence one would not expect QR to take place across the CP boundary (May 1977; see Fox 2000 and references therein for counterexamples). The gapless construction allows a full CP to occur even if the subject is genitive; if the subject is nominative it must be CP. What we saw is that with the nominative subject, the subject cannot scope over the head, which is expected under the locality condition for QR. For genitive, the fact that it can scope over the head means that this option is available only in the reduced (AspP) version and not if the clause is a full CP. I assume that this optional movement is governed by Scope Economy (Fox 2000), which requires of all optional operations involving scope that they lead to a new scope relation. In Miyagawa (1993) I took this availability of the "wide" reading

of the genitive subject as evidence that the genitive subject is licensed by D at Spec,DP (at LF). We no longer need to make this assumption given that Agree without movement takes care of the D-subject relation.

In the RC, with the nominative subject, there is a full CP, and the fact that we see scope ambiguity is due to the variable that occurs below the subject, and the operator itself is coindexed with the head. The availability of scope ambiguity with the genitive subject could be for one of two reasons. One is that because this is a reduced structure, QR takes place, just as I argued for the gapless construction. The other possible reason is that the pro in the RC makes the inverse scope possible.

(38) [Taroo-ka Hanako-*no* pro$_i$ yonda] hon$_i$
     Taro-or Hanako-*Gen* pro bought book
     'the book that Taro or Hanako read'

If it turns out that an empty pro does not take part in scope calculation in this kind of an environment, then the ambiguity has to come from QR. I will leave this issue open.

8. Concluding Remarks

In this paper, I dealt with genitive subjects in three Altaic languages, Dagur, Japanese, and Turkish. I agued that Dagur and Turkish, which have φ-feature agreement, demonstrate the idea that a φ-feature probe merges on a phase head, C, *v*, or D. In Dagur the φ-feature probe that agrees with the genitive subject occurs on D, while in Turkish it occurs on C. As a result, Dagur has a reduced structure, which, following Hale (2002), I assume to be AspP. This reduced structure allows D to "reach in" and license the genitive subject. I suggested that the Japanese genitive construction is identical to Dagur in having the "reduced" AspP. This allows D-licensing of the genitive subject. I gave evidence that the verbal inflection in this construction in Japanese is not tense, but aspectual, like in Dagur. I also argued that there is a difference between RC and the gapless construction. While the genitive-subject RC has an aspectual interpretation, the gapless construction allows a full tense interpretation. Moreover, the famous transitivity restriction discovered by Harada turns out to apply only in RC. In the gapless construction, its effect is suspended, a phenomenon consistent with the fact that in the gapless construction, a full CP is allowed despite the occurrence of the genitive subject.

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Department of Linguistics and Philosophy
32-D808 MIT
77 Massachusetts Avenue
Cambridge, MA 02139
USA

miyagawa@mit.edu
http://web.mit.edu/miyagawa/www