Genitive Subjects in Altaic and Specification of Phase[*]

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Abstract

In Dagur the genitive subject is licensed by D while in Turkish it is licensed by C. For the genitive subject in Japanese, both D-licensing as in Dagur and C-licensing as in Turkish have been proposed. Drawing on the earliest work on genitive subjects in Japanese by Harada (1971), I argue against the C-licensing approach in Japanese, and I develop a D-licensing analysis that resembles Hale's (2002) D-licensing analysis of Dagur. I show that the verbal inflection when the genitive subject occurs is not simple tense, which is similar to what we find in Dagur.

Keywords: genitive, subject, agreement, aspect, relative clause, nominalization

1. Introduction

Subjects may appear with the genitive case marker in certain instances. Three Altaic languages exemplify this — Dagur (Mongolian) (Hale 2002, Martin 1961), Japanese (Bedell 1972, Harada 1971), and Turkish (Kornfilt 1984).[1]

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)

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[1]I am using "Altaic" more as a typological label than to presume an actual genetic relation among the languages named.

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 these examples, the subject of the relative clause (RC) is marked with the genitive case marker. Although genitive subjects are not limited to Altaic languages (see, for example, Hiraiwa 2001), in this article I will focus on these languages with much of the discussion centering on Japanese.

　　　I will address the question of how the genitive case marker is licensed in these and other constructions. Dagur and Turkish demonstrate that the licensing conditions are not uniform across languages.[2] Hale (2002), based on his own fieldwork and on Martin (1961), shows that the Dagur RC has the structure of an Aspectual Phrase (AspP), a structure commonly found in pre-nominal modification (Krause, 2001). AspP is smaller in structure than a CP, and this reduced nature of the structure allows the nominal head, or more precisely the D associated with the nominal head, to license the genitive case marker inside the AspP. As we can see in (1), this D enters into agreement with the subject, clearly identifying the D head as the licenser. I will call it "D-licensing" of the genitive subject. In contrast, Kornfilt (1984, 2003) shows that in Turkish, it is the nominalized form of C that licenses the genitive case marker on the subject and this C also enters into agreement with the subject. I will call it "C-licensing" of the genitive subject. The agreement in Turkish ultimately ends up on T presumably due to inheritance (e.g., Chomsky 2007, 2008). For Japanese, both D-licensing and C-licensing have been proposed —D-licensing is represented by Bedell (1972), Miyagawa (1993, 2008), Ochi (2001), and Saito (1983), for example, while C-licensing is found in Watanabe (1996) and Hiraiwa (2001). Hiraiwa in particular draws attention to the fact that Turkish and others like it C-license the genitive subject and argues that the Japanese genitive subject should be considered in parallel. Capturing cross-linguistic affinity in this way potentially enhances the strength of an analysis, and it is one reason why his proposal — and Watanabe's — has been so influential. But when we look across languages, we see that another possible affinity that the Japanese genitive subject construction may have is with Dagur, which invokes D-licensing, not C-licensing.[3] I will give arguments to show that the Japanese construction better fits the Dagur model of D-licensing. Starting with the original work on genitive subjects in Japanese by Harada (1971), which contains a number of examples that cast doubt on the Watanabe/Hiraiwa proposal for C-licensing, I will develop a D-licensing analysis based on Hale's study of Dagur. As we will see, the D-licensing approach I will present opens the door to exploring issues of aspect/tense marking, which has been largely

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[2]Another example of the diversity of licensing of genitive subjects is found in the so-called genitive of negation, in which negation apparently licenses the genitive on the subject of certain verbs in languages such as Russian (see Pesetsky 1982).
[3]See Kornfilt (2008) for other languages that fall into the category of what I call D-licensing.

ignored in the study of the genitive subject construction. In addition, our analysis has consequences for specifying the nature of "phase." As we will see, the comparative study of these three languages leads us to a particular way to describe the notion of "phase" (e.g, Chomsky 2001). I will argue that a phase is defined by Case, not uninterprtable agreement features (Chomsky 2001); particularly, the appearance of a Case-marking head identifies it as a phase head. The three natural candidates are D, v, and C, the last one, C, assuming that Case, like phi-feature, originates at C and is inherited by T (Chomsky 2001, 2007, 2008).
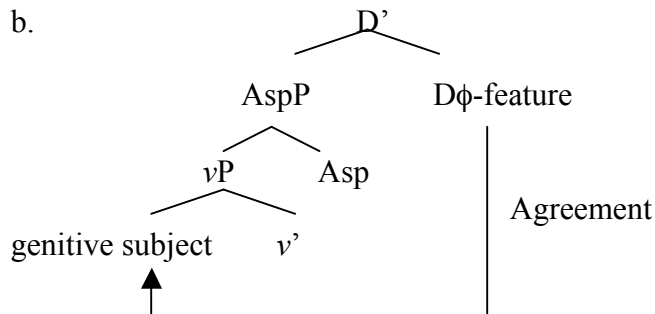
2. Dagur and Turkish: D-licensing vs. C-licensing

Why do we find the two heads, D and C, in Dagur and Turkish, respectively, emerging as the heads that license the genitive subject? Why not T, for example? What I suggest is that the presence of phi-feature agreement in these languages, as we saw in (1) and (3), is the key to understanding why D or C becomes the locus of licensing of the genitive subject in these languages (Miyagawa 2006, 2008). What we see here is the notion that phi-feature agreement occurs at the phase level (Chomsky 2005; see also Boeckx 2003, Carstens 2003, Kornfilt 2003, Miyagawa 2005). The two phase heads most commonly noted are C and v; I will assume that D is also a phase head (see Chomsky 2001 for relevant discussion; also Hiraiwa 2005 and Svenonius 2004 among others). Because D and C are phase heads, D-licensing and C-licensing are a natural set that comes out of this idea for phi-features. A phase head — C or D in this instance — is needed to host the phi-feature agreement. There is, then, a principled reason why D and C, but not, say, T, play the central role in licensing the genitive subject when there is phi-feature agreement. v is another possibility, but it typically does not license Case on subjects in RCs.

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 carry any agreement. From our perspective the absence of C predicts exactly that — that agreement would not occur on the verbal inflection because there is no C to host the agreement to begin with. Also, the verb only carries aspectual marking (perfect, imperfect). The reduced nature of the RC in Dagur allows the phi-feature on D to enter into agreement with the subject in the RC as shown in (4b) (only the relevant portion of the structure from Hale 2002 is given).

(4) 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                    ┐
           ╱    ╲                  Agreement │
   genitive subject    v'                    │
            ▲_____|
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The probe in Dagur appears on the phase head, D, and it enters into an agreement relation with the genitive subject. This is possible because of the reduced structure (AspP).[4] Hale also argues that the genitive subject undergoes movement to Spec,DP in line with the assumption in earlier studies of agreement and Case that requires spec-head agreement. I will not assume this movement and will return to the issue later.

For Turkish, I will assume the analysis in Kornfilt (2003, 2008) in which the nominal agreement begins at C; it is pronounced at T due, I presume, to inheritance. In the example below, repeated from earlier, the agreement we see is in the nominal, and not the verbal, paradigm of agreement, because C is nominalized, a common assumption made for Turkish subordinate clauses (see, for example, Kornfilt, 1984, 2003).

(5)   [**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 Turkish, then, C occurs to license the genitive case marking because phi-feature agreement occurs.

Kornfilt's argument that the agreement in Turkish is C-licensed is based on an asymmetry observed in the distribution of agreement depending on what is relativized (Kornfilt 2008 and references therein).

(6) a. subject relativization
       [[e$_i$ dün   bölüm -de   ben-i destekle -**yen**]   arkadaş -lar$_i$]
          yesterday   department-LOC I -ACC support-**(y)An**   friend -PL
       'The friends/colleagues who supported me in the department yesterday'
       (No phi-feature morphology; special nominalization form on predicate)

    b. non-subject relativization
        [[*pro* dün   bölüm -de   e$_i$ destekle-**diğ-im**]   arkadaş-lar$_i$]
           yesterday department-LOC   support-**FN-1.SG** friend -PL
       'The friends/colleagues who(m) I supported in the department yesterday'
       (Phi-feature morphology and general indicative nominalization form on predicate)

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[4]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.

In (6a), it is the subject that has undergone relativization while in (b) the target of relativization is a nonsubject (object). The important point to note is that in the subject relativization example in (a), the verb carries no agreement while there is full agreement in the nonsubject relativization. What Kornfilt suggests is that this asymmetry is parallel to the well-known *que/qui* complementizer alternation in French (Rizzi, 1990), in which *que* is selected for nonsubject extraction while *qui* must occur if the subject is extracted. There is no question that *que/qui* is at C, and, with the parallel that Kornfilt draws, the agreement in Turkish must also be related to C. See Kornfilt's (2008) article for details of the analysis.

3. Two approaches to the genitive subject in Japanese (*ga/no* Conversion)

Harada (1971) first brought our attention to the phenomenon of genitive subjects in Japanese — the fact, particularly, that in RCs and in noun-complement clauses, nominative *ga* and genitive *no* may alternate on the subject in many cases, although not in all cases. Instead of delving into the licensing condition for the genitive subject, he focused on the differences between *ga* and *no* constructions, including idiolectal differences for what later was termed the transitivity restriction (see Watanabe, 1996; also Harada, 1976), an issue we will take up in some detail below. In the literature today, we find two competing approaches to the genitive subject, D-licensing (e.g., Bedell, 1972, Miyagawa 1993, 2008, Ochi, 2001, Saito, 1983) and C-licensing (Watanabe, 1996, Hiraiwa, 2001). I will review the two approaches, and show that while C-licensing is questionable, D-licensing appears not only to be the right approach, but it opens the door to interesting research topics heretofore largely ignored in the study of genitive subjects. One important observation that emerges from our study is that in Japanese RCs, two heads play a role in licensing Case on the subject: D for genitive and C for nominative. Note that this is the same as D and C that we found in Dagur and Turkish, respectively, although in those languages we focused on genitive, and not also on nominative, case marking. Given that in Dagur and Turkish, D and C respectively function to license Case on the subject because D and C are phase heads that initially host phi-feature agreement, it is surprising that in Japanese, which does not have phi-feature agreement in the relevant sense, the same heads emerge to license the Case on the subject. If phase heads are somehow defined by the occurrence of phi-feature agreement (e.g., Chomsky 2007, 2008), this would be puzzling. I will argue that phases are, in fact, defined universally by Case and not by phi-feature agreement.

3.1. The D-licensing approach

In Japanese, the genitive case marker occurs in the context of D (or N). The D-licensing approach takes advantage of this fact.

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

In this example, two arguments and an adjunct within the noun phrase headed by the noun "criticism" must bear the genitive case marker. The D-licensing approach equates the genitive

marking on the subject with this phenomenon of genitive in noun phrases. Within the D-licensing approach, we find two views of where the genitive subject ultimately resides. Bedell (1972), reflecting the spirit of the time, argued that the genitive subject occurs in Spec,DP. But Miyagawa (1993) argues that the genitive subject undergoes covert movement to Spec,DP; "covert movement" could translate into today's framework as simply Agree without movement, which is the approach I will support. Such an approach is made explicitly in Ochi (2001). Miyagawa (1993) argues for covert movement — Agree in today's terms — based on data from Nakai (1980). An adjunct belonging to the modifier clause may precede the genitive subject as shown in (8) below and as diagrammed in (9) (the following example is modeled after Nakai's example).

(8) [*kyonen-made* danro-*no*   atta]   heya
     last.year-until fireplace-*GEN* existed   room
     'the room where there was a fire place until last year'

(9) [DP ...[TP kyonen-made danro-no ....]   heya]
            last.year-until fireplace-GEN   room

As Nakai (1980) notes, this militates against Bedell's assertion that the genitive DP occupies Spec,DP at overt syntax, because an adjunct belonging to the TP occurs to the left of the genitive subject. The PP cannot directly modify the head 'room', so the PP must reside in the TP: **kyonen-made heya* 'the room until last year'. The genitive subject therefore cannot be in Spec,DP. Rather, the best way to view it under D-licensing is that D directly licenses the genitive subject by Agree without requiring the subject to overtly move to Spec,DP.

3.2. The C-licensing approach

Drawing on his work on wh-agreement (Watanabe, 1993), Watanabe (1996) introduced a novel proposal for the analysis of *ga/no* Conversion. He argues that the genitive is a reflex of wh-agreement on a "subjunctive" C that occurs in RCs and nominal clauses (Watanabe 1996: 391). As evidence, he gives the following (p. 394):

(10) John-wa   [Mary-**no**   yonda   yori]   takusan-no hon-o   yonda.
      John-TOP [Mary-GEN   read   than   many-GEN book-ACC read
      'John read more books than Mary did.'

There is no nominal head, which presumably would exclude D-licensing for the genitive subject. Wh-movement of the comparative operator licenses the genitive under wh-agreement. *Ga-no* are free alternants under this agreement (pp. 399-400).

Hiraiwa (2001) takes over Watanabe's C-licensing analysis and demonstrates its applicability to a variety of languages. He abstracts away from Watanabe's notion of wh-agreement and specifically allocates the responsibility for the licensing of the genitive to what he calls the C-T amalgam that results from movement of T to C, and this C-T combination forms what he calls, following Watanabe, "subjunctive." Following Watanabe, Hiraiwa assumes that

this subjunctive morphology licenses both the genitive and the nominative, the two being entirely free alternants of the same Case licensed by the subjunctive (pp. 72-73, 115).[5]

3.3. Problems with Watanabe/Hiraiwa's C-licensing approach

Watanabe (1996) argues that the subjunctive C that licenses the genitive also licenses the nominative, so that the *ga/no* alternation is a completely free alternation (p. 399-400). Hiraiwa also makes this claim (Hiraiwa, 2001: 72-73, 115). However, it has been known since Harada's 1971 article that *ga* and *no* differ, the latter typically more limited in the range of acceptability than the former. For example, Harada (1971: 80) notes the following minimal pair.

(11) a. kodomotati-ga   minna-de   ikioi-yoku kake-nobotta   kaidan
         children-NOM   together   vigorously run-climb up   stairway
         'the stairway which those children ran up together vigorously'

   b. *kodomo-tati-no   minna-de   ikioi-yoku kake-nobotta   kaidan
         children-GEN   together   vigorously run-climb up   stairway

Harada's point is that if there is more than one element intervening between the subject and the verb, the genitive is not tolerated on the subject, while the nominative raises no problem. I will return to this issue of intervening elements below. We will see that it is not just any element that intervenes that causes degradation in acceptability. Certain distinctions are apparently idiolectal, being limited to what Harada calls "Speaker B," but there are many pairs that he provides where every speaker finds a difference in grammaticality, such as what we see above in (11). He also gives the following (see his work for others).

(12) a. Taroo-ga   Hanako-ni   kasita   (Ziroo-no) hon
         Taro-NOM Hakako-DAT lent   (Jiro-GEN) book
         'the book (of Jiro's) that Taro lent Hanko'

   b. *Taroo-no   Hanako-ni   kasita   (Ziroo-no) hon
         Taro-GEN Hakako-DAT lent   (Jiro-GEN) book
         'the book (of Jiro's) that Taro lent Hanko'

Later, I will show that the minimal pairs in (11) and (12) have different reasons for the contrast in grammaticality.

The Watanabe/Hiraiwa approach is based on the idea that the "subjunctive" morphology on the verb licenses the Case on the subject, and this Case may freely alternate between *ga* ("nominative") and *no* ("genitive"). It is, in fact, the most interesting aspect of their approach that they deal with *ga/no* Conversion literally as a free alternation. But the existence of minimal pairs such as those noted by Harada above that clearly distinguish between the nominative and

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[5] The term "subjunctive" is probably not the appropriate one to use here since languages that have a distinct subjunctive form typically do not allow the subjunctive in constructions such as the relative clause. In this sense, Hiraiwa's notion of "C-T amalgam" more appropriately expresses the intent of the analysis.

the genitive subjects — and there are many other examples of this sort, some of which I will take up below — deems this otherwise interesting proposal to be questionable. Harada's examples show that the choice of *ga* or *no* has consequences, and his observations hint at a structural difference, which we will take up below.[6] In Hiraiwa (2005), he does draw one distinction between nominative and genitive case markings: to license the genitive, he proposes that the verbal complex, which includes T and C in his analysis, is in what he calls the Predicate Adnominal form, and this form is nominalized. However, structurally, he draws no distinction between the two case markings, so that there is no clear way in which his proposal could account for the kinds of differences between the nominative and the genitive observed by Harada.

This still leaves the problem noted by Watanabe (1996) that there are constructions where the genitive subject is licensed despite the apparent absence of a nominal head. The example is repeated below.

(13) John-wa   [Mary-**no**   yonda   yori]   takusan-no hon-o   yonda.
     John-TOP [Mary-GEN   read   than   many-GEN book-ACC read
     'John read more books than Mary did.'

Hiraiwa provides additional examples such as this ((14b) below without the additional overt nominal is from his work). What Maki and Uchibori (2008) point out is that these examples, which ostensibly do not have a nominal head, in fact can be viewed as having a phonetically null nominal head (see also Sudo 2009 for a similar point, although his analysis differs fundamentally from Maki and Uchibori). (See Lees 1965 for a similar analysis for Turkish; see Kornfilt 1984, 2003 for counterarguments to Lees's analysis, and an alternative that I am assuming in this paper for Turkish.)

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[6] Another example of a difference between *ga* and *no* is found in a recent study by Maki, Tsubouchi, and Hamasaki (2007). They surveyed 464 undergraduate students, who were asked to rate *ga/no* sentences from 5 to 1, with 5 being fully grammatical, and statistically significant differences arose between *ga/no*. Following is one such difference.

(i)

Structure	Average Rating
[ADVP NP-Nom ADVP V] N	4.23
[ADVP NP-Gen ADVP V] N	2.51

When an adverb (ADVP) is placed in front of a nominative subject or after it, the sentence was judged as essentially acceptable (4.23), but if the subject is genitive, there was a clear perception of grammatical degradation (2.51), again showing that there is a fundamental difference between the nominative and the genitive case markings on the subject. Crucially, these researchers chose "active" verbs — transitives and unergatives — for their study (there are a couple that are questionable as active, such as a verb of motion). We return to this issue of verbal type below.

(14) 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.'

As Maki and Uchibori note, the meaning of these ostensibly nominal head-less constructions is best captured by positing a phonetically null head that has the appropriate meaning, such as *teido* 'degree' and *toki* 'time'. There is, then, an explanation for the evidence given for the C-licensing hypothesis that is consistent with the D-licensing hypothesis.[7]

We saw earlier that there is evidence drawn from Harada's article (1971) that the nominative and genitive subjects occur in different structures. The only way, then, that C-licensing could remain as a possible contender is to entertain the idea that C-licensing holds only when there is a genitive subject. When there is a nominative subject, some other licensing is operative. Although it is a weaker version of C-licensing, hence less attractive, it is a possibility that we need to address. We will see that when the genitive subject occurs, the structure that licenses it is smaller than when there is a nominative subject. This structure when the genitive subject occurs cannot possibly be a CP, in other words, but what we will see is that it is similar to Hale's AspP for Dagur, although we will argue that it is a TP. This makes even the weak version of C-licensing difficult to uphold. From here on, I will assume the D-licensing approach to genitive subjects. I note, however, that, despite its incompatibility with C-licensing, in developing the particular D-licensing analysis below, I will draw on some important insights and ideas particularly from Watanabe's (1996) version of the C-licensing approach.

4. Genitive subjects in RCs: D-licensing

In the remainder of the paper, I will develop a D-licensing analysis of the genitive subject in Japanese. In so doing, I will be informed by Hale's (2002) D-licensing analysis of Dagur. There are two points from his analysis that I wish to focus on. The first is that, in order to allow D-licensing, the modificational clause (RC) that contains the genitive subject must be sufficiently small to allow the D to "reach in" and license the genitive subject. I will argue that the clause that contains the genitive subject is a TP without a CP above it. This differs from Hale's analysis since he postulates an ApsP. In the end, the Japanese case may be the same (see

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[7]As the editors note, we might be able to explain Watanabe's (16) under D-licensing without adopting the Maki-Uchibori analysis. While the Maki-Uchibori analysis postulates a silent nominal head, what the D-licensing requires minimally is the D head. If D can directly select a clause, such as the comparative *–yori* clause in (16), without also selecting an NP, we would have a solution to (16). One such example of a D directly selecting a clause without an NP is found in the relative clause analysis of Vergnaud/Kayne (see Bianchi 1999).

Miyagawa 2008 for such an analysis), but because in Japanese, the predicate may inflect for tense, as shown below, I will assume it to be TP.

(15) ame-no   hur-u/hut-ta   hi
      rain-GEN   fall-PRES/fall/PAST   day
      'the day it rains/rained'

This structure fits one of several nominalization structures that Borsley and Kornfilt (2000) propose based on Grimshaw's (1991, 2000) idea of mixed projections. Second, the inflection on the verb is in many cases aspectual, not tense. I will take up these points in this order below.

4.1. Size of the clause

Sakai (1994:187) points out that the nominative and genitive structures differ relative to Condition B of the binding theory. (I have changed the example to include an experiencer verb, "hear"; this has no bearing on the argument, and I will discuss the relevant issue below.)

(16) a. Mary$_i$-no   [kanozyo$_i$-ga kik-anakat-ta]   hihan
        Mary-Gen   she-NOM   hear-NEG-PST   criticism
        'Mary's criticism which she did not hear'

     b. *Mary$_i$-no   [kanozyo$_i$-no kik-anakat-ta]   hihan
        Mary-Gen   she-GEN   hear-NEG-PST   criticism

 (16a) contains a pronominal nominative subject in the RC, and this pronoun may be co-referential with the possessor R-expression *Mary* in Spec,DP; *Mary* here is the possessor of the noun "criticism." Due to the pro-drop nature of Japanese, having the overt pronoun as in (16a) naturally invites a contrastive interpretation; coreference is nevertheless possible with such interpretation. In contrast, as indicated in (16b), when the subject is genitive, coreference becomes difficult, if not impossible. If we replace the pronoun with an R-expression like *Taroo* (*Mary-no [Taroo-no kik-anakat-ta] hihan* 'Mary's criticism that Taro didn't hear'), or if we interpret 'she' in (16b) as disjunct from Mary, there is no problem. This suggests that the size of the clause containing the genitive subject is smaller than the clause that contains the nominative subject.

 (17) The clause containing the genitive subject is smaller than the clause containing the nominative subject.

A reasonable way to think about the "small" nature of the clause containing the genitive subject is that it contains no Case-marking head that would intervene between D and the genitive subject. What I suggest is that the clause containing the genitive subject is a TP. In Miyagawa (2003), I suggested that when the genitive subject occurs, it is because the T is defective and therefore is unable to assign nominative Case. The notion of defective T shows up in the analysis of ECM construction in English, where the lower clause is only a TP, and *v* from the higher clause reaches into the TP and marks the subordinate subject with accusative Case.

(18) I expect *him* to win.

Chomsky (2001) suggests that the defective nature of T in the ECM construction naturally follows from the idea that probes, including Case, appear on phase heads such as C, and undergo inheritance (to T, for example). In the ECM construction, because the lower clause is a TP to begin with so that there is no phase head to host a probe or Case, the TP naturally would not contain agreement or Case, forcing the subordinate external argument to seek Case from *v* in the higher clause. We can account for the defective nature of T in genitive subject construction in the same way: the genitive-subject RC is a TP, not a CP, so that T cannot license (nominative) Case. Because T is not a Case licensor, it does not intervene in D licensing Case on the subject. We can see below that the defective T does not count as a binding domain in the ECM construction, which is consistent with Sakai's observation in (16) above for the genitive-subject construction.[8]

(19) *John$_i$ expects him$_i$ to win.

On this view, the D-licensing of subjects is simply another instantiation of ECM with the following structure.[9]

(20)

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                    D′
          ┌─────────┴─────────┐
         TP                    D′
         △                ┌────┴────┐
                          N         D
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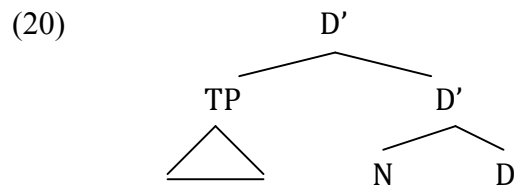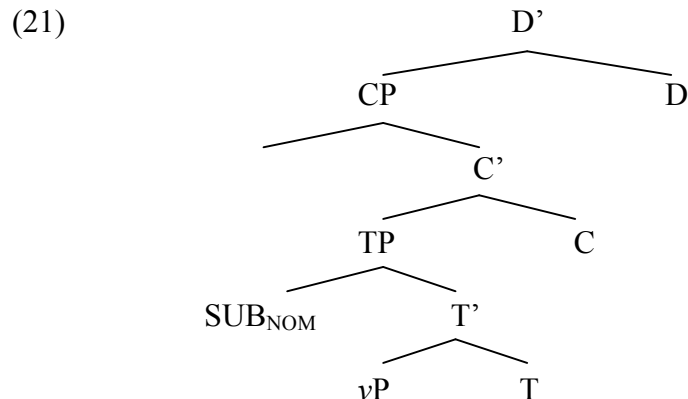
On the other hand, if T assigns nominative, it must be that it is in a larger clause, namely, CP (I exclude the N head below).

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[8] See Lasnik and Saito (1991) for arguments that the ECM subject may optionally stay in-situ in Spec,TP. What we see in (19) is that even if the ECM subject stays inside the TP, Condition B is violated, indicating that the defective TP does not function as a binding domain. This is somewhat different from Lasnik and Saito's prediction based on anaphor binding.

[9] Murasugi (1991) argues that the Japanese RC is a TP in all cases, but what we are advocating is that this is true only when the subject is genitive; if it is nominative the RC is a full CP. Also, while I use D' for the node that immediately dominates the RC, this is strictly for convenience, and I stay neutral to the precise nature of the projection.

(21)

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                              D'
                    _____
                   CP                        D
          _____
                            C'
                 _____
                TP                      C
        _____
    SUB_NOM               T'
                  _____
                 vP               T
```

Here, CP is a phase so that C blocks D from licensing Case on the subject. The CP also functions as a binding domain as we saw from Sakai's data earlier in (16).

Scope facts provide corroborating evidence for the reduced nature of the structure for genitive subjects. In English, QR is not possible out of a tensed clause, as we can see in (22) (May 1977).

(22) Someone thinks that every student failed the test.

(22) only has the reading of "someone > every student." However, if the subordinate clause is an infinitive, inverse scope is possible (e.g., Johnson 2000).

(23) Someone wants to order every item in the catalogue. (ambiguous)

The clause that contains "every item in the catalogue" is a TP, and this reduced nature of the clause allows the universal quantifier to QR outside of it.[10] We find the same difference in scope between nominative and genitive subjects. In a noun-complement construction, this scope difference appears between the subject and the head noun (Miyagawa 1993; see also Ochi 2001).
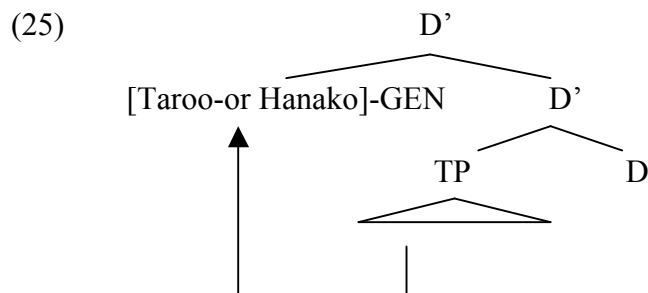
(24) a. [[Taroo-ka   Hanako]-ga   kuru] riyuu-o   osiete.
         Taro-or   Hanako-NOM come reason-ACC   tell.me
       'Tell me the reason why either Taro or Hanako will come.'
        reason > Taro or Hanako, *Taro or Hanako > reason

     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

The nominative subject in (24a) solely takes narrow scope relative to the head "reason," which is expected since the nominative subject is inside the CP, which contains a fully tensed TP, and we would not expect it to QR outside of this domain. In contrast, the genitive subject in (24b) may

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[10] The universal quantifier in (23) is contained in vP, and we must assume that it is able first to adjoin to this vP. See Johnson (2000), for example, for some relevant discussion.

take scope over the head noun, "reason," so that, on this reading, the speaker is seeking reason why Taro came or why Hanako came, as opposed to the other reading of the reason why Taro or Hanako, but not both, came. This is shown below (the noun head is excluded).[11]

(25)

```
                                D'
                   _____
         [Taroo-or Hanako]-GEN         D'
                   ↑                _____
                   |              TP          D
                   |          _____
                   |_____|
```

[11]The lack of ambiguity in (24a) indicates that there is no operator movement in this noun-complement construction, unlike the counterpart in English (Miyagawa 1993). A possible alternative to the QR analysis of (24b) is that the genitive subject is in Spec,DP to begin with as the possessor of "reason," and from this position it takes scope over the head noun. Evidence in favor of this "possessor" analysis is that for many speakers, placing an adverb such as 'tomorrow' to the left of the genitive subject deprives the wide-scope reading of the genitive subject (Ochi 2001).

(i) [Asita   [Taroo-ka Hanako]-no   kuru]   riyuu-o   osiete.
     tomorrow Taro-or   Hanako-GEN come   reason-ACC tell.me
   'Tell me the reason why Taro or Hanako will come tomorrow.'
   (*)Taro or Hanako > reason

The adverb belongs to the TP, so that it blocks the genitive subject from occurring in Spec,DP, in turn, depriving the subject from taking scope over the head noun. Another way to view (i) is that an adverb at the left edge encourages a one-event reading — an event that will happen tomorrow. The wide scope reading requires a two-event reading. Evidence in favor of the QR analysis is the following.

(ii) [Syatyoo-no   [[Taroo-ka Hanako]-no   syusse-suru] riyuu]-o   osiete.
     president-GEN Taro-or   Hanako-GEN be.promoted reason-ACC tell.me
   'Tell me the president's reason for why Taro or Hanako will be promoted.'
   Taro or Hanako > reason

In this example the possessor position is filled by 'president', so that the genitive subject has to be within TP. Nevertheless, the genitive version allows wide-scope reading of this subject, suggesting that the genitive subject undergoes QR to take the wide scope. The wide-scope reading is difficult, if not impossible, for the nominative version. It is important to note that a double-possessor reading is not possible: *syatyoo-no Taroo-no riyuu 'the president's Taro's reason'. This excludes the genitive subject from being in the lower Spec,DP position in a double-possessor construction.

On the assumption that the genitive subject is contained in a reduced clause, TP, these examples in (24) parallel what we observed for quantifier scope in English, thus giving further credence to the idea that while the nominative subject is contained in a full CP, the genitive subject is contained in a reduced clause, TP.[12]

Further evidence for the CP (*ga*)/TP (*no*) distinction comes from the types of adverbials that may occur. Cinque (1999) holds that speech act, evaluative, and evidential adverbials (*honestly, unfortunately, evidently*) occur in the CP region, while, for example, "modal" adverbials such as "probably" occur lower, possibly in the TP region. Note the following (thanks to Heizo Nakajima for noting below).

(26) a. [saiwai-ni   Taroo-ga/*-no   yomu]   hon
            fortunately   Taro-NOM/-GEN   read   book
            'the book that Taro will fortunately read'

      b. [kanarazu   Taroo-ga/-no   yomu]   hon
            for.certain Taro-NOM/-GEN   read   book
            'the book that Taro will read for certain'

In (26a), we see that with the "CP" adverbial 'fortunately', only the nominative subject is possible, suggesting that there is no CP structure with the genitive subject, while in (26b), with the "TP" adverbial 'probably', either the nominative or the genitive subject is possible.[13]

The CP/TP distinction also addresses in the most direct way an observation that Hiraiwa (2005: 142) makes, namely, that the genitive subject only occurs if the complementizer is covert; if there is overt complementizer, genitive subject is blocked. From our perspective, the "covert" complementizer simply indicates an absence of complementizer because the clause that allows the genitive subject is a TP.

We thus have strong evidence that in Japanese, the head that licenses Case on the subject is D when there is reduced clause (TP), and C when there is a full CP, with the relevant feature inherited by T. This is identical to what we saw in Dagur and Turkish, namely, in these languages, D and C respectively licenses Case, and also agreement, associated with the subject. In Chomsky 2001, it is suggested that one purpose of the probe (uninterpretable feature) is to specify the phase head and close off the phase, but in the data he looks at, principally English, it is not clear whether it is the uninterpretable agreement feature or the concomitant Case feature that functions in this way to identify the head of a phase. From the fact that in Japanese, we see the same notions of phase as in Dagur and Turkish despite the apparent lack of agreement strongly suggests that it is Case, not agreement, that functions to specify the phase head.

---

[12]Since Watanabe (1996) and Hiraiwa (2001) point to "subjunctive" as the form that licenses genitive subjects, it is worth noting that the subjunctive in English does not lead to scope ambiguity.

(i) Someone asked that every car be washed.

[13]The example with "fortunately" and genitive subject improves makedly if the predicate is unaccusative or passive (Miyagawa, to appear). In an earlier version of this ms., I mistakenly used a passive verb.

(27)   Case identifies phase heads.

This makes sense because many languages lack phi-feature agreement while all languages presumably have Case in some fashion, and because phases are part of the universal architecture of narrow syntax, it is only natural that Case is invoked to specify a phase.

4.3. Intervening elements

As mentioned earlier, Harada (1971) observed that one major difference between the nominative- and genitive-subject constructions is that in the latter, placing items between the genitive subject and the predicate sometimes leads to degradation in grammaticality. I repeat the examples.
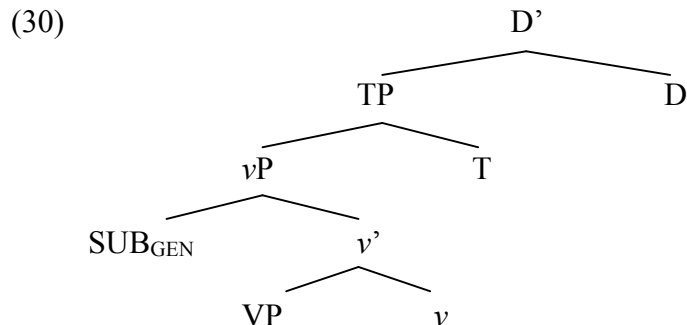
(28) a.   kodomotati-ga   minna-de   ikioi-yoku kake-nobotta   kaidan
           children-NOM   together   vigorously run-climb up   stairway
           'the stairwary which those children ran up together vigorously'

     b. *kodomo-tati-no   minna-de   ikioi-yoku kake-nobotta   kaidan
           children-GEN   together   vigorously run-climb up   stairway

While Harada's point here is that two or more intervening elements lead to ungrammaticality, many speakers find even one intervening phrase to be awkward.

(29)   ??kodomo-tati-no   minna-de   kake-nobotta kaidan
           child-GEN   together   run-climb up   stairwary
           'the stairwar which those children ran up together'

Setting aside the degrees of difference, what could be the source of this degradation in naturalness? It has been one of the main puzzles in the analysis of genitive subjects in Japanese. I will propose an analysis based on economy.

It has been argued that in Japanese, T is associated with the EPP feature so that something — most typically the subject — must raise to Spec,TP (Kishimoto 2001, Kitahara 2002, Miyagawa 2001). However, in Miyagawa (2009), I give arguments to show that, universally, when the T lacks any formal grammatical features as a result of not being selected by C (ECM construcutions, for example), T does not trigger movement, hence there is no EPP on T in, for example, infinitival clauses in English. The genitive-subject construction should, then, have the same property of not requiring movement.

15

(30)

```
                        D'
                 ┌──────┴──────┐
                TP              D
           ┌─────┴─────┐
          vP           T
      ┌────┴────┐
  SUB_GEN       v'
           ┌────┴────┐
          VP          v
```

Given that T here is not selected by C, so that it fails to inherit any formal grammatical features, we would not expect this T to trigger movement of the subject (or any other element).[14] On this account, the awkwardness associated with intervening elements is due to the fact that movement takes place without any motivation. In other words, in order for the genitive subject to occur to the left of an adverb, for example, the subject must undergo movement from its original Spec,*v*P to a higher position, its landing site depending on the nature of the intervening element. In order to occur to the left of the intervening element, the genitive subject must have undergone movement, and this movement, being unmotivated, is flagged as uneconomical, hence the degradation in grammaticality.

Finally, if the intervening element is something that does not require the genitive subject to move, we predict that the construction should be grammatical. The following is a sentence taken from the novel, *Koibumi*, by Renjo Mikihiko (see next section for discussion of a corpus study that used this and other novels).

(31) Koozi-no mattaku sir-anai   kakudo
      Koji-GEN at.all   know-NEG angle
      'an angle that Koji doesn't know at all'

The genitive subject occurs to the left of the adverb *mattaku* 'at all', which is a VP adverb that can be viewed as directly modifying the VP and sits lower than the Spec,*v*P, hence the genitive subject need not have moved.

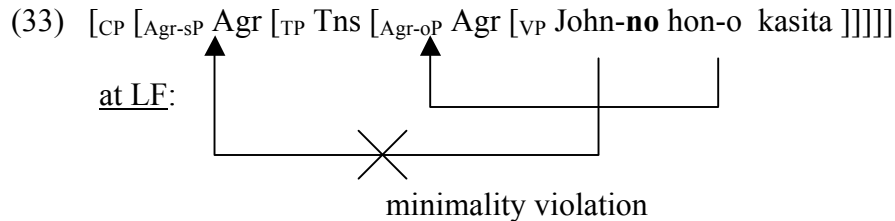**4.4. Transitivity restriction**

Harada (1971) observed another phenomenon involving a particular type of intervening element between the genitive subject and the predicate. This is the restriction that forbids accusative objects from occurring in structures that have the genitive subject; if the subject is nominative, there is no problem with such an object. The following is taken from Watanabe (1996: 389) with a slight modification to show that the nominative case marking is fine.

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[14]One might wonder why some formal feature from D isn't inherited by T here. The technical specification of T and C is that C and T are merged together into the structure as if they are a single lexical item (Chomsky 2007, 2008), and it is only when this happens that a probe can appear on C, and inherited by T. T and D are never merged together.

(32) [John-ga/*no   hon-o   kasita]   hito
       John-NOM/GEN   book-ACC lent   person
       'the person to whom John lent a/the book'

To account for this "transitivity restriction," Watanabe offers an analysis couched in early minimalism. He assumes that the genitive subject does not move to Spec,TP at overt syntax, but it must undergo movement at LF. This is shown below.

(33)   [$_{CP}$ [$_{Agr-sP}$ Agr [$_{TP}$ Tns [$_{Agr-oP}$ Agr [$_{VP}$ John-**no** hon-o kasita]]]]]

       <u>at LF</u>:

                             minimality violation

At LF, the genitive phrase, which for him is simply nominative that is pronounced as the "genitive" *no*, must move to Spec,AgrS to have its Case feature licensed at LF. The same holds for the accusative case marker, which must move to Spec,AgrO. The problem arises after the accusative object moves to Spec,AgrO, and the genitive (for him, equivalent of "nominative") subject tries to move to Spec,AgrS. This movement is blocked by locality because the closest potential landing site is Spec,AgrO. If the subject is nominative, it undergoes movement at overt syntax, so no minimality violation occurs at LF for licensing the accusative object.

While intriguing, there are alternatives to this analysis found in the more recent version of the theory. For example, under certain assumptions, the object only needs to enter into an Agree relation with the "small" *v* without movement. The small *v* would be below the genitive subject, so that the genitive subject would not intervene in this *v*–accusative relation.[15]

How can we account for the transitivity restriction? As it turns out, we can find fragments of a solution in Watanabe's (1996) article, although he does not fully implement it. Two points to note from his article are: (i) the genitive subject stays in Spec,*v*P at overt syntax; (ii) the transitivity restriction in the genitive subject construction in Japanese resembles a similar restriction found in French stylistic inversion (SI). Alexiadou and Anagnostopoulou (2001) incorporate Watanabe's (1996) suggestion within a broader theory of Case, and I will adopt their analysis, and will extend it to another observation made by Harada (1971).

Alexiadou and Anagnostopoulou (2001, 2007) (A&A) propose the following generalization (the following is from A&A 2007).

(34) *The subject-in-situ generalization (SSG)*

       By Spell-Out, *v*P can contain only one argument with an unchecked Case feature.

---

[15]Hiraiwa (2001) proposes for the transitivity restriction that assignment of the accusative in one phase requires the assignment of the nominative in the next phase (Hiraiwa, 2001: 115). Although there is some empirical data that might be taken to support this, in the end, it is a stipulation that awaits a more principled explanation.

The "Case" here is structural Case, and it typically receives its valuation from *v* (accusative) or T (nominative) under Agree; the Case feature is, then, deleted (checked) at the point of Spell-Out, which occurs after the next higher phase is constructed (Chomsky 2000, 2001; see also Collins 2003). A typical case of the SSG is found in a construction where both the subject and the object can stay in situ in *v*P; if both have structural Case, the sentence is ungrammatical. A&A (2001) demonstrate the SSG with data from a variety of languages such as Arabic, Celtic, English, Icelandic, Greek, and French, the last of which I will summarize.

Stylistic inversion (SI) in French (Kayne & Pollock 1975, 2001, Déprez 1990, Collins and Branigan 1997) occurs in wh-questions, relative clauses and subjunctive complements (the examples below from Déprez 1991 are quoted from A&A).

(35) a. Je me demande quand partira Marie.
         I   wonder   when   will leave Mary
         'I wonder when Mary will leave.'

     b.   Les resultats que nous donnent ces experiences
          the results   that us   give   these experiments

See Déprez (1991) for evidence that the subject in SI stays in-situ in *v*P.

The observation that demonstrates the SSG is that SI is impossible if the *v*P contains a direct object (Kayne and Pollock 1977, Voalis and Dupuis 1992, Collins and Branigan 1997, among others).

(36) *Je me demande quand acheteront les consommateurs les pommes.
        I wonder when will-buy   the consumers-NOM the apples-ACC

There are three ways to "save" this construction, all having to do with the object: (i) wh-extract the object; (ii) cliticize the object; (iii) have the object surface as a PP (the last point is due to Collins and Branigan 1997 citing Kayne 1972). These are illustrated below.

(37) a.   Que crois-tu que manquent un grand nombre d'etudiants?
          What believe-you that be-absent-from a great number of students

     b. Tes cours, a quelle occasion les ont manques
         your course at which occasion them-have been absent-from
         un grand nombre d'etudiants?
         a great number of students

     c. ?Quand ecrira   ton frere   a sa petite amie?
          when will write your brother to his little friend

A&A (2001), based on Watanabe (1996), point out that the SSG can account for the transitivity restriction in Japanese if we assume, following Watanabe, that the genitive subject, but not the nominative subject, stays in situ in Spec,*v*P. Both the subject and the object would then receive Case within *v*P before Spell-Out in violation of the SSG. A&A (2001) note correctly

that this account is neutral to D-licensing or C-licensing; so long as we assume that the genitive subject stays inside the *v*P, the SSG can account for the restriction.

Given this, let us return to another example given by Harada (1971), repeated below.

(38) *Taroo-no   Hanako-ni   kasita   (Ziroo-no) hon
      Taro-GEN   Hakako-DAT lent   (Jiro-GEN) book
      'the book (of Jiro's) that Taro lent Hanko'

Sadakane and Koizumi (1995) argue that the particle *ni* may be either Case or postposition. Miyagawa (1997) and Miyagawa and Tsujioka (2004) provide further evidence for this, and in Miyagawa and Tsujioka, it is pointed out that the distinction between Case and postposition is sensitive to animacy. If the goal phrase is inanimate, *ni* is necessarily a postposition, while *ni* with an animate goal such as *Hanako* tends to be interpreted as Case (although it needn't be). To force the *ni* to be Case, we can insert a floated numeral quantifier, which occurs with Case marking but not with postposition. Note the contrast below (see Miyagawa 2003 for further discussion).

(39) a. *Taroo-no   gakusei-ni san-nin okutta   (Ziroo-no) hon
          Taro-GEN   student-NI 3-CL   sent   (Jiro-GEN) book
          'the book (of Jiro's) that Taro sent three students'

      b. Taroo-no   daigaku-ni   okutta   (Ziroo-no) hon
          Taro-GEN   university-NI sent   (Jiro-GEN) book
          'the book (of Jiro's) that Taro sent to the university'

On the surface these examples differ only in the animacy of the goal phrase (and the FNQ in (a)), a difference which has as a consequence that in (39a) *ni* must be Case while in (39b) *ni* is a postposition. For (39a) and Harada's example in (38), we can impose the SSG account: there are two Cases in *v*P in (38) and (39a) in violation of the SSG, but not in (39b), which has a postposition for the goal. Finally, we can presume that speakers who do not find (38) as bad as Harada are interpreting *ni* as a postposition, an option even with an animate goal so long as there is no floated numeral quantifier to force *ni* to be Case, as we saw in (39a).[16]

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[16]In Miyagawa (2008), I suggested that the transitivity restriction does not apply in noun-complement clauses, suggesting that the the complement clause is a CP even when it contains a genitive subject.

(i)   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.'

However, it appears that this was incorrect. When we place an adverb in front of the genitive subject, the effects of the transitivity restriction clearly emerges (thanks to Hiroki Maezawa for pointing this out to me).

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.

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

What is the nature of the empty element in the object position? If the SSG is responsible for the transitivity restriction, and SSG has to do with Case, it means that in (40) the object empty element does not have Case. What would be the identity of the empty element if there is no Case? One possibility is to postulate an empty pro (see Murasugi, 1991, Hiraiwa, 2001 for relevant discussion) and adopt Baker's (1996) suggestion that an empty pro does not require Case. This is speculative, and there may be other possiblities, but I will not attempt to develop a more articulated analysis.

Finally, we predict that Turkish should not evidence transitivity restriction because the clause that contains the genitive subject is a full CP. This is shown below (see Hiraiwa 2001; thanks to Jaklin Kornfilt for the example below).

(41) Turkish
       [Sen-*in*   bilgisayar-da   makale-ler-in -i   yaz-acağ-mi]-ı   duy-du-m.
        you-*GEN* computer-LOC article-PL-2.SG-*ACC*   write-FUT-2.SG-ACC hear-PST-1.SG
        '(I) heard that you will write your articles on the computer.'

This is because in Turkish the genitive subject behaves essentially the same as a nominative subject in entering into agreement with the probe at C (which is inherited by T), so it would be reasonable to assume that the genitive subject moves to Spec,TP and avoids an SSG violation.

5. Defective T and interpretation

What consequence does the defectiveness of T in the genitive-subject construction have for interpretation? In English, infinitival clauses, which arguably contain a defective T, are known to have severe restrictions on tense interpretation (e.g., Stowell 1982). What I suggest is that in the genitive subject construction, the defectiveness of T also imposes a restriction on its interpretation. In particular, it appears that this construction is aspectually limited to stative

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(ii)   *[Kinoo   Taroo-*no*   Hanako-o   susumeta]   riyuu-o   osiete.
           yesterday Taro-GEN   Hanako-ACC recommend   reason-ACC   tell.me
           'Tell me the reasons why Taro recommended Hanako yesterday.'

Apparently, in (i) the genitive subject is placed in the higher, Spec,DP, in the possessor position.

interpretations, where the stative may be the actual Aktionsart of the predicate or the result of an eventuality.[17]

A good place to begin is to look at a recent corpus study by Kim (2009). Kim looked at four novels from the 1970s to the 1990s,[18] and from these works she identified 1143 examples of subjects in RCs or noun-complement clauses. Of these, 572 were genitive subjects and 571 were nominative subjects, so half were genitve and half were nominative, a result which by itself does not directly shed light on our question of interpretation of clauses containg a genitive subject. However, when she broke down the examples into the types of predicates that occurred in the clause — adjective, unaccusative, and transitive/unergative — a striking pattern emerged. The following gives the percentage of genitive subjects for each of the predicate types.

(42) Adjective: 91%
      Unaccusative: 56%
      Transitive/Unergative: 17%

As shown, 91% of the relevant occurrences of adjectives are associated with a genitive subject as opposed to a nominative subject. Adjectives are by nature stative.[19] Below is an example of an adjective taking a genitive subject taken from her work.

(43) kami-no   nagai hito
      hair-GEN   long person
      'a person whose hair is long'

We can surmise that when the Aktionsart of the predicate is purely stative, as in the case of adjectives, the predicate appears in unmarked cases with the genitive subject because the genitive-subject construction itself has an inherently stative meaning. Although the nominative Case is also possible, it clearly is the case that the the genitive is favored (91%), and the nominative, which must be licensed by a T selected by C, would presumably carry special meaning such as contrast or focus. The following is the nominative-subject counterpart of (42).

(44) kami-ga   nagai hito
      hair-NOM   long person
      'a person whose hair is long'

---

[17]Our proposal that the genitive-subject construction has some type of stative interpretation contrasts with the claim in Horie and Kang (2000) that the genitive subject construction is non-stative in nature. See Nambu (2007) for evidence against Horie and Kang's claim.

[18] The novels are *Byakuya Soshi* (1976) by Itsuki Hiroyuki, *Hoshibosi no Kanashimi* (1984) by Miyamoto Teru, *Koibumi* (1987) by Renjo Mikihiko, and *Fukai Kawa* (1996) by Endo Shusaku.

[19]Nambu (2007) presents another extensive corpus study of *ga/no* Conversion based on the minutes of the national Diet. While the percentage of genitive subjects is smaller than in Kim's study (27.8%), Nambu's results echo Kim's in showing that the genitive subject occurs far more frequently with adjectives than with verbs (10.6%). The lower percentage in Nambu's study may reflect the formal style of the Diet minutes.

In reality, there appears to be no obvious difference between this and the genitive subject counterpart, most likely because an adjective, being purely stative, only has this aspectul meaning whether it occurs in a defective TP or a full CP. However, as we will see below, with verbs, we can detect differences between the two Cases.[20]

Kim (2009) found that 56% of the subject of unaccusatives in RCs/noun-complements are genitive. This is a smaller percentage than adjectives but far greater than unergatives/transitives. Following are two examples.

(45) [tokutyoo-no   aru]   kao-tuki
     distinctive -GEN exist   face-expression
     'a facial expression that is distinct'

(46) [kaze-no   fuku] sakamiti
     wind-GEN blow   hill
     'a hill where the wind blows'

Unaccusative constructions appear to be associated with at least two different kinds of stative interpretations. The first is the purely stative interpretation that we see in (45), in which there is no eventuality contained in the meaning of the sentence, so that it is the same as adjectives in its aspectual meaning. (46) is different in that it contains the event of wind blowing, but because it is a habitual/generic statement, it, too, is straightforwardly stative.[21]

The following, pointed out to me by Yasuaki Abe, differs from (45) and (46) and provides an example of the second kind of stativity associated with unaccusatives that take a genitive subject.

(47) [Simi-no   tuita syatu]-o   kiteiru.
     stain-Gen   had   shirt-Acc   is.wearing
     'He's wearing a shirt that has sustained a stain.'

Here there is clearly an event — the shirt getting stained — but the clause containing the genitive subject refers to the *result* of this eventuality. A natural interpretation is that the shirt is still stained, in other words, although one could imagine a situation where this result held sometime in the past. So the difference between adjectives and unaccusatives such as (45) on the one hand and (47) on the other is like the difference between adjectives and resultative participles (e.g., verbal/adjectival passives) in English. For example, Kratzer (1994) distinguishes the pure stative *cool* from the resultative participle *cooled* as follows.

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[20] For adjectives, I am assuming the CP (nominative)/TP (genitive) distinction as argued earlier. However, it is possible — probably likely — that the adjective also has a simple Adjective Phrase projection (e.g., Yamakido 2000). It is possible that a purely stative unaccusative verb may also have something similar, such as a Modifer Phrase as proposed by Ogihara (2004). I will simply note this possiblity but will not incorporate it into the analysis in this paper.

[21] (45) may also be purely stative if the "present tense" *ru* has this property in RCs, a possibility which has been noted (thanks to Yasu Sudo for this point).

(48) a. *cool*: λ*x*λ*s*[cool*(x)(s)*]

 b. *cooled*: λ*x*λ*s*∃*e*[cool*(x)(s)* ∧ *s* = *f*$_{target}$*(e)*]

With *cooled*, there is an event, and the adjectival passive expresses the result of this event.

 An important point about (47) above is the use of the "past tense" *ta* on the unaccusative predicate. This verbal inflection *ta* is known to lack a tense interpretation in certain RCs (e.g., Teramura, 1984, Abe ,1993, Kinsui, 1994, Ogihara, 2004). An example often given to demonstrate this is the following.

(49) [yude-ta]   tamago
     [boil-PAST]   egg
      (i) 'the egg which (I) boiled' (eventive reading)
      (ii) 'the boiled egg' (stative reading)

The first reading contains the event of having boiled the egg, and *ta* here is used as past tense to indicate that this event occurred prior to utterance time. The second reading is often described as a stative modifier in which the state holds at the time of utterance, so that *ta* here does not indicate past tense. However, even in the second interpretation, the event of having boiled the egg is contained in the meaning of the sentence, so that, following Kratzer's analysis, the perceived lack of tense is probably due to the focus of this second interpretation on the *state* that holds at the time of the utterance as a result of a past eventuality (see Ogihara 2004 for a different analysis). To further explore this idea of resultant states, let us compare (47) with the nominative-subject counterpart.

(50) a. [Simi-ga   tuita syatu]-o   kiteiru.
         stain-NOM   had   shirt-ACC is.wearing
         'He's wearing the shirt that sustained a stain.'

 b. [Simi-no   tuita syatu]-o   kiteiru.
        stain-GEN   had   shirt-ACC is.wearing
        'He's wearing the shirt that has a stain.'

In (50a), which has the nominative case marker, the RC indicates that there was an event of the shirt getting stained; the RC is ambiguous about whether the result is being made prominent. In (50b), while the event of staining is included in the meaning, the focus is on the the result of this eventuality, and the most natural interpretation is that the shirt being worn has a stain at the time of the utterance. The latter is stative in aspect due to the focus on the resultative meaning. We can see the stative nature, as opposed to the eventive nature, of the genitive subject clause by the fact that it is odd with an adverb that emphasizes the event as opposed to the result (thanks to Masayuki Wakayama for the data).

(51) [Totuzen   simi-ga/*-no   tuita   syatu]-o   misete kudasai.
       suddenly   stain-NOM/-GEN   had   shirt –ACC show.me
       'Pease show me the shirt that was suddenly stained.'

The adverb "suddenly" puts focus on the event of the shirt getting stained, and is in conflict with the meaning of the genitive-subject construction as stative. As we can see, this adverb is fine with the nominative subject. The following demonstrates the same point.

(52) a. untensiteiru aida-ni doro-ga   tuita   syatu
        driving   while   mud-NOM had   shirt
        'the shirt that got mud on it while driving'

    b. ??untensiteiru aida-ni doro-no   tuita   syatu
         driving   while   mud-GEN had   shirt
         'the shirt that got mud on it while driving'

The event modifier 'while driving' puts the focus on the event itself as opposed to the result; there is no problem with the nominative subject but there is degradation with the genitive subject for many speakers.
      Finally, the smallest number of genitive subjects is found with transitives and unergatives, as expected (17%).[22] According to Kim (personal communication), many of these involve psychological predicates, which, by virtue of lacking an agent, are amenable to a stative interpretation. The following are two such examples.

(53) kare-no   sinziteiru kami
     he-GEN   believe   God
     'the god that he believes in' (from *Fukai Kawa*)

(54) Koozi-no mattaku sir-anai   kakudo
     Koji-GEN at.all   know-NEG angle
     'an angle that Koji doesn't know at all' (from *Koibumi*)

There are, however, instances in which the predicate appears to have an agent, as exemplified by the following from Endo's novel in Kim's data.

(55) tuma-no   tukatta mono
     wife-GEN   used   thing
     'the thing that my wife has used'

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[22]The paucity of genitive subjects with transitives and unergatives recalls Terada's (1987) contention that the genitive subject only occurs with unaccusatives (she did not consider adjectives). Although it is not quite true, her observation does capture a clear tendency towards favoring unaccusatives (and, even more, adjectives) over transitives and unergatives as Kim (2008) shows. Unfortunately, the actual example that Terada gives is an instance of transitivity restriction, so the emprical evidence she provides is not appropriate. The example from Terada (1987: 636) is the following.

(i) *?Perry-no Tokyo-o   kengakusiteita toki-wa   orisimo   yuki-ga hutteita.
        Perry-GEN Tokyo-ACC sightsee   time-TOP seasonably snow-NOM falling
      'At the time of when Perry did sightseeing of Tokyo, it was seasonably snowing.'

Up to now the examples have all involved nonagentive predicates — adjective, unaccusative, psych — which are amenable to a stative interpretation of some sort, either because the predicate itself has this Aktionsart or because the focus is placed on the result of an eventuality. In (54), we have what appears to be a genuine agent, "wife," of an event. Is this the correct interpretation? The transitive verb here has the "past" inflection *ta*, but because the verb is not unaccusative, but a straightforward transitive verb, this *ta* is likely not the aspectual inflection we saw earlier. What I speculate is that the *ta* form here indicates what is equivalent to perfect tense, which "is said to describe (or focus on) a state that follows from a prior eventuality" (Iatridou, Anagnostopoulou, and Izvorski 2001: 154; see their article for the references). There are several different kinds of perfect tenses, but the one that appears to be consistent with all that we have observed is the experiential perfect demonstrated below (Iatridou, Anagnostopoulou, and Izvorski 2001: 155).

(56) I have read "Principia Mathematica" five times.

On the experiential perfect interpretation, (56) states that "I have the experience of having read "Principia Mathematica" five times. For (55), a similar experiential perfect interpretation would give it the meaning of "the thing that my wife has the experience of having used." While it is difficult to tease apart the difference between this and the nominative subject counterpart which presumably lacks this experiential meaning, we can find evidence elsewhere for the stative nature of the genitive-subject construction.

(57) Wazato   kodomo-ga/*-no   kowasita   kabin-o   misete-kudasai.
     intentionally child-NOM/*-GEN broke   vase-ACC   show.me-please
     'Please show me the vase that the child broke intentionally.'

The adverb *wazato* 'intentionally' goes with an agent, so that in this example, it puts the focus on the actual event of breaking the vase instead of on the result or the experience of having broken the vase. As shown, while the nominative subject is fine, the genitive subject is highly degraded, if not ungrammatical. One possible way to view (57) is that the genitive-subject construction does not allow agents but only experiencers for external arguments. On this interpretation, (57) without the agentive adverb 'intentionally' would mean for the genitive subject that there is a vase that Taro has an experience of having broken. These are all speculative at best, and I will have to leave the topic without a more definitive analysis.[23]

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[23]There is a construction that allows multiple *ga/no* Conversion. These are instances where the object is otherwise marked by the nominative (e.g., Miyagawa 1993), which is possible with complex stative predicates.

(i) [Taroo-ga/no   Ziroo-ga/no   suisen-deki-nai]   riyuu
      Taro-NOM/GEN Jiro-NOM/GEN recommend-can-NEG reason
      'the reason why Taro can't recommend Jiro'

8. Concluding remarks

In this article, I showed that there are two ways in which Altaic languages license the genitive case marking on the subject: "D-licensing" is found in Dagur while "C-licensing" is what is operative in Turkish. I gave evidence that the *ga/no* Conversion in Japanese, where the genitive is allowed on the subject of RCs and noun-complement clauses, best fits the D-licensing model of Dagur. This is a counter-proposal to the analysis by Watanabe (1996) and Hiraiwa (2001), who have put forth a C-licensing analysis for Japanese. They specifically argue that both the nominative *ga* and the genitive *no* are a reflex of the same Case feature licensed by C with "subjunctive" inflection, which is found in environments in which the genitive subject ostensibly occurs. However, data from the earliest work on the topic, by Harada (1971), gives clear indication that the nominative and genitive subjects must be treated differently. In Japanese, the key heads are C for the nominative and D for the genitive. C and D are phase heads, and they emerge in all three Altaic languages as phases — and in all other languages, presumably — which, we argued, are defined not by uninterpretable agreement features but by Case.

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As shown, this construction potentially allows four different combinations: NOM-NOM, GEN-GEN, NOM-GEN, GEN-NOM. In Miyagawa (1993) I noted that all four are possible, and Hiraiwa (2001) points out that this construction validates C-licensing, since *ga* and *no* seemingly occur freely as if they are the same case marker. However, it turns out that, while all speakers accept NOM-NOM, speakers vary on the acceptability of others; all find NOM-GEN particularly degraded or even ungrammatical. So the judgment I reported earlier is not quite accurate. Strikingly, when an adverb is placed in front of the subject, speakers uniformly judge all but NOM-NOM to be ungrammatical.

(ii) [kokoroyoku Taroo-ga/no   Ziroo-ga/no   suisen-deki-nai]   riyuu
      gladly   Taro-NOM/*GEN Jiro-NOM/*GEN recommend-can-NEG reason
      'the reason why Taro can't recommend Jiro gladly'

I have consulted six native speakers and they all report this judgment. It appears that when the subject is genitive in this construction, it is in Spec,DP and not in TP apparently acting as a modifier of the head "reason." If this is correct, this multiple *ga/no* Conversion construction need not be considered as evidence against the D-licensing approach.

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