



[INVITED ARTICLE]

## STRONG UNIFORMITY AND *GA/NO* CONVERSION

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We will look at *ga/no* Conversion in Japanese from the perspective of Strong Uniformity, which is a concrete implementation of Chomsky's (2001) Uniformity Principle that is proposed in Miyagawa (2010). We begin with the assumption that every language contains the same set of grammatical features; these features include the discourse features of topic and focus, and they all initially occur on C. The difference between an agreement-based language such as English and a discourse-configurational language such as Japanese is in the feature that is inherited by T: in the English-type, the agreement feature is inherited by T while in the Japanese-type the discourse features are inherited by T. We will look at how this system interacts with case marking in Japanese, particularly with the case alternation of *ga/no* Conversion.\*

**Keywords:** *ga/no*, genitive, phase, QR, genitive of negation

### 1. Introduction

Modern linguistic theory addresses two major questions: in what ways are human languages the same, and in what ways can they be different? In GB, the answer to the first question is that all human languages are defined by the same universal set of principles; and the answer to the second question is that a certain component of these principles may be parametrized to allow for variation. In the Minimalist era, in which effort is made to rid the theory of anything that does not have an intuitive and independent justification, there is little, if any, room for such principles: these principles tend to describe the problems they are supposed to solve—in an interest-

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ing way, but nevertheless they have no place in MP. Having gotten rid of the principles, we are faced with the problem that we must still answer the questions about universality and variability. Recognizing the vacuum left by having gotten rid of the principles and the parameters built into them, Chomsky (2001) suggests the Uniformity Principle in their place.

(1) Uniformity Principle (Chomsky (2001: 2))

In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances.

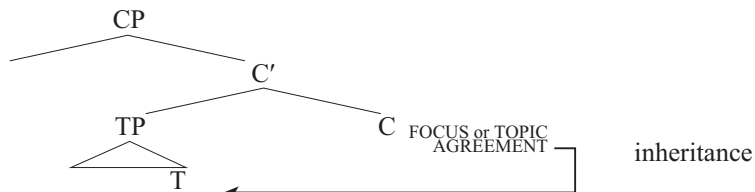
We can consider the Uniformity Principle (UP) as a roadmap of how a linguistic theory should address the two questions. For the UP to have empirical value, however, we must provide more specificity to both the universal portion and the variability portion. When we assume languages to be uniform, precisely what is it that we are assuming to be shared across languages? And what, specifically, are the detectable properties that lead to variation? In Miyagawa (2010), I attempted to provide a concrete implementation of the UP by focusing on agreement features that trigger operations such as movement.

(2) Strong Uniformity (Miyagawa (2010))

Every language shares the same set of grammatical features, and every language overtly manifests these features.

On first blush, Strong Uniformity appears to be patently wrong in that, for example, there are languages such as Chinese and Japanese that do not exhibit agreement features. To address this issue, I argued that the universal stock of grammatical features not only contains agreement features, but also the discourse configurational features (Kiss (1995)) of topic and focus. To account for the variation among languages, I argued, following Chomsky (2005, 2008) and Richards (2007), that all grammatical features first occur on C; unlike these works just cited, which assume that the agreement feature must always be inherited by T, I proposed that there is a variation among languages as to what gets inherited by T. These are sketched below.

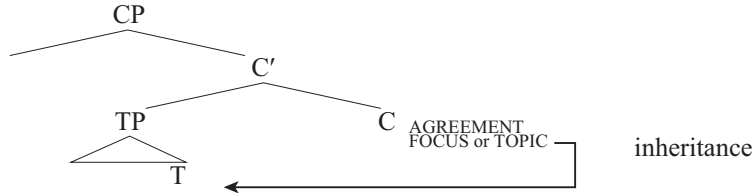
(3) Agreement-based languages



For an agreement-based language such as English, T inherits the agree-

ment feature, and this triggers movement of the appropriate nominal to Spec,TP. In contrast, for a discourse-configurational language such as Japanese, it is topic/focus that is inherited by T.

- (4) Discourse-configurational languages



In a discourse-configurational language, Japanese being one of them, once a discourse configurational feature is inherited by T, it triggers focalization or topicalization within the TP domain. Topicalization in the form of scrambling, which is known to occur within the TP (Saito (1985)), is one such instance of a discourse-configurational movement.<sup>1</sup>

In this article, I will look at the so-called *ga/no* Conversion from the perspective of Strong Uniformity. I will show that recent work on *ga/no* Conversion provides further evidence for the way that Strong Uniformity portrays universality and variability regarding grammatical features.

Harada (1971) brought our attention to the fact that in Japanese, the subject of relative clauses and noun complements may be marked with the genitive *no* instead of the nominative *ga*; he named it *ga/no* Conversion.

- (5) Hanako-*ga*/-*no* katta hon  
 Hanako-Nom/-Gen bought book  
 ‘the book that Hanako bought’

As Harada noted, while the nominative is always possible, there are restrictions on the occurrence of the genitive. For example, unlike the nominative subject, the genitive subject does not sound natural if certain elements intervene between it and the verb (Harada (1971: 80)).

- (6) 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

<sup>1</sup> There is a third type of language in which both the agreement and discourse features are inherited by T. Jiménez-Fernández (2010) shows that Spanish and Turkish are precisely this type of language, where there is f-feature agreement at T, and it is possible to topicalize a phrase within the TP domain.

In (6b), which contains a genitive subject, the intervention of “together” and “vigorously” between this subject and the verb leads to ungrammaticality.

Also, Dubinsky (1993) shows that scrambling, which is common in Japanese, is usually not possible across a genitive subject (I have changed the original example to avoid a transitivity restriction violation).

- (7) geki-de<sub>i</sub> musume-ga/\*-no t<sub>i</sub> odotta koto  
 play-in daughter-Nom/-Gen danced fact  
 ‘the fact that my daughter danced in the play’

I will show that (6), noted by Harada, and (7) are the same phenomenon when we look at them through the lens of Strong Uniformity.

Finally, in a recent work, Akaso and Haraguchi (2011) observe another restriction on the genitive subject, in which a focus element on the subject prohibits the genitive from occurring.

- (8) Taroo-*dake*-ga/\*-no nonda kusuri  
 Taro-only-Nom/-Gen took medicine  
 ‘medicine that only Taro took’

I will demonstrate that Akaso and Haraguchi’s observation follows from the typology of Japanese as a discourse-configurational language. Our account will be based on the so-called D-licensing of the genitive case marking and the extension of the D-licensing analysis proposed in Miyagawa (2012). I begin with the explanation of the D-licensing approach to *ga/no* Conversion.

## 2. D-licensing of the Genitive Case

The D-licensing analysis (Bedell (1972), Miyagawa (1993, 2008, 2011), Ochi (2001), etc.) is based on the fact that in Japanese, the genitive typically occurs in nominal environments.

- (9) [<sub>DP</sub> 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, assuming that such noun phrases are headed by D.

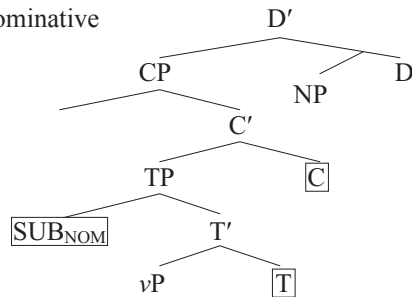
What precisely is the nature of the alternation between the nominative and the genitive case marking? On the surface the alternation appears to be optional, and this is what Hiraiwa (2001, 2005) and Watanabe (1996) assume. In Miyagawa (2008), following the analysis of Dagur by Hale (2002), I

argued that the structures for the two case markers, nominative and genitive, are different, so that the alternation is not due to optionality, but the choice is predicated by structure. The intuition, following Hale's work, is that while the nominative case marking occurs in a full CP, the genitive case marking occurs in a smaller clause, Aspectual Phrase, as noted for the Dagur genitive subject. In Miyagawa (2011), I revise this proposal somewhat and suggest that the smaller structure for the genitive case is a TP.

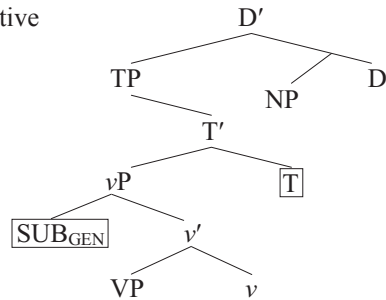
(10) Nominative: CP

Genitive: TP

(11) a. Nominative



b. Genitive



(Miyagawa (2011))

Let us look at the differences between these two structures. In (11a), which contains the nominative subject, the structure is a full CP, and the C selects the T. As a result, this T is fully active and able to license the nominative on the subject. Because this T has a full set of features, presumably having inherited them from C (e.g. Chomsky (2005, 2008); Miyagawa (2010); Richards (2007)), it triggers movement of the subject to its specifier (Miyagawa (2010)). Given that T is the closest head to license case marking on the subject, D outside the CP cannot license case marking on the subject. In contrast to this, in (6b) D directly selects a TP and, because the T is not selected by C, the T does not contain formal features and is unable to license nominative case. As a result, D reaches in to license the case marking on the subject, leading to the subject being marked

by genitive case. Also, because T lacks formal features, it does not trigger movement of the subject to its specifier (Miyagawa (2010, 2011)), leaving the subject in the original Spec,vP position.<sup>2</sup>

The fact that the genitive subject does not move accounts for the grammaticality judgment that Harada (1971:80) noted; the examples are repeated below.

- (12) 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

The adjuncts *minna-de* ‘together’ and *ikioi-yoku* ‘vigorously’ occur between Spec,TP and Spec,vP. In (12a), which has the nominative subject, the construction is grammatical because the nominative subject is in Spec,TP, having moved there across the adjuncts. But in (12b), which contains the genitive subject, there is no reason for the genitive to move from its original Spec,vP position because T is inert for the purpose of movement; the fact that the genitive subject occurs to the left of the adjuncts shows that it has moved without the need to do so, and this is what causes the ungrammaticality (Miyagawa (2011)).<sup>3</sup>

In Miyagawa (2011), three arguments are given for justifying the different structures in (12). I will give two of these here. First, if the nominative subject is contained in a CP as proposed, while the genitive subject is contained only in a TP, we predict that CP-level adverbs such as speech act, evaluative, and evidential adverbs (*honestly, unfortunately, evidently*)

<sup>2</sup> For a very different reason, Watanabe (1996) also assumes that the genitive subject stays in Spec,vP.

<sup>3</sup> Harada’s (1971) original point was that in (7b), having two items between the genitive subject and the verb leads to ungrammaticality. However, having even one of the items is awkward (Miyagawa (2011)).

- (i)??kodomo-tati-no minna-de kake-nobotta kaidan  
 child-Gen together run-climb up stairway  
 ‘the stairway which those children ran up together’

Also, if the intervening element is part of the VP, so that the genitive subject can stay in Spec,vP, we predict that it should be perfectly grammatical; this is shown below (Miyagawa (2011)).

- (ii) Koozi-no mattaku sir-anai kakudo  
 Koji-Gen at.all know-Neg angle  
 ‘an angle that Koji doesn’t know at all’

*Mattaku* ‘at all’ is a VP adverb.

(Cinque (1999)) can only occur with the nominative subject.

- (13) 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’

(13a) shows that a CP-level adverb is compatible only with the nominative subject as predicted, while (13b) demonstrates that both types of subjects are fine with “for certain,” an adverb that occurs lower in the structure.

Second, as noted in Miyagawa (1993) (see also Ochi (2001)), the two types of subjects lead to different scope relations.

- (14) 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 (14a), with the nominative case marking, the disjunction expression “Taro or Hanako” scopes under the head noun ‘reason,’ so that this structure can only mean that the speaker is asking for a reason that Taro or Hanako will come. (14b), which has the genitive case marking on the subject, is ambiguous between this reading and a reading in which the disjunction takes scope over ‘reason.’ The latter means ‘tell me the reason why Taro will come or the reason why Hanako will come.’<sup>4</sup> This distinction in scope parallels what we see in English.

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

(15) only has the reading of “someone > every student” (May (1977)).

<sup>4</sup> An anonymous reviewer wonders if the wide-scope reading noted for (9b) is due to the genitive subject (“Taro or Hanako”) having merged directly to the specifier of the DP:

(i) [<sub>DP</sub> [Taroo-ka Hanako]-no [<sub>TP</sub> pro kuru] riyuu]...  
 Taro-or Hanako-Gen come reason

We can see that such a direct possessive reading cannot be the case by the fact that it is not possible to just have such a possessive construction: \*[Taroo-ka Hanako]-no riyuu ‘the reason for Taro or Hanako.’ It is also evident in such a construction as *kuruma-no tomatta riyuu* ‘the reason why the car stopped’; it is completely ungrammatical to say, \**kuruma-no riyuu* ‘the reason for the car.’

However, if the subordinate clause is an infinitive, that is, a TP, inverse scope is possible (e.g. Johnson (2000)).

- (16) Someone wants [<sub>TP</sub> to order every item in the catalogue]. (ambiguous)

From this, we see that while CP is a barrier to QR, TP isn't, which is consistent with the CP/TP distinction drawn for nominative and genitive subjects.

### 3. A Different Kind of Genitive: Genitive of Dependent Tense

Watanabe (1996) and Hiraiwa (2001, 2005) present a fundamentally different approach to *ga/no* Conversion in which the licensing head is C for both the nominative and the genitive. This is made possible, according to them, because of the special status of the verbal inflection, which they describe as “subjunctive/adnominal.” In their analysis, *ga/no* Conversion is truly an optional alternation (but see Hiraiwa (2005) for a slightly different view). In order to motivate their C-licensing approach, they present counterexamples to the D-licensing approach. One counterexample that Hiraiwa (2001) gives is the following.

- (17) John-wa [ame-ga/-no yam-u made] ofisu-ni ita.  
 John-Top rain-Nom/Gen stop-Pres until office-at be-Past  
 ‘John was at his office until the rain stopped.’

As Hiraiwa correctly notes, there is no nominal head to license the genitive case marker here since *made* ‘until’ is a postposition. This, then, is an instance in which the genitive is not licensed by a D head, yet it is grammatical.

In response to this type of counterexample, H. Takahashi (2010) points out that these counterexamples tend to contain an unaccusative verb (‘stop<sub>unaccusative</sub>’ above). As she notes, if we consider an example similar to above, but with an unergative verb, it is ungrammatical.

- (18) John-wa [oogoede Mary-ga/-\*no sakeb-u made] odotta.  
 John-Top loudly Mary-Nom/Gen shout-Pres until danced  
 ‘John danced until Mary shouted loudly.’

Indeed, other counterexamples by Hiraiwa (2001, 2005) include the following, both with unaccusative verbs.

- (19) a. Kono atari-wa [hi-ga/-no kureru niture(-te)]  
 around here-Top sun-Nom/Gen go down.Pres.Adn(-as)  
 hiekondeku-ru.  
 get colder-Pres  
 ‘It gets chillier as the sun goes down around here.’



- b. John-wa [toki-**ga/-no** tatu-to tomoni]  
 John-Top time-Nom/Gen pass.Pres-An with/as  
 Mary-no koto-wo wasurete-itta.  
 Mary-Gen fact-Acc forget-go.Past

‘Mary slipped out of John’s memory as time went by.’

One counterexample, in fact the original counterexample to D-licensing given by Watanabe (1996), is different from Hiraiwa’s examples in that it contains a transitive verb.

- (20) John-wa [Mary-**ga/-no** yonda yori] takusan-no  
 John-Top Mary-Nom/Gen read.Past.Adn than many-Gen  
 hon-wo yonda.  
 books-Acc read-Past

‘John read more books than Mary did.’ (Watanabe (1996: 396))

Although Watanabe’s contention is that this is a counterexample to D-licensing, it appears in fact to be an instance of D-licensing, with a covert nominal element that furnishes the D head. This is what is argued by Maki and Uchibori (2008) and, from a semantic point of view, by Sudo (2009). We can see this by the fact that a CP-level adverb is not allowed with the genitive subject, just as we saw for the typical cases of the D-licensed genitive subject (Miyagawa (2012)).

- (21) John-wa [saiwaini Mary-**ga/?\*-no** yatotta yori]  
 John-Top fortunately Mary-Nom/Gen hire-Past.Adn than  
 takusan-no gakusei-o yato-e-nakat-ta.  
 many-Gen students-Acc hire-can-Neg-Past

‘John was unable to hire more students than Mary fortunately hired.’

This leaves the question of what precisely is the nature of Hiraiwa’s counterexamples—why are they fine with unaccusative verbs but not with other types of verbs? Such a distinction is not found with regular *ga/no* Conversion in which there is an overt nominal head (or in the case of Watanabe’s case, cover nominal head, if we are correct in our analysis of his counterexample).

### 3.1. Dependent Tense and the Genitive

Fujita (1988) identified a kind of genitive that has exactly the distribution of Hiraiwa’s counterexamples as explicated by Takahashi (2010). I will begin with a discussion of the *-toki* ‘when’ temporal clause to demonstrate Fujita’s observations. As shown below, a *-toki* temporal clause does not license the genitive.

- (22) [Kodomo-ga/\*-no waratta toki], tonari-no heya-ni ita.  
 child-Nom/Gen laughed when next-Gen room-in was  
 ‘When the child laughed, I was in the next room.’

If, however, a case marker attaches to the *toki* phrase, genitive is possible (Fujita (1988), Miyagawa (1989)).

- (23) [Kodomo-ga/-no waratta toki]-o omoidasita.  
 child-Nom/Gen laughed time-Acc recalled  
 ‘I recalled the time when the child laughed.’

Upon seeing these facts, Whitman (1992) suggested that *toki* is a C in an adjunct clause such as (22), but it is an N in an argument position such as in (23). Let us assume this.<sup>5</sup>

Even in the adjunct CP clause, it turns out that the genitive is possible if the verb is unaccusative (Fujita (1988)).

- (24) [Kodomo-ga/-no kita toki], tonari-no heya-ni ita.  
 child-Nom/Gen came when next-Gen room-in was  
 ‘I was in the next room when the child came.’
- (25) [Kaze-de doa-ga/-no aita toki] daremo kizukanakatta.  
 wind-by door-Nom/Gen opened when no one noticed  
 ‘When the door opened due to wind, no one noticed.’

It is also possible to have this special instance of the genitive with the passive.

- (26) Watasi-wa [kodomo-no home-rare-ta toki] hontouni uresii  
 me-TOP child-Gen praise-Pass-Past when really happy  
 kimoti datta.  
 feeling was  
 ‘When my child was praised, I was really happy.’

As I noted in Miyagawa (2012), the distribution of this special genitive case matches the distribution of the so-called genitive of negation in Slavic (Babby (1980); Pesetsky (1982); Bailyn (1997); Babyonyshev (1996) etc.). This genitive in Slavic occurs as an alternant to the nominative when

<sup>5</sup> As an anonymous reviewer and Satoshi Tomioka independently noted to me, there are other ways to force the “N” reading of *toki* without attaching a case marker. For example, adding *ano* ‘that’ makes *toki* an N even in an adjunct clause.

- (i) [Taro-no waratta *ano toki*], minna odorota.  
 Taro-Gen laughed that time everyone was surprised  
 ‘That time when Taro laughed, everyone was surprised.’

The occurrence of *ano* ‘that’ modifying *toki* makes it possible for the subject to be marked by the genitive case marker even with the unergative verb ‘laugh,’ which we saw earlier is not possible with just *toki* in an adjunct clause.

the verb is unaccusative or passive; it also can occur on the object of a transitive verb. The contrast between unaccusative and unergative is illustrated below for Russian (Pesetsky (1987)).

Unaccusative subjects

- (27) a. Griby                      zdes' ne rastut.  
          mushrooms.Nom here Neg grow.3Pl  
       b. Gribov                     zdes' ne rastët.  
          mushrooms.Gen here Neg grow.3Sg

Unergative subjects

- (28) a. V pivbarax kul'turnye ljudi            ne p'jut.  
          in beerhalls cultured people.Nom Neg drink.3Pl  
       b. \*V pivbarax kul'turnyx ljudej            ne p'ët.  
          in beerhalls cultured people.Gen Neg drink.3Sg

In accusatives and passives, the verbal structure contains the “weak *v*” (Chomsky (2000, 2001)), hence the licensing of the relevant genitive in Japanese and Slavic contains weak *v*, plus an additional condition. In Slavic, it is negation; in Japanese, it is apparently dependent tense (Miyagawa (2012)).

(29) Licensing of the non-D genitive

Genitive is licensed in the environment of weak *v* and:  
 negation (Slavic) or dependent tense (Japanese).

The fact that negation may occur in the matrix as well as the subordinate clause makes it possible in Slavic for the genitive to occur in the matrix clause, but dependent tense is strictly a subordinate clause phenomenon, hence the genitive of dependent tense in Japanese only occurs in subordinate environments. It cannot occur in matrix clauses.

- (30) Doa-ga/\*no aita.  
       door-Nom/Gen opened

What is dependent tense? Ogihara (1994, 256) points out that the semantic content of tense in the subordinate clause is determined “in relation to structurally higher tenses.” The following example demonstrates this.

- (31) a. [Hanako-ga te-o ageta toki] kore-o watasite  
          Hanako-Nom hand-Acc raised when this-Acc give  
          kudasai.  
          please  
          ‘Please hand this (to her) when Hanako (lit.) raised her hand.’  
       b. [Hanako-ga te-o ageru toki] kore-o watasite  
          Hanako-Nom hand-Acc raise when this-Acc give  
          kudasai.  
          please

‘Please hand this (to her) when Hanako (lit.) raises her hand.’ In (31a), the inflection on the verb within the adverbial clause is that of past tense, yet the event it refers to occurs at a future time. The past inflection simply indicates a sequence in which first Hanako raises her hand and then an event of giving something to her should take place. In (31b), the verb within the temporal clause has the “present” inflection, but again denotes a future event. In this sentence, it refers to an event of Hanako raising her hand either after or at the same time as an event of giving something to Hanako. Ogihara (1994: 257) points out that “a present tense morpheme in a temporal adverbial clause shows that the episode described in it is simultaneous with (or is subsequent to) the event or state described in the matrix clause.” What we see, then, is that in these temporal constructions, the subordinate tense is somehow not fully specified as tense in the sense that it is dependent on the higher tense for semantic determination.

If a clause contains non-dependent tense, the genitive is not possible. The “because” or “if” clause has independent tense, as shown below.

- (32) Hanako-ga kekkon-suru/\*kekkon-sita kara/nara,  
 Hanako-Nom marry/married because/if  
 kanozyo-no kekkonsiki-ni de-tai.  
 her-Gen wedding-Dat attend-want  
 ‘Because/if Hanako is getting married/\*got married, I’d like to attend her wedding.’

These clauses in turn do not license the genitive.

- (33) a. Hanako-ga/\*-no kuru kara, uti-ni ite-kudasai.  
 Hanako-Nom/-Gen come because home-at be-please  
 ‘Because Hanako will come, please be at home.’  
 b. Ame-ga/\*-no futta kara, miti-ga nurete-iru.  
 rain-Nom/-Gen fall because street-Nom wet-is  
 ‘Because it rained, the streets are wet.’

We saw earlier that the D-licensed genitive occurs in TP without CP. Because T is not selected by C, it is incapable of assigning nominative case to the subject, which opens the way for D to license the case on the subject, and this case is the genitive. What about the genitive of dependent tense (GDT)? Given that it is not licensed by D, there is no reason to assume that the clause is less than a CP. In fact, we can see that it is a CP by the fact that a CP-level adverb is possible with a GDT.

- (34) [Saiwaini ame-no yanda toki] kodomotati-o soto-de  
 fortunately rain-Gen stopped when kids-Acc outside  
 asob-ase-ta.  
 play-Cause-Past

‘When the rain fortunately stopped, I made the kids play outside.’

To summarize the differences between the two types of genitive:

- (35) Two types of genitive in Japanese  
 D-licensed genitive: occurs in TP without CP; occurs with all kinds of predicates  
 Genitive of dependent tense: occurs in CP; occurs with unaccusatives and passives and on the object of certain transitive verbs.

As we will see, this difference is crucial to explaining the examples noted by Akaso and Haraguchi (2011), in which they show that the genitive is ungrammatical in the environment of focus.<sup>6</sup>

Another correlation between genitive of negation in Slavic and genitive of dependent tense in Japanese is that both can occur on objects of transitive verbs. The following shows this for Slavic.

- (36) a. Ja ne polučal pis'ma.  
 I Neg received letters.Acc.Pl  
 b. Ja ne polučal pisem.  
 I Neg received letters.Gen.Pl

This genitive is not possible on the subject of transitive verbs.

<sup>6</sup> Another difference between GDT and D-licensed genitive is found in the scope of the subject. Recall that a D-licensed genitive subject may take scope over the head noun ((9)) because with the D-licensing, the modifying clause is only a TP and the genitive subject is able to QR out of this TP and above the head noun. If GDT is contained in a CP, as we just saw, we predict that the genitive subject cannot take scope outside of its clause. This prediction is borne out (Miyagawa (2012)).

- (i) a. [[John-ka Mary]-**ga** kuru made] mati-masyou.  
 [[John-or Mary-Nom come until wait-let us  
 (i) ‘Let’s wait until the time when John or Mary comes.’  
 (ii) \*‘Let’s wait either until John comes or until Mary comes.’  
 b. [[John-ka Mary]-**no** kuru made] mati-masyou.  
 [[John-or Mary-Gen come until wait-let us  
 (i) ‘Let’s wait until the time when John or Mary comes.’  
 (ii) \*‘Let’s wait either until John comes or until Mary comes.’

As we can see in (ib), the genitive (GDT) subject only takes scope below the postposition *made* ‘until.’ Thanks to an anonymous reviewer for confirming data like this for the GDT.

- (37) a. Studenty ne smotrjat televizor.  
 students.Nom Neg watch.Pl TV  
 b. \*Studentov ne smotrit televizor.  
 students.Gen Neg watch.Sg TV

The correlation with Japanese is not direct, as the object of a normal transitive verb cannot be marked with the genitive.

- (38) Taroo-ga hon-o/\*-no yomu toki, ...  
 Taro-Nom book-Acc/-Gen read when  
 ‘When Taro reads a book, ...’

Where we do find such genitive marking is with the object of stative predicates. As is well known, the object of a transitive predicate is often marked with the nominative instead of the accusative.

- (39) Hanako-ga eigo-ga hanas-e-ru.  
 Hanako-Nom English-Nom speak-can-Pres  
 ‘Hanako can speak English.’

Now, to see that the GDT can mark the object in this kind of stative environment, observe the following examples (Miyagawa (2012)).

- (40) a. [Ziroo-ga eigo-ga wakar-anakat-ta toki]  
 Jiro-Nom English-Nom understand-Neg-Past when  
 Hanako-ga tasukete-ageta.  
 Hanako-Nom help-out.Past  
 ‘When Jiro didn’t understand English, Hanako helped out.’  
 b. \*[Ziroo-no eigo-ga wakar-anakat-ta toki]  
 Jiro-Gen English-Nom understand-Neg-Past when  
 Hanako-ga tasukete-ageta.  
 Hanako-NOM help-out.Past  
 c. ?\*[Ziroo-no eigo-no wakar-anakat-ta toki]  
 Jiro-Gen English-Gen understand-NEG-PAST when  
 Hanako-ga tasukete-ageta.  
 Hanako-Nom help-out.Past  
 d. (?) [Ziroo-ga eigo-no wakar-anakat-ta toki]  
 Jiro-Nom English-Gen understand-Neg-Past when  
 Hanako-ga tasukete-ageta.  
 Hanako-Nom help-out.Past

In (40a), both the subject and the object have nominative case, and there is no problem. In the ungrammatical (40b) and (40c), the subject has the genitive case; just as with Russian, we do not expect the genitive of dependent tense to occur on the subject of a transitive predicate. The striking example is (40d). In this example the subject has the nominative case and

the object has the genitive case. This example is predicted to occur on our analysis because it is an instance of the GDT, and this genitive occurs with T that is selected by C. Though it is dependent tense, being selected by C, this T is capable of licensing the nominative on the subject. The *v* here is weak because the entire predicate is stative and the *v* does not assign accusative case. This *v*, in conjunction with the dependent tense, can license the genitive on the object.

Why is it that in Japanese, the genitive cannot occur on the object of a non-stative transitive verb, which is possible in Slavic? Recall that one essential condition for the genitive is the occurrence of weak *v*. In Japanese, the stative predicate occurs with the weak *v* in that we do not see the accusative case, but instead, the default nominative case marker. What I speculate is that in Slavic, the occurrence of negation somehow optionally “weakens” the *v*, making it possible for the genitive to occur on the object. This is certainly not a solution and we need to look more carefully to see if this is on the right track.

#### 4. Strong Uniformity and Scrambling

I now turn to the problems posed at the outset concerning certain distinctions between nominative-marked and genitive-marked subjects. As I will show, Strong Uniformity and related assumptions can account for these distinctions.

Recall the minimal pair below noted by Harada (1971).

- (41) 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. \*kodomoto-tati-no minna-de ikioi-yoku kake-nobotta kaidan  
 children-Gen together vigorously run-climb up stairway

The fundamental assumption behind Strong Uniformity is the idea that all formal features, including the discourse configurational ones, start out at C. T by itself is devoid of any formal features that interact with syntactic operations to begin with, and it inherits whatever features it has from C. It is only when such inheritance occurs that T is active syntactically, and, for example, it attracts the subject to its specifier—the so-called EPP movement. The nominative subject in (a) is in Spec,TP, having moved there because T, being selected by C, has the full set of features and therefore is active, which triggers movement of the subject to its specifier (Miyagawa

(2010)). In (b), the genitive subject, being D-licensed, is in TP without CP, so that this T carries no formal features, making it inert as far as requiring movement is concerned. The reason why (b) is degraded is that the genitive subject has moved from its Spec,vP position despite the lack of need to do so; it is therefore an economy violation (Miyagawa (2011)).

We can make the same argument for why scrambling, which usually occurs freely in Japanese, is blocked when the subject is genitive (Dubinsky (1993)).

- (42) geki-de<sub>i</sub> musume-ga/\*-no t<sub>i</sub> odotta koto  
 play-in daughter-Nom/-Gen danced fact  
 ‘the fact that my daughter danced in a play’

The ungrammaticality of the genitive subject and scrambling cannot be due to the fact that the genitive subject must occur on the left edge. As Nakai (1980) showed, it is possible for items such as the temporal adverb to occur to the left of the genitive subject.

- (43) [*kyonen-made* danro-no atta] heya  
 last.year-until fireplace-Gen existed room  
 ‘the room where there was a fire place until last year’

In Miyagawa (2001), I argued, following a suggestion in Kuroda (1988), that scrambling may move an element to Spec,TP. Unlike Kuroda, who suggested that this movement is strictly optional, I argued that this movement is “EPP” movement. According to this, the two word orders, SOV and OSV, are structurally equivalent, as shown below.

- (44) a. Hanako-ga piza-o tabeta.  
 Hanako-Nom pizza-Acc ate  
 ‘Hanako ate pizza.’  
 b. Piza-o Hanako-ga tabeta.  
 pizza-Acc Hanako-Nom ate
- (45) a. [<sub>TP</sub> Hanako-ga<sub>i</sub> [<sub>vP</sub> t<sub>i</sub> piza-o tabe]-ta]  
 Hanako-Nom pizza-Acc eat -Past  
 b. [<sub>TP</sub> piza-o<sub>i</sub> [<sub>vP</sub> Hanako-ga t<sub>i</sub> tabe]-ta]  
 pizza-Acc Hanako-Nom eat -Past

In (a) the subject has moved to Spec,TP, and in (b), the object has moved to Spec,TP. In Miyagawa (2001), I give evidence that something must occupy the specifier of TP, commonly called the EPP requirement of T, and this is what we see above (see Koizumi and Tamaoka (2010) for experimental evidence for this analysis). In (a), the subject meets this requirement; in (b) the object meets the requirement. The latter is possible in Japanese, but not in English, because Japanese does not have subject-agreement, given



that it is a discourse-configurational language without agreement at T. This opens the way for essentially anything to move into Spec,TP to meet the EPP requirement.

Why is scrambling not possible if the subject is genitive, as we saw in (42)? The reason is that for the genitive subject to be D-licensed, there cannot be a CP structure, but only the TP structure. T is not selected by C, so that it does not contain any formal features that relate to syntax (such as nominative case). As I argued in Miyagawa (2010), unlike in Miyagawa (2001), the “EPP” requirement only arises if the T is selected by C and has formal features relevant to syntax. Scrambling an element such as in (42) is therefore an unnecessary movement, and, unless there is some reason to move, it violates economy of derivation.

There is one exception to the restriction against scrambling in the genitive-subject construction (thanks to Naoyuki Akaso for pointing this out).

- (46) a. [Hanako-ga furansugo-no hanas-e-ru] koto  
 Hanako-Nom French-Gen speak-can-Pres fact  
 ‘the fact that Hanako can speak French’  
 b. [furansugo-no<sub>i</sub> Hanako-ga t<sub>i</sub> hanas-e-ru] koto  
 French-Gen Hanako-Nom speak-can-Pres fact

This genitive is the GDT, which can only occur on internal arguments such as the object, as is the case above. What we saw earlier about the GDT is that, unlike the D-licensed genitive, it occurs in CP. This means that the T that occurs in (46) is selected by C, and has inherited formal features. We can see this by the fact that the subject “Hanako” has the nominative case marker. This also means that T may trigger movement, and in the scrambled case, it is the genitive object that has moved into Spec,TP to meet the EPP requirement of T.

## 5. Focus and Genitive

Let us now turn to the problem noted at the beginning of the paper in which the genitive becomes ungrammatical if there is focus (Akaso and Haraguchi (2011)).

- (47) Taroo-dake-ga/\*-no nonda kusuri  
 Taro-only-Nom/-Gen took medicine  
 ‘medicine that only Taro took’

Without the focus marker, the construction is perfectly grammatical.

- (48) Taroo-ga/-no nonda kusuri  
 Taro-Nom/-Gen took medicine

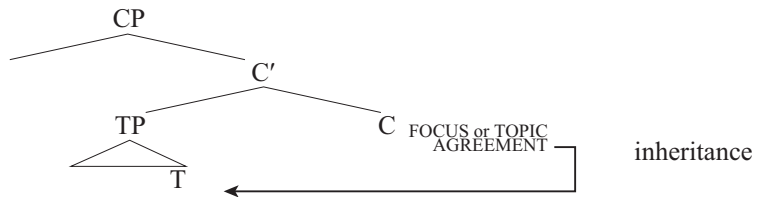
‘medicine that Taro took’

Why should focus matter in determining when the genitive can or cannot occur? To add to the mystery, in a recent work, Akaso and Haraguchi (2012) point out that the genitive is fine even with the focus marker if the verb is unaccusative.

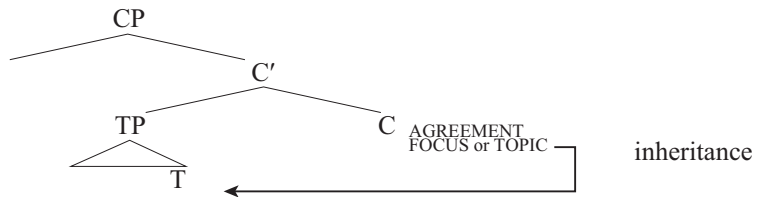
- (49) umi-dake-ga/-no mieru heya  
 ocean-only-Nom/-Gen see.can room  
 ‘the room from which only the ocean can be seen’

Under the Strong-Uniformity approach (Miyagawa (2010)), all languages begin with agreement and topic/focus features on C. The variation occurs with the choice of which feature is inherited by T.

- (50) Agreement-based languages



- (51) Discourse-configurational languages



Under this approach, the occurrence of agreement or focus/topic requires that a full CP occurs, so that these features will find the appropriate initial host at C. For agreement, we can see this in the ECM construction (Chomsky (2005)).

- (52) Mary expects John to come to the party.

The lower clause is a TP, not a CP, so that there is no agreement (or Case). Likewise, in a discourse-configurational language, occurrence of focus (or topic) is an indication that there is a full CP, with C having initially hosted the topic/focus feature before it is inherited by T.

This explains why the occurrence of the focus prohibits the genitive. The focus requires the clause to be a CP, but the genitive, which is D-licensed, can only occur in a TP without a CP.

## (53) D-licensed Genitive and Focus

A D-licensed genitive cannot occur with focus because focus requires CP but the D-licensed genitive cannot occur in CP.

This analysis also predicts that the genitive should be fine with focus if it is the genitive of dependent tense. As already noted, Akaso and Haraguchi (2012) notice precisely this point.

- (54) umi-dake-ga/-no mieru heya  
 ocean-only-Nom/-Gen see.can room  
 ‘the room from which only the ocean can be seen’

The following shows that the CP adverb “fortunately” is fine with the GDT.

- (55) saiwaini umi-dake-ga/-no mieru heya  
 fortunately ocean-only-Nom/-Gen see.can room  
 ‘the room from which fortunately only the ocean can be seen’

### 5.1. Focus at *v*

One issue that I did not take up in Miyagawa (2010) is the question of whether discourse configurational features such as focus may occur not only at C, but also at *v*. Focus marking combined with *ga/no* Conversion allows us to explore this issue in an interesting way. Recall that the following is ungrammatical because the occurrence of the focus marker *dake* ‘only’ requires the CP structure to occur.

- (56) Taroo-dake-ga/\*-no nonda kusuri  
 Taro-only-Nom/-Gen took medicine  
 ‘medicine that only Taro took’

Because the genitive, if it were to occur, would be on the subject of a transitive verb, this genitive cannot be the GDT. Therefore, it would have to be the genitive that is D-licensed, but D-licensing requires a TP without CP, which is not possible here because of focus marking. Now note the following contrast.

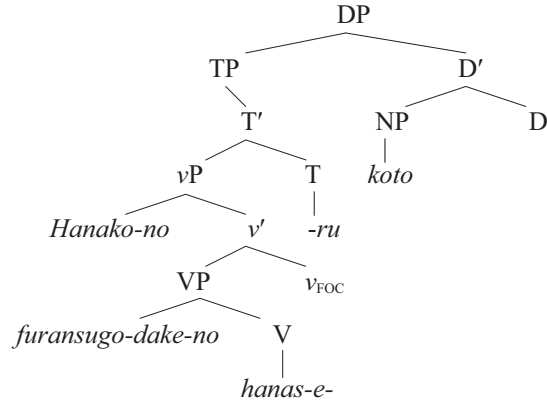
- (57) a. \*Hanako-dake-no furansugo-no hanas-e-ru koto  
 Hanako-only-Gen French-Gen speak-can-Pres fact  
 ‘the fact that only Hanako can speak French’  
 b. Hanako-no furansugo-dake-no hanas-e-ru koto  
 Hanako-Gen French-only-Gen speak-can-Pres fact  
 ‘the fact that Hanako can speak only French’

(57a) is ungrammatical for the same reason as (56): the genitive must be D-licensed, but focus marker forces there to be a CP structure which prevents D-licensing. In (57b), there is genitive marking on the object, and given that it occurs with the focus marker, we assume that it is the GDT. Earlier,

we saw that the GDT occurs in CP, unlike the D-licensing kind; if that is the case, then D-licensing of the genitive should be out. Yet, in (57b), the genitive on the subject is fine. This genitive cannot be the GDT because it occurs on the subject of a transitive verb. How can it be grammatical?

I suggest that in (57b), the focus marker is licensed by focus feature not on C, but on  $v$ .

(58)



The focus feature on  $v$  licenses the focus marker on the object ‘only French.’ Since this focus feature occurs on the phase head  $v$ , the requirement that the grammatical feature appears on a phase head is met with the  $vP$ . This, in turn, makes it possible for the higher structure to simply be a TP without a CP, which makes it possible for the genitive on the subject to be D-licensed. Further evidence for this is shown below.

- (59) a. \*saiwaini Hanako-no furansugo-dake-no hanas-e-ru  
 fortunately Hanako-Gen French-only-Gen speak-can-Pres  
 koto  
 fact  
 ‘the fact that fortunately Hanako can speak only French’
- b. saiwaini Hanako-ga furansugo-dake-no hanas-e-ru  
 fortunately Hanako-Nom French-only-Gen speak-can-Pres  
 koto  
 fact  
 ‘the fact that fortunately Hanako can speak only French’

In (a) the D-licensed genitive on the subject precludes a CP structure, so that the CP-adverb ‘fortunately’ cannot occur. In (b), the subject is marked with the nominative, which requires a CP structure and, as expected, ‘fortunately’ is perfectly grammatical.

One issue that comes up in the analysis given above is the status of weak

$v$ . If it is the case that the focus feature occurs on the weak  $v$ , and that is what is licensing the focus marker on the object, this weak  $v$  is a phase head, just like *C*. Yet, a weak  $v$ , by its nature, is normally thought to not function as a phase head (e.g. Chomsky (2000, 2001); but see Legate (2003)). Note, however, that the weak  $v$  for GDT (and also genitive of negation) is different from the typical weak  $v$  in that it licenses Case in the form of genitive case. In Miyagawa (2011), I suggested that phasehood is defined by the ability to assign Case.

(60) Case identifies phase heads. (Miyagawa (2011:1273))

Hence, despite being a weak  $v$ , this  $v$  counts as a phase head because it licenses Case. The fact that the weak  $v$  can host a focus feature is simply a consequence of this way of identifying phases.<sup>7</sup>

## 6. Conclusion

The idea that grammatical features, including discourse features of topic and focus, begin at *C*, and may be inherited by *T*, provides a typology of languages that makes a number of predictions. In this article, we pursued some of those predictions by looking at *ga/no* Conversion in Japanese. What we saw was that in Japanese, *T* that is not selected by *C* is inert for syntactic operations such as the EPP movement. This accounts for some of the differences in word-order possibilities noted by Harada (1971) in the first paper on *ga/no* Conversion, as well as later works. It is also the case that in a discourse-configurational language such as Japanese, the presence of topic/focus is equivalent to the presence of agreement in agreement-based languages such as English in requiring a full CP structure. This has the consequence of prohibiting the D-licensed genitive when focus marking occurs, only allowing the type of genitive licensed by dependent tense that has the same distribution as the genitive of negation in Slavic.

<sup>7</sup> A question that comes up is, what if  $v$  does not assign Case?

(i) ?(\*)Hanako-no furansugo-dake-ga hanas-e-ru koto  
Hanako-Gen French-only-Nom speak-can-Pres fact  
'the fact that Hanako can speak only French'

Speakers generally accept this, although one speaker did not, and this speaker noted that it becomes worse if some adverbial is placed before the genitive subject. If, however, the example is fine, one way to account for it is that the occurrence of the focus identifies  $v$  as a phrase head. This is speculation, and more work is needed to understand both the grammatical nature of this example and how to account for it.

## REFERENCES

- Akaso, Naoyuki and Tomoko Haraguchi (2011) "On the Categorical Status of Japanese Relative Clauses," *English Linguistics* 28, 91–106.
- Akaso, Naoyuki and Tomoko Haraguchi (2012) "On the Agent/theme Asymmetry in Japanese Nominative/genitive Conversion," paper presented at the 8th Workshop on Altaic Formal Linguistics.
- Babby, Leonard. H (1980) *Existential Sentences and Negation in Russian*, Karoma, Ann Arbor, Mich.
- Babyonyshev, Maria A (1996) "Structural Connections in Syntax and Processing: Studies in Russian and Japanese," Doctoral dissertation, MIT.
- Bailyn, John F. (1997) "Genitive of Negation is Obligatory," *Annual Workshop on Formal Approaches to Slavic Linguistics: The Cornell Meeting, 1995*, ed. by W. Browne, E. Dornsich, N. Kondrashova and D. Zec, 84–114. Michigan Slavic Publications, Ann Arbor, Mich.
- Bedell, George (1972) "On No," *UCLA Working Papers in Syntax 3: Studies in East Asian Syntax*, 1–20. University of California, Los Angeles.
- Chomsky, Noam (1995) *The Minimalist Program*, MIT Press, Cambridge, MA.
- Chomsky, Noam (2000) "Minimalist Inquiries: The Framework," *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels and Juan Uriagereka, 89–155, MIT Press, Cambridge, MA.
- Chomsky, Noam (2001) "Derivation by Phase," *Ken Hale: A Life in Language*, ed. by Michael Kenstowicz, 1–52, MIT Press, Cambridge, MA.
- Chomsky, Noam (2005) "Three Factors in Language Design," *Linguistic Inquiry* 36, 1–23.
- Chomsky, Noam (2008) "On Phases," *Foundational Issues in Linguistic Theory*, ed. by Robert Freidin, Carlos Otero and Maria-Luisa Zubizarreta, 133–166, MIT Press, Cambridge, MA.
- Cinque, Guglielmo (1999) *Adverbs and Functional Heads*, Oxford University Press, Oxford.
- Dubinsky, Stanley (1993) "Case-Motivated Movement to Non-Argument Positions: Evidence from Japanese," *Proceedings of the Japanese/Korean Linguistics 2*, 338–354.
- Fujita, Naoya (1988) *Genitive Subject in Japanese and Universal Grammar*, MA thesis, Ohio State University.
- Hale, Kenneth (2002) "On the Dagur Object Relative: Some Comparative Notes," *Journal of East Asian Linguistics* 11, 109–122.
- Harada, Shin-Ichi. (1971) "Ga-No Conversion and Idiolectal Variations in Japanese," *Gengo Kenkyu* 60, 25–38.
- Hiraiwa, Ken (2001) "On Nominative-Genitive Conversion," *MIT Working Papers in Linguistics 39: A few from Building E39: Papers in Syntax, Semantics, and Their Interface*, ed. by E. Guerzoni and O. Matushansky, 66–125.
- Hiraiwa, Ken (2005) *Dimensions of Symmetry in Syntax: Agreement and Clausal Architecture*, Doctoral dissertation, MIT, Cambridge, MA.

- Jiménez-Fernández, Ángel L. (2010) "Discourse-Agreement Features, Phasal C and the Edge: A Minimalist Approach," *Diacrítica—Ciências da Linguagem* 24, 23–46.
- Johnson, Kyle (2000) "How Far Will Quantifiers Go?" *Step by Step: Essays on Minimalism in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels and Juan Uriagereka, 187–210, MIT Press, Cambridge, MA.
- Kiss, Katalin É. (1995) "Introduction," *Discourse Configurational Languages*, ed. by Katalin É. Kiss, 3–27, Oxford University Press, Oxford.
- Koizumi, Masatoshi and Katsuo Tamaoka (2010) "Psycholinguistic Evidence for the VP-Internal Subject Position in Japanese," *Linguistic Inquiry* 41, 663–680.
- Kuroda, Shige-Yuki (1988) "Whether We Agree or Not: A Comparative Syntax of English and Japanese," *Linguisticae Investigationes* 12, 1–47.
- Legate, Julie (2003) "Some Interface Properties of the Phase," *Linguistic Inquiry* 34, 506–516.
- Maki, Hideki and Asako Uchibori (2008) "*Ga/No* Conversion," *The Oxford Handbook of Japanese Linguistics*, ed. by Shigeru Miyagawa and Mamoru Saito, 192–216, Oxford University Press, Oxford.
- May, Robert (1977) *The Grammar of Quantification*, Doctoral dissertation, MIT, Cambridge, MA.
- Miyagawa, Shigeru (1989) *Structure and Case Marking in Japanese, Syntax and Semantics* 22, Academic Press, New York.
- Miyagawa, Shigeru (1993) "Case-Checking and Minimal Link Condition," *MIT Working Papers in Linguistics: Papers on Case and Agreement* 2, 213–254.
- Miyagawa, Shigeru (2001) "The EPP, Scrambling, and *Wh*-in-Situ," *Ken Hale: A Life in Language*, ed. by Michael Kenstowicz, 293–338, MIT Press, Cambridge, MA.
- Miyagawa, Shigeru (2008) "Genitive Subjects in Altaic," *Proceedings of the Fourth Workshop on Altaic Formal Linguistics* (WAFL 4), 181–198.
- Miyagawa, Shigeru (2010) *Why Agree? Why Move? Unifying Agreement-based and Discourse Configurational Languages*, Linguistic Inquiry Monograph 54, MIT Press, Cambridge, MA.
- Miyagawa, Shigeru (2011) "Genitive Subjects in Altaic and Specification of Phase," *Lingua* 121, 1265–1282.
- Miyagawa, Shigeru (2012) *Case, Argument Structure, and Word Order*, Routledge Leading Linguists Series, Routledge, London.
- Nakai, Satoru (1980) "A Reconsideration of *Ga–No* Conversion in Japanese," *Papers in linguistics* 13, 279–320.
- Ochi, Masao (2001) "Move F and *Ga/No* Conversion in Japanese," *Journal of East Asian Linguistics* 10, 247–286.
- Ogihara, Toshiyuki (1994) "Adverbs of Quantification and Sequence-of-Tense Phenomena," *Proceedings from Semantics and Linguistic Theory IV* (SALT4), 251–267.
- Pesetsky, David (1982) *Paths and Categories*. Doctoral dissertation, MIT, Cambridge, MA.

- Richards, Mark D. (2007) "On Feature Inheritance: An Argument from the Phase Impenetrability Condition," *Linguistic Inquiry* 38, 563–572.
- Saito, Mamoru (1985) *Some Asymmetries in Japanese and Their Theoretical Implications*, Doctoral dissertation, MIT, Cambridge, MA.
- Sudo, Yasutada (2009) "Invisible Degree Nominals in Japanese Clausal Comparatives," *Proceedings of the Fifth Workshop on Altaic Formal Linguistics (WAFL 5)*, 285–295.
- Takahashi, Hisako (2010) "Adverbial Clauses and Nominative/Genitive Conversion in Japanese," *Proceedings of the Sixth Workshop on Altaic Formal Linguistics (WAFL 6)*.
- Watanabe, Akira (1996) "Nominative-Genitive Conversion and Agreement in Japanese: A Cross-linguistic Perspective," *Journal of East Asian Linguistics* 5, 373–410.
- Whitman, John (1992) "String vacuous V to Comp," paper presented at the 14th GLOW.

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