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( )	SHIGERU MIYAGAWA, MARIA BABYONYSHEV
journal or publication title	Scientific approaches to language
volume	3
page range	159-185
year	2004-03-30
URL	http://id.nii.ac.jp/1092/00000102/

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The EPP, Unaccusativity, and the Resultative Constructions in Japanese[1]

SHIGERU MIYAGAWA
MIT

MARIA BABYONYSHEV
Yale University

In this work in progress we explore the possibility that the EPP, which has been claimed to be "strong" universally for T, may not need to emerge when the verb is unaccusative. We present a detailed analysis of the *-te aru* resultative constructions in Japanese. There are two *-te aru* constructions, "intransitivizing" and "non-intransitivizing." It is the "intransitivinzing" construction which we claim lacks the EPP on T. The nominative object of this construction must move out of its VP/ *v*P, but it does not go all the way to the matrix Spec of TP. The matrix T apparently does not project a specifier, which is consistent with the idea that it does not have the EPP feature. The other resultative construction, "non-intransitivizing," is a subject-to-subject raising construction and the T does have the EPP. While we do not attempt in this paper to try to explain the root of this difference between the two resultative constructions, it is possible that the difference is pointing to some fundamental property of the EPP which has yet to be discovered.

1. Introduction

The EPP was originally proposed because of the obligatory appearance of the expletive in the Spec of TP in English sentences such as *There appeared a boy in the room* (Chomsky 1981). The EPP is informally referred to as the requirement that a clause must have a subject. If there isn't a category that can fulfill this requirement -- most commonly the thematic subject -- languages turn to other means, such as merging of an expletive, to satisfy this requirement. For it to work properly, we must assume that the EPP feature on T is universally "strong" (Chomsky 1995).

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[1] This paper (March 2004) is a progress report, and is intended to clarify some of the major issues we plan to take up more in depth in a longer version of the article.

In an important work, Alexiadou and Anagnostopoulou (1998) argued that this is true even when a language does not always fill the Spec of TP. In their study, the well-known "pro-drop" construction in Romance and other languages (e.g., Greek) does not have a phonetically null *pro* in the Spec of TP, so that the Spec of TP is not projected. The EPP on T, however, is strong. The EPP is satisfied by the AGR element on the verb, which, according to them, has the necessary D feature for checking the EPP feature on T (cf. Chomsky 1995). What is crucial in their analysis is that the AGR, which appears as part of the verbal complex, raises to T, thereby deleting the EPP feature. The following is taken from their work to compare English and Greek.

(1)   English   Greek

   I love   we love   agapo   agap**ame**

   you love you love   agap**as**   agap**ate**

   he loves they love   agap**a**   agap**ane**

The boldface portion of the Greek verb complex is the AGR. The point here is that this AGR is like an independent pronoun in English, an idea that can be traced back to Borer (1989). Both are D, and both can raise to T to satisfy the EPP requirement. In Greek and in other pro-drop languages, this is accomplished by raising the verb with the AGR to T. As Alexiadou and Anagnostopoulou point out, this makes the prediction that a pro-drop language necessarily has verb raising, a prediction that they state is confirmed without exception among the languages they have investigated.

    Although the EPP has been claimed to be a universal principle, the languages for which the EPP has been discussed are those that have agreement. What about languages that do not evidence agreement morphology? Japanese is such a language. Linguists have claimed that in Japanese nothing needs to raise to the Spec of TP, thereby suggesting that the EPP in Japanese is inapplicable (cf. Fukui 1986, Kitagawa 1986, Kuroda 1988). However, in recent work, Miyagawa (2001, 2003) has suggested that we can find evidence for the EPP even in

Japanese. We will go over the argument later in the article.[2]

Much of the discussion of the EPP and T has centered on the expletive construction, and also unergative and transitive verb constructions. In this article we will investigate the question of whether the EPP always holds for constructions involving unaccusative verbs. What we will find is that, in fact, it does not. This raises a question about the nature of the EPP – what exactly is behind the "a clause must have a subject" requirement? We will not attempt to answer this question in this article. Our contribution is that the EPP is not needed (although it may occur) with one type of verbs – unaccusatives. If this turns out to be correct, it indicates that the EPP is not a feature that is automatically merged on T. Rather, there is a direct relationship between the occurrence of the EPP and the type of predicate in the sentence.

In this article, we will look at the resultative construction in Japanese as a way of exploring issues of the EPP and unaccusativity. We begin with a description of the resultative construction.

2. Resultative Construction in Japanese

The resultative construction, illustrated in (2), is composed of the gerundive form of a verb with the ending -*te* (or the voiced counterpart -*de* in some instances) and the stative auxiliary verb *aru*.[3] Typically, the construction is formed from a transitive verb whose direct object bears accusative case (see (a)). In the resultative form, the underlying object surfaces with the nominative case (see (b)). In this construction, the subject cannot occur overtly, as shown in (c).

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[2] Other works have also suggested the EPP in Japanese. These include Kishimoto (2001), Kitahara (2002), Takahashi (2001), and Tsujioka (2001).

[3] See Martin (1975) for extensive discussion of these constructions. We will assume that this aru is something like the copula. It is used alone as a verb of location and possession.

(i) Heya-ni   terebi-ga   aru.
    room-in   TV-Nom   is
    'There is a TV in the room.'

(ii) Taroo-ni (wa)   musume-ga   aru.
    Taro-Dat (Top)   daughter-Nom   is
    'Taro has a daughter.'

(2) a. Taroo-ga   mado-o   aketa.
       Taro-Nom   window-Acc   open-Past
       'Taro opened the window'
    b. Mado-ga   akete aru.
       window-Nom   open is
       'The window has been opened'
    c. *Taroo-ga   mado-ga   akete aru.
       Taro-Nom   window-Acc   open is

We will refer to the resultative construction in (b) as the "intransitivizing" resultative. The understood subject in the intransitivizing resultative is typically interpreted as an arbitrary PRO, an issue which we will deal with later.

There is a second type of the resultative construction, which we will refer to as the "non-intransitivizing" resultative (cf. Miyagawa 1989), in which the object occurs with the accusative case. In this construction the subject surfaces with the expected nominative Case.

(3) Taroo-ga   mado-o   akete aru.
     Taro-Nom   window-Acc   open is
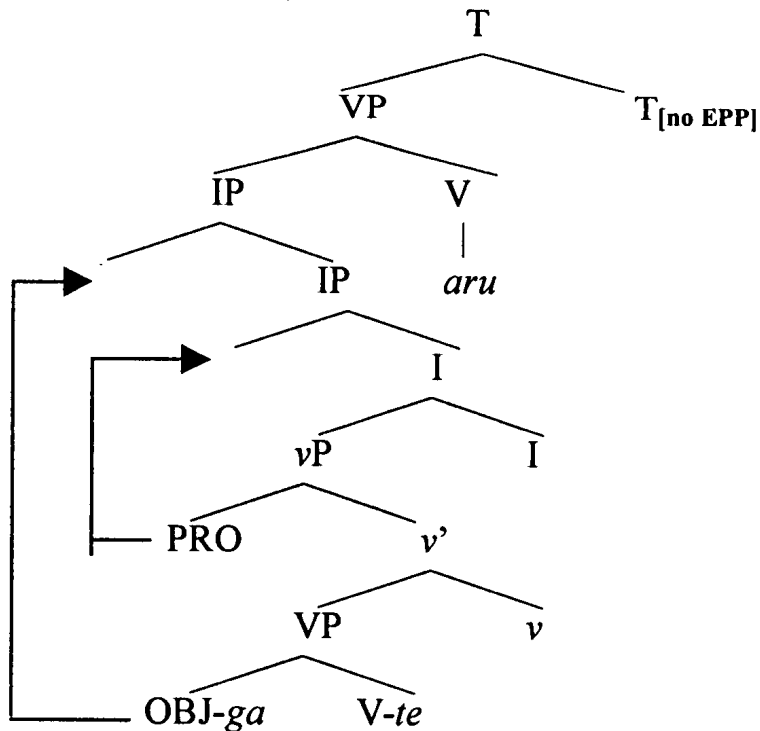   'Taro has opened the window.'

The following examples, taken from Matsumoto (1990), also illustrate the intransitivizing/non-intransitivizing resultatives.

(4) a. Kusuri-ga   sukosi nonde aru.
       medicine-Nom   a bit   take   is
       'The medicine has been taken'
    b. Hanako-wa   sono kusuri-o   nonde aru.
       Hanako-Top   that medicine-Acc   take   is
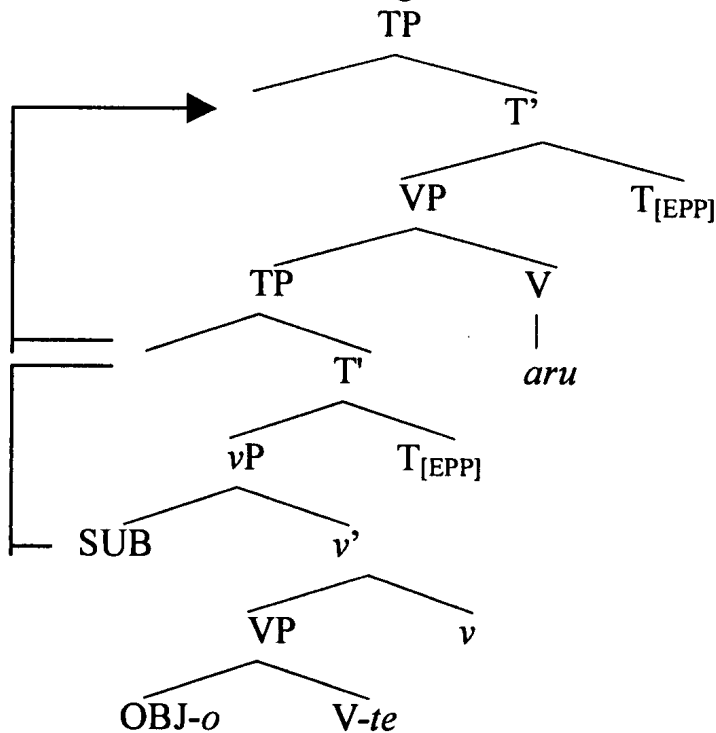   'Hanako has taken that medicine'

Matsumoto (1990) describes the difference in the meanings of the pair of examples in the following way. (4a) describes the state of the medicine, which occurs as a result of it being taken (e.g., some tablets are missing from the bottle), while (4b) describes the state of Hanako, which occurs as a result of her taking the medicine (e.g., she might be expected to recover from illness as a result of his action).

The structures we will propose for the intransitivizing and non-intransitivizing resultatives are as follows, ignoring irrelevant details. One crucial difference is that in the intransitivizing resultative, *aru* takes an IP, where I is "defective," while in the non-intransitivizing resultative, it takes an TP with a full tense.

(5) a. Intransitivizing resultative

```
                    T
           _____/ _____
          VP                  T[no EPP]
      ___/  \___
     IP        V
   _/ \_       |
  →    IP      aru
      _/ \_
     →     I
        __/ \__
       vP      I
     _/  \_
  →PRO     v'
         _/  \_
        VP     v
      _/  \_
 OBJ-ga    V-te
```

b. Non-intransitivizing resultative

```
                    TP
           _____/ _____
          →                   T'
                       _____/ _____
                      VP              T[EPP]
                  ___/  \___
                 TP         V
              __/  \__      |
             →        T'    aru
                    _/  \_
                   vP     T[EPP]
                 _/  \_
              SUB     v'
                    _/  \_
                   VP     v
                 _/  \_
             OBJ-o    V-te
```

Note that in the intransitivizing resultative, the nominative object moves out of its own VP and adjoins to the embedded IP, a point we will substantiate below, along with the other components of these two structures. At the same time the matrix T, which occurs with the unaccusative copula *aru*, is not associated with the EPP. This, we will argue, is a property of unaccusatives, of which the verb *aru* is one.

In the non-intransitivizing resultative, which has a true biclausal structure with independent T in the embedded clause, both the matrix T and the subordinate T are associated with the EPP. This requires the subordinate nominative subject to raise first to the lower Spec of TP, then to the higher Spec of TP. This is a subject-to-subject raising construction. In both (a) and (b) the matrix verb is the unaccusative copula *aru*, but in (a) the T does not have the EPP, while in (b) it apparently does. We do not know why the EPP appears on the matrix T in (b). At least this suggests that the situation in which the EPP appears is not just a matter of having a T. Independent of the resultative construction, we will see that the T with the copula *aru* does not have the EPP. This is maintained in the intransitivizing resultative, if the analysis above is correct. However, the same T appears with the EPP in the non-intransitivizing resultative. It is not clear to us precisely what the conditions are that trigger the emergence of the EPP in (b). In this article we will limit ourselves to showing that the T with unaccusatives does not need to have the EPP, and show its consequences. The next section describes some of the syntactic properties of the two resultative constructions.

2.1. Evidence for VP-Internal Base Position of the Nominative and Accusative Nominals

Let us turn to the question of where the nominative object argument of the intransitivizing resultative originates. Here, evidence from the distribution of numeral quantifier points to the fact that it is base-generated in a VP-internal position -- we assume the complement position of the verb. Numeral quantifiers and their associated NP hosts must occur in mutually c-commanding positions for the sentence containing them to be grammatical (Miyagawa 1989; cf. Haig 1980, Kuroda 1980).

This pattern is illustrated in (6). As (6a) shows, a VP-internal numeral quantifier associated with the surface subject of a passive verb is acceptable (because the base position of this nominal and the position of the numeral quantifier are in a c-commanding relationship), and as (6b) shows, a VP-internal numeral quantifier associated with the subject of a transitive verb is not acceptable (because the nominal has not occupied a VP-internal position at any point in the derivation).

(6) a. Kuruma$_i$-ga [$_{VP}$ doroboo-ni   t$_i$ ni-dai   nusum-are   ]-ta
       cars$_i$-Nom [$_{VP}$ thief-by   t$_i$ 2-CL   steal-passive]-PAST
       'Two cars were stolen by a thief'

   b. *Gakusei-ga   [$_{VP}$ hon-o   san-nin   kat] -ta
       students-Nom [$_{VP}$ book-acc 3-CL   buy] -PAST
       'Three students bought a book'

Thus, the ability of an NP to occur with a VP-internal numeral quantifier associated with it is a test for it having occupied a VP-internal position at some point in the derivation.

The floated numeral quantifier test shows that the nominative argument in the resultative construction originates in a VP-internal position (Miyagawa 1989), similar to the nominative argument of a passive verb. The relevant pattern is illustrated below.

(7) Hon$_i$- ga   tukue-no-ue-ni   t$_i$ san-satu   oite   aru.
     books-Nom   desk-Gen-top-on   t   3-CL   place   is
     'Three books have been placed on the desk'

This is evidence that the nominative object is base-generated in the standard direct object position, that is, VP-internally. It is also possible to associate a floated numeral quantifier with the accusative object in the resultative construction, as the example below demonstrates.

(8) Hanako-ga   tukue-no-ue-ni   hon-o   san-satu   oite   aru.
     Hanako-Nom   desk-Gen-top-on   book-Acc 3-CL   place   is
     'Hanako has placed three books on the desk'

We will assume, without further discussion, that the addition of *aru* makes it possible for the object of the transitive verb to occur with the nominative instead of the accusative case. This, in turn, triggers the movement of the nominative object, as we will see.

2.2. Evidence for Movement of the Nominative Object in the Intransitivizing Resultative

We now turn to evidence that the nominative object in the intransitivizing resultative moves to a position higher than its own VP, while the accusative object in the non-intransitivizing resultative does not. The evidence involves the focusing item *sae* 'even'. This element focuses the constituents that it c-commands (Ogino 1990). It is capable of attaching to a VP and focusing the elements that occupy a VP-internal position. But it is not capable of attaching to TP and focusing the elements that are contained within it – it simply does not attach to T. This is illustrated in (9a) and (9b). (9c) demonstrates that only the elements that are contained within a VP are focused by *sae*.

(9) a. [$_{VP}$ kuruma-o uri-] sae
        car-acc   sell -even
      'even sell a car'

   b. * [$_{TP}$ Taroo-ga   konpyuutaa-o   naosita]-sae
          Taro-Nom computer-Acc   repaired -even
       'Even Taro repaired the computer'

   c. Taro-ga [$_{VP}$ Hanako-ni   hon-o   age] -sae   sita.
       Taro-nom [$_{VP}$ Hanako-Dat book-Acc give]-even   did
       'Taro even gave Hanako a book'
      *'Even Taro gave Hanako a book'

The example in (c), in which the subject is not in the scope of *sae*, addresses a question we have not raised up to now. Ogino (1990) suggested that *sae* in these constructions attaches to VP. At the time of her writing, *v*P was not a part of the theory, but now, we can imagine the alternative that it is to *v*P, not VP, that *sae* attaches. However, what (c) suggests is that Ogino's original idea is correct – *sae* attaches to VP. The reason is that in (c), the subject is not in the scope of *sae*. If *sae*

were to attach to *v*P, we would expect the trace of the subject in the Spec of *v*P to allow the subject to be focused. The fact that it can't be is indication that *sae* attaches to VP. We will assume this.[4]

When *sae* occurs in the resultative constructions, attaching to the VP, the nominative object in an intransitivizing resultative can be focused, demonstrating that, unlike the nominative subject of a transitive verb in (9c) above, it originated in a VP-internal position, so that there exists a VP-internal trace coindexed with this element (see 10a). The parallel construction is also possible with the accusative object in the non-intransitivizing resultative (see 10b).

(10) a. Hon$_i$-ga   [tukue-no-ue-ni   t$_i$ oite] -sae   aru.
        book$_i$-Nom   [desk-Gen-top-on t$_i$ place] -even is
        'Even books are placed on the desk'

      b. Taroo-ga   hon$_i$-o   [tukue-no-ue-ni   t$_i$ oite]-sae   aru.
         Taroo-Nom book$_i$-Acc [desk-Gen-top-on t$_i$ place] -even is
         'Taro even put books on the desk'

Using *sae*, we can demonstrate that the final positions of the nominative object in the intransitivizing resultative and the accusative object in the non-intransitivizing resultative are distinct, with the nominative object ultimately occupying a higher position. Consider the sentences in (11a,b). Both of these can have the interpretation given in (11c), where the verb together with its underlying object is focused.

(11) a. (John-wa) baabon-ga   nonde-sae aru.
        (John-top) bourbon-Nom drink-even is
      b. (John-wa) baabon-o   nonde-sae aru
        (John-top) bourbon-Acc drink -even is
      c. John even DRUNK BOURBON - Even the action of drinking bourbon has taken place. (John is usually a very quiet teetotaler. He behaved out of character last night -- he danced on the table, picked a fight, insulted the waitress, and he even drunk bourbon)

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[4] Alternatively, we might imagine that the trace left by the subject is invisible to computation of focus and other such matters, a possibility that is in fact noted in Miyagawa (2001, 2003).

d. John even DRUNK bourbon. - Even the action of drinking has taken place in relation to bourbon. (John has discovered that he is fascinated with bourbon. Yesterday, he spent all evening playing with bourbon: he smelled it, he set it on fire, he looked at it in different lights. He even drank it.)

(11c) is a pattern similar to the one discussed above, and it shows one of two things: either the nominative and accusative objects are VP-internal in overt syntax or the nominative and accusative objects have left a coindexed trace in a VP-internal position. However, the interpretation given in (11d), where the verb, but not the underlying object, is focused, is available only to (11a), which contains a nominative object.

Presumably, when an element originates within the scope of *sae* and then moves, passing out of *sae*'s c-command domain, its scope can be determined in one of two ways. It can be assigned in accordance to the position of the element's trace, or it can be assigned in accordance to the surface position of the element. Thus, the fact that the interpretation (11d) is available for the intransitivizing resultative shows that the nominative object's ultimate position is outside of the c-command domain of *sae*, that is, outside of the VP. By the same token, the unavailability of the interpretation (11d) for the non-intransitivizing resultative shows that the accusative nominal does not raise out of the VP.

A similar conclusion can be reached by examining the interpretation of the nominative and accusative objects when they co-occur with the focusing element *dake* 'only'. The properties of NP modified by *dake* have been discussed by Tada (1992) and Koizumi (1995). Koizumi argues that the scope of such NPs is determined by the position in which they are case-licensed. If the NP is case-licensed in the position c-commanded by a verb, it will have narrow scope with respect to the verb, but if it is case-licensed in a position that c-commands the verb, it will have wide scope with respect to the verb. This basic observation is illustrated in (12), where it is shown that an accusative object has narrow scope with respect to a potential verb, but a nominative object has wide scope with respect to the potential verb. The explanation of this pattern, according to Koizumi, is that the accusative nominal is licensed in the

embedded clause, while the nominative nominal is licensed in the matrix clause.

(12) a. John-wa   baabon-dake-o   nom-e-ru.
John-Top bourbon-only-Acc drink-pot(ential)-pres
can > only 'John can drink straight bourbon'
*only>can   'It is only bourbon that John can drink'
b. John-wa   baabon-dake-ga   nom-e-ru.
John-Top bourbon-only-Nom drink-pot-pres
*can > only   'John can drink straight bourbon'
only > can   'It is only bourbon that John can drink'

Turning to the resultative constructions, we can see that the nominative and the accusative nominals have different scopal interpretations. As (13) demonstrates, the accusative nominal has narrow scope with respect to the verb, while (14) shows that the nominative nominal has wide scope with respect to the verb.

(13) Baabon-dake-o   nonde aru.
bourbon-only-Acc drink   is
'It is only bourbon (straight bourbon) that has been drunk.'
(14) Baabon-dake-ga   nonde aru
bourbon-only-Nom drink   is
'It is only drinking bourbon that has occurred.'

This pattern shows that in the final position of the nominative object, the object occupies a VP-external position. It also shows that the position of the accusative object is not VP-external, so that it is c-commanded by the verb.

Let us summarize what we have shown so far. The object in both the intransitivizing resultative and the non-intransitivizing resultative have been shown to be base-generated in a VP-internal position -- the position of the internal argument of the verb. Further, the nominative object of the intransitivizing resultative construction has been shown to move out of the VP, and the accusative object of the non-intransitivizing resultative has been shown to remain VP-internal. Thus, the positions of the two types of objects are distinct, with the position of the nominative object being higher than the position of the

object being higher than the position of the accusative object.   In the next section we present evidence that this movement of the nominative object in the intransitivizing resultative is A-movement.   We will also show that the landing site is not the matrix Spec of TP.   The last point gives evidence that the T of this construction is not associated with the EPP.

2.3. Evidence for A-movement o a Position Below the Spec of TP

In this section we present evidence showing that the movement of the nominative object in the intransitivizing resultative is A-movement.   We will also show that the target of this movement operation is lower than the matrix Spec of TP.

Evidence for A-movement being involved in the intransitivizing resultative comes from idiom chunks.   It is well known that such A-movement operations as passive and raising can move a part of an idiom without changing the meaning of the idiom as a whole.

(15) a.   Tabs were kept on John.

b.   Tabs seem to have been kept on John.

The examples given below show that the movement operations within passive formation and resultative formation pattern together, with the resultative allowing the object of an idiom to move just in those cases when the same movement is possible in the passive.   The passive and intransitivizing pair in (15) shows that with this idiom, a chunk of the idiom may move without sacrificing the idiomatic meaning.

(16) idiom: sigoto-o   sewasuru
                work-Acc   take:care
                'introduce (someone) to a job'

a.   Kare-ni   sigoto-ga   sewas-are-ta.   (passive)
      he-to   work-Acc   take:care-Pass-Past
      'A job was introduced to him.'

b.   Kare-ni(-wa)   (mou)   sigoto-ga   sewasite aru.
      he-to(-Top)   (already)   work-Nom   take:care is

(intransitivizing resultative)

'A job has (already) been introduced to him.'

In contrast, the following idiom does not allow either the passive or the intransitivizing resultative to apply. The example in (c) shows that the idiomatic meaning is maintained in the non-intransitivizing resultative.

(17) idiom: mendoo-o   miru
        care-Acc   see
        'to take care of somebody'

  a. *Kare-no   kodomo-no mendoo-ga   mi-rare-ta. (passive)
      he-Gen   child-Gen   care-Nom   see
      'His child has been taken care of.'

  b. *Kare-no kodomo-no   mendoo-ga mite aru.
      he-Gen child-Gen   care-Nom   see is
                       (intransitivizing resultative)
      'His child has been taken care of.'

  c. ?Kare-no   kodomo-no   mendoo-o   mite aru.
      he-Gen   child-Gen   care-Acc   see is
                    (non-intransitivizing resultative)
      'His child has been taken care of.'

The parallel with the passive illustrated above shows that the movement operation that raises the nominative object in the intransitivizing resultative is A-movement, and obeys the same constraints as other instances of A-movement.

We now turn to evidence that the nominative object in the intransitivizing resultative does not move into the matrix Spec of TP. The subject-oriented anaphor *zibun* 'self', which can only take nominals occurring in the subject position as its antecedent, shows that this movement of the nominative object is to a position lower than the Spec of TP. As shown below, the nominative subject of a transitive verb, and a passive verb, may function as the antecedent of *zibun*.

(18) a.   Hanako$_i$-ga   zibun$_i$-no hon-o   yonda.
        Hanako$_i$-Nom self$_i$-Gen   book-Acc read
        'Hanako read self's book.'

  b.   Taroo$_i$-ga   zibun$_i$-no sensei-ni   sikar-are-ta.
        Taro$_i$-Nom   self$_i$-Gen teacher-by scold-Pass-Past
        'Taro was scolded by self's teacher.'

Crucially, the nominative object in the intransitivizing resultative cannot act as the antecedent of *zibun*, indicating that it is not in the Spec of TP.

(19)   *Hanako$_i$-ga   zibun$_i$-no sensei-ni   t$_i$ syookaisite aru.[5]
       Hanako$_i$-Nom self$_i$-Gen teacher-Dat t$_i$ introduce   is
       'Hanako has been introduced to self's teacher'

This makes the nominative object in the intransitivizing resultative the same as the standard nominative object in stative constructions. As shown below, the nominative object of a stative verb cannot be the antecedent of *zibun*.

(20)   Taroo$_i$-ga Hanako$_j$-ga   zibun$_{i/*j}$-no kuruma-de okur-are-ru.
       Taro-Nom Hanako-Nom self-Gen   car-by   take-can-Present
       'Taro was able to take Hanako by his/*her own car.'

To sum up, so far we have seen that the nominative object in the intransitivizing resultative is base-generated as the internal argument of the verb, it undergoes A-movement out of the VP, and ultimately raises to a position which is lower than the Spec of TP. Below we will give a structural analysis of the two resultative constructions.

3. The Structure of the Two Types of Resultatives

In this section, we present an analysis of the structure and derivation of the two types of resultatives.

We have seen that the resultative construction allows the object to be marked with the nominative case (intransitivizing) or the accusative case (non-intransitivizing). However, there are instances in which only the

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[5] We have checked with a number of native speakers about (19), and the judgment that it is ungrammatical with the intended construal is unanimous. However, Matsumoto (1990:271) claims, contrary to this judgment, that the nominative phrase in the intransitivizing resultative may function as the antecedent of the anaphor. The example he gives is the following.

(i) (?) Tabuchi$_i$-ga   zibun$_i$-no negai doori-ni   daida-ni   totte aru koto.
        Tabuchi-Nom self-Gen wish in-the-way pinch-hitter take is   thing
        'the fact that someone is in the state of keeping Tabuchi$_i$ as a pinch-hitter, as self$_i$ wishes'

The question mark in parentheses, which is Matsumoto's, indicates that he himself apparently finds this example somewhat marginal, although he assumes that it is basically grammatical. The example sounds marginal to one of the co-authors, Miyagawa.

accusative case is allowed. The following is taken from Sugioka (1984:186).

(21) a. Boku-wa yado-o   kinoo   yoyakusi-te aru.
         I-Top   room-Acc yesterday reserve   is
                                                 (non-intransitivizing)
         'I've reserved the room yesterday.'
     b. *?Boku-wa yado-ga   kinoo   yoyakusi-te aru.
         I-Top   room-Nom yesterday reserve   is
                                                 (intransitivizing)

In Sugioka's analysis, the subordinate, gerundive verb and *aru* in the intransitivizing resultative are reanalyzed as a single predicate, and together, they denote a perfective tense. Hence, an adverb such as "yesterday," which denotes "past," cannot occur with the intransitivizing resultative because it would refer solely to the tense of the gerundive verb, "reserve." In contrast, as Sugioka notes, an adverb that has a perfective meaning, such as "already," is possible with the intransitivizing resultative.

(22) Boku-wa yado-ga   sudeni   yoyakusi-te aru.[6] (intransitivizing)
      I-Top   room-Nom already reserve   is
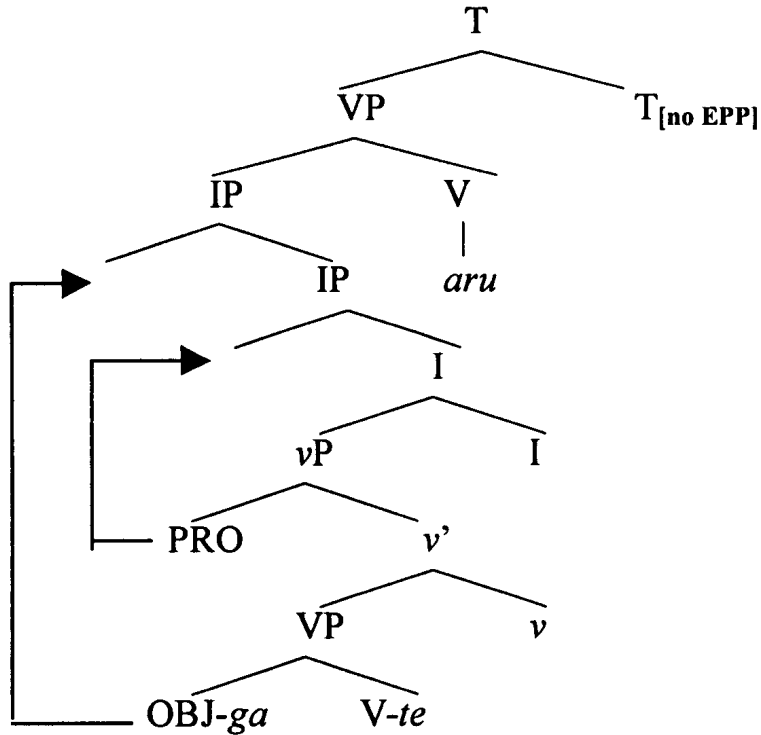   'I have reserved a room already.'

Reanalysis does not occur with the non-intransitivizing resultative, making it possible for "yesterday" to occur and pick out the tense reference just of the gerundive verb "reserve" (cf. (21a).

As Sugioka notes, we can assume that the fact that a time adverb such as "yesterday" can occur in the non-intransitivizing resultative, but not in the intransitivizing one, is an indication that there is independent tense associated with the lower clause in the non-intransitivizing resultative, but not in the intransitivizing one. To distinguish the two, we follow Sugioka in assuming that the lower clause of the intransitivizing resultative has a "defective"   Infl, while the
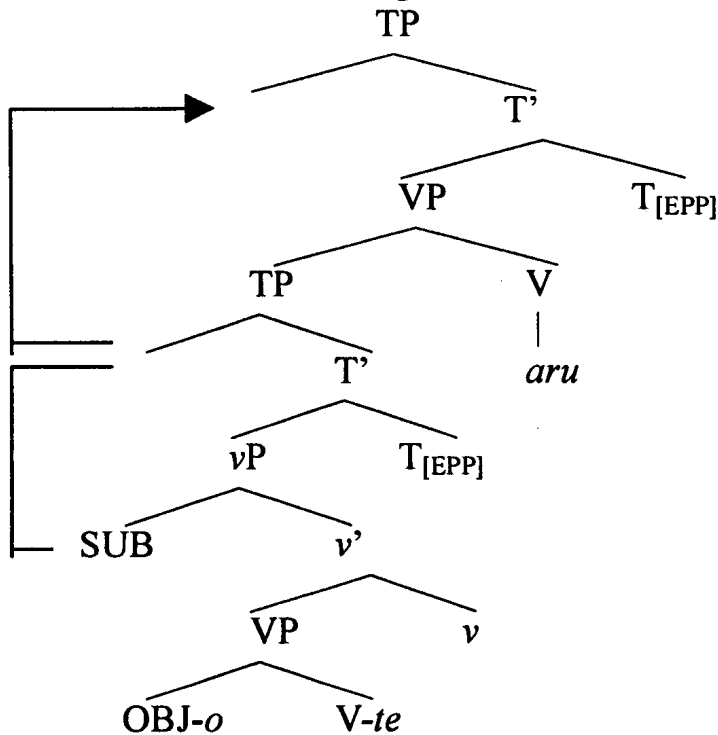
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[6] Sugioka's translation of this intransitivizing resultative example in (21b) makes it look as if it is able to have an overt agent, something we have denied. In fact the interpretation of the topic ("I") is something like "As for me..." and not as the true agent of the sentence.

intransitivizing resultative has a "defective" Infl, while the lower clause in the non-intransitivizing resultative is a "full" T that has independent tense. However, we do not assume that any sort of reanalysis takes place.

(23) a. Intransitivizing resultative

```
                        T
              ┌─────────┴────────┐
             VP                 T[no EPP]
        ┌─────┴─────┐
       IP           V
   ┌───┴───┐        │
  →IP       IP      aru
  │     ┌───┴───┐
  │    →         I
  │    │    ┌────┴────┐
  │    │   vP         I
  │    │ ┌──┴──┐
  └────PRO     v'
            ┌──┴──┐
           VP      v
        ┌───┴───┐
      OBJ-ga   V-te
```

b. Non-intransitivizing resultative

```
                     TP
            ┌─────────┴────────┐
          →            T'
                  ┌─────┴─────┐
                 VP          T[EPP]
            ┌─────┴─────┐
           TP           V
       ┌────┴────┐      │
      →          T'     aru
              ┌───┴───┐
             vP       T[EPP]
          ┌───┴───┐
        SUB       v'
              ┌───┴───┐
             VP        v
          ┌───┴───┐
        OBJ-o    V-te
```

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The "T" in the lower clause in the non-intransitivizing resultative in (b) is independent tense, allowing a time adverb such as "yesterday" to occur with this tense. No such full tense occurs in the intransitivizing resultative, so that a time adverb cannot solely pick out the tense of the lower clause. The "I" in the intransitivizing resultative is an inflection that is "defective" in the sense that it does not have tense. The adverb "already," which, as we saw above, is fine with the intransitivizing resultative, is associated with the T in the matrix clause, which is perfective, as noted by Sugioka.[7]

Let us look more carefully at these structures. We begin by explaining the second structure above, that of the non-intransitivizing resultative. As shown by the movement of the lower subject, first to the lower Spec of TP, then to the higher Spec of TP, this structure is a subject-to-subject raising construction. Presumably, each of the movements is required by the EPP on each of the T heads. Evidence that the nominative subject in the non-intransitivizing resultative moves all the way up to the Spec of the matrix TP is given below.

The universal expression *zen'in* 'all' may be interpreted inside the scope of negation if it occurs in the object position.

(24)   Taroo-ga zen'in-o   sikari-masen-desita.[8]
       Taro-Nom all-Acc   scold-Neg-Past
       'Taro didn't scold all.'
       not > all

As pointed out by Kato (1988), when the universal expression occurs in the subject position, it is difficult to interpret it inside the scope of negation.

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[7] See Stowell (1982) for arguments that the I of an infinitive clause that hosts PRO has independent tense.

[8] We are using the "polite" *masu* form of the verb in order to ensure that this sentence is interpreted as a matrix clause, and not as an embedded clause. Embedding masks the relevant judgment (see Miyagawa 2001 for discussion of this phenomenon).

(25) Zen'in-ga   tesuto-o   uke-masen-desita.
     all-Nom   test-Acc   take-Neg-Past
     'All did not take the test.'
     *not > all, all > not

Miyagawa (2001, 2003) argues that this is evidence that even in Japanese, there is EPP on T.   In (25), the subject, *zen'in*, has moved to the Spec of TP, where it fails to be c-commanded by negation.   Negation is assumed to occur somewhere between *v* and T (cf. Laka 1990, Pollock 1989).   We must assume, of course, that the A-movement of the subject from its original Spec of *v*P to the Spec of TP does not reconstruct.   This analysis gives further credence to the idea that the EPP on T is strong, a point Miyagawa states explicitly.

What Miyagawa showed is true of transitive   and unergative verbs. However, it turns out that we get a different result with unaccusatives.[9]   Note, first of all, that the copula *aru*, which is the matrix verb of the resultative constructions,   is   unaccusative by the test of floated numeral quantifier (cf. Miyagawa 1989). (This   verb takes an inanimate subject only).

(26) Zen'in-no-hon-ga$_i$ koko-ni   t$_i$ san-satu   aru.
     all-Gen-book-Nom$_i$ here-at   t$_i$ 3-CL   are
     'Three books are here.'

Now note that the nominative subject of *aru* may be interpreted inside the scope of negation, unlike the subject of transitives and unergatives (*arimasen* is the polite form of *aru*).

(27) Zen'in-no-hon-ga   ari-masen.
     all-Gen-book-Nom   be-Neg
     'There aren't everyone's books (here).'
     not > all (all > not)

As we will see, this property of the absence of the EPP with the

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[9] In Miyagawa (2001), he states that T with unaccusatives also appear to have the EPP, but that there are some issues to resolve.

unaccusative *aru* is maintained with the intransitivizing resultative (but not with the non-intransitivizing resultative).

Returning to the non-intransitivizing resultative, note that the universal "all" in the subject position is outside the scope of negation, indicating that it has moved up to the Spec of the matrix TP.

(28) Zen'in-ga   tesuto-o   ukete   ari-masen.
      all-Nom   test-Acc   take   is-Neg
      'All has not taken the test.'
      *not > all, all > not

This means that the matrix T of the non-intransitivizing resultative behaves the same as the T of transitives and unergatives, i.e., it has the EPP feature.

Turning to the intransitivizing resultative, there are at least three characteristics of the structure in (23a), repeated below, that we need to explain.

(23) a. Intransitivizing resultative
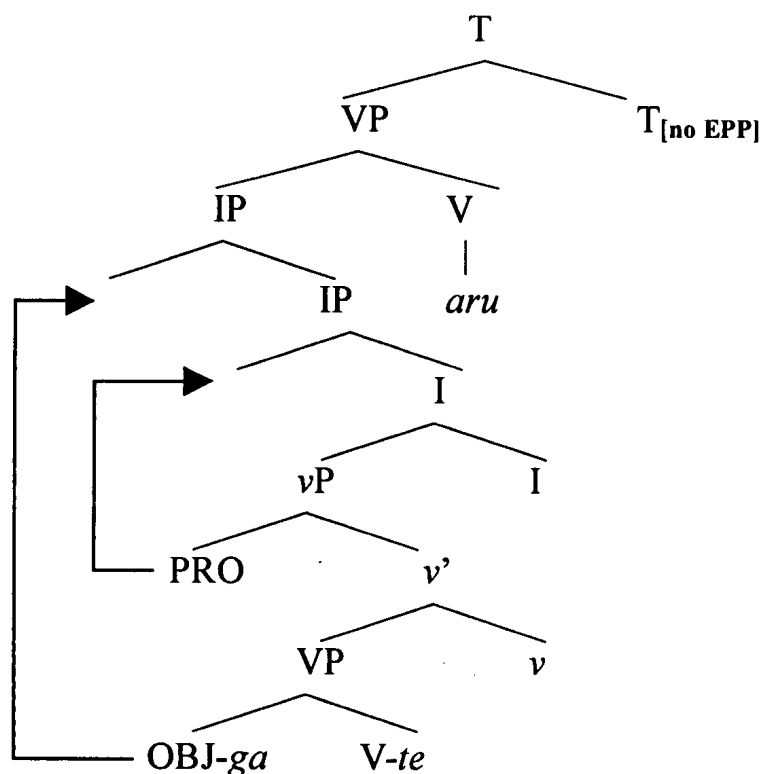
The first is the occurrence of PRO. Second is the lack of a full "TP" projection for the matrix clause; the structure has the "defective" I. The

third is the movement of the nominative object to adjoin to IP. We will begin with PRO.

There are two points about PRO. First, this PRO is not control PRO, but something like arbitrary PRO. This can be seen in the earlier example from Matsumoto (1990). We repeat the example and his description.

(3) a. Kusuri-ga sukosi nonde aru.
　　　 medicine-Nom a bit take is
　　　 'The medicine has been taken'

This sentence describes the state of the medicine, which occurs as a result of it being taken (e.g., some tablets are missing from the bottle). Hence, there is no specified agent, although that may be understood from the context. There is no need, however, for a specific individual to be identified as the taker of the medicine in this example. All intransitivizing resultative examples have this basic arbitrary agent interpretation or, in some cases, it picks up a specific referent from the context.

The second point about PRO is the question, how can we be sure that PRO, as opposed to a fully-specified DP, occurs in the intransitivizing resultative? Recall from our discussion of Sugioka's observations that in the intransitivizing resultative, the lower clause is not a fully tensed clause. We assume that this lack of a tensed clause (the defective "I") precludes a fully specified DP from occurring in this position and having its nominative case be licensed. PRO is presumably possible because it has an impoverished set of features, which, in English, leads to its occurrence in the infinitival clauses whose T is also impoverished (Chomsky 2000).

Next, we turn to the movement of the nominative object from its original complement position inside the VP to adjoin to IP. Why does the nominative object have to move, and why does it not move to the matrix specifier of TP? Let us begin with the second question. We can give evidence using the negative scope test.

(29)　Zen'in-ga　yonde　ari-masen.
　　　all-Nom　　invite　is-Neg
　　　'All have not been invited.'
　　　?not　> all (all > not)

As shown, it is possible for the nominative object "all" to be interpreted inside the matrix negation.[10]　This suggests that the nominative object does not move all the way to the Spec of matrix TP.　What could be the reason?

　　　We suggest that the matrix T of the intransitivizing resultative lacks the EPP feature.　On the surface, this appears only to be describing the problem.　And in a sense it is.　However, what we have in mind with this is that, universally, there is a certain kind of "T" that need not come with the EPP feature.　We suggest that this T is the T that accompanies unaccusative verbs,　of which the　intransitivizing　resultative　is　one. As shown below, a true unaccusative verb has a similar　property with regard to the interpretation of the universal expression in negation.

(30)　Zen'in-ga　sini-masen-desita.
　　　all-Nom　　die-Neg-Past
　　　'All didn't die.'
　　　not > all (all > not)

As shown a verb like "die", which is a typical unaccusative verb, does not require the sole DP to raise to the Spec of TP.　We thus have the following generalization.

(31)　EPP
　　　The EPP is universally "strong" for all T except for the T that takes a vP that contains an unaccusative verb.

　　　It is worth pointing out that we can observe this even in English. The locative inversion example below has the property that a locative

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[10] Note that it is also possible to have the all > not reading.　One possibility is that "all" can be interpreted as a group, which always gives the all > not reading (cf. Miyagawa 2001).The possibility of the other reading, all > not, is due to the fact that "all" can be interpreted as a group (cf. Miyagawa 2001).

phrase appears pre-verbally and the nominal that T agrees with appears post-verbally, very much like the expletive construction (cf. Bresnan and Kinerva 1989). This locative inversion occurs most commonly with unaccusatives.

(32) On the wall hung a picture.

It is sometimes said that the pre-verbal PP meets the EPP of T. However, if we look closely, we can see that the PP is not in the standard Spec of TP (cf. Miyagawa, to appear).

(33) *Who$_i$ was on the wall hung a picture of t$_i$?

The wh-extraction is ungrammatical with the verb *was* inverting. The PP is somehow blocking this inversion, something that should not happen if the PP were in the Spec of TP. In contrast to (33), the following is perfect.
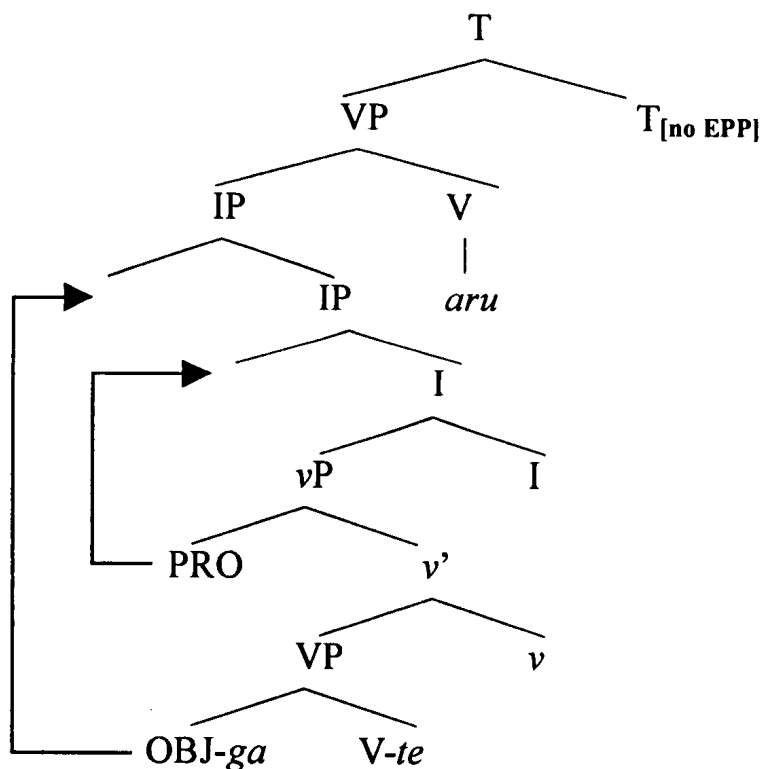
(34) Who was there a picture of t$_i$ on the wall?

In this example the expletive occurs in the Spec of TP, something that is uncontroversial. As a result it is perfectly fine to invert *was* across it as part of wh-extraction. On this account of locative inversion, the example in (32) does not have anything in the Spec of TP, at least anything with phonetic content. We can surmise that here is another example in which the T that goes with an unaccusative verb need not have the EPP[11].

Let us return to the third and final problem we mentioned earlier, namely, what causes the nominative object to move and adjoin to IP? The structure is again repeated.

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[11] However, it is important to note that the situation is not entirely straightforward here, since the literature does contain arguments for analyzing the pre-verbal PPs as occurring in the Spec of TP in English as well as a range of other languages (e.g., Branigan 1992, Babyonyshev 1996, etc).

(23) a. Intransitivizing resultative

```
                        T
              ┌─────────────────┐
             VP              T[no EPP]
        ┌──────────┐
       IP          V
   ┌────────┐      │
  IP        IP    aru
         ┌───────────┐
        vP           I
    ┌────────┐
   PRO       v'
        ┌──────────┐
       VP          v
   ┌────────┐
 OBJ-ga   V-te
```

As we noted earlier, the evidence for this movement has to do with the fact that the nominative object may have scope inside or outside the focus marker *sae* 'even', which attaches to VP. The fact that it can be interpreted outside the scope of the focus marker shows that the nominative object has moved out of the VP. The fact that it can be interpreted inside the scope of focus shows that the trace left by the movement is available for focus interpretation. Since we know already that this nominative object does not move to the matrix Spec of TP, we assume that it moves and adjoins to IP.

Why does this nominative object move at all? A temptation is to say that the I head has an EPP feature. However, there is a way to derive the movement without postulating the EPP on I. The nominative case marking must be checked by T (Takezawa 1987). This means that it must move to a position where it is accessible from the matrix T, since there is no T in the embedded clause that can license a fully-specified nominative DP. Assuming that vP is a phase and the only item that is accessible from the next phase is at the edge of vP (and the head) (Chomsky 2000, 2001), we have a natural explanation for why the

nominative object must move and adjoin to IP without stipulating that I has the EPP feature. Once it moves and adjoins to IP, it is accessible from the matrix T, and the relevant feature on T and the nominative Case on the nominative object enter into an AGREE relation (Chomsky 2000, 2001). This relation per se does not require movement, unless there is an EPP feature present. We know already that the EPP feature is absent due to the fact that the T occurs with the unaccusative verb *aru*. The question that remains is, why does the same T occur obligatorily with the EPP in the non-intransitivizing resultative, which also has *aru*. Whatever the answer is, it points to the idea that it is not just unaccusativity that frees a T from having the EPP feature. We leave this problem open in this paper.

4. Concluding remarks

In this article we gave evidence that the EPP is not universal. It is universal for T that occurs with unergatives and transitives. But if the T occurs with an unaccusative, the EPP need not occur. We gave evidence for this using the resultative construction in Japanese. We saw that of the two types of resultatives, the non-intransitivizing resultative has a T that has the EPP, while the intransitivizing resultative T does not, allowing the nominative object to remain lower in the structure than the matrix Spec of TP. It is this intransitivizing resultative T that gives credence to the idea that the EPP does not need to occur with T when the verb is unaccusative. This leads us in directions very different from previous research on the EPP. In the past it was believed that the EPP occurs on all T. Now we must contend with the possibility that the EPP is sensitive to the type of verb that occurs with the T. It is not clear what the generalization is yet. Is it that the EPP is required if the predicate has an external argument? That may account for why the T in the non-intransitivizing resultative comes with the EPP feature, since the external agent arises in the non-intransitivizing resultative. Since the external argument appears initially in the lower clause, we must show a direct relation between the emergence of the external agent in the lower *v*/T, and the matrix T. Of course, this "external argument" generalization may not be the right generalization. An obvious difficulty is the *there*

construction, which ostensibly requires the expletive to be merged to T despite the fact that the verb is unaccusative. Either we have to rethink the expletive construction altogether, or there may be some, not so apparent, generalization other than the "external argument" one waiting to be discovered.

REFERENCES

Babyonyshev, Maria (1996) Structural Connections in Syntax and Processing: Studies in Russian and Japanese. Doctoral dissertation, Massachusetts Institute of Technology, Cambridge, Mass.

Bobaljik, D. Jonathan, and Dianne Jonas. (1996) Subject positions and the roles of TP. *Linguistic Inquiry* 27: 195-236.

Borer, Hagit. (1989) Anaphoric AGR, In Osvaldo Jaeggli and Ken Safir (eds.), *The null subject parameter*. Dordrecht: Kluwer.

Branigan, Phil (1992) *Subjects and Complementisers,* Doctoral dissertation, Massachusetts Institute of Technology, Cambridge, Mass.

Bresnan, Joan, and J. Kinerva (1989). Locative inversion in Chichewa: a case study of factorization in grammar. *Linguistic Inquiry* 20, 1-50.

Chomsky, Noam. (1981) *Lectures on Government and Binding.* Dordrecht: Foris Publications.

Chomsky, Noam. (1995). *The minimalist program.* Cambridge, Mass.: MIT Press.

Chomsky, Noam (2000) Minimalist inquiries: The framework. In Roger Martin, D. Michaels, and Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik* (pp. 89-155). MIT Press.

Fukui, Naoki (1986). *Theory of Category Projections and Its Theoretical Implications.* Doctoral dissertation, Massachusetts Institute of Technology, Cambridge, Mass.

Haig, John (1980) Some observations on quantifier floating in Japanese, *Linguistics* 18, 11-12 (237-238), 1065-1083.

Kato, Yasuhiko. 1988. Negation and the discourse-dependent property of relative scope in Japanese. *Sopia Linguistica* 23-24. Sophia University, Tokyo.

Kishimoto, Hideki (2001). Binding of indeterminate pronouns and clause structure in Japanese. *Linguistic Inquiry* 32, 597-634.

Kitagawa, Yoshihisa. 1986. *Subjects in Japanese and English.* Doctoral dissertation, University of Massachusetts at Amherst, Amherst, Mass.

Kitahara, Hisatsugu (2002) Scarmbling, case, and interpretability. In Samuel David Epstein and T. Daniel Seely (eds.), *Derivation and explanation in the minimalist program.* Oxford: Blackwell Publishing, 167-183.

Koizumi, Masatoshi (1995) *Phrase structure in minimalist syntax,* PhD Dissertation, MIT.

Kuroda, S.-Y. (1980) Bun kouzou no hikaku (The comparison of sentence structures), in Kunihiro, T. (ed.) *Niti-eigo hikaku kouza 2: bunpou* (Lectures on Japanese-English Comparative Studies 2: grammar), 23-61. Taisyukan, Tokyo.

Kuroda, S.-Y. (1988). Whether we agree or not: a comparative syntax of English and Japanese, *Linguisticae Investigationes* 12, 1-47.

Laka, Itziar. (1990) *Negation in syntax: on the nature of functional categories and projections.* Doctoral dissertation, MIT, Cambridge, Mass.

Martin, Samuel (1975) *A reference grammar of Japanese.* Yale University Press.

Matsumoto, Yo (1990) Constraints on the 'intransitivizing' resultative *–te aru* construction in Japanese. *Proceedings of the Japanse/Korean Conference,* pp. 269-283.

Miyagawa, Shigeru (1989) *Structure and case marking in Japanese, Syntax and Semantics 22* Academic Press.

Miyagawa, Shigeru (2001) EPP, scrambling, and wh-in-situ. In Michael Kenstowicz (ed.), *Ken Hale: A Life in Language.* MIT Press, 2001, pp. 293-338.

Miyagawa, Shigeru (2003). A-movement scrambling and options without optionality. In Simin Karimi (ed.), *Word order and scrambling.* Blackwell Publishers, p. 177-200.

Miyagawa, Shigeru (to appear) On the EPP. In Martha McGinnis and Norvin Richards (eds.), *Proceedings of the EPP/Phase Workshop, MIT Working Papers in Linguistics.* Cambridge, Mass.

Ogino, Megumi (1990) *An analysis of SAE.* M.A. thesis, Ohio State University.

Pollock, J.-Y. (1989) Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry* 20:365-424.

Stowell, Tim (1982) The tense of infinitives. *Linguistic Inquiry* 13, 561--570.

Sugioka, Yoko (1984) *interaction of derivational morphology and syntax in Japanese and English.* Ph.D. dissertation, University of Chicago.

Tada, Hiroaki (1993) Nominative objects in Japanse. *Journal of Japanese Linguistics.*

Takahashi, Daiko. 2001. Scrambling and empty categories. *Proceedings of Formal Approaches to Japanese Linguistics 3, MIT Working Papers in Linguistics.*

Takezawa, Koichi (1987) *A configurational approach to case marking in Japanese,* doctoral dissertation, University of Washington, Seattle, Washington.

Tsujioka, Takae. (2001) *The syntax of possession in Japanese.* Doctoral dissertation. Georgetown University, Washington, D.C.

Ura, Hiroyuki. (1996) *Multiple feature-checking: a theory of grammatical function splitting.* Ph.D. dissertation, Massachusetts Institute of Technology, Cambridge, Mass.

(Miyagawa)

Department of Linguistics and Philosophy

MIT

32-D808

Cambridge, MA 02139

miyagawa@mit.edu

(Babyonyshev)

Department of Linguistics

Yale University

370 Temple (Room 204)

P. O. Box 208366

New Haven, Connecticut 06520-8366

maria.babyonyshev@yale.edu