To appear, *Proceedings of the EPP/Phase Workshop,* Norvin Richrads
and Martha McGinnis, eds., MIT Working Paper in Linguistics

On the EPP*

Shigeru Miyagawa
Massachusetts Institute of Technology

The EPP is shown to interact with either agreement or focus. I suggest
that there is a structural reason why agreement and focus are
parameterized relative to the EPP: both agreement and focus are merged
very high in the structure, in the region of C. While languages vary as to
whether they are "agreement prominent" (e.g., Indo-European) or "focus
prominent" (e.g., Japanese, Kinande, Turkish), I will show that, with
close inspection, all languages instantiate both features in some fashion,
although in some cases a feature does not always get expressed the same
way.

1. Introduction

I will be concerned with issues of movement, particularly those operations that
move a category to the specifier of TP or the specifier of a projection higher
than the TP. The following exemplify the kinds of movement I will be
concerned with.

(1) Movements to TP and higher
   - wh-movement
   - focus movement
   - "agreement" movement (e.g., thematic subject)
   - scrambling

My analysis of these movement operations is that they are fundamentally the
same: they are all triggered by the EPP feature on the relevant head (Chomsky
2000). Whether it is movement of the subject to the Spec of TP to meet the EPP
requirement of T, or the movement of a wh-phrase to the Spec of CP, the

_____

movement is triggered by the EPP. The EPP was originally suggested by Chomsky (1981) because of the appearance of the expletive in existential constructions (*There stands a statue in the town center*). The agreement is between the verbal inflection and the postverbal nominal, and the expletive *there* fills the Spec of TP. The expletive makes it possible for the existential construction with this long-distance agreement to have a subject. The EPP is in fact informally referred to as the requirement that a clause must have a subject. I will generalize this to all movements of a category, focusing my attention in this article on movement to the Spec of TP and to positions higher than the TP. I will not deal with movement to the Spec of *v*P, which presumably also involves the EPP (Chomsky 2001).

The EPP is merely a stipulation. We hope that it will follow from some deeper properties of the grammar. For example, it may be related to the requirement identified by Alexiadou and Anagnostopoulou (2001) that something must vacate the VP. Despite this stipulatory nature of EPP, I will continue to assume it. My concern in this article is to discover the ways in which the EPP interacts with other formal features, with the hope that this and other properties noted in the literature (e.g., Alexiadou and Anagnostopoulou 1998, Baker 2003) will eventually lead us to the real identity of the EPP. In so doing, there are three questions I wish to address about (1).

First, if all four movements in (1) are the same "EPP" movement, why do they involve such disparate heads? Wh-movement and focus movement are typically thought to be in the region of C. This leaves agreement, which is normally thought to be on T (for subject-verb agreement). I will suggest, using data from recent work by Carstens (2003) and Kornfilt (2004), that we can postulate the agreement feature at C instead of T. If this turns out to be correct, it has the desirable result that much — possibly all – of the inflectional features (agreement, focus) are in the region of the two phase heads, C and *v* (cf. Chomsky 2000, 2001, for relevant comments on *v*). I will show that scrambling, too, involves a feature on a head in the region of C.

Second, why is it that a given language typically only has a subset of the four movements? English has wh-movement, while Turkish doesn't. Japanese has scrambling, but not French. The answer I will give is that these differences are only apparent. I will give evidence that all languages share the same features relevant to all four movements. The variations emerge because of different ways in which the shared features interact with each other in a given language. This view of language is consistent with the *Uniformity Principle* (Chomsky 2001: 2).

(2) *Uniformity Principle*
    In the absence of compelling evidence to the contrary, assume languages
    to be uniform, with variety restricted to easily detectable properties of
    utterances.

The approach I am going take is very much in line with Sigurdsson (2003), who assumes this uniformity principle literally for all languages, and suggests the

"Silent Principle," by which he means that a given language, which shares all of the features with other languages, has features that are not pronounced. This is, at least in part, the reason for the differences among languages. I am going to adopt a strong version of the *Uniformity Principle* along these lines, and assume that, at least for **inflectional features**, such as agreement and focus, every language not only shares a uniform set, but, contra Sigurdsson, every language overtly manifests these features in some fashion. Thus, for example, Japanese, which shows no agreement inflection, is predicted to have something that reflects "agreement," something I will attempt to show. This strong version of the *Uniformity Principle* cannot be right for all features of a language. After all, languages do vary. In adopting the strong version at least for inflectional features, I intend to explore some of the outer bounds of the *Uniformity Principle*.

Third, although I assume that all four movements are the same "EPP" movement, they clearly are triggered by different features, e.g., agreement, wh, etc. How many features do we need to account for the four movements? Is it four (wh, focus, agreement, scrambling)? In the literature we find all four proposed.[1] But it would considerably weaken the explanatory power of the analysis to postulate one-for-one; it would be describing the problem. I will suggest that the four movements can be reduced to two features that interact with the EPP: agreement and focus.

2. Agreement, Focus, and the Uniformity Principle

My analysis of the EPP is based on a parametric variation between agreement and focus, whereby a language is either agreement prominent or focus prominent. The idea is that in a given language, the EPP on T, which I assume to be universal, works in tandem with either agreement or focus. This is similar, although not the same, as an idea of Baker (2003), who argues on the basis of Kinande and pro-drop languages of Indo-European (cf. Alexiadou and Anagnospoulou 1998), that there are three relevant features, the EPP, agreement, and (nominative) Case. In his system agreement is central, and it works in tandem with the EPP, or with Case. Although I take a slightly different approach, I inherit the basic notion of variability in the way features interact with each other, including the EPP. I also utilize Baker's (2003) analysis of Kinande, a Bantu language, which plays a key role in the analysis.

An immediate problem arises with the idea of a focus-agreement parameter. Focus and agreement are usually thought to be on fundamentally different heads. Focus is commonly postulated on the FOCUS head that is higher than T and in the region of C (e.g., Culicover and Rochemont 1983, Rizzi 1997). In contrast, agreement in, for example, subject-verb agreement, is normally construed as being on T. While it is not entirely implausible for two features on fundamentally different heads to vary parametrically, it would be more plausible if they aren't on such vastly different heads. There is sufficient

---

[1] For focus movement, see, for example, Brody 1990, Ordóñez 1997, and Rizzi 1997, and Yang 2004. Rizzi in fact suggests a fifth feature, "Topic."

evidence to associate focus with a head higher than T, so if we are going to do anything about "head parity," we need to look at agreement. To get right to the point, I suggest that agreement in, for example, subject-verb agreement, is principally associated with a head higher than T (I thank Noam Chomsky for suggesting this possibility; cf. Chomsky, to appear, and Boeckx 2003, for a similar idea). I will assume that it is C, which will put it in the same region as focus. Below, I give two pieces of evidence that the agreement in subject-verb agreement may show up on C.

Carstens (2003) notes the following West Flemish examples from Haegeman (1992).

(3) a. Kpeinzen *dan-k* (ik) morgen goan.
    I-think that-I (I) tomorrow go
    'I think that I'll go tomorrow.'

   b. Kpeinzen *da-j* (gie) morgen goat.
    I-think that-you (you) tomorrow go
    'I think that you'll go tomorrow.'

   c. Kvinden *dan* die boeken te diere zyn.
    I-find that-PL the books too expensive are
    'I find those books too expensive.'

While a number of linguists have proposed that the complementizer-subject agreement is an instance of the agreement on T raising to C, Carstens (2003) argues that the agreement originates on C (see Carstens (2003) for additional references for and against this idea). In these examples, the embedded verb also inflects for agreement, suggesting that the agreement also shows up on T. Under our analysis, this suggests that **the agreement on C may percolate down from C to T.** What is the reason for this feature percolation to T? It may be to allow a category to move to a position that is not at the edge, so that it does not automatically need to take on discourse properties of definiteness/specificity. Alternatively, it may be to create an A-position to which a category can internally merge without having to occupy an operator position. There are other equally plausible scenarios, but I will not pursue them here.

Another instance of complementizer agreement is given in Kornfilt (2004). In Turkish there is a difference between subject relativization and non-subject relativization.[2] In subject relativization, the embedded subject does not carry agreement, while in non-subject relativization it does.

---

[2] The data for her analysis, but not the analysis itself, appeared earlier in Kornfilt (2000).

(4) a. subject as the target of relativization

    [[e_i geçen yaz   ada-da   ben-i gör-**en**]   kiş i-ler$_i$]
    [[last   summer   isalnd-Loc I-Acc see-**(y)An**   person-Pl
    'the people who saw me on the isalnd last summer' (No ϕ-feature
   morphology; special nominalization form on predicate)

  b. a non-subject as the target of relativization

    [[pro geçen yaz   ada-da e_i gör-**düğ-üm**]   kiş i-ler$_i$]
    [[last   summer   island-Loc   see-**DIK-1.sg**   person-Pl
    'the people who(m) I saw on the island last summer' (ϕ-feature
    morphology; general indicative nominalization form on predicate).

In (a) the subject is relativized and there is no agreement on the embedded verb. Kornfilt argues that this lack of agreement has to do with the fact that C in the relative clause agrees with the subject (*e*), and this suppresses the emergence of agreement on the embedded verb. In (b) what is relativized is the object; no agreement with C is triggered so that the embedded verb is free to agree with the subject. These Turkish examples suggest the following. Assuming that the agreement originally appears on C, it gets copied onto T, as in the case of West Flemish and as seen in (4b) above. If the subject appears in Spec of CP, however, the agreement on C picks up this subject, and the agreement does not percolate down to T. This is what we see in (4a).[3]
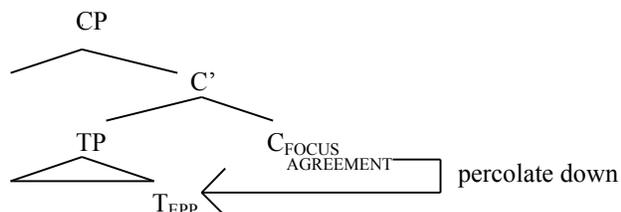
    Maintaining the view that the EPP is on T, we have the following representations for focus and agreement (I will use the head-final order).

(5) Focus

---
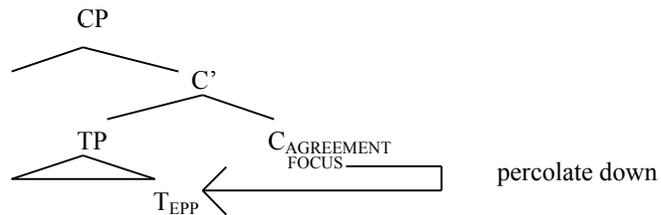
[3] Another work that is relevant here is Watanabe (1993), which postulates the sort of agreement I am proposing.

(6) Agreement

```
                    CP
              _____|_____
             |            C'
            TP       _____|_____
         ___|___    |              |
        |       |  T_EPP   C_FOCUS/AGREEMENT
                          ◁————————————  percolate down
```

The FOCUS/AGREEMENT feature is matched with a feature on a category in syntax, for example, the thematic subject. In most cases this category is brought up to the Spec of TP, to satisfy the EPP on T. I say "in most cases" because there are known cases of long-distance agreement, which lead to something other than the agreed-with category ending up on the Spec of TP. We will see many cases of such long-distance agreement. When the agreed-with category does move for the purpose of satisfying the EPP, there is no need for it to move any higher than the Spec of TP since T is the head that has the EPP.[4]

By placing agreement as well as focus on a "high" head in the region of C, we make it plausible for these two features to be the two polarities of the same parameter. Because agreement and focus constitute the primary inflectional features in our system, this means that we isolate all such features on phase head, C, leaving T with the EPP feature and, if relevant, Case (cf. Pesetsky and Torrego 2001). But do focus and agreement constitute some sort of a natural class? If so, there is a plausibility argument to add to our empirical and theoretical arguments. In fact, Simpson and Wu (2001) give a number of arguments to show that historically, agreement in a variety of languages developed from some sort of a focus structure. Although much of what they deal with is what we would normally call concordance, as in the case of the French *ne … pas*, their argument that dependencies such as concordance/agreement find historical source in focus structure is highly suggestive of why we see focus and agreement as constituting the two polarities of a parametric variation.

Before turning to the actual analysis, I wish to touch on an issue which will drive much of the analysis presented in this article. As mentioned above, the view of language I will present is that a language is either focus prominent or agreement prominent. But it isn't the case that, for example, an agreement prominent language does not also have focus. In fact, as we will see, some of the most interesting cases are those in which an agreement prominent language also evidences focus, and, in parallel, those cases in which a focus prominent

---

[4] I am glossing over the problem of infinitives. Presumably the infinitive T also has the EPP feature, but, for example, in the ECM construction, the embedded subject moves higher (according to the traditional analysis). This is an issue for the analysis of ECM – does the embedded subject actually move (Koizumi 1995), or does it not have to (Lasnik 1999)? If it does move beyond the lower Spec of TP, this means that Case is also pertinent to the kinds of derivations we are looking at, something not at all surprising, and, in fact, expected. There are interesting issues which I cannot pursue here due to limitation of space and time.

language also evidences agreement. What these cases suggest is that languages do not have a subset of a uniform set of features, but rather, they appear to have the complete set always. Some recent work by Cinque (1999) and the cartography linguistics of Rizzi and others hint at this idea that all languages have essentially the same universal features/structures. The most explicit proposal along this line is by Sigurdsson (2003). He notes Chomsky's (2001) ideas of L-Uniformity ("language is uniform in the relevant sense") and L-Selection ("languages make different selections of features from a universal feature set"), and argues that we only need L-Uniformity, which means that all languages contain the same universal set of features. Sigurdsson then assumes that, since we don't apparently always see some of these features overtly manifested in a given language, there are many such features without phonetic instantiation. He calls this the "Silent Principle." Although I will differ on some points, I will adopt the spirit of his idea that all languages share a uniform set of features. Where I depart from his proposal is in taking the stronger position that at least for inflectional features, all features in every language are not only uniformly shared, but that they are all somehow "pronounced."

As a way to demonstrate the general approach, let us contrast it with two proposals in the literature. In highly influential series of works, Fukui (1986, 1995) and Kuroda (1988) look at some of the same types of movement for English and Japanese. In the case of Fukui, differences such as the presence of wh-movement in English and its absence in Japanese, and the presence of scrambling in Japanese and its absence in English, among many parametric variations, are due to the fact that Japanese does not have functional categories (or that functional heads are "inert"). Fukui, therefore, identifies a deep difference between English and Japanese – that of lack of functional categories for Japanese. Although there are some similarities to the theory I am pursuing, we see immediately that by the strong version of the *Uniformity Principle* I am assuming, Fukui's overall approach is untenable.[5] Our approach predicts that there should be no such "deep" differences between any two languages. For Kuroda, who looks at a similar range of parametric variations, it is the lack of "forced agreement" that gives Japanese the properties it has in contrast to English. Kuroda points to this lack of forced agreement for the absence of overt wh-movement in Japanese. The lack of forced agreement is also responsible for what he considers to be optional movement typically called scrambling, which, for him, may freely move a category into any specifier position because there is no agreement. Although I differ on both views, as I will show, the analysis in this article inherits Kuroda's basic premise that Japanese is not an agreement language, and it makes partially the same prediction with regard to the absence of wh-movement, a point shared by Fukui's approach as well. In this sense, my analysis is an extension of Kuroda's work.

Below, I will turn to the discussion of focus prominence using data from Japanese.

---

[5] See Shibatani (1990) for counterexamples to each of Fukui's (and to some extent also Kuroda's) works.

3. A Focus-prominent Language: Japanese

In speaking about "focus", I will adopt É. Kiss's (1998) distinction. According to É. Kiss there are two types of focus, which she calls "informational focus" and "identificational focus."[6]

(7) É. Kiss (1998)
　　(i) Informational focus: what is not presupposed in a topic-focus (theme-rheme) structure.
　　(ii) Identificational focus: expresses exhaustive identification.

"Informational focus" in (7i) is the familiar "topic-focus" structure, in which the relevant category at the left edge refers to what the sentence is about, and the remainder, or some portion of the remainder, provides new information about this "topic." As we will see later, there is a specific prosodic pattern associated with sentences with informational focus. Briefly, sentences with informational focus have the nuclear stress on the syntactically lowest element in the structure (Cinque 1993).

(8) John bought a BOOK.

In (8) the direct object, along with the verb, are lowest on the syntactic tree; setting aside the verb (see later), the head of the direct object receives nuclear stress. A typical way to understand this sentence is that *John* here is the "topic," and some or all of the VP gives new information about this topic of *John*.

　　Identificational focus is different from informational focus in that, first of all, the stress falls on whatever element is associated with identificational focus. In contrast to (8), it is possible to create an identificationally focused sentence by, for example, placing the primary stress on *John*.

(9) **JOHN** bought a book.

Here the primary stress is not on the lowest element in the tree, but rather on the subject. What distinguishes identificational focus from informational focus is that identificational focus expresses "exhaustive identification" (É. Kiss 1998). This is illustrated in the cleft construction in English.

(10)　It was a hat and a coat that Mary picked for herself.

In this example, the identificationally focused phrase, "a hat and a coat," expresses exhaustivity. Consequently, as Szabolcsi (1981) notes, the following is not a logical consequence of the sentence above.

---

[6] A similar, but perhaps not identical, distinction was drawn by Kuroda (1972, 1992), which he calls "thetic" and "categorical" judgments based on the work of the philosopher Anton Marty. While I will use É. Kiss's terminology of informational focus and identificational focus, it should be noted that a similar distinction was already suggested earlier by Kuroda.

(11)   It was a hat that Mary picked for herself.

The reason is that in (10), the set, "a hat and a coat," exhaustively and exclusively identifies the entities that Mary picked for herself. Hence one cannot pick out a subset, as in (11), with the notion of exhaustivity. It is logically wrong. As É. Kiss and Szabolcsi note, this notion of exhaustivity carries over to the notion of contrastiveness as well.

3.1 Japanese

I will now turn to the study of identificational focus in Japanese. Japanese does not have any overt agreement, hence, on the focus-agreement parameter, it is a focus prominent language. As already noted, there are two types of "focus," informational and identificational. The construction I will look at in Japanese to illustrate its focus prominence is the indeterminate pronoun expression. We will see that the indeterminate pronoun is associated with identificational focus.

In Japanese a wh-phrase can be interpreted as an indeterminate pronoun in the context of the universal quantificational particle *mo*. This combination of wh-*mo* is an NPI.

(12)   Taroo-ga   *nani-mo*   kawa-nakat-ta.
   Taro-Nom   what-MO   buy-Neg-Past
        'Taro didn't buy anything.'

As is well known, the wh-phrase portion and *mo* can be separated (Kuroda 1965, Nishigauchi 1990).

(13)   Taroo-ga   *nani*-o   kai-*mo*   sina-kat-ta.
        Taro-Nom   what-Acc buy-MO   do-Neg-Past
        'Taro didn't buy anything.'

Here the wh-phrase as an indeterminate pronoun occurs in the object position with the accusative case marker *o*, and the universal quantificational particle *mo* occurs on the verb stem. One distinct property of the indeterminate pronoun expression is that it is always associated with a sense of exhaustive interpretation – something like "absolutely nothing/no one." I will assume that the indeterminate pronoun is associated with the focus feature which gives it this "identificational focus" interpretation. As we will see below, the pattern of grammaticality associated with the indeterminate pronoun demonstrates the focus-prominent nature of Japanese, and certain properties that this entails.

I will make use of Kishimoto's (2001) analysis of the indeterminate pronoun. As we have observed, the indeterminate pronoun is a wh-phrase; it is interpreted as an indeterminate pronoun in the context of the universal particle *mo*. Kishimoto proposes that in order for the wh-phrase to be interpreted as an

indeterminate pronoun, the wh-phrase must be dominated by the same immediate maximum projection that dominates *mo*; that is, *mo* and the indeterminate pronoun must occupy the same minimal domain.[7] As part of his analysis, Kishimoto argues that the verb raises to *v* in Japanese, and it takes with it *mo* that attaches to it.

(14)

```
            vP
         /      \
               v'
              /  \
          VP     V-mo-v
         /  \
            t_V
```
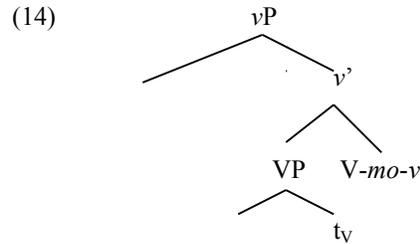
In this structure, *mo* can go with any indeterminate pronoun in its local *v*P. In Kishimoto's analysis the object is assumed to move to the Spec of *v*P. This is why it is fine to have an object indeterminate pronoun as we saw above in (13). As a piece of evidence for his analysis, Kishimoto observes that an indeterminate pronoun cannot occur in the subject position.

(15)*Dare*-ga   piza-o   tabe-*mo* sina-kat-ta.
    who-Nom   pizza-Acc eat-MO do-Neg-Past
    'Anyone didn't eat pizza.'

Kishimoto assumes the EPP here, and argues that the subject indeterminate pronoun *dare* 'who' raises to the Spec of TP to satisfy the EPP of T, and this takes it outside the scope of *mo*, which is on *v*. According to the analysis I'm pursuing, the relevant portion of the structure of (15) is the following.

---

[7]Kishimoto's licensing occurs for the most part at LF, although he himself mentions the EPP requirement. Hiraiwa (2002) makes explicit the idea that *mo* must license the indeterminate pronoun at overt syntax.

(17)

```
                        CP
               _____/ _____
                                  C'
                        _____/ _____
                     TP                      C FOCUS ————
              _____/ _____                          |
          dare-ga          T'                        percolate
          [focus]      ___/ \___                          |
                     vP        T_EPP  ◄————————————————————
                 ___/ \___
              t_SUB     v'
                     ___/ \___
                   VP       V-mo-v
```
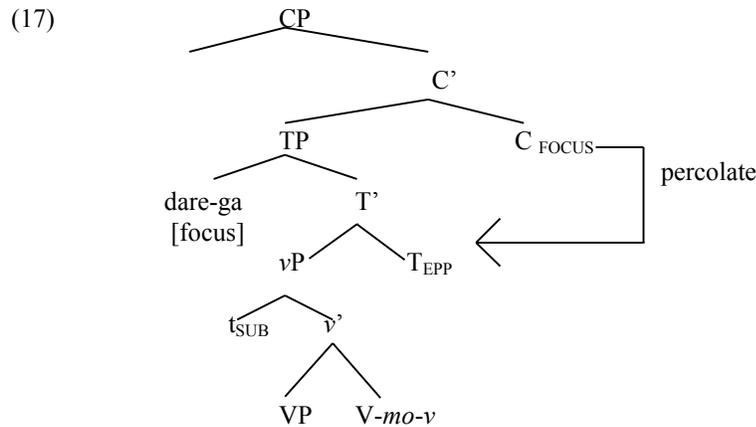
The focus feature percolates down to T and enters into an AGREE relation with the feature on the indeterminate pronominal subject, and the indeterminate pronoun is raised to the Spec of TP to satisfy the EPP on T.

An interesting fact which Kishimoto does not observe is that this sentence is equally ungrammatical even if the object "pizza" is scrambled to the left of the indeterminate pronoun subject (cf. Miyagawa 2003).

(18) * Piza-o$_i$ dare-ga   t$_i$ tabe-*mo*   sina-kat-ta.
       pizza-Acc$_i$ who-Nom   t$_i$ eat-MO   do-Neg-Past
       'Pizza, anyone didn't eat.'

We will see later that in the informational focus structure (as opposed to the identificational focus structure above), it is fine for the object to move in this way and satisfy the EPP on T. Why is it not possible in an identificational focus structure as in (18)? Before going further, let us consider another piece of data from Kishimoto. First, recall that the indeterminate pronoun is fine in the object position. The example is repeated below as (19).

(19)   Taro-ga   *nani*-o   kai-*mo* sina-kat-ta.
        Taro-Nom   what-Acc   buy-MO do-Neg-Past
        'Taro didn't buy anything.'

Now observe what happens if we scramble the object to the head of the sentence (cf. Kishimoto 2001).

(20)   *Nani*-o$_i$ Taroo-ga   t$_i$ kai-*mo*   sina-kat-ta.
         what-Acc$_i$ Taro-Nom   t$_i$ buy-MO   do-Neg-Past
         'Taro didn't buy anything.'

As shown, if the object indeterminate pronoun is scrambled to the left of the subject, the sentence becomes ungrammatical. What does this indicate? It

obviously indicates that this scrambled object indeterminate pronoun cannot reconstruct. This, in turn, signifies that the movement of the indeterminate object *must be solely A-movement*. That is, it must exclusively be the EPP-triggered movement. Crucially, it cannot be A'-scrambling, which would allow it to reconstruct (cf. Mahajan 1990, Tada 1993).

The pattern of grammaticality we just observed gives credence to the idea that Japanese is a focus prominent language, and, in particular, that the EPP on T in Japanese interacts with focus. To see this, let us first look at the existential construction in English.

(21) a. There appeared a boy in the room.
    b. A boy$_i$ appeared t$_i$ in the room.

(21a) demonstrates that agreement and EPP may apply separately. (21b) indicates that if the agreed-with phrase does move, it must be by the EPP and it moves into the Spec of TP as expected.

Returning to the indeterminate pronoun construction in Japanese, we can see that it is similar to the English existential. If the focus feature agrees with the postverbal nominal, and there is no movement, something else moves into the Spec of TP. The example (19) is repeated below as (22).

(22)   Taro-ga   *nani*-o   kai-*mo* sina-kat-ta.
         Taro-Nom what-Acc buy-MO do-Neg-Past
         'Taro didn't buy anything.'

We can see immediately that there is a difference between English and Japanese: while English uses the expletive in this context, Japanese apparently does not have any expletive, and allows a "close" DP – the subject in this case – to raise to the Spec of TP and satisfy the EPP. If the agreed-with phrase moves, the movement must be triggered by the EPP on T, leading to the postverbal indeterminate pronoun to have to move to the Spec of TP. This leads to ungrammaticality as we saw, since this movement takes the indeterminate pronoun out of the licensing domain of *mo*. The example is repeated below.

(23)   **Nani-o$_i$ Taroo-ga   t$_i$ kai-*mo*   sina-kat-ta.
       what-Acc$_i$ Taro-Nom   t$_i$ buy-MO   do-Neg-Past
       'Taro didn't buy anything.'

Finally, there is strict locality with FOCUS agreement, just as in the agreement phenomenon in English. If the agreed-with phrase is closest to T, then it must be the one to satisfy the EPP on T. Another, non-identificationally focused DP, cannot be moved across it and into the Spec of TP. The example is repeated below.

(24) * Piza-o$_i$ dare-ga   t$_i$ tabe-*mo*   sina-kat-ta.
       pizza-Acc$_i$ who-Nom t$_i$ eat-MO   do-Neg-Past
       'Pizza, anyone didn't eat.'

The scrambled object, "pizza-Acc," cannot satisfy the EPP on T because the agreed-with phrase, the subject indeterminate pronoun, is closest to T.

      What we have observed is that focus "agreement" in Japanese involving identificational focus works in the same way as agreement in Indo-European. This gives credence to the idea that focus and agreement are two polarities of a single parameter. The one difference we found was that when there is long-distance agreement, English uses the expletive to satisfy the EPP, while Japanese allows a normal DP – the subject, for example – to meet the EPP. This may reduce to the parametric variation at hand. English, being an agreement language, requires any item that can meet the EPP to have some sort of agreement feature compatible with the T; Chomsky (2001) in fact speculates that the expletive has a person feature. But in Japanese, a focus-prominent language, no agreement feature plays a role at T, and a full DP in the right location is free to meet the EPP. It may be that this DP has some sort of a "focus" feature – the "topic" feature, or some such feature. It is, in fact, probable, but I will not pursue it further.

4. Focus Prominent Languages and Informational Focus

In the previous section I demonstrated how focus-prominence manifests itself in Japanese – it has properties similar to agreement in Indo-European. The evidence involved the indeterminate pronoun construction, which is associated with the "exhaustive" interpretation of identificational focus structure. The indeterminate pronoun has the focus feature associated with it, and this feature is matched with the same feature on T that percolated from C. As a result the focused phrase moves to Spec of TP to satisfy the EPP on T. But not every Japanese sentence has a phrase associated with identificational focus. In the following discourse, *Taroo* in (b) does not entail exhaustivity.

(25) a.   Taroo-ga   hon-o   kaimasita ka?
           Taro-Nom   book-Acc bought   Q
           'Did Taro buy a book?'

    b.   Hai, Taroo-ga   kono   hon-o   kaimasita.
               yes   Taro-Nom   this   book-Acc bought
               'Yes, Taro bought this book.'

We understand *Taroo* in (b) as what the sentence is about ("theme" in theme-rheme, or "topic" in a broad sense), and the rest of the sentence, or some part thereof, provides new information ("focus"). This sort of "topic" is not limited to thematic subjects. Under the right context, the same kind of characterization can be given to the object that has moved to the head of the sentence.

(26) Hon-o$_i$ Taroo-ga   t$_i$ kaimasita.
      book-Acc$_i$ Taroo-Nom   t$_i$ bought
      'A/The book, Taro bought.'

In this sentence "book" is what the sentence is about, and the remainder is understood to give some new information about this "book."

What we observed is the typical structure for what É. Kiss (1998) calls "informational focus." Informational focus is the portion that is not the topic; what corresponds to the topic is, in the examples in (25b) and (26), on the left periphery. The phrase on the left periphery does not receive stress because it is not focused. The main stress falls on the object in (25b) and the subject *Taroo* in (26). Later we will see that this stress assignment is due to the universal nuclear stress rule (Cinque 1993).

The question about informational focus in Japanese is this. Given that there is a focus feature that must seek out an appropriate feature on a category within TP, what does this feature "agree" with? Remember that it is mandatory that the focus feature find a comparable feature on a category within the TP, because T has the EPP feature, and this EPP can only be satisfied in conjunction with focus. If there is an identificational focused element, such as an indeterminate pronoun, we saw that the focus feature on FOC agrees with the focus feature on the identificationally focused category. But what about informational focus?

I will simply assume that, in the absence of an identificationally focused category, some sort of agreement takes place between focus and a category within TP. The agreed-with phrase raises to the Spec of TP to satisfy the EPP on T. The agreed-with phrase does not carry a "focus" feature; rather it is simply probed by the feature on T. This much is due to syntax; syntax does not care about informational structure. It is up to the interface system responsible for assigning informational structures to interpret the syntactic structure. This interface system would use the input from syntax, which has the structure below, and impose the informational structure of topic-focus.

(27) [$_{TP}$ … [$_{vP}$ …]]
             _____/ _____/
              topic   focus

Some category (e.g., subject, object) raises to the Spec of TP, and everything else stays in-situ. What is important to point out is that the raised category *is not focused*; it is the *unfocused* portion of the informational focus structure. The interface system therefore needs to know that the agreement here is "anti-focus," sort of speak; it is the "topic" of informational focus.

The crucial test given in Miyagawa (2001; cf. also 2003) to show the effects of the EPP on T involves the universal quantifier *zen'in* 'all' and its interpretation relative to sentential negation. As shown below, *zen'in* 'all' in the object position may have the partial negation interpretation of "not all."

(28)   Taroo-ga   *zen'in*-o   sikari-masen-desita.[8]
        Taro-Nom   all-Acc   scold-Neg-Past
        'Taro didn't scold all.'
        not > all (all > not)[9]

To do the test, it is necessary to set up a situation where it is plausible to choose "all" and negation, and have it be the same meaning as "no X." Suppose that a product is going to be introduced, and you are trying to determine which of the three colors, red, yellow, and green, the customers would least like, and also the color that they would most like. A test is done with ten people. The following are reported by the tester. First, the example that is irrelevant to our concern.

(29) Zen'in-ga   kiiro-o   erabi-masita.
     all-Nom   yello-Acc choose-Past
     'All chose yellow.'

The tester also informed you the following.

(30)   *Zen'in-ga*   aka-o   erabi-masen-desita.
        all-nom   red-Acc   choose-Neg-Past
        'All did not choose red.'
        *not > all, all > not

(31)   Midori-o$_i$ *zen'in-ga*   t $_i$ erabi-masen-desita.
        green-Acc $_i$ *all-Nom*   t $_i$ choose-Neg-Past
        'All didn't choose green.'
        not > all, all > not

As shown in (30), when "all" is in the subject position in the SOV order, the preferred reading is "all > not" (cf. Kato 1988). In (31), we can see that, by

---

[8] I am using the formal style with *desu/desita* to ensure that the sentence is interpreted as a root clause and not embedded. Embedding the sentence leads to possibility of ambiguity in examples that are not ambiguous in the root clause. See Miyagawa (2001) for discussion.
[9] There is also the possibility that the quantifier *zen'in* 'all' may be interpreted outside the scope of negation, as indicated by "all > not." In Miyagawa (2001), I suggest that this is due to the fact that *zen'in* can be associated with a group reading, which does not have distributivity.

scrambling the object to the left edge, partial negation becomes possible (Miyagawa 2001).[10]

How does negation take scope over "all" to achieve the partial negation interpretation? Following a long tradition starting with Klima (1964), I assume the following.

(32)   A quantifier is in the scope of negation iff it is c-commanded by negation (cf. Klima 1964)

In (30), in which the subject "all" is outside the scope of negation, "all" begins in the Spec of *v*P, but moves to a position outside the c-command domain of negation. A reasonable assumption is that it moves to the Spec of TP as shown below. (The position of negation is roughly as proposed by Laka (1990), Pollock (1989).)

---

[10] In Miyagawa (2001) I used examples of the following sort.

(i) Zen'in-ga   tesuto-o   uke-masen-desita.
    all-Nom   test-Acc   take-Neg-Past
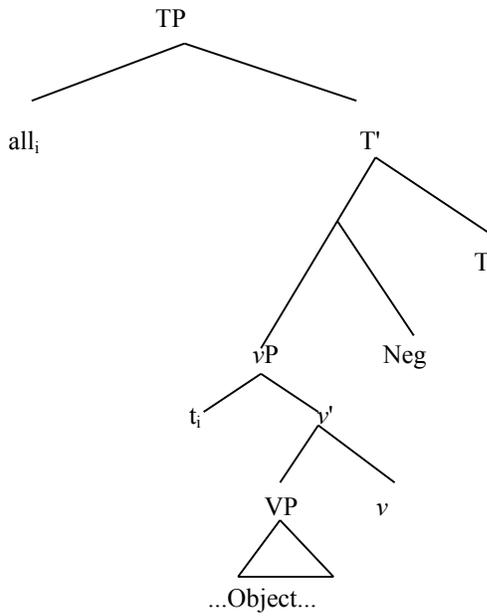   'All did not take the test.'
    *not > all, all > not
(ii) Tesuto-o$_i$ zen'in-ga   t$_i$ uke-masen-desita.
     test-Acc$_i$ all-Nom   t$_i$ take-Neg-Past
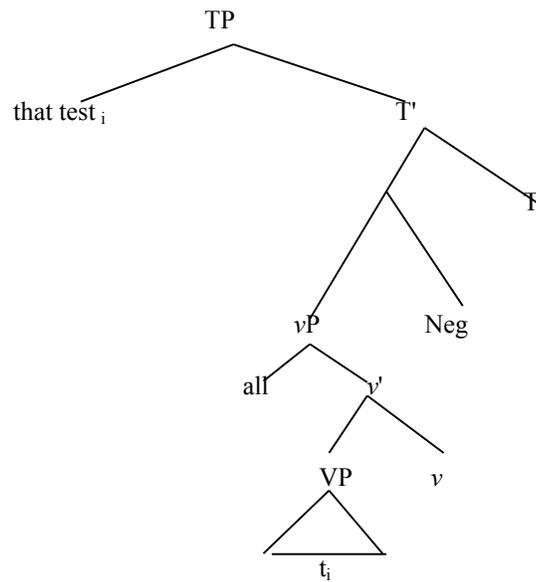   'All didn't take the test.'
     not > all, all > not

Most people I consulted shared the judgment given, that is, (i) is solely "all > not" while the OSV order in (ii) made it possible to get the partial negation. Call this speaker A. There were two other speaker types. Speaker B does not get the partial negation even in (ii). These speakers prefer to interpret scrambling solely as A'-scrambling; or, they simply prefer a narrow scope reading of negation. Speaker type C is able to get the partial negation even with the SOV order in (i). I suspect that the Speaker type C's judgment has to do, at least in part, with the quality of the data I presented. Given the situation of giving tests, it is highly implausible to imagine a situation where no student took the test. In addition, if such a situation did exist, it would be more natural to express it with "no student took the test" using the NPI: *daremo tesuto-o uke-masen-desita*. Hence Speaker type C may simply be compensating for either the implausibility of the situation, or the unnaturalness of the expression "all did not take the test" to describe the intended situation. In the examples above in which examples are given in the context of test marketing, I hope to have overcome some of these problems with the data.

(33)=(30)

```
                          TP
                    ┌──────┴──────┐
                  all_i          T'
                            ┌─────┴─────┐
                           vP           T
                      ┌────┴────┐
                     t_i        v'
                           ┌─────┴─────┐
                          VP           v
                         ╱  ╲
                       ...Object...
```

Above the T' the node is labeled Neg (vP ... Neg branch).

In (31) in which the subject "all" occurs in the "scrambled" order of OSV, it is able to be interpreted inside the scope of negation. The simplest assumption to make here is that this subject "all" stays in-situ in the Spec of vP, which is made possible by the movement of the object to the Spec of TP.

(34)=(31)

```
                          TP
                 ┌─────────┴─────────┐
            that test_i             T'
                               ┌─────┴─────┐
                              vP           T
                         ┌────┴────┐
                        all        v'
                              ┌─────┴─────┐
                             VP           v
                            ╱  ╲
                            t_i
```

With Neg in the T' / vP structure.

If we compare the two structures above, there is a simple generalization:

(35) Something must move to the Spec of TP (e.g., subject, object).

If the subject moves to the Spec of TP, the object stays in-situ, as in (33). On the other hand, if the object moves to the Spec of TP, this allows the subject to stay in-situ, as shown in (34). As I argue in Miyagawa (2001), the simplest account of what we just observed is that the T in Japanese is associated with the EPP feature. The Spec of TP is filled by something (subject, object, etc.), and this meets the EPP.[11]

How does the object "escape" *v*P in (34) to raise to the Spec of TP to satisfy the EPP? One possibility is that it undergoes Object Shift ("short scrambling") to the edge of *v*P. It then raises to the Spec of TP to satisfy the EPP on T. In Indo-European languages, if the object were to undergo the same Object Shift to the edge of *v*P, it would get stuck there, because in IE the EPP can only utilize agreement, not focus, and the agreement would be with the thematic subject. The thematic subject, too, would be stuck, because now it is too far from T owing to the intervening object. As a result the EPP on T goes unfulfilled, and the derivation does not go through. The subject presumably also has an unchecked Case feature, which will get checked only if it moves to the Spec of TP. This, then, excludes the possibility of inserting an expletive to save the derivation. [12]

4.1 Informational focus and nuclear stress
In this subsection I will make explicit the principal notions related to focus in an informational focus structure, which we just discussed for Japanese. Informational focus is signaled by sentential stress. This stress is autonomously assigned by the nuclear stress rule, and the sentence, once assigned the stress, is used by interface systems to relate the sentence to its context (Chomsky 1971, 1976; Jackendoff 1972; Neeleman and Reinhart 1998). Nuclear stress is the central prosodic stress assigned to sentences in neutral contexts (cf. Chomsky and Halle 1968, Halle and Vergnaud 1987, Cinque 1993, Selkirk 1995, Ishihara 2000). In the neutral cases, the interface system uses the focus stress to partition the sentence into topic and focus, creating a theme-rheme informational structure. The nuclear stress rule, which is responsible for assigning the main stress of the sentence that defines the focus in neutral contexts, is assigned by an independent rule. Cinque (1993), building on the work of Chomsky and Halle (1968) and Halle and Vergnaud (1987), argues that nuclear stress falls on the phrase located lowest on the syntactic tree.

---

[11] Kuroda (1988) was the first to propose that, for example, the object in Japanese can move to the Spec of TP. For him this is purely an optional movement, but in our approach it is an obligatory fulfillment of the EPP requirement, which can be achieved by moving the object or the subject or some other category into the Spec of TP. See Kitahara (2002) for an analysis of scrambling that also utilizes the EPP feature on T.

[12] I thank Noam Chomsky for this suggestion about Indo-European.

(36) Mary read a **book** yesterday.

In this example the object phrase *a book* bears the nuclear stress. Note that there are two elements that are lowest in the structure, the object and its verb. The object and the verb are sisters. Cinque suggests that in such a case, what is selected by the other is the lowest, so that, in this example, the object is the lowest because it is selected by the verb.

      In English the word order is fixed, so that if one wants to focus something other than the lowest element, nuclear stress must be supplanted by a special focus assignment. For example, in the above example, if the speaker wants to indicate that "John" is the focus (what is not presupposed), one has to forego nuclear stress (or it is masked) and invoke a special focus assignment rule that stresses the thematic subject.

(37) **John** read a book yesterday.

      In the so-called scrambling languages we see a different phenomenon for focus. Scrambling changes word order. By virtue of this, scrambling changes the focus structure of the sentence. Reinhart (1995) and Neeleman and Reinhart (1998) point out that scrambling allows a given phrase to move away from the position of nuclear stress. In the following Dutch example, the phrase that bears the nuclear stress is in bold.

(38)	Dat	Jan	langzaam	het **boek**	las
	that	John	slowly	the book	read

In this example both the object "book" and the verb "read" are lowest on the tree since they are sisters. As already noted, Cinque argues that in this situation the element that is selected is lower; in the above example, the object "the book" is selected by the verb, hence it is, by definition, lower, and it receives the stress.[13] Dutch allows some flexibility in word order; it is possible to "scramble" the object to the left of the adverb.

(39)	Dat	Jan	het boek	langzaam	**las**
	that	John	the book	slowly	read

---

[13] Gussenhoven (1984) (as quoted in Neeleman and Reinhart 1998) gives confirmation for Cinque's idea from Dutch.

(i)	a.	Dat	ik	op	een	bankje	**wacht**
		that	I	on	a	bench	wait

        'that I am waiting on a bench'

	b.	Dat	ik	op	een	**bankje**	wacht

        'that I am waiting for a bench'

In (a) the locative "on a bench" is an adjunct not selected by the verb, hence, it does not receive nuclear stress, but instead, the stress falls on the verb, which is the lowest element. In (b) "the bench" is the object of "wait," hence selected by the verb, so that the stress falls on the object instead of the verb.

Note that now, the nuclear stress falls on the verb because the verb is the lowest in the structure.

      Reinhart and Neeleman (1998) bring an interesting perspective on this word order flexibility. They note the well-known fact that Dutch scrambling of the type shown in (39) is possible only with definite phrases, and it is linked to some entity in the discourse, i.e., something that is presupposed in the discourse. But what is responsible for the word order permutation in Dutch? Neeleman and Reinhart (1998) argue that both the adverb-object and the object-adverb orders are base generated. However, there is much literature that argues that this type of object shift is movement. Chomsky (2001) suggests that object shift as observed in examples such as (39) is due to the object moving to the edge of the v phase, where it is attracted by the EPP feature on v. This EPP feature is optional, so that object shift itself is optional. The movement here appears to be an agreement prominent one. Only the object may move, which means that the only phrase that can move is the one that agrees with the head v. The EPP is parasitic on this agreement, and if it occurs, it raises the object to vP. But why is it optional? Following Reinhart (1995) and particularly Fox (2000), Chomsky (2001) suggests that this kind of optionality is allowed only when the movement has an effect on the output. The effect for object shift is on the focus structure of the sentence as clearly demonstrated by Reinhart and Neeleman.

      Returning to the Japanese cases, there are several points that distinguish the Japanese case from Dutch. First, in Japanese the "shift" is of the object, or a locative phrase, to a position above the subject. Dutch does not allow the object to shift above the subject in normal cases. Second, there does not appear to be a definiteness effect in Japanese since an indefinite phrase can move above the subject. Third and finally, as we saw earlier, the Spec of TP must be filled, which means that the EPP feature on T is always present. There is no optionality. The Spec of TP may be filled by moving the subject into it, or the object, or some other phrase such as a locative, but something must occupy the Spec of TP.

      What Japanese shares with Dutch is that, in neutral contexts, what moves into the Spec of TP does not bear the nuclear stress, so that the focus falls on something lower in the structure. The following are taken from Ishihara (2000) (Ishihara assumes V-raising to T).[14]

(40) a. Taroo-ga   [$_{VP}$ **hon**-o t_v] katta.
            Taro-Nom   [$_{VP}$ book-Acc t_v] bought

        b. Hon-o$_i$ **Taroo**-ga   [$_{VP}$ t_i t_v] katta
            book-Acc$_i$ Taro-Nom   [$_{VP}$ t_i t_v] bought

(41) a. Taroo-ga   kyoo   **hon**-o   katta.
            Taro-Nom   today   book-Acc bought

---

[14] See Bailyn (2001) for extensive discussion of these sort of issues for scrambling in Japanese and Slavic.

b. Hon-o$_i$ Taroo-ga   **kyoo**   t$_i$ katta.
    book-Acc Taro-Nom   today   t$_i$ bought

In (40a), the object *hon* 'book' predictably receives nuclear stress. In (40b) the object has moved to the Spec of TP, and it is the subject, *Taroo*, that receives the nuclear stress. As Ishihara notes, this is different from Dutch; in Dutch when the object shifts the verb receives stress. Ishihara argues that this is due to the fact that in Japanese the verb undergoes V-to-I raising (cf. Koizumi 1995), so that, in the OSV order in (40b), the subject and the verb are the same height, and because the verb (more precisely, *v*) selects the subject, the subject receives the stress. In (41b), the object has moved again to the Spec of TP, and this time, an adverb, *kyoo* 'today', receives the nuclear stress since it is presumably lower than the subject or the raised verb.

Just as in Dutch, nuclear stress gives the possible focus domains of the sentence; these are the domains that, informally speaking, are identified as "new" information. See Ishihara (2000) for a detailed discussion of how Neeleman and Reinhart's system applies to Japanese. Below I summarize his work.

Neeleman and Reinhart (1998) propose to assign focus domains by their Focus Role.

(42)   Focus Rule
       The focus of IP is a(ny) constituent containing the main stress of IP, as
       determined by the stress rule (=nuclear stress rule).

Let us look at (40a), repeated below.

(40)   a. Taroo-ga   [$_{VP}$ **hon**-o   t$_v$] katta
           Taro-Nom   [$_{VP}$ book-Acc t$_v$] bought

The focus here is on the object **hon** 'book', which is the phrase that bears the nuclear stress. According to the Focus Rule, the focus domain of this sentence may be **hon**, the VP that contains it, or the entire IP. Thus, (40a) can be used as an answer to the following three questions:

(43)   a. What happened? (focus on IP)
       b. What did Taro do? (focus on VP)
       c. What did Taro buy? (focus on object)

(40b) has a different focus domain set due to the scrambling of the object.

(40)   b. Hon-o$_i$ **Taroo**-ga   [$_{VP}$ t$_i$ t$_v$] katta
           book-Acc$_i$ Taro-Nom   [$_{VP}$ t$_i$ t$_v$] bought

The focus domains are the subject NP **Taroo** and the TP, but the VP cannot be a focus domain because it does not contain the stress. Therefore (40b) cannot be used to answer "What did Taro do?"

If we compare (40a) and (40b), we can see that Japanese is a "topic prominent" language in the true sense of the term. What occurs in the initial position of the sentence is ultimately interpreted as the topic in the informational structure: *Taroo* in (a) and *hon* 'book' in (b). In this way what I am arguing for directly reflects the intuition of traditional grammarians such as Mikami (1960) that Japanese is a topic prominent language, not subject prominent like English.

Finally, there is one point I need to note about the "anti-focus" phrase in an informational focus structure. Recall from our discussion of identificational focus with indeterminate pronouns that, in a structure that contains the indeterminate pronoun in, for example, the object position, it is possible optionally to raise the subject. The object indeterminate pronoun is in a long-distance agreement with FOC without moving. This kind of long-distance agreement never happens in informational focus structure. What is marked for "anti-focus" must necessarily raise to Spec of TP. This is logical. If something other than this phrase raises to the Spec of TP, the structure would end up with two "topics," something not allowed at least in Japanese (cf. Kuno 1973).

5. Kinande (Baker 2003)

In this section I will look at Kinande, a Bantu language. I will depend on the insights of Baker (2003). I am going to assume that Kinande is a focus prominent language. However, Kinande also has agreement, in fact quite an elaborate agreement system that allows agreement between not only the subject and the verbal affix but also with the object and with a locative (and possibly other arguments). What I will propose is that while Kinande is a focus prominent language, it also manifests agreement on C, similar to West Flemish and Turkish that we saw at the start of this article. Kinande falls together with Japanese in being a focus prominent language despite the appearance of agreement because Kinande shows a property that is not shared by the agreement prominent languages of Indo-European. As noted by Baker, the agreed-with category must be interpreted as definite/specific. This is illustrated for the object below.

(44)   Eritunda,   n-a-ri-gul-a.
       fruit.5   1SG.S-T-OM5-buy-FV
       'The fruit, I bought it.'

In this "reversal construction," the object is in a position to trigger agreement on the verb, and it must be interpreted as specific/definite, i.e., the topic. Baker notes that "[t]rue polysynthetic languages…always have agreement and always have dislocation" (2003:112). What Baker means by "dislocation" is that he views the agreed-with category as ultimately being somewhere above the "basic" Spec of TP – he assumes that it is in the higher Spec of TP — in a

position comparable to the dislocation position in languages such as Italian. Dislocation in these languages is only possible if the phrase is not indefinite/nonspecific (Rizzi 1986). The agreement, therefore, occurs in a specifier higher than the normal Specifier of TP. Baker (2003: 109) expresses this as a biconditional for languages such as Kinande (and Mohawk, etc.).

(45)   A verb X agrees with an NP Y if and only if Y is in a dislocated, adjunct position.

How is the agreed-with phrase "dislocated"? Baker forces the agreed-with phrase to occur in a higher position – thus the agreement to hold between this higher specifier and some head – by requiring pro to occur in the "normal" Spec of TP for Case reasons (see his article for details) (Ibid., p. 124).

(46) $[_{TP}$ NP$_i$ $[_{TP}$ pro$_i$ T<AGR$_i$>+Verb ... $[_{VP}$ t$_i$...]]]

The occurrence of pro in the lower Spec of TP forces the agreed-with phrase, NP$_i$, to be in the higher specifier where the agreement takes place according to the biconditional in (45).
         What I wish to key in on is Baker's intuition that the DP triggering agreement in Kinande must occur in a higher specifier position than the normal Specifier of TP, which he calls the "dislocated" position.[15] In our system, we have a way to capture this without having to postulate the pro in the lower Spec of TP. A natural way under our approach is to postulate the following structure.

(47)   Kinande, etc.
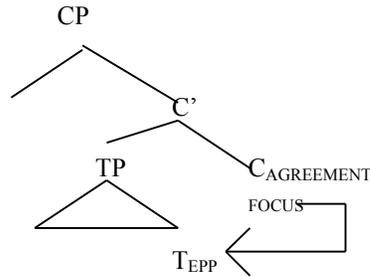
As a focus prominent language, the focus feature on FOC probes an "anti-focus" phrase, and the EPP feature on T raises it to the Spec of TP. This leaves agreement on C. Here, let us make the following "design" stipulation.

(48)   Agreement or focus must occur in the context of EPP.

---

[15] Baker's system is designed, in part, to account for the difference between IE languages such as Greek (Alexiadou and Anagnostopoulou 1998), which appears not to have the EPP on T, and languages such as Kinande. I will not go over this portion of Baker's analysis.

Agreement, for example, may occur at C, and the EPP on T. But if the EPP on T is satisfied by focus, the agreement on C must come with its own EPP feature, which requires that a category be raised to C.[16] The closest one is the category already raised to the Spec of TP by EPP/focus, and it is raised to the Spec of CP, where agreement takes place. By assuming that Kinande is a focus prominent language, but with also agreement in the higher node (C), we capture Baker's intuition embodied in his biconditional in (45) which states that the agreement holds of a specifier higher than the basic Spec of TP. Below, I will present some of the major data from Baker (2003).

Baker observes that Kinande allows non-subjects as well as subjects in the Spec of TP, and the verb agrees with whatever occurs there. In the following pair, the subject occurs in the Spec of TP in the first example, and the object in the second example.

(49) a. Omukali   mo-a-seny-ire   okukwi   (lw'-omo-mbasa).
        woman.1   AFF-1.S/T-chop-EXT   wood.11   LK11-LOC.18-axe.9
        'The woman chopped wood (with an axe).'

     b. Olukwi   si-lu-li-seny-a   bakali   (omo-mbasa).
        wood.11   NEG-11.S-PRES-chop-FV   women.2   LOC.18-axe.9
        'WOMEN do not chop wood (with an axe).'

In (a) the subject occurs in the Spec of TP and the agreement is with this thematic subject. In (b) the object occurs in the Spec of TP, and the verb agrees with this object. The translation for (b) indicates that this construction, the so-called "reversal construction," "expresses contrastive focus on the thematic subject" (Ibid. p. 113). This is telling of the purpose of the reverse construction. Although Baker does not pursue this notion of contrastive focus, it seems to be an indication that this effect comes at least in part from removing the object from the position of sentential nuclear stress, which is the region naturally interpreted as focus (new information). By moving the object out of this position, the subject gets the focus reading (new information). This parallels what we observed in Japanese, and it is a sign that Kinande is focus prominent.

Another kind of inversion is with the locative expression. This construction is found with unaccusatives and passives of transitives.

(50) ?Omo-mulongo   mw-a-hik-a   omukali.
      LOC.18-village.3 18.S-T-arrive-FV   woman
      'At the village arrived a woman.'

Unlike in English, in Kinande locative inversion leads to the verb agreeing with the inverted locative expression. It is important to note that although English has

---

[16] Alternatively, the EPP feature could be merged on FOC, so that the category in the Spec of TP needs to raise just to the Spec of FOCP. This will be identical in modus operandi to the EPP on T. I will not attempt to argue for one or the other, but will assume that the category moves to the Spec of CP in the exposition.

a similar construction of locative inversion (e.g., Bresnan and Kinerva 1989), the locative PP in English is not in the same position. It is not in the "basic" Spec of TP. We can tell this easily by the fact that the locative PP does not allow Aux inversion in questions, one of many pieces of evidence for this fact.[17]

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

(52) Who was there a picture of t$_i$ on the wall?

(51) indicates that the auxiliary *was* cannot invert across the locative PP *on the wall*, suggesting that this locative PP is positioned somewhere other than in the Spec of TP, possibly adjoining to the Spec of TP. In (52), we see that there is no problem in inverting the aux *was* across the expletive *there*, which arguably is in the Spec of TP. That the Kinande locative in (50) enters into agreement with T indicates that the locative inversion in Kinande is fundamentally different from English. In Kinande, locative inversion moves the locative phrase into the Spec of TP. This difference is in part due to the fact that in Kinande the locative phrase is a DP, but in English it is a PP; P in English does not enter into agreement.

In all of these cases, Baker argues that the phrase that is "agreed-with" must occur on the left edge, where it is interpreted as definite/specific. One piece of evidence for this has to do with "augment vowels." Nouns often begin with an "augment" vowel that matches the vowel of the class that the noun prefix belongs to. This augment vowel may drop under the scope of negation and in some other contexts; a noun without this augment vowel has a nonspecific, indefinite interpretation. The following exemplifies an object with and without its augment vowel.

(53) a. Yohani   si-a-nzire   o-mu-kali.
          John   NEG-1.S/T-like   AUG-CL1-woman
          'John does not like the woman.'

      b. Yohani   si-a-nzire   mu-kali.
          John   NEG-1.S/T-like   CL1-woman
          'John does not like a(ny) woman.'

A point relevant to our discussion is that the agreed-with phrase can never drop its augment vowel. Because the agreed-with phrase only occurs on the left edge, the agreed-with phrase is always specific/definite. By a transitivity of reasoning, a nonspecific, indefinite phrase can only occur in a lower position, probably in their originally merged positions within *v*P/VP. In the first example below the subject has the augment vowel, while in the second example it does not.

---

[17] I thank Noam Chomsky (personal communication) for pointing out this fact.

(54) a. Omukali   mo-a-teta-gul-a   ki-ndu.
          AUG-CL.1-woman   AFF-1.S-NEG/PAST-buy-FV   CL7-thing
          'The woman didn't buy anything.'

      b. *Mu-kali   mo-a-teta-gul-a   eritunda.
           CL1-woman   AFF-1.S/T-NEG/PAST-buy-FV   fruit.5
          'No woman bought a fruit.'

As shown in (b), it is not possible for a phrase without the augment vowel, which is nonspecific and indefinite, to occur in the Spec of TP.

What we can observe by using the augment-vowel phenomenon is that in Kinande, something that moves to the left edge is marked for being the specific/definite topic of the sentence and also for agreement. Being just in the "normal" Spec of TP does not force a category to be interpreted as specific/definite, as we can see from English and Japanese. This added interpretation arises from the category moving to a higher node, which I assume is the Spec of CP (or the Spec of FOCP), which is a position that the interface system interprets as specific/definite. This movement to the higher specifier is forced by the occurrence of agreement in a focus prominent language.

What Kinande demonstrates is that a language that is focus prominent can also have agreement. It is just that this agreement raises a category to a higher specifier than the TP because agreement occurs on C (universally), and the EPP occurs with it.

5.1 Turkish – further evidence

Turkish provides a particularly dramatic demonstration of what we just saw for Kinande. The following from Ozturk (2003) shows the effect of adding agreement (example (b)).

(55) a. Bütün çocuk-lar   dergi-yi   sev-me-di.
        all   child   magazine-Acc   love-not-past
        'All children didn't like the magazine.'
        not > all

    b. Bütün çocuk-lar   dergi-yi   sev-me-di-**ler**.
       all   child   margarine-Acc   love-not-past-**pl**
       'All children didn't like the margarine.'
       *not > all, all > not

As Ozturk points out, without the plural agreement suffix –*ler* in (a), the universal quantifier in the subject position is interpreted as being in the scope of negation, not > all. But if the plural suffix is added as in (b), the universal quantifier which the verb now agrees with can only be interpreted as being outside the scope of negation. Ozturk analyzes the universal quantifier here as being higher than negation. Setting aside the details of her analysis, what this shows is that the presence of agreement can raise a category higher than when

the agreement is absent. In Kinande, the agreement on C raises the category in the Spec of TP to a higher specifier where it receives the definite/specific interpretation. This is the "dislocation" effect Baker notes. In Japanese, another focus prominent language, agreement in the traditional sense does not occur on C (but see below for something else that in effect instantiates "agreement" in Japanese), hence the category raised to the Spec of TP stays there, thus it need not be interpreted as definite/specific. Other languages that have this property of specific/definite include Hindi (cf. Mahajan 1990) and Tagalog (cf. Rackowski 2002 and references therein) among others.

6. Wh-movement vs. Wh-in-situ

In this section I will show that the theory of the EPP I have outlined can predict with a measure of precision the presence/absence of overt wh-movement in a given language. The presentation will have to be brief due to limitation of space. In Miyagawa (2001) I suggested that one can predict when a language requires overt wh-movement, and when it doesn't. In that work, I suggested that the feature [+wh] in overt wh-movement languages occurs on C, while it occurs on T in non-wh-movement languages. I argued that when it occurs on C, there is no option but to move a wh-phrase to the Spec of CP. However, when occurring on T, the [+wh] feature may be satisfied without moving the wh-phrase to the Spec of TP, because the T also has other features, e.g., features that go with a non-wh-phrase category. If one moves such a non-wh category, the EPP on T is met, and there is no reason to move the wh-phrase. This allows the wh-phrase to stay in situ.

Given the theory of the EPP outlined in this article, we can now refine the notions involved. We can make a simple statement, as follows.

(56) Overt wh-movement: when it must occur, and when it does not
Overt wh-movement to the Spec of CP only occurs in agreement prominent languages. The movement occurs when, along with agreement, FOC is projected due to the presence of a wh-phrase.

The structure below illustrates this for a sentence with an object wh-phrase. (I am going to somewhat arbitrarily assume that FOC in an argument prominent language occurs above C.)

(57) Overt wh-movement
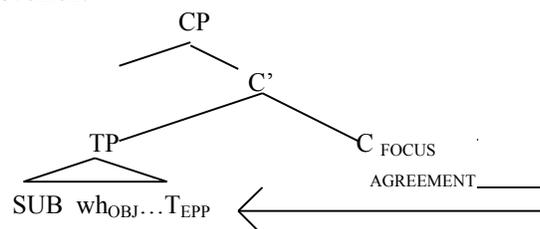
Being that this is an agreement prominent language such as those of Indo-European, the agreement feature on C works in tandem with the EPP on T. This raises the agreed-with phrase, in this case the thematic subject, to the Spec of TP. This takes care of the agreement and the EPP on T. But there is the focus feature, which has been merged into the structure because of the presence of the object wh-phrase, which has a focus feature. The focus feature requires (another) EPP, because of the requirement that focus works in tandem with the EPP. Suppose that this EPP is merged at C. The focus feature agrees with the focus feature on the wh-phrase, and in tandem with the EPP raises the wh-phrase to the Spec of CP. Hence, what raises the wh-phrase is the focus feature that is not checked as part of satisfying the EPP on T. It is not checked because this is an agreement prominent language.

Now consider a focus prominent language. Take Kinande, for example.

(58)   Kinande, etc.
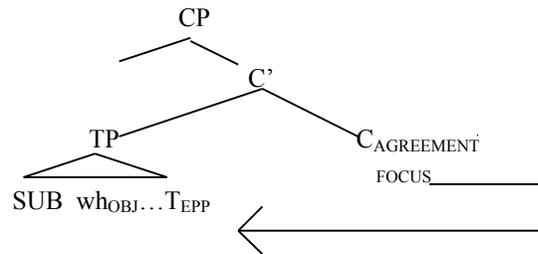
Given that this is a focus prominent language, the focus feature works in tandem with the EPP on T. Because this is a wh-construction, the focus feature "agrees" with the wh-phrase focus. Recall from our discussion of the identificational focus structure in Japanese that it is possible to have long-distance agreement, just as in the existential construction in English. In such a case, some other phrase meets the EPP on T. The following is such an example from Kinande (Baker 2003: 112).

(59)   Kambale   a-gul-a   ebihi?
       Kambale   1.S/T-buy-FV   what.8
       'What did Kambale buy?'

Here the subject "Kambale" raises to the Spec of TP, then to the Spec of CP (or FOCP) for agreement. The wh-phrase stays in-situ, since there is no need for it to raise under this "long-distance" agreement. As Baker points out, a wh-phrase cannot occur in the agreement position because that position requires the phrase in it to be definite/specific.

In languages such as Japanese, there is no overt agreement (but see next section), hence once focus is satisfied in tandem with the EPP on T by long-distance agreement with the wh-phrase, nothing more happens, and there is no instance in which overt wh-movement is required. It is, of course, possible for the wh-phrase to move to the Spec of TP to satisfy the EPP. This is similar to

overt wh-movement in agreement prominent languages, but, as I noted in Miyagawa (2001), unlike in an overt wh-movement language, it is not necessary for the wh-phrase to be picked to move in this way to the Spec of TP in a language such as Japanese. What must be satisfied is the EPP on T, and there are a number of options including the wh-phrase to accomplish this.

Finally, Turkish, which we also saw is a focus prominent language by virtue of the fact that it need not have agreement, also does not have overt wh-movement as expected even when there is agreement.

Our approach predicts that when a language has no agreement, it does not have wh-movement because it is a focus prominent language. Kuroda (1988) (and also Fukui 1986), too, makes the same prediction. What differentiates ours from his system is that he predicts that when there is agreement, there should be wh-movement. In our system, a language with agreement only requires wh-movement if the language is agreement prominent, as in the case of IE languages.[18]

7. Where is the Agreement in Japanese?

At the beginning of this article I said that I will assume a strong version of the *Uniformity Principle* (Chomsky 2001) for the inflectional system. This means that features such as focus and agreement should be present uniformly in every language.

(60)   *Uniformity Principle* (Chomsky 2001)
        In the absence of compelling evidence to the contrary, assume languages
        to be uniform, with variety restricted to easily detectable properties of
        utterances.

We saw that Kinande and Turkish, both focus prominent languages, also have agreement. We also saw that English (in fact all of IE), is agreement prominent, but the focus feature is also instantiated (at least) in the wh-construction. That leaves Japanese. What instantiates agreement in Japanese? Japanese has no overt agreement.

I suspect that a possible candidate for "agreement" is the topic construction, which in Japanese is typically overtly marked with the topic marker -*wa*.

(61)   *Taroo-wa*   hon-o   katta.
        Taro-Top   book-Acc bought
        'As for Taro, he bought a book.'

---

[18] Norvin Richards has pointed out to me that the North Germanic languages might be a problem for the claim that null-agreement languages always have wh-in-situ—Norwegian, for example, basically doesn't have subject-verb agreement, and does have wh-movement. On the other hand, these are V2 languages, so possibly V2 is another way for EPP to be expressed, not directly related to agreement.

Parallels with agreement include the fact that there can only be one true topic per sentence (Kuno 1973). Also, the topic phrase, which typically occurs on the left edge, occurs high in the structure. Whitman (1991) suggests that it is in the region of the Spec of CP. If this is correct, it is precisely in the specifier of the head, C, that I have argued is the locus of agreement. Finally, topics do not occur in most subordinate clauses such as a relative clause (Kuno 1973).

(62) *Taroo-ga   [Hanako-wa katta]   hon-o   yonda.
    Taro-Nom [Hanako-Top bought]   book-Acc read
    Taro read the book that Hanako bought.'

While other explanations may be possible, following the idea that topic is "agreement," it is possible to correlate the lack of topic in subordinate clauses to the lack of agreement in subjunctive clauses. Uchibori (2000) gives compelling evidence that a variety of subordinate clauses in Japanese behave like subordinate clauses in languages where the subjunctive is well established, e.g., Romance.

The indicative/subjunctive in Japanese, which, if real, is not represented by verbal inflection. It corresponds approximately to the conclusive/attributive distinction in Classical Japanese of some one thousand years ago, which was represented by distinct inflections (cf. Miyagawa and Ekida 2003 and references therein). The conclusive form typically appeared in root clauses, while the attributive form appeared most commonly in subordinate clauses. There was one instance in which the conclusive form appeared in a subordinate clause; this is when the subordinator is the complementizer –to. Because the conclusive form in Classical Japanese correlates with the indicative form in present-day Japanese, if Uchibori's analysis is right, we predict that the subordinate clause with the –to complementizer should allow a topic. The following is such an example.

(63)   Hanako-ga   [*Taroo-wa*   kuruma-o katta   to]   omotteiru.
      Hanako-Nom [Taro-Top   car-Acc   bought   C]   think
      'Hanako thinks that as for Taro, he bought a car.'

There may be better examples to demonstrate this point, but even with this example it contrasts sharply with "subjunctive" clauses such as below.

(64)   *Hanako-ga   [*Taroo-wa*   katta]   kuruma-o   mita.
      Hanako-Nom   [Taro-Top   bought]   car-Acc   saw
      'Hanako saw the car that Taro bought.'

While speculative, and with a number of problems remaining (e.g., what to do with sentences that do not have a topic phrase with -*wa*?), it does make a prediction. Namely, we should only find a robust topic structure in languages that do not evidence any overt agreement. At least this is true for Chinese,

Japanese, and Korean. Further study is necessary to see whether this hypothesis of "topic-agreement" holds up.

8. Concluding remarks

If what I have outlined in this article is anywhere near on target, we have a view of languages in which all the features of universal grammar are uniformly present in every language, at least for the domain of inflection which we explored. This is what Sigurdsson (2003) suggests. This idea is based on the notion that the universal stock of features is uniform (Chomsky 2001). I took the strong version of this to be true and hypothesized that these features appear in every language in the domain of inflection. The differences among languages, which appear vast on the surface, as in the case of overt wh-movement languages versus languages that do not move the wh-phrase, or between "scrambling" and "nonscrambling" languages, are the result simply of varying the way some of the features interact with each other. It does not reflect some deep difference among languages.

References

Ackema, Peter and Ad Neeleman (2001). Context-sensitive spell-out and adjacency. Ms., Utrecht University and University College London.

Alexiadou, A. and Elena Anagnostopoulou (1998). Parametrizing word order, V-movement, and EPP-checking. *Natural Language and Linguistic Theory* 16, 491-539.

Alexiadou, A. and Elena Anagnostopoulou (2001). The subject-in-situ generalization and the role of case in driving computations. *Linguistic Inquiry* 32, 193-232.

Bailyn, John (2001). On scrambling: a reply to Boskovic and Takahashi. *Linguistic Inquiry* 32.

Bailyn, John (2003). Does Russian scrambling exist? In Simin Karimi, eds., 156-176. Carnie, Heidi Harley, and Mary Willie (eds.), *Formal approaches to function in grammar: in honor of Eloise Jelinek*, Amsterdam/Philadelphia: John Benjamins, pp. 107-134.

Baker, Mark (2003) Agreement, dislocation, and partial configurationality. In Andrew Carnie, Heidi Harley, and MaryAnn Willie, eds., *Formal approaches to function in grammar*, pp. 107-132. John Benjamins Publishing Company.

Boeckx, Cedric (2003). *Islands and chains: resumption as stranding.* John Benjamins Publishing Company.

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

Brody, Michael (1990). Some remarks on the focus field in Hungarian. *UCL working papers* 2:201-225.

Carstens, Vicki (2003) Rethinking complementizer agreement: agree with a case-checked goal. *Linguistic Inquiry* 34, 393-412.

Chomsky, Noam (1971). Deep structure, surface structure and semantic interpretation. In D. Steinberg and L. Jakobovits (eds.), *Semantics, an interdisciplinary reader in philosophy, linguistics and psychology*. Cambridge University Press.

Chomsky, Noam (1976) Conditions on rules of grammar. *Linguistic analysis* 2:303-349.

Chomsky, Noam (1981). *Lectures on government and binding*. Dordrecht: Foris
    Publications.
Chomsky, Noam (1993). Minimalist program for linguistic theory. In Kenneth Hale and
    Samuel Jay Keyser (eds.), *The view from Building 20*, Cambridge, Mass.: MIT   Press,
    1-52.
Chomsky, Noam (2000). Minimalist inquiries: the framework. In *Essays on minimalist
    syntax in honor of Howard Lasnik*. Roger Martin, David Michaels, and Juan
    Uriagereka (eds.), 89-156. Cambridge, Mass.: MIT Press.
Chomsky, Noam (2001). Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: a
    life in language*. Cambridge, MA: MIT Press, pp. 1-52.
Chomsky, Noam (to appear) Three factors in language design. *Linguistic Inquiry*.
Chomsky, Noam and Morris Halle (1968). *The sound pattern of English*. New York:
     Harper & Row, Publishers.
Cinque, Guglielmo (1990). *Types of A'-dependencies*. Cambridge, Mass.: MIT Press.
Cinque, Guglielmo (1993). A null theory of phrase and compound stress. *Linguistic
    Inquiry* 24: 239-298.
Cinque, Guglielmo (1999). *Adverbs and functional heads*. Oxford: Oxford University   Press.
Culicover, Peter and Michael Rochemont (1983). Stress and focus in English,
    Language 59, 123-165.
Dayal, Veneeta (2003). Bare nominals: non-specific and contrastive readings under
     scrambling. In Karimi Simin, ed., 67-90.
É. Kiss, Katalin (1998). Identificational focus versus informational focus. *Language*
     74: 245-273.
É. Kiss, Katalin (2003) Argument scrambling, operator movement, and topic movement
     in Hungarian. In Simin Karimi, ed., 22-43.
Fox, Danny (2000). *Economy and semantic interpretation*. Cambridge, Mass.: MIT
    Press.
Fukui, Naoki (1986). *Theory of category projections and its theoretical implications*.
    Doctoral dissertation,.MIT, Cambridge, Mass.
Fukui, Naoki (1995). The principles-and-parameters approach: A comparative
    syntax of English and Japanese. In Masayoshi Shibatani and Theodora Byron (eds.),
    Approaches to language typology. Oxford: Clarendon   Press.
Gussenhoven, C. (1984). *On the grammar and semantics of sentence accents in
    Dutch*. Dordrecht: Foris.
Haegeman, Liliane (1992). Some speculations on argument shift, clitics and crossing
    in West Flemish. Ms., University of Geneva.
Halle, Morris and Jean-Roger Vergnaud (1987). *An essay on stress*. Cambridge,
    Mass.: MIT Press.
Hiraiwa, Ken (2002). Indeterminate-agreement and varieties of raising. Ms., MIT.
Holmberg, Anders (1999). Remarks on Holmberg's generalization. *Studia linguistica*
    53: 1-39.
Iatridou, Sabine (1993). On nominative case assignment and a few related things.
    Papers on case and agreement II, Colin Phillips (ed.), *MIT working papers in
    linguistics* 19: 175-196.
Ishihara, Shinichiro (2000). Stress, focus, and scrambling in Japanese. *MIT working
    papers in linguistics* 39, 142-175.
Jackendoff, Ray (1972). *Semantic interpretation in generative grammar*. Cambridge,
    Mass.: MIT Press.
Jelinek, Eloise (1984). Empty categories, case, and configurationality. *Natural
    Language and Linguistic Theory* 2, 39-76.

Jung, Yeun-Jin (2002). Scrambling, edge effects, and A/A'-distinction, *The Linguistics Association of Korea Journal 10.4*.

Karimi, Simin, ed., (2003). *Word order and scrambling*. Blackwell Publishing.

Kato, Yasuhiko (1988). Negation and the discourse-dependent property of relative scope in Japanese. *Sophia Linguistica*, 23-4: 31-37.

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

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

Klima, Edward (1964). Negation in English. In Jerry A. Fodor and Jerrod Katz (eds.), *The structure of language*. Englewood Cliffs, New Jersey: Prentice-Hall, pp. 246-323.

Koizumi, Masatoshi (1995). *Phrase structure in minimalist syntax*. Doctoral dissertation, MIT, Cambridge, Mass.

Kornflit, Jaklin (2000) Some syntactic and morphological properties of relative clauses in Turkish, in A. Alexiadou, C. Widler, and P. Law (eds), *The syntax of relative clauses*. Amsterdam/Phildelphia: John Benjamins, 121-159.

Kornfilt, Jaklin (2004). Unmasking covert complementizer agreement. Presented at the Linguistic Society of America conference, Boston, Mass., January 10, 2004.

Kuno, Susumu (1973). *The structure of the Japanese language*. MIT Press, Cambridge, Mass.

Kuroda, S.-Y. (1965). *Generative grammatical studies in the Japanese language*. Doctoral dissertation, MIT, Cambridge, Mass.

Kuroda, S.-Y. (1972). The categorical and the thetic judgments, *Foundations of language* 9, 153-185.

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

Kuroda, S.-Y. (1992). Judgment forms and sentence forms. In *Japanese syntax and semantics: collected papers*, 13-77, Dordrecht: Kluwer Academic Publishers.

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

Lasnik, Howard (1999). Chains of arguments. In Samuel Epstein and Norbert Hornstein (eds.), *Working minimalism*. Cambridge, Mass.: MIT Press.

McCloskey, James (2001). On the distribution of subject properties in Irish,' in *Objects and other subjects*, William D. Davies and Stanley Dubinsky, eds., Kluwer Academic Publishers: 157–192

Mahajan, Anoop (1990). *The A/A-bar distinction and movement theory*. Doctoral dissertation, MIT, Cambridge, Mass.

Mikami, Akira (1960). *Zoo-wa hana-ga nagai*. Tokyo: Kurosio Shuppan.

Miyagawa, Shigeru (1989). *Structure and case marking in Japanese*. New York: Academic Press.

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

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

Miyagawa, Shigeru, and Fusae Ekida (2003) *Historical development of the accusative case marking in Japanese as seen in classical literary texts*. A special issue of *Journal of Japanese Linguistics* 19.

Neeleman, Ad and Tanya Reinhart (1998). Scrambling and the PF interface. In Miriam Butt and Wilhelm Geuder (eds.), *The projection of arguments: lexical   and compositional factors*, Stanford, California: CSLI Publications, pp. 309-   353.

Nishigauchi, Taisuke (1990). *Quantification in the theory of grammar*. Kluwer, Dordrecht.

Ordóñez, Francisco. (1997). *Word order and clause structure in Spanish and other Romance languages.* Doctoral dissertation, CUNY.

Ozturk, Balkız (2003). Configurationality: a typology based on case and   referentiality. Ms., Harvard University. Paper presented at CASTL, Trømsø,   Norway.

Pesetsky, David, and Esther Torrego (2001). T-to-C: causes and consequences. In Michael Kenstowicz   (ed.), *Ken Hale: a life in language.* MIT Press.

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

Rackowski, Andrea (2002). The Structure of Tagalog: Specificity, Voice, and the Distribution of Arguments. Doctoral dissertation, MIT, Cambridge, Mass.

Reinhart, Tanya (1995). *Interface strategies*. OTS working papers, Utrecht University.

Rizzi, Luigi (1986).   Null objects in Italian and the theory of pro, *Linguistic Inquiry* 17:501-557.

Rizzi, Luigi (1997). The fine structure of the left periphery. In Liliana Haegeman (ed.), *Elements of grammar: handbook in generative syntax*. Dordrecht: Kluwer Academic Publishers, pp. 281-337.

Rochemont, Michael (1986). *Focus in generative grammar*. Amsterdam: Benjamins.

Saito, Mamoru (1992).   Long distance scrambling in Japanese. *Journal of East Asian Linguistics* 1:69-118.

Selkirk, Elizabeth (1984). *Phonology and syntax: the relation between sound and structure*. Cambridge, Mass.: MIT Press.

Selkirk, Elizabeth (1995). Sentence prosody: Intonation, stress, and phrasing. In John A. Goldsmith (ed.), *Handbook of phonological theory*. London: Basil Blackwell, pp. 550-569.

Shibatani, Masayoshi (1990). On parametric syntax. In *Festschrift for Professor Hisao Kakeshi's Sixtieth Birthday*. Tokyo: Kurosio, pp.   397-420.

Sigurdsson, Halldór Ármann (2003). Meaningful silence, meaningless sounds. Ms., Lund University, Sweden.

Simpson, Andrew and Zoe Wu (2001). Agreement, shells, and focus. *Language* 78: 287-313.

Szabolcsi, Anna. (1981). The semantics of topic-focus articulation. In Jan Groenendijk, Theo Janssen, and Martin Stokhof (eds.), *Formal methods in the   study of language*, Amsterdam: Matematisch Centrum, pp. 513-41.

Tada, Hiroaki (1993). *A/A' partition in derivation*. Doctoral dissertation, MIT, Cambridge, Mass.

Uchibori, Asako (2000).*The Syntax of subjunctive complements: evidence from Japanese*. Doctoral dissertation, University of Connecticut, Storrs, Conn.

Watanabe, Akira, (1993), *Agr-based case theory and its interaction with the A-bar system.* Doctoral dissertation, MIT, Cambridge, Mass.

Webelhuth, Gert (1989). *Syntactic saturation phenomena and the modern Germanic languages*. Doctoral dissertation, University of Massachusetts,   Amherst.

Whitman, John (1991). String vacuous V to Comp. Paper presented at GLOW.

Yamashita, Hideaki (2001). EPP and the ordering effects on interpretation: a preliminary study, *Nanzan studies in Japanese language education 8*, 300-338. Nagoya: Nanzan University.

Yang, Dong-Whee (2004). Scrambling, interpretive complex, and cyclic spell-out. A paper presented at the Linguistic Society of America, Boston, Mass.

Shigeru Miyagawa
Department of Linguistics and Philosophy
32-D886
MIT
Cambridge, MA 02139
USA

miyagawa@mit.edu