

A Checking Theoretical Analysis of Japanese Adverbial Particles with Special Reference to *dake* 'only'

Masaki Sano

0. Introduction

Japanese is a language rich in adverbial particles, such as *mo* 'also', *sae* 'even', *dake* 'only', and *sika* '(not) anything but', to name just a few. They attach postpositionally to a category which they focus on a constituent of. They also share the property of having scope, namely the domain over which they are semantically effective. Scope is typically defined by a clausal boundary, but may extend over it to a higher clause. Thus consider the following example:¹

- (1) [_S titioya wa Hanako ni [_S PRO otokonoko dake paatee ni syootaisuru]
 father TOP DAT boy only party to invite
 koto o yurusita]
 C ACC allowed
 '(her) father allowed Hanako to invite only boys to the party'

This sentence has an embedded clause whose subject PRO is controlled by the dative NP *Hanako* in the matrix clause.² The adverbial particle *dake* attaches to the object of the embedded clause, *otokonoko*. The scope of the particle may either be narrow, limited to the embedded clause, or wide, extending over to the matrix one. In the narrow scope reading, the sentence means that what her father allowed Hanako to do is invite only boys to the party; he allowed her not to invite anyone other than boys. In the wide scope reading, it means that it is only boys that her father allowed Hanako to invite to the party; he did not allow her to invite anyone but boys. Thus the sentence is ambiguous, just as is its English analogue, indicated as a gloss in (1).

No such ambiguity arises, however, if we use, in place of *dake*, semantically similar adverbial particle *sika*; the two readings of (1) correspond to different forms with this particle, which is a negative polarity item (NPI) requiring the presence of a negative associate:

- (2) a. [_S titioya wa Hanako ni [_S PRO otokonoko sika paatee ni syootaisi-nai]
 father TOP DAT boy party to invite-NEG
 koto o yurusita
 C ACC allowed
 ‘her father allowed Hanako not to invite anyone other than boys to the party’
- b. [_S titioya wa Hanako ni [_S PRO otokonoko sika paatee ni syootaisuru]
 father TOP DAT boy party to invite
 koto o yurus-anak-atta
 C ACC allow-NEG-PAST
 ‘her father did not allow Hanako to invite anyone other than boys to the party’

In (2a), the negative associate of *sika* appears on the embedded predicate, while in (2b) it appears on the matrix one. The scope of the particle is uniquely defined by these negatives: it is limited to the embedded clause in (2a), and it is over the matrix one in (2b). The associate of *sika* thus functions as a scope marker.

Sika has been studied by a greater number of those of a generative vein than *dake* has, the reason obviously being related to its NPI property. Examination of the relation between *sika* and its associate negative suggests some movement operation whose properties are largely determined by universal principles. Muraki (1978) observed a number of facts concerning the relation that are reminiscent of the unbounded dependency and island-sensitivity of movement; Kato (1985) similarly suggests that whatever predicate may intervene between *sika* and its non-clausemate associate must be something like a ‘bridge’, recalling the observation by Erteschik (1973) concerning *wh*-movement; and Takahashi (1990) shows that *sika* induces effects characteristic of movement, such as weak crossover and minimality, and goes on to argue that a phrase headed by *sika*, or a *sika*-phrase, moves to the Spec of a NegP.

Chomsky (1993) claims that movement of a category α is driven by morphological properties of α ; it is 'self-serving', applying to satisfy properties of α itself. For instance, a *wh*-phrase in English moves to the Spec of an appropriate CP to have its *wh*-operator feature checked by the head C having such a feature (Spec-Head Agreement), thereby satisfying a formal feature of its own. Suppose that a *sika*-phrase has a negative operator feature that must be checked by (or 'agree with') some negative element. Then the *sika*-phrase must move for feature checking to the Spec of a NegP or to the checking domain (in the sense of Chomsky (1993)) of some negative head. This operation gives the phrase its associated scopal property, along with other (A-bar) movement properties such as those observed by the works cited above. See Aoyagi and Ishii (1994) and Nishioka (1994) for recent analyses of NPIs along these lines.

Unlike *sika*, *dake* and other adverbial particles lack any explicit, obligatory indication of their scope; they apparently do not require the presence of a particular associate of their own in the way *sika* requires a negative. This might discourage any attempt to analyze them in terms of agreement/checking. It is the main purpose of this paper, however, to explore the possibility of the checking theoretical analysis of adverbial particles that lack explicit scope markers. With *dake* as a representative of such particles, we will show that the suggested analysis allows a number of desirable consequences that would otherwise be unpredictable.

1. *Dake* as a Defective Predicate

The adverbial particle *dake* has a predicate-like property which is most clearly seen in a sentence like the following:

- (3) Taroo wa [Hanako ni atta] dake da
 TOP DAT met only COP

'as for Taro, it's only that he met Hanako' or 'Taro only met Hanako'

In (3), *dake* attaches to the bracketed clause, which we may assume to be an IP (with its vacated subject construed with the topicalized *Taroo*);³ it functions like an auxiliary predicate that adds a modal meaning to the proposition expressed by the main clause,

on a par with other auxiliary-like predicates appearing in similar environment, such as the adjective *rasi(-i)* 'seem (-PRES)' in (4) :

- (4) Taroo wa [Hanako ni atta] rasii
 TOP DAT met seem
 'as for Taro, it seems that he met Hanako', or 'Taro seems to have met Hanako'

The only syntactic difference between *dake* and *rasi(-i)* here is that *rasi(-i)*, although auxiliary in function, is a 'full-fledged' predicate that inflects in exactly the same way as other adjectival predicates like *hosi(-i)* 'want-PRES', whereas *dake* does not itself inflect (hence 'particle') and requires copular predicate *da* for inflection. Thus the past counterpart of (4) is (4)' below, with the past form of *rasi* itself, whereas the past counterpart of (3) is (3)', with the past form of the copular predicate *da*, *dake* lacking inflection:

- (4)' Taroo wa [Hanako ni atta] rasikatta
 TOP DAT met seemed
 'as for Taro, it seemed that he had met Hanako' or 'Taro seemed to have met Hanako'
- (3)' Taroo wa [Hanako ni atta] dake datta
 TOP DAT met only COP-PAST
 'as for Taro, it was only that he (had) met Hanako'

The copula appearing in sentences like (3) and (3)' might serve some other function(s) than just to inflect for *dake*. But whatever it is, we may say that *dake* is a 'defective' predicate that must be supported, or licensed, by some other predicate.⁴

Suppose that this use of *dake* as a defective predication of what it attaches to is in fact a general property of the particle, extending over to cases in which it attaches to categories other than IP, such as NP as in the following:

- (5) Taroo wa [[_{NP} Hanako] dake] ni atta
 'Taro met only Hanako'

That is, suppose the occurrence of *dake* in (5) is licensed by the predicate *atta* 'met',

just as *dake* in (3) is licensed by *da*. This recalls the property of an NPI such as *sika* that must be licensed by a negative, suggesting that a similar approach might be in order. For concreteness, let us assume that associated with a *dake*-phrase is a feature, say [+Pred(icate)], projected from its head *dake* that must be checked by the functional category Agr that also checks properties of the predicate of a sentence; with Agr a mediator, a *dake*-phrase is paired with its licensing predicate. Movement of a *dake*-phrase is thus driven by the requirement of satisfaction of its morphological property ('perfection' of its predicate-like property which would otherwise remain defective), and the phrase is raised to the Spec of an AgrP whose head Agr the licensing predicate is also raised to by the process known as Head Movement. Let us develop this idea, and see what consequences will follow.

2. Order of *dake* and Other Particles

2.1. Reflection Principle

A complement, whether *dake* is attached to it or not, is generally in agreement relation with the predicate that selects it, particularly in term of Case; its Case feature is checked by the Agr that checks the predicate. If so, then in a sentence like (5) where *dake* appears on a complement together with a Case-marker *ni*, it must be the entire phrase with *dake* and *ni*, that moves to the Spec of AgrP; the Case and the Pred features on the phrase are checked by the same Agr in the same Spec position. Note that nothing dictates specific order of checking; which of the two features is to be checked first does not matter. Suppose that there is a principle requiring that phonology reflect syntactic computation as much as possible. Call it Reflection Principle. Specifically, this principle requires that, wherever possible, the order of syntactic operations on a phrase or a set of phrases be reflected in its pronunciation. Thus given two features on a phrase, if one of them is checked first and then the other, this order of checking process will be reflected in the pronunciation of the phrase if the resulting pronunciation does not conflict with any other principles. In (5), *ni*, the pronunciation of the dative Case feature, occurs after *dake*, and this can be taken to be a reflection of the Case having been checked after the Pred checking. But if the opposite order of the Case being checked first is also possible, we should have a variant of (5) in which *ni*

is pronounced first, and in fact we do:

- (6) Taroo wa Hanako ni dake atta

Thus the phonological order of the Case marker and *dake* on a complement to the same predicate is free, the checking order of the two being free. This is true if the Case involved is accusative:

- (7) Taroo wa Hanako {dake o / o dake} butta
hit-PAST
'Taro hit only Hanako'

Suppose, however, that we have a Case feature that must be checked after the Pred checking for a principled reason. If such a Case feature appears on a *dake*-phrase, then by Reflection Principle the Case should only be pronounced after *dake*. There is in fact one Case that must be checked after: the nominative, which, when appearing on a subject, is checked by a finite tense in [Spec, TP], a position higher than [Spec, AgrP].^{5,6} Under the predicate (VP/AP) internal subject hypothesis, which we will assume throughout, the nominative subject with *dake* will first move from the Spec of VP (or AP) to the Spec of AgrP for checking the Pred feature, and then to the Spec of TP for checking the nominative Case.⁷ This fixed ordering of the checking process should then be reflected as the fixed phonological order of *dake* followed by *ga*, in accordance with Reflection Principle; and in fact we have the *dake-ga* order but not *ga-dake*:

- (8) Taroo {dake ga /*ga dake} Hanako ni atta
'Only Taro met Hanako'

The restriction against the *ga-dake* order, however, applies not only to a nominative subject but also to a nominative object, which appears as a complement of a stative predicate (Kuno (1973)). Thus the object of the stative *wakar(-u)* 'understand (-PRES)' is marked with *ga*, which may be preceded, but never followed, by *dake*:

- (9) Taroo wa eigo {ga /*o} wakaruru
TOP English NOM/ACC understand

'Taro understands English'

(10) Taroo wa eigo {dake ga /*ga dake} wakaru

'Taro understands only English'

If a nominative object is checked for Case in the same position that a *dake*-phrase and other complements are checked, namely in the Spec of AgrP, then *ga* for such an object should be free to appear with *dake* in either order, just like other Case-particles, contrary to the fact. If, however, such an object is Case-checked in some position higher than the Spec of AgrP, then its Case marker *ga* can only appear after *dake*, just like *ga* for subjects. I will suggest in the next subsection that a nominative object is indeed checked in a higher position, by giving some evidence that it is located in a position higher than is occupied by an accusative object, although I will not make an attempt to identify the (functional) category that provides such a position.

2.2. Nominative vs. Accusative Object

As is often noted in the literature (see, e.g., Homma (1989, 1992)), a quantified object of a negative sentence generally interacts with the negative to give scopal ambiguity:

(11) Taroo wa subete no setumei o rikaisi-nak-atta

TOP all GEN explanation ACC understand-NEG-PAST

'Taro did not understand all the explanations'

The universally quantified object in (11) may have scope over the negative, giving a total negation reading saying that Taro did not understand any of the explanations, or it may be within the scope of the negative, with a partial negation saying that not all of the explanations were understood by Taro. Note that the object is accusative, since the predicate is non-stative. If we replace the predicate with a stative one like *wakar(u)*, the object must be nominative:

(12) Taroo wa subete no setumei ga wakar-anak-atta

understand-NEG-PAST

'Taro did not understand all the explanations'

Interestingly, the nominative object in (12) may only have wide scope and cannot be

within the scope of negation, in sharp contrast with the accusative in (11). This difference between the nominative and the accusative objects will follow if the former is located in a position higher than the latter, under the natural assumption that a higher position is associated with wider scope; the nominative object is structurally too high to be associated with narrow scope, or to be within the scope of a negative, whereas the accusative is not so high and in a position that allows scopal interaction with a negative. Unfortunately, however, the two sentences do not constitute a minimal pair, the predicates involved being different lexically (though similar in meaning). Since in general stative predicates allow their objects to be marked only with the nominative, it is hard to construct a minimal pair in which Case on the contrasting objects is the only difference. But this is not totally impossible; even where the only possible Case-assigner is a stative predicate, its object may be marked accusative as well as nominative under certain contextual support. Subordination is one of the factors that may help to enhance the acceptability of the accusative marking, although characterization of the nature of the relevant subordinating context is not an easy task.⁸ Thus in a context like the following, one could use either one of the two Case markers for the object:

- (13) a. Taroo wa imada subete no setumei ga wakar-azu ni ita
TOP still all GEN explanation NOM understand-NEG at was
'Taro still was (at) not understanding all the explanations'
- b. Taroo wa imada subete no setumei o wakar-azu ni ita

ACC

(13) involves clausal embedding, and the negated stative predicate *wakar-azu* is embedded by the matrix predicate *ita* with the postposition *ni* something like a complementizer. The predicate thus embedded, while stative, may take either the nominative object (13a) or the accusative one (13b). Note that the accusative cannot be due to any device like 'Exceptional Case Marking (ECM)'; the only predicate that could be relevant to it is *ita*, but this cannot be an ECM predicate because it is intransitive and lacks an accusative-Case-marking ability. Still the accusative version is as acceptable as the nominative, if not preferable to it. Now consider the scope of the quantifier on the two differently Case-marked objects, relative to the negative. Both

the nominative and the accusative versions clearly allow the wide scope reading. However, while the accusative may also be assigned the narrow scope reading, the nominative can hardly have this option. I would not say that the nominative is never assigned this reading; it often happens that the narrow scope reading of a quantifier that is unavailable in a root context like (12) becomes more or less accessible under subordination, as pointed out in Sano (1992: 78ff). A similar observation is made in Miyagawa (1993: 224, fn. 8). In any event, it remains true that the narrow scope is far less likely a reading with the nominative than with the accusative.

In (13) the negative involved is *(a)zu*, a morpheme that is restricted in use to a subordinate clause. The following pair has essentially the same subordinating context as (13) but involves a more familiar negative morpheme without such a restriction:

- (14) a. Taroo wa imada subete no setumei ga wakar-anai de ita
 TOP still all GEN explanation NOM understand-NEG in was
 'Taro was still (in) not understanding all the explanations'
- b. Taroo wa imada subete no setumei o wakar-anai de ita
 ACC

The accusative version (14b) may sound somewhat unnatural; if one is to use the accusative Case, (13b) might be a better context. Still, (14b) seems to be sufficiently acceptable that we can make a judgment on scopal interpretation: it allows narrow as well as wide scope reading of the quantifier. The nominative version (14a), on the other hand, can hardly have narrow scope, just as before. Quite the same direction of interpretation obtains with the following pair of examples as well:

- (15) a. watasi wa Taroo ni subete no kotae ga wakar-anai de hosii
 I TOP DAT all GEN answer NOM understand-NEG want
 'I want Taro not to know all the answers'
- b. watasi wa Taroo ni subete no kotae o wakar-anai de hosii
 ACC

Here the embedding predicate is *hosii* 'want' (with the preceding element *de* something like a subordinating marker). This cannot be an ECM predicate, since it is adjectival and does not license an accusative Case. Again, the narrow scope reading of the

quantifier is almost impossible with the nominative (15a), while it is certainly an option with (15b), if we abstract away the possible unnaturalness that may be created by the accusative marking.⁹ We therefore find throughout these examples a systematic tendency, namely that nominative objects are exclusively associated with wide scope, while accusatives additionally allow narrow scope reading, an indication that the former are located and Case-checked in a position higher than the latter. If so, we have a unified explanation for the fixed order of *dake-ga* that covers objects as well as subjects.

2.3. The Position of *wa*

Let us turn briefly to another case of the fixed order of particles: the one involving the topic marker *wa*. A well-known fact about *wa* that in my view has been given at most a descriptive account, is that it is always placed in a position external to a Case-marked complement, to the right of whatever Case-particle may appear on it. This follows if a topicalized complement is licensed in TopP (Topic Phrase), which contains a TP (or IP) (cf. Nakamura (1994)). Thus a topic has its associated topic feature checked in the Spec of TopP; this checking must be after Case checking, since TopP is external to TP and hence to AgrP. Therefore, the topic feature on a complement must be pronounced after the pronunciation of the Case feature that may be on the same complement. Thus we have the *ni-wa* order but not *wa-ni*:

- (16) Hanako {*ni wa* /**wa ni*} Taroo ga atta
 'Hanako, Taro met'

But this analysis implies that *wa* must be pronounced after *dake* as well, because the Pred feature is checked before the topic for the same reason as Case features. This is indeed the case:

- (17) a. Taroo wa Hanako ni dake wa atta
 'Taro met at least Hanako'
 b. *Taroo wa Hanako ni wa dake atta

In fact, *wa* can only appear in the end position of a sequence of particles, and this is because it is the last particle to be licensed, just as the nominative is the last

Case-marker to be licensed.

3. The Scope of *dake* and the Position of a Case-marker

We saw in the introduction that the scope of *dake* may be ambiguous when the sentence involves clausal embedding. Let us see how this ambiguity can be captured under the present analysis. Consider (1) again, repeated here:

- (1) [_S titioya wa Hanako ni [_S PRO otokonoko dake paatee ni syootaisuru]
 father TOP DAT boy only party to invite
 koto o yurusita]
 C ACC allowed
 'her father allowed Hanako to invite only boys to the party'

Since (1) is biclausal, it has two AgrPs, one for the matrix and the other for the embedded clause. If the *dake*-phrase, a complement of the embedded predicate, moves to the Spec of the embedded AgrP and has its Pred feature checked there, it c-commands and has scope over the embedded VP, a domain that will be mapped to a nuclear scope under Diesing's (1992) Mapping Hypothesis.¹⁰ The *dake*-phrase therefore has the narrow scope in which it is 'paired with' the embedded predicate. But nothing on our present assumptions prevents the Pred feature from being checked by the matrix rather than the embedded Agr; the phrase may move to the Spec of the matrix Agr whereby it is paired with the matrix predicate, giving the wide scope reading.

The scopal ambiguity is thus accounted for without having recourse to a rule like Quantifier Raising (May (1977)), a move that was made in Sano (1985) to account for scopal properties of *dake*; the independently motivated raising to [Spec, AgrP] in effect does the job of scopal assignment when it applies to a scope-bearing phrase like the *dake*-phrase, in conformity with Runner's (1993) claim that [Spec, Agr-oP] is a position for quantificational NPs.¹¹

Notice that the *dake*-phrase in (1), while functioning as an object, lacks its accusative Case marker *o*, an instance of the Case-drop phenomena. The Case marker may overtly attach to the *dake*-phrase, as in (18):

(18) [_S titioya wa Hanako ni [_S PRO otokonoko dake o paatee ni syootaisuru]

ACC

koto o yurusita]

'her father allowed Hanako to invite only boys to the party'

Interestingly, however, this overtly Case-marked *dake*-phrase cannot take the matrix, wide scope, in sharp contrast with (1); the embedded scope is the only option available (at least under the normal intonation; see below). Why should this be so? Consider the process that would be necessary for obtaining the matrix scope. Notice that the accusative Case on the *dake*-phrase must have some licensing predicate, and this can only be the embedded one; the matrix predicate already has its own Case-marked complements to license, and predicates generally can license only the Case features of complements of their own. Thus while the *dake*-phrase must be Case-licensed and hence must be checked for Case, the checking can only be by the Agr that checks the embedded predicate, that is, by the embedded Agr. The phrase therefore must move to the Spec of the embedded AgrP. But if it were to have matrix scope, it must further move to some matrix position. This will be driven by the checking requirement of the Pred feature, which, as has been seen in (1), need not be checked by the local Agr. So the phrase first moves to the Spec of the embedded AgrP, and then to that of the matrix AgrP, for different morphological reasons. But then the accusative Case cannot be phonologically ordered after *dake*, since it has been checked first. Rather, the Case must be pronounced before *dake*, in accordance with the Reflection Principle. Indeed, the variant of (18) in which *o* appears first allows the matrix scope reading:

(19) [_S titioya wa Hanako ni [_S PRO otokonoko o dake paatee ni syootaisuru]

ACC

koto o yurusita]

Note that this sentence also allows the narrow scope reading, in which case the Pred feature must have been checked in the Spec of the embedded AgrP, namely in the same position that the Case is checked. The freeness of the order of *dake* and the Case-particle therefore obtains only under the narrow scope, that is, only if the Pred and the Case features are checked in the same position, a natural consequence of the

Reflection Principle.

A question might be raised concerning Case-checking a complement *dake*-phrase that lacks an overt Case-marker, as in (1). Note that there is no point in requiring a Case feature to phonologically precede the late-checked, wide scope *dake*, when the feature lacks a phonological reflex in the first place. Thus the *dake*-phrase in (1) may have wide scope irrespective of the question whether or not a complement without an overt Case-marker has a Case-feature that needs to be checked in the same manner as a Case-feature on an overtly Case-marked complement. Being of no direct relevance to the issue, the question will be left open.

As exemplified by (18), the presence of a Case-particle on the right of *dake* in effect serves to block its scope extension across a clausal boundary. However, such a blocking effect may be overcome with a prosodic device that gives prominence to the *dake*-phrase. Thus a strong accent on *dake* makes available the matrix scope reading that is otherwise blocked by a Case-particle, as in (18)', where the strong accent is indicated by capitalization:

(18)' [_S titioya wa Hanako ni [_S PRO otokonoko DAKE o paatee ni syootaisuru]
koto o yurusita]

'her father allowed Hanako to invite ONLY boys to the party'

The phenomenon is general. Thus the same is true when the Case involved is the dative *ni*. Consider the following paradigm:

(20) a. [_S titioya wa Hanako ni [_S PRO Taroo dake ni au] koto o yurusita
DAT meet

'her father allowed Hanako to meet only Taro'

b. [_S titioya wa Hanako ni [_S PRO Taroo ni dake au] koto o yurusita

c. [_S titioya wa Hanako ni [_S PRO Taroo DAKE ni au] koto o yurusita

The *dake*-phrase in (20a), with normal intonation, takes only the embedded scope. However, the matrix scope reading is obtained, not only by putting *dake* to the right of *ni* as in (20b), but also by giving a strong accent to it, as in (20c). The availability of the matrix scope reading in (20b) is no problem, since *dake* after a Case-particle is compatible with the matrix as well as with the embedded scope for the reason already

noted. However, the matrix scope reading in sentences like (20c) and (18)' requires an explanation; when its Pred feature is checked, the *dake*-phrase in these sentences is in the same checking domain as its Case-feature is checked, namely in the embedded AgrP, but this embedded position would not provide matrix scope. Somehow the *dake*-phrase must move out of the embedded AgrP to some position for matrix scope. Given that there is no reason for moving to the Spec of the matrix AgrP, where does it move to, and why? The most natural answer would be to say that such prominence as may be given by a strong accent allows the *dake*-phrase to be taken as the focus of the sentence, and justifies its further movement out of AgrP to some matrix position for focus interpretation. Such a focus position we may assume to be the Spec of FP (Focus Phrase; cf. Kiss (1987)). The head of FP may be a position for a modality-like expression such as *no-da* 'it is that'; *no-da* is attached to a root sentence and often indicates the speaker's attitude of strong assertion toward what is expressed in the sentence, with the focus of the assertion falling on an accented part, if there is one. Addition of this expression to (18)' and (20c) further enhances the accessibility of the matrix scope reading:

- (21) a. [_S titioya wa Hanako ni [_S PRO otokonoko DAKE o paatee ni syootaisuru] koto o yurusita] no-da
 ' {it is that / I assert that} her father allowed Hanako to invite ONLY boys to the party'
- b. [_S titioya wa Hanako ni [_S PRO Taroo DAKE ni au] koto o yurusita no-da
 ' {it is that / I assert that} her father allowed Hankao to meet ONLY Taro'

The accented *dake*-phrase is thus construed with *no-da* and explicitly licensed for focus by its occurrence. We may assume that a *dake*-phrase (or any phrase) may have the feature [+F(ocus)] that triggers its movement to the Spec of FP. This feature is checked by the head F and is realized in phonology as an extra accent.¹²

Although *dake* and other adverbial particles are sometimes referred to as focus particles, presumably because they have a function of focalizing on a constituent of the phrase they attach to (cf. note 3), the entire *dake*-phrase (or phrases created by

adverbial particles in general) need not itself be the focus of what the speaker wants to assert; if it does not assume a strong accent, the phrase may be taken to be 'backgrounded', as part of a presupposition. Thus consider the following:

- (22) Hanako wa otokonoko dake o paatee ni syootaisita (no-da)
 TOP boys only ACC party to invited (it-is-that)
 '(it is that) Hanako invited only boys to the party'

It is quite possible to put a strong accent, say, on *paatee* 'party' and no other constituents. In this case the accented phrase is the focus of assertion, with all other phrases, including the *dake*-phrase, pushed to the background. In quite the same way, if a strong accent falls exclusively on *dake*, it is the accented *dake*-phrase that is the assertion focus; it is not because of *dake* per se, but because of its accent, that the phrase is taken to be the focus of the entire sentence. While *dake* and other adverbial particles have the focusing function noted above, the assertion focus we are talking about, which is closely tied to an accent, is quite independent of this function. As we have seen, the focal accent has an effect on a *dake*-phrase (and other scope-bearing phrases) to extend its scope over to the domain which it cannot otherwise have scope over.

Summarizing, the scope of *dake* may be defined by the occurrence of a Case-particle to its right as no wider than the clausal projection of the predicate that licenses the Case. In this sense such a Case-particle functions as a scope marker, just as the negative associate of an NPI like *sika* functions as its scope marker. This function, however, may be overridden by a focal accent on *dake*.

4. *Dake* and Postposition

4.1. Overt vs. Covert Movement

The dative *ni* taken by a predicate like *aw* 'meet' is like accusative *o* or nominative *ga* in that it is a Case marker; we may take it to be a functional element rather than a lexical category such as a postposition that projects a PP. As is well known, however, there is another use of the particle which can be characterized most naturally by assigning it a postpositional or lexical property. There are both conceptual

and empirical reasons noted in the literature that the two uses must be distinguished, if related. Consider first the following:

- (23) a. Taroo wa san'nin no on'nanoko ni atta
 TOP three GEN girl DAT met
 'Taro met three girls'
- b. Taroo wa mittu no zinzya o otozureta
 TOP three GEN shrine ACC visited
 'Taroo visited three shrines'
- c. Taroo wa mittu no zinzya ni itta
 TOP three GEN shrine to went
 'Taro went to three shrines'

The *ni*-marked complement in (23a) is an object of the predicate, in a way similar to the *o*-marked complement in (23b), although the Case is dative in the former and accusative in the latter.¹³ But the *ni*-marked complement in (23c) does not look like an object of the predicate *ik* 'go', which is intransitive. Rather, it is a directional phrase in which the particle, together with the predicate, assigns the semantic role of goal to the NP *mittu no zinzya* 'three shrines'. In addition to this conceptual distinction, the dative complement in (23a) also goes with the accusative and not with the directional phrase in allowing Quantifier Floating:

- (24) a. Taroo wa on'nanoko ni san'nin atta
 TOP girl DAt three met
 (Lit.) 'Taro met girls three'
- b. Taroo wa zinzya o mittu otozureta
 TOP shrine ACC three visited
 (Lit.) 'Taroo visited shrines three'
- c. * Taroo wa zinzya ni mittu itta
 TOP shrine to three went
 (Lit.) 'Taro went to shrines three'

As shown by (24c), the directional *ni*-phrase does not allow Quantifier Floating. Suppose the occurrence of *ni* in (24c) but not the one in (24a) is a postposition projecting

a PP. Then we can say that the floating quantifier in (24c) is ruled out because it is not c-commanded by the host NP, *zinzya* 'shrine', while the one in (24a) is acceptable because it is c-commanded by the host NP *on'nanoko* 'girl', with the dative marker *ni*, just like accusative *o*, not projecting a (lexical) category like PP that blocks c-command. This is essentially an account based on Miyagawa (1989).

Further empirical argument for the distinction can also be made with *dake*. Consider the position of *dake* relative to *ni* and *o*:

- (25) a. Taroo wa on'nanoko dake ni atta
 TOP girl only DAT met
 'Taro met only girls'
- b. Taroo wa zinzya dake o otozureta
 TOP shrine only ACC visited
 'Taro visited only shrines'
- c. (*) Taroo wa zinzya dake ni itta
 TOP shrine only to went
 (Lit.) 'Taro went to only shrines'
- c'. Taroo wa zinzya ni dake itta
 to only
 'Taro went only to shrines'

Dake is placed to the left of the dative Case marker *ni* in (25a) and to the left of the accusative Case marker *o* in (25b). But as (25c) shows, the directional *ni* does not allow it to be placed to its left as readily as these Case markers, favoring its placement to its right, as in (25c'). (The reason why the asterisk in (25c) is parenthesized will be made clear in the discussion to be given in a moment, where the sentence will be shown to have an acceptable reading.) Recall that with the Case marker *ni* or *o*, *dake* is free to occur either to its left or to its right, for a principled reason. The unfavorableness of *dake* to the left of the directional *ni* indicates that this *ni* is not a Case marker that brings the free-order principle into play. Suppose that it is a postposition that projects a PP. Then its complement *dake*-phrase must move out of the PP in raising to the Spec of AgrP for checking, leaving the postposition *ni* stranded. But postpositions, like other 'dependent' words, are linked to their complements rather

strongly in Japanese, which is an agglutinative language. If the movement of a *dake*-phrase we have been considering operates in overt syntax, before Spell-Out in the sense of Chomsky (1993), such postposition-stranding must be barred by whatever principle it may be that gives the language the agglutinative character, and that prevents, in particular, movement of a complement of P out of its containing PP under such an operation as scrambling:

- (26) * zinzya_i Taroo wa [_{PP} t_i ni] itta
 shrine TOP to went
 (Lit.) 'shrines, Taro went to'

Overt movement of a *dake*-phrase is in fact required if its [+Pred] feature must disappear with checking before the derivation enters PF component, as it should since it is an illegitimate PF object, not a proper component of phonetic matrices (cf. Chomsky (1993: 30)); it is hardly likely that the feature plays any role in PF.

Thus a *dake*-phrase with the [+Pred] feature must move overtly for feature checking, subject to the principle barring P-stranding, with consequences illustrated in (25); note that if the postposition that cooccurs with *dake* is to its left rather than to its right, as in (25c'), its projected PP will be a constituent of the *dake*-phrase and the P will not be stranded, since the entire PP will be carried along when its containing *dake*-phrase moves overtly. The construction is therefore on a par with movement of a *dake*-phrase with a Case-marker.

Suppose, however, that instead of the [+Pred] feature the *dake*-phrase had some other feature projected from its head that is either 'weak', invisible at PF, or else is a legitimate PF object even if visible. Then by the economy principle of Procrastinate (Chomsky (1993)), it will undergo covert rather than overt movement, after Spell-Out, with the relevant feature checked at LF; in such a case the phonology-oriented principle barring P-stranding would not come into play and the *dake*-phrase would be allowed even with a postposition to its right. A plausible candidate for such a feature is one associated with focalization of the *dake*-phrase, realized in phonology as an extra or marked accent on its head *dake*; thus the status of (25c) is much improved with *dake* a focal accent, indicated by capitals below:¹⁴

(27) Taroo wa zinzya DAKE ni itta (no da)

'(it is that) Taroo went to ONLY shrines'

Actually, the accented *dake* favors cooccurrence with a modality-like expression like *no da*, parenthesized in (27), that indicates the speaker's assertive attitude toward what is expressed in the main clause, with a certain expression in it (the *dake*-phrase in (27)) the focus of the assertion. This provides a support to the view that the occurrence of an accented *dake* does not involve checking the [+Pred] feature but rather the focus feature, [+F], which must be licensed by (or agree with) not a predicate but some focus-oriented assertion modal, overt or covert. If [+F] is a legitimate PF object triggering a proper accent, it does not force overt movement of its associated *dake*-phrase; the phrase will receive an focal accent at PF and move to the Spec of what may be termed Modal Phrase (MP) at LF, both by virtue of [+F].¹⁵

4.2. The Feature Incompatibility

The argument made above concerning focalization assumes that *dake* may have associated with it either the [+Pred] or the [+F] feature but not both; if it had both, a sentence like (27) would be ruled out for the same reason that (25c) is. Although I cannot give at present plausible conceptual grounds for their incompatibility, there is some independent empirical evidence that the two are distinct features only one of which *dake* may be associated with. Consider (28) (\cong (3)):¹⁶

(28) Taroo wa [Hanako ni itta] dake desu

TOP DAT met only COP-POL

'as for Taro, it's only that he met Hanako' or 'Taro only met Hanako'

As already noted in discussing (3), the occurrence of *dake* here functions like a (defective) predicate, a predication of the bracketed clause it attaches to. This function is characterized by assigning it the [+Pred] feature: the predicative *dake* in a sentence like this, we take it, is always associated with the feature. Now suppose, contrary to what we have assumed, that the [+Pred] feature of *dake* are compatible with the [+F] feature, and the predicative *dake* may have [+F], in addition to [+Pred]. If this were in fact an option, the *dake* should be able to assume a focal ac-

cent that is a phonological realization of [+F]. The fact is, however, that the predicative *dake* rejects such an extra accent, except in a marked context that could justify it:

(28)'**' Taroo wa Hanako ni atta DAKE desu

A sentence like (28)' with the accented *dake* could only be uttered to deny a previous utterance that explicitly asserts that Taro did something in addition to meeting Hanako. In contrast, the other use of *dake* in which it attaches to an argument of some predicate does not require such a special context to justify the accentuation:

(29) Taroo wa Hanako ni {dake/DAKE} ai-masi-ta
 TOP DAT meet-POL-PAST
 'Taro met *dake*/ONLY Hanako'

That is, the accented version of *dake* in a sentence like (29) is not restricted in use to a denial of someone's previous claim that Taro met someone in addition to Hanako; the speaker may as well utter (29) with the accented *dake* just to emphasize (or bring into focus) the exhaustiveness of the list of the persons Taro met.

The impossibility of placing on the predicative *dake* the focal accent that can be placed on the *dake* attaching to an argument suggests that [+Pred], an inherent feature on the former *dake*, is not compatible with [+F]. This incompatibility will be given a further support if we can also show that the latter *dake* likewise resists focal accentuation or its associated focus construal when it must be associated with [+Pred] for some reason. Let us consider the possibility of an argument along these lines.

As already noted, *dake* itself focalize a constituent of the category it attaches to (cf. note 3). Thus either *Hanako* or *atta* in (28) may be the focus of *dake*. This 'association with focus' is made explicit by putting an accent on the constituent intended to be the focus of *dake*:

(30) a. Taroo wa [HANAKO ni atta] dake desu.
 TOP DAT met only COP-POL
 'Taro only met HANAKO. (He didn't meet anyone else.)'

b. Taroo wa [Hanako ni ATTA] dake desu.

'Taro only MET Hanako. (He didn't do anything else to her.)'

Furthermore, it is possible for more than one constituent to be such a focus associate: thus in (31) below, the two capitalized (accented) constituents, apparently discontinuous, are both focus associates of *dake*:

- (31) Taroo wa [TAMATAMA eki de HANAKO ni atta] dake desu.
 TOP by-chance station at DAT met only COP-POL
 Wazawaza soko de Yosiko ni nanka ai-mas-en.
 on-purpose there at DAT such-as meet-POL-NEG
 'Taro only met HANAKO at the station BY CHANCE. He never meets
 (such a person as) Yoshiko there on purpose.'

In these examples showing the focus-association property of *dake*, the *dake*'s are predicative, or [+Pred], and, as has been seen above, cannot be [+F] (or at least cannot assume a focal accent). It is reasonable to assume, therefore, to attribute the property to the [+Pred] feature of *dake*. Now the occurrence of *dake* attaching to an argument of a predicate may also be [+Pred], by assumption. We therefore expect, and do find, instances of this *dake* likewise manifesting the focus-association property. Consider the following:

- (32) Keisatu wa [_{NP} [_S Hanako o urande ita]
 police TOP ACC having-a-grudge-against be-PAST
 hito] ni dake ai-masi-ta
 person DAT only meet-POL-PAST
 'The police met only those who had had a grudge against Hanako'

In (32), the dative complement with *dake* contains a relative clause with a predicate and its complement as its constituents, and either of these constituents may be the focus associate of *dake*:¹⁷

- (33) a. Keisatu wa [_{NP} [_S HANAKO o urande ita] hito] ni dake ai-masi-ta
 'The police met only those who had had a grudge against HANAKO.
 (They did not meet those who had had a grudge against Yosiko.)'

- b. Keisatu wa [_{NP} [_S Hanako o URANDE ita] hito] ni dake ai-masi-ta
 'The police met only those who had had a GRUDGE against Hanako.
 (They did not meet those who loved her.)'

The *dake* occurring in (33) must therefore be [+Pred]. Now, if [+F] is compatible with [+Pred] and can be assigned to the *dake*-phrase complement in sentences like (33), the *dake*-phrase should be construable as the sentence focus, with a focal accent on *dake*. This construal, however, is impossible: the sentences in (33) do not allow such 'stacked' focalization as in the following in which the *dake*-phrase is taken to be the sentence focus that itself contains a focus associate of the particle:

- (34) a. * Keisatu wa [_{NP} [_S HANAKO o urande ita] hito] ni DAKE ai-masi-ta
 'The police met ONLY those who had had a grudge against HANAKO.'
 b. * Keisatu wa [_{NP} [_S Hanako o URANDE ita] hito] ni DAKE ai-masi-ta
 'The police met ONLY those who had had a GRUDGE against Hanako.'

Crucially, note that there may be two foci in the same phrase if they are of the same kind, as in (31). The unacceptable construal in (34) will not arise if [+F] cannot be assigned to a *dake*-phrase that is [+Pred]. This supports our claim that the two features are incompatible.

5. Predicate-like Postposition

5.1. Instrumental/Means *de*

We saw in section 4.1. that a *dake*-phrase (in fact, any phrase) cannot be an immediate constituent of a PP if it is required to move overtly out of it, but it may be if overt movement is not required, as in the covert movement under focalization. What if movement *out of* PP is not required? To see if such exists, consider what happens if in fact the *dake*-phrase complement to a P does not move out of the PP. Let us keep to the case of the *dake*-phrase having the [+Pred] feature that characterizes its head *dake* as a defective predicate. Then there must be something that licenses it (through

checking). But as long as the phrase does not move out of the PP, the only possible element that could serve as a licenser is the P head. But the licenser must also be something like a predicate, given the agreement character of licensing relation. As long as the P lacks a predicate-like property, it is not qualified as a licenser of the *dake*-phrase, which is then left unlicensed within the PP. In (25c), the directional *ni* may reasonably be assumed to be without a predicate property that licenses the *dake*-phrase (which therefore must be licensed outside of the PP, an impermissible move unless it is [+F]). However, if the language has some element which, while categorially a postposition projecting PP, is nevertheless predicate-like in the relevant sense, then a *dake*-phrase may appear as its complement and be licensed by it with no need to move out of its projected PP; there may be movement involved, but at most as high as to the checking domain of this 'predicate postposition' (e.g., [Spec, PP]; see note 18). The most plausible candidate for such a postposition is the means/instrumental *de* 'with', which has a semantic property of the predicate *tukau* 'use'; thus what is expressed by (35a) may also be expressed by (35b):

- (35) a. Sono byooki wa [_{PP} tyuusya de] naoru
 the disease TOP injection with cure
 'The disease will be cured with an injection'
- b. Sono byooki wa [_S tyuusya o tukatte] naoru
 the disease TOP injection ACC using cure
 'The diseases will be cured (by) using an injection'

In fact, this *de* may take a *dake*-phrase as its complement:

- (36) Sono byooki wa [_{PP} [tyuusya dake] de] naoru
 the disease TOP injection only with cure
 'The disease will be cured with only an injection'

Unlike (25c), (36) is quite acceptable without any extra accent on *dake*, indicating that it is the [+Pred] feature rather than [+F] that is checked. Furthermore, the feature must be checked within the PP, by the P head *de*, for otherwise the construction would be barred for the same reason (25c) is barred.¹⁸ The checking process is therefore analogous to the one involved in a sentence like the following:

- (37) Sono byooki wa [_S tyuusya dake o tukatte] naoru
 the disease TOP injection only ACC using cure
 'The diseases will be cured (by) using only an injection'

Here the *dake*-phrase is licensed by the predicate *tukatte* (with Agr a mediator), within the bracketed adjunct clause that corresponds to the instrumental PP adjunct in (36).

Note that it is possible for *dake* to be placed externally, to the right of the PP headed by *de*, but with a meaning quite different from the one obtained from its internal placement:¹⁹

- (38) Sono byooki wa [[_{PP} tyuusya de] dake] naoru
 the disease TOP injection with only cure
 'The disease will be cured only with an injection'

In (38), the whole *dake*-phrase containing the PP moves to the Spec of AgrP whose head position the predicate *naoru* is raised to; the *dake*-phrase is in agreement relation with the predicate, in contrast to (36), where it is in agreement relation with the postposition. The meaning difference is reduced to the scopal difference of *dake*: the *dake*-phrase in (38) c-commands and has scope over the predicate, but the one in (36) does not c-command and cannot have scope over it. These scopal and meaning differences may be expressed in English as follows, with the connective and the predicative elements in the meaning of *de* translated as 'if' and 'use', respectively:²⁰

- (38)' only if you use an injection will the disease be cured
 (36)' the disease will be cured if only you use an injection

Thus if there is something other than an injection that can cure the disease, this makes (38) false but not (36).

5.2. Interaction with Focus

We noted above that (36) does not require that an extra accent fall on *dake*; the *dake*-phrase need not be interpreted as the focus of the sentence. This does not mean that the phrase cannot be the sentence focus. Thus just as a sentence like (25c) is 'saved' by focalization of the *dake*-phrase, one like (36) should also be given an extra, focus, interpretation of the *dake*-phrase, with an extra accent on *dake*. Notice that if the

dake-phrase to be interpreted as focus undergoes (covert) movement to a position higher than the predicate, as suggested above, then it extends its scope over it, yielding an interpretation analogous in scope to a sentence like (38). To see if this is the case, consider first the following:

- (39) a. *sono byooki wa syuzyutu dake de naoru*
 the disease TOP operation only with cure
 'the disease will be cured with only an operation', or
 'the disease will be cured by only performing an operation'
- b. *sono byooki wa syuzyutu de dake naoru*
 the disease TOP operation with only cure
 'the disease will be cured only with an operation', or
 'the disease will be cured only by performing an operation'

These two sentences are identical with (36) and (38) except that *tyuusya* 'injection' is replaced here by *syuzyutu* 'operation'; they differ from each other in exactly the way (36) and (38) differ from each other. Thus (with normal accent) (39a) and (36) say that all that is needed to cure the disease is an operation/injection (and no other means, such as chemical or dietary therapy, are necessary), while (39b) and (38) say that an operation/injection is the only means to cure the disease (and no other means will do). In terms of scope, the *dake*-phrase has scope over the predicate only in the latter. However, a heavy accent on *dake* makes the wide scope reading available in a sentence of the former type as well, perhaps with a help of an expression like *no da* and/or with some contextual indication of the intended construal, as in the following:

- (40) *Sono byooki wa kusuri ya tyuusya de wa naoranai.*
 the disease TOP medicine and injection with TOP cure-NEG
 [_{PP} *Syuzyutu DAKE de*] *naoru no da.*
 operation ONLY with cure-PRES C COP
 'The disease will not be cured with medicine or injection.
 It will be cured with ONLY an operation.'

Note that if the second sentence in (40) is read with the scope of the *dake*-phrase narrow, the entire discourse becomes incoherent, since this reading does not deny,

and even suggests, the existence of means other than an operation that can cure the disease, when the first sentence explicitly denies it. But the wide scope construal that focalization makes available gives the discourse a complete coherency. Note that the second sentence with *dake* internal to the PP may be paraphrased by the one with the external, uncontroversially wide scope, *dake*:

- (41) Sono byooki wa kusuri ya tyuusya de wa naoranai.
 the disease TOP medicine and injection with TOP cure-NEG
 [_{PP} Syuzyutu de] dake naoru (no da).
 operation with only cure-PRES C COP
 'The disease will not be cured with medicine or injection.
 It will be cured only with an operation'

Note also that no focal accent is required of this external occurrence of *dake*, in contrast to the internal one in (40).

One might suspect that the coherent reading of discourse like (40) is really obtained by some kind of 'reinterpretation' strategy whereby the internal *dake* is reprocessed 'as if' it were external, under some contextual force. Apart from the unclear nature of this process (if such exists), there is no obvious reason why it cannot apply to an embedded context like the following:

- (42) Sono byooki wa kusuri ya tyuusya de wa naoranai.
 the disease TOP medicine and injection with Top cure-NEG
 [_{NP} [_S Syuzyutu {#dake de/de dake} naoru] byooki] na no da
 operation cure-PRES disease COP C COP
 'The disease will not be cured with medicine or injection.
 It is a disease that is cured {#with only/only with} an operation.'

The first sentence that forces the wide scope construal is the same as before. Furthermore, the second sentence is apparently a close paraphrase of the one in (40) / (41), with the original main clause becoming an embedded relative clause modifying *byooki* 'disease', an element that is the 'understood' topic or theme of the original sentence in (40) / (41).²¹ Despite the apparent paraphrase relationship, however, (42) and (40) are quite distinct in that the occurrence of *dake* to the left of *de* in (42), un-

like the one in (40), hardly allows the interpretation that makes the discourse coherent (hence '#'). That is, the PP-internal *dake*-phrase fails to have scope over the predicate *naoru* regardless of accentuation, or at least the tendency is clearly that it is far more difficult to assign the wide scope to this phrase than to the same phrase in (40). This would be quite unexpected under the 'reinterpretation' account. Note that the external occurrence of *dake* in (42) gives a coherent reading, with its scope over *naoru*. In our analysis, the (virtual) impossibility of the internal *dake* taking wide scope must be an indication that the *dake*-phrase cannot move (covertly) to a position higher than *naoru* under focalization. This is in fact expected, since such a position must be provided by an assertion modal like *no da* or its covert analogue, but such a modal cannot in general appear (even covertly, we may assume) in a relative clause, as shown by the following:

- (43) [_{NP} [_S syuzyutu de naoru (* no da)] byooki]
 operation with cure-PRES disease
 'the disease that (* it is that) is cured with an operation'

This leaves the *dake*-phrase no option but to move for wide scope to some matrix position which is provided by the matrix occurrence of an assertion modal (*no da* in (42)). But this movement obviously violates whatever principle it may be that derives the complex NP constraint (Ross (1967)), which bars extraction out of a relative clause.²² With no permissible landing site outside its containing PP, the *dake*-phrase cannot take wide scope. (Recall that the overt movement option is excluded in the first place.)

We conclude that a *dake*-phrase complement to a P may be licensed by an element outside the PP under focalization, with the resulting wide scope, even if it could otherwise be locally licensed by the P. It is possible, however, that the availability of the local construal with such a predicate-like P with 'less effort' (i.e., without an extra accent) makes the non-local construal harder to obtain. In fact, it seems that *dake* in (40) requires much stronger accent for wide scope than *dake* in (27), where the local construal with the non-predicative postposition *ni* is impossible in the first place.

5.3. Locative *de*

Apart from focalization, combination of *dake* and the instrumental/means *de* yields truth-functionally different interpretations depending on their relative order, the reason traced to the predicate-like property of the P whereby it licenses *dake*. Now *de* functions not only as a postposition of instrument/means but also as one of location, with its projected PP interpreted as a locative phrase designating the place of the action/process or event expressed by the sentence, as in the following:

- (44) Taroo wa gakkoo de uta o utatta
 TOP school in song ACC sang
 'Taro sang a song in (his) school'

Does this locative *de* license *dake*? This is doubtful, because semantically it lacks the predicate property that the instrumental/means *de* has; the locative *de* is not interpreted as a transitive predicate selecting a theme as its complement in the way the instrumental/means *de* is. If *de* in its locative use does not license *dake*, then the *dake-de* order will be ruled out for the same reason that a sentence like (25c) is (focus construal aside), or at least will not give a truth-functionally different interpretation from the *de-dake* order. This is indeed the case:

- (45) a. (*) Taroo wa gakkoo dake de uta o utatta
 TOP school only in song ACC sang
 'Taro sang a song in only (his) school'
 b. Taroo wa gakkoo de dake uta o utatta
 TOP school in only song ACC sang
 'Taro sang a song only in (his) school'

The status of (45a) depends on the extent to which the *dake*-phrase complement to *de* can be interpreted as the sentence focus (hence the parenthesized asterisk). Whatever the acceptability, (45a) can only be given an interpretation that is truth-functionally equivalent to (45b): that Taro sang a song in no other place than his school, or there is no place other than his school that Taro sang a song in; the scope of *dake*, irrespective of its position relative to *de*, must be over the predicate *utatta*.

The case is often made less clear-cut, however, by the fact that a number of in-

stances of what initially appears to be the locative use of the postposition also allow the instrumental/means construal, or are amenable to such 'reinterpretation'; we can easily conceive of the place in which some action takes place as effectively functioning as the means of its performance. In addition, the very presence of *dake* may contribute to enhancing the plausibility of such instrumental/means construal; it is natural that an element like *dake* that requires a licensing associate should try to find one as early as possible under some locality principle, making the most local potential associate (or the element potentially interpretable as predicative) the actual associate, perhaps via something like reinterpretation. While in my view these interacting factors between *de* and *dake* are important to the issue, they seem to have escaped the attention of those interested in the phenomenon. Thus Moriṭa (1972=1994) claims that not only in its instrumental/ means but also in its locative use, *de* gives different interpretations with *dake* depending on their relative order; and Kuno (1983), who makes the same claim, gives examples like the following minimal pair by way of illustration:²³

- (46) a. *zyuken-benkyoo wa gakkoo de dake dekiru*
 entrance-exam-study TOP school in only can-PRES
 '(one) can study for entrance exams only in school'
- b. *zyuken-benkyoo wa gakkoo dake de dekiru*
 entrance-exam-study TOP school only in can-PRES
 (Lit.) '(one) can study for entrance exams in only school (or in school only)'

The example (46b) indeed allows an interpretation that is truth-functionally different from (46a): while (46a) says that one cannot study for entrance exams in any place other than school, (46b) can be read as saying that one need not use any other place than school to study for entrance exams. Thus the existence of a place other than school in which one can study for the exams makes (46a) false, but not (46b) if read this way.²⁴ Notice, however, that under this reading of (46b), *gakkoo* 'school' is interpreted not simply as a physical place but as an institution that you can make use of to study for entrance exams; it is taken as a means of that activity (cf. my use of the verb *use* in the above account of the meaning of (46b)). This interpretation is possible precisely because the occurrence of *de* in the context of (46b) is construable not only

as locative but also as means, a construal that is invited, if not forced, by the presence of the predicative *dake*, which requires a licensing predicate (in the most local position possible). Notice that since there is no such invitation if *dake* is external to the *de*-phrase with only *dekiru* as its possible licensing predicate, (46a) readily allows the exclusively locative interpretation of the *de*-phrase.

Thus, a pair of sentences like (46) do not exemplify the 'pure' locative *de* interacting with *dake* to yield different interpretations depending on their relative positions; the interpretation of (46b) that is different from (46a) is due to the means interpretation of the postposition that could be purely locative without *dake* to its left. In fact, some *de*-phrases that are primarily locative in a given context may change to instrumental/means once *dake* is inserted to the left of *de* but not to the right. Thus consider the following:

- (47) *gakusei-zidai no Taro wa huyu wa kotatu de benkyoo-sita*
 student-time GEN TOP winter TOP at study-did
 'when a (college) student, Taro studied at the *kotatu* in winter'²⁵

According to the most natural interpretation of (47) read in isolation, *kotatu*, the complement to *de*, designates just the place at which Taro studied in winter; his reason for the choice of the place may or may not be to warm himself, because it may well serve just as a desk (see note 25). Thus if Taro does not have a desk, he may use a *kotatu* for one even in summer; we could replace *huyu wa* 'in winter' in (47) with an expression like *itinenzyuu* 'throughout the year' without necessarily implying that while studying, Taro warmed himself with the *kotatu* every season regardless of the temperature. This locative interpretation of the *de*-phrase is not affected if *dake* is put to its right:

- (48) *gakusei-zidai no Taro wa huyu wa kotatu de dake benkyoo-sita*
 student-time GEN TOP winter TOP at only study-did
 'when a (college) student, Taro studied only at the *kotatu* in winter'

However, if *dake* is put internally, to the left of *de*, the whole phrase may receive the typical instrumental interpretation that is lacking in (47) and (48):

- (49) *gakusei-zidai no Taro wa huyu wa kotatu dake de benkyoo-sita*
 student-time GEN TOP winter TOP only at/with study-did
 'When a (university) student, Taro studied at/with only a *kotatu* in winter'

The sentence (49) can be interpreted either as saying that in winter, Taro used only a *kotatu* to warm himself while studying, or, with *dake* accented for the phrase to be the focus of a covert assertion-modality, as saying that in winter Taro studied only at a *kotatu* (not necessarily to warm himself with it). The first interpretation involves *de* taken as a means postposition and the second, *de* as a locative one. These two interpretations are clearly an instance of ambiguity rather than vagueness, since the interpretation of a pro-form like *so sita* 'did so' in discourse like (50) below depends upon which of the two interpretations is assigned to the antecedent clause:

- (50) *gakusei-zidai no Taro wa huyu wa kotatu dake de benkyoo-sita.*
 student-time GEN TOP winter TOP only at/with study-did
Ziroo mo so sita
 also so did
 'When a (college) student, Taro studied at/with only a *kotatu* in winter.
 Jiro did so, too.'

In (50), no crossing interpretation is possible, and one of the two interpretations assigned to the first sentence requires the parallel interpretation of the second containing the pro-form.

6. Concluding Remarks

No linguistic expression can occur anywhere without regard to context; the possibility of the occurrence of an expression is determined relative to the occurrence of others. If an element is allowed to occur only with a certain element that is in a certain configurational relation to it, the former is said to be licensed by the latter. Thus the accusative is licensed by a certain set of items (typically transitive verbs), the nominative by tense/aspectual features (like stativity), and an NPI like *sika* by negative. We have argued that *dake* similarly has its licensing element, namely a

predicate.

Licensers cannot be limited to formal features; there is reason to believe that semantic features are relevant to licensing Case as well as adverbial particles. Consider the following:

- (51) a. [sebiro o kiru] sai (ni)
 suit ACC put-on occasion on
 ‘(on) the occasion to put on a suit’
- b. [sebiro o tyakuyoo] no sai (ni)
 suit ACC put-on GEN occasion on
 ‘(on) the occasion of putting on a suit’

In both examples, the bracketed phrase modifies a nominal *sai* ‘occasion’. *Kiru* ‘put-on’ in (51a) is a transitive verb taking an accusative complement. *Tyakuyoo* in (51b) similarly takes an accusative complement, but it is not a verb but a nominal; as Kageyama (1993: 37) notes, the nominal nature is indicated by the presence of the genitive *no*, which is required when what modifies a nominal is nominal. Thus while the bracketed phrase in (51a) is a verb-headed clausal category that modifies *sai* directly without *no*, the one in (51b) is a nominal category headed by *tyakuyoo*, and requires *no* for modification of the following nominal. In spite of its nominal nature, however, *tyakuyoo* appears to be involved in licensing the accusative in a way similar to the accusative licensing by the verb *kiru*. Given the categorial difference between the two Case-licensing heads, it seems that some semantic feature, something like transitivity, must be taken into account in the accusative licensing.

The problem is general. The stativity that is often taken to be responsible for the accusative marking of an object is definitely a semantic notion. The negative feature that licenses an NPI like *sika* is no exception. Thus consider the following.

- (52) a. kono hon sika omosiroku nai
 this book interesting NEG
 ‘only this book is interesting’

- b. * kono hon sika tumar-anai
 this book uninteresting
 'only this book is interesting'

The last morpheme *nai* in (52a) is negative both morphologically and semantically, and licenses *sika*. But the last morpheme *anai* in (52b) is negative only morphologically; it is suffixed to the stem of what is morphologically a verb. This morphological negative, lacking a negative feature semantically, does not license the NPI. On the other hand, as noted by Martin (1975: 76, 80), a formally affirmative predicate may license *sika* when it is semantically negative:

- (53) kono hon sika dame-da
 this book no-good-COP
 'only this book is good'

In spite of its affirmative form, *dame-da* is 'negative enough' to license *sika* in a way the formally negative *tumar-anai* does not. Similarly, Martin suggests that a question morpheme *ka* may license *sika* in a rhetorical question with a strong negative flavor, as in (54a), but not in a pure, answer-soliciting question as in (54b):

- (54) a. Kono hon sika yomu (mono) ka!
 this book read Q
 'I will not read anything but this book!'
 b. * Kono hon sika yomu (no) ka?
 this book read Q
 'Will you read anything but this book?'

In view of these observations, it will not come as a surprise if what licenses *dake* turns out to be characterized in terms of a semantic rather than syntactic notion; in fact, we have seen that the licenser may be categorially a postposition which is semantically a predicate.

If this line of argument is on the right track, it casts a serious doubt on Chomsky's (1995) contention that only formal features, not semantic ones, come into play in the computation of the human language.

NOTES

1 The abbreviations to be used are as follows:

ACC: accusative Case marker

COP: copula

C: complementizer

DAT: dative Case marker

GEN: genitive Case marker

NEG: negative

POL: politeness marker

PRES: present tense

TOP: topic marker

2 Throughout, we put aside the distinction between NP and DP. Furthermore, the symbol S will be used to refer to a clausal constituent whose exact categorial status will not be of direct relevance to the issue.

3 That *dake* is combined with the clause rather than directly with the verb *atta*, at least at some stage of derivation, is shown by the fact that an element other than the verb may be construed as the focus of the particle, as long as it is within the clause (cf. Kuroda (1970=1992)). Thus the complement *Hanako (ni)* may be construed as the focus of *dake* as in (ia) below, in the same way that the verb may be so construed in (ib):

(i) a. Taroo wa Hanako ni atta dake da. Yosiko ni wa aw-anak-atta.

DAT TOP meet-NEG-PAST

'Taro only met Hanako. He didn't meet Yoshiko.'

b. Taroo wa Hanako ni atta dake da. Kisu wa si-nak-atta.

kiss TOP do-NEG-PAST

'Taro only met Hanako. He didn't kiss her.'

Assuming that such 'association with focus' as exemplified in (i) is possible only under c-command (cf. Jackendoff (1972)), any potential focus of *dake* must be c-commanded by it. This c-command requirement is most naturally satisfied if *dake* combines with the clause, but not if it combines directly with the verb.

4 In casual speech, the copular *da* in a sentence like (3) may be absent. I simply assume that the copula is deleted after licensing *dake*.

5 To the best of my knowledge, the claim that Tense is responsible for the nominative subject in Japanese was first made by Arai (1980). We turn to the nominative appearing on an object of a stative predicate below.

6 We follow the standard assumption that TP dominates AgrP, without assuming, however, that TP is dominated by another occurrence of AgrP, namely Agr-sP for checking features of a subject other than its Case feature; we therefore take a Japanese clause to have only one

AgrP, dominated by TP. If there is more than one complement that agrees with the same predicate, they can be checked in separate Spec positions of the same AgrP, under the multiple Spec analysis along the lines of Miyagawa (1993), Ura (1994), and Koizumi (1994). Thus the two *dake*-phrases below, complements to the same verb *age* 'give', may be checked in this manner:

- (i) Taroo wa Hanako ni dake okasi dake o ageta
 TOP DAT only cookie only ACC gave
 'Taro gave cookies only to Hanako only'

- 7 Since multiple Specs are allowed (note 6), the subject may move to [Spec, AgrP] even if there is another phrase like an object to move to [Spec, AgrP].
 8 Ueyama (1989: 12-3) notes that the stative adjective *suki(-da)* 'fond (-be)' (and its antonym *kirai(-da)*) allows its object to be accusative when embedded by some elements.
 9 Note that the accusative is quite innocuous if the negative is suppressed:

- (i) watasi wa Taroo ni subete no kotae o wakatte hosii
 'I want Taro to know all the answers'

Thus it seems that the negative in a sentence like (15b) is somewhat undoing the upgrading effect that the subordination with *hosii* has had on the embedded accusative.

- 10 A nuclear scope is a propositional function that a restricted quantifier like a *dake*-phrase applies to. Note that under the predicate-internal subject hypothesis we are assuming, a predicate phrase like VP is a domain in which all arguments of the predicate can be filled.
 11 Runner in fact maintains that [Spec, Agr-oP] is a position *only* for quantificational NPs; non-quantificational NPs do not move there and their Case is licensed in situ, within VP.
 12 *No-da* is presumably generated in some predicate or auxiliary position and raised to F, perhaps as part of the amalgamated predicate created by adjunction of the main predicate to it; even without *no-da*, the main predicate will raise to the head F to license a focus material, if there is any.
 13 As Morita (1987=1994) points out, we even have such verbs as *tayori(-u)* 'rely (-PRES)' that allow their complements to be marked either with the dative or the accusative, as in *aya {ni/o} tayori* 'rely on (one's) parents'. Note further that with either Case, the referent of the complement to such a verb may be taken to be 'affected' by that of the subject (Morita (1994: 150)) and in this sense the verb is transitive even with the dative.
 14 Recall that *dake* itself has a function of focussing on a constituent of the category it attaches to. The focus accent under consideration is independent of this function. See note 3 and sec. 4. 2.

In my speech, *dake* in (25c) is pronounced with the accent pattern of HL, with a concomitant strong stress favored, if the sentence is to be acceptable; and in (25c'), where

there is no need to put a focus on the *dake*-phrase, *dake* may be pronounced with LH, but if the phrase is to be focused, the same accent pattern as in (25c) manifests itself. It is conceivable, though, that speakers of different dialects use different accent patterns. In what follows, we simply capitalize *dake* to indicate focal accent.

- 15 The term MP is introduced by Ueyama (1989), who also deals with focus-related phenomena but uses it in a sense different from (though perhaps related to) ours. The term is also adopted by Tateishi (1994) (a slightly revised version of his 1991 doctoral dissertation), but again not really in the same sense as Ueyama's. Our MP may rather correspond to what Kiss (1987) calls FP (Focus Phrase).

Nakamura (1994) proposes a clausal structure in which the head C of CP takes as its complement a Top(ic) P, whose head takes an FP (in the sense of Kiss) with a TP as one of its constituents. Under this analysis, the topic *Taroo wa* and the focus *zinzya DAKE* in (27) will occupy the Spec of TopP and that of FP, respectively.

Tsubomoto (1989) argues that a modal expression like *no da* may fill the head position of a CP, with its Spec filled by some modal-oriented expression that agrees with it. While the phenomena he discusses are more discourse-bound than those illustrated by (27), a unified account seems quite in order.

A number of what seem to be related but perhaps distinct phenomena are discussed under the rubric of 'modality' or 'focus'. This very fact suggests, it must be admitted, the intricate and ill-defined nature of the notions.

- 16 (28) differs from (3) only in the form of the copular predicate: *desu* in (28) is the polite form of *da*. Predicates in Japanese have grammaticalized polite forms with appropriate auxiliaries. In what follows, we will use predicates in their polite forms to indicate that the examples are used in conversational contexts, when their interpretation is potentially dependent on the discourse in which they are uttered.
- 17 This, incidentally, shows that association with focus is immune from the so-called Complex NP Constraint. See Aoyagi (1994) for similar observation concerning focus particles like *mo* 'also' and *sae* 'even', which he shows may pick up their focus associates across a relative clause.
- 18 It is not entirely clear whether the *dake*-phrase that originates in the complement position of a PP stays in situ or raises to its Spec position when checked by the P, although generality favors the latter option. The latter requires, however, the assumption that such (string-vacuous) movement within the minimal domain of a P (in the sense of Chomsky (1993)), or within its projected maximal phrase PP, does not contribute to making the P phonologically stranded, PP serving as the smallest phonological unit for P.
- 19 The contrasting examples (36) and (38) are adapted from Morita (1972=1994), who is the first to note the meaning difference.
- 20 Noguchi and Harada (1992) analyze the relevant semantic difference in terms of the scope of

- dake* relative to the conditional that may be associated with the occurrence of a *de*-phrase in certain modal contexts; although they are mainly concerned with a potential predicate as a context inducing the conditional interpretation of a *de*-phrase, the examples in the text instantiate another modal context of the same effect, generic modal context. The relevance of elements like potentiality and genericity to the availability of different meanings is noted by Morita (1972=1994), although he does not use the term modal.
- 21 Kuno claims that what is relativized in a relative clause is a thematic NP (1973, Ch. 21), and that a relative clause must be a statement about its head noun (1976: 420).
 - 22 We are assuming that covert as well as overt movement is subject to such a principle. This would have a (desirable) implication that movement operations are invariably subject to the same conditions everywhere in the derivation. Cf. Chomsky (1995).
 - 23 Morita's own examples, not comprising minimal pairs, are as Kuno says inappropriate, involving extraneous factors that should be avoided.
 - 24 (46b) also allows an interpretation that is truth-functionally equivalent to (46a), under the focus construal of the *dake*-phrase, a point not noted by Kuno (1983).
 - 25 *Kotatsu* is a Japanese foot warmer (or rather, 'leg warmer') with a frame and quilt; a table is usually set on it, serving just the function of a normal table. In winter, when a *kotatsu* is taken from a closet and set in the room, it is often used not only as a foot warmer but simply as a table or desk (with its switch off).

REFERENCES

- Aoyagi, H. (1994) "On Association with Focus and Scope of Focus Particles in Japanese", *Formal Approaches to Japanese Linguistics 1*. MITWPL 24, MIT.
- Aoyagi, H. and T. Ishii (1994) "On NPI Licensing in Japanese", in N. Akatsuka (ed.), *Japanese/Korean Linguistics*. 4, SLA, Stanford University.
- Arai, Y. (1980) "Comparison of *Te*-Construction in Japanese with the English Infinitives", *Dokyo University Studies in English* 16, 1-32.
- Chomsky, N. (1993) "A Minimalist Program in Linguistic Theory", in K. Hale and S. J. Keyser (eds.), *The View from Building 20*. MIT Press, Cambridge, Mass. Reprinted in Chomsky (1995).
- Chomsky, N. (1994) "Bare Phrase Structure", *MIT Occasional Papers in Linguistics* 5, MIT. Reprinted in G. Webelbuth (ed.) (1995) *Government and Binding Theory and the Minimalist Program*, Blackwell, Cambridge, Mass.
- Chomsky, N. (1995) *The Minimalist Program*. MIT Press, Cambridge, Mass.
- Diesing, M. (1992) *Indefinites*, MIT Press, Cambridge, Mass.
- Erteschik, N. (1973) "On the Nature of Island Constraints". Ph. D. dissertation, MIT.
- Homma, S. (1989) "The Scope of Negation and INFL-Movement in English and Japanese", *Tsukuba English Studies* 8, 85-102.
- Homma, S. (1992) "Scope of Negation and Syntactic Movement", ms., Niigata University.
- Jackendoff, R. (1972) *Semantic Interpretation in Generative Grammar*. MIT Press, Cambridge, Mass.
- Kageyama, T. (1993) *Bunpoo to Gokeisei*. Hituzi Syoboo, Tokyo.
- Kiss, K. E. (1987) *Configurationality in Hungarian*. D. Reidel Publishing Company, Dordrecht.
- Kato, Y. (1985) *Negative Sentences in Japanese*. Sophia Linguistica 19, Sophia University.
- Koizumi, M. (1994) "Layered Specifiers", in the Proceedings of NELS 24.
- Kuno, S. (1973) *The Structure of the Japanese Language*. MIT Press, Cambridge, Mass.
- Kuno, S. (1976) "Subject, Theme, and the Speaker's Empathy — A Reexamination of Relativization Phenomena", in Li, C. N. (ed.), *Subject and Topic*, Academic Press, New York.
- Kuno, S. (1983) *Shin Nihon Bunpoo Kenkyuu*. Taishuukan, Tokyo.
- Kuroda, S.-Y. (1970) "Remarks on the Notion of Subject with Reference to Words Like *also*, *even* or *only*", Part II. *Annual Bulletin, Research Institute of Logopedics and Phoniatrics* 4, 127-152, University of Tokyo. Reprinted in Kuroda (1992).
- Kuroda, S.-Y. (1992) *Japanese Syntax and Semantics*. Kluwer Academic Publishers, Dordrecht.
- Martin, S. E. (1975) *A Reference Grammar of Japanese*. Yale University Press, New Haven and London.
- May, R. (1977) "The Grammar of Quantification". Ph. D. dissertation, MIT.
- Miyagawa, S. (1989) *Structure and Case Marking in Japanese*. Syntax and Semantics 22. Academic Press, New York.

- Miyagawa, S. (1993) "Case-Checking and Minimal Link Condition", in C. Phillips (ed.), *Papers on Case & Agreement II*, MITWPL 19, MIT.
- Morita, Y. (1972) "Dake, Bakari no Yoohoo", *Kiyoo* 10, Waseda University. Reprinted in Morita (1994).
- Morita, Y. (1987) "Jidooshi to Tadooshi", *Kokubunpoo Kooza* 6, Meiji Shyoin, Tokyo. Reprinted in Morita (1994).
- Morita, Y. (1994) *Dooshi no Imironteki Bunpoo Kenkyuu*. Meiji Shoin, Tokyo.
- Muraki, M. (1978) "The Sika Nai Construction and Predicate Restructuring", in J. Hinds and I. Howard (eds.), *Problems in Japanese Syntax and Semantics*, Kaitakusha, Tokyo.
- Nakamura, M. (1994) "Topicalization, Neg-Preposing, and Locative Preposing", in M. Nakamura (ed.), *Current Topics in English and Japanese*. Hituzi Syobo, Tokyo.
- Nishioka, N. (1994) "On Negative Polarity Items in English and Japanese: An Analysis in Terms of Movement for Feature Checking", ms., Prefectural University of Kumamoto and Harvard University.
- Noguchi, N. and Y. Harada (1992) "Semantic and Pragmatic Interpretation of Japanese Sentences with DAKE (ONLY)", in the Proceedings of COLING '92.
- Ross, J. R. (1967) "Constraints on Variables in Syntax", Ph. D. dissertation, MIT. Published as *Infinite Syntax!*, Ablex, Norwood, N. J. (1986).
- Runner, J. T. (1993) "Quantificational Objects and Agr-o", in V. M. Lindblad and M. Gamon (eds.), *Papers from the Fifth Student Conference in Linguistics V*, MITWPL 20, MIT.
- Sano, M. (1985) "LF-Movement in Japanese", *Descriptive and Applied Linguistics* 18, 245-259.
- Sano, M. (1992) "Unlike-Subject Desiderative Construction in Japanese", *Studies in Language and Culture* 18, 70-90, Hiroshima University.
- Takahashi, D. (1990) "Negative Polarity, Phrase Structure, and the ECP", *English Linguistics* 7, 129-146.
- Tateishi, K. (1994) *The Syntax of 'Subjects'*. Kuroshio Publishers, Tokyo.
- Tsubomoto, A. (1989) "Null Subject Phenomena in Japanese: Incorporation, Null Expletives, and Topic-Agreement", *English Linguistics* 6, 130-149.
- Ueyama, A. (1989) "FOCUS no ga to Nihongo no Kukoozoo", *Kansai Linguistic Society* 9, 1-16.
- Ura, H. (1994) "Superraising in Japanese", *Formal Approaches to Japanese Linguistics 1*, MITWPL 24, MIT.