

# Intensional Predicates without Biclausal Structures\*

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## 1. Introduction

This paper lends a support to the bipropositional analysis of intensional predicates by observing seemingly exceptional Case-properties of a subclass of intensional predicates in Japanese. Through the analysis of instances in which adjectival intensional predicates exceptionally mark their object as accusative, I attempt to elucidate the processes after Spell-Out such as linearization and morphological Case licensing processes. It will be shown that the seemingly puzzling data is best accounted for by postulating *a bipropositional structure with a single CP*, taken together with the compositional approach to the categorihood of lexical items (Marantz 1997, Borer 2000, Baker 2003), through which the Syntax-Morphology mismatch (i.e., adjectives, which are not a canonical category for accusative Case, licensing accusative Case) can be explained in terms of "late determination" of the categorial feature specification with a limited class of roots exhibiting the exceptional Case alternation patterns.

## 2. "Exceptional Accusative" Predicates

### 2.1. Data

Among stative predicates in Japanese, the following two kinds stand out from the others in various respects.

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\* Earlier versions of this paper were presented at various occasions, including the Annual Meeting of the Linguistic Society of America (Boston, January 2004), the Kin3 Roundtable at the Department of Linguistics at Kyoto University, the CBL seminar at Hiroshima University (August 2004), the Ling-Lunch Colloquium at the Stony Brook University (October 2004), and the linguistic colloquium at Tohoku University (November 2004); I am much indebted to the audience of those linguistic events. One version of this research was published as Harada 2005; I am grateful to the two anonymous reviewers for the paper. All errors are my own. The talk at Stony Brook University was funded by the Japan Society for the Promotion of Science A(1) No. 15202009 (Principal Investigator Prof. Takao Gunji, to whom I am deeply indebted). Throughout the period of time in which this research was conducted, I was affiliated to the Advanced Telecommunications Research Institute International. This research was thereby supported in part by the National Institute of Information and Communications Technology (NICT) of Japan.

- (1) *"Exceptional Accusative" predicates*<sup>1</sup>
- |    |                             |                           |                   |
|----|-----------------------------|---------------------------|-------------------|
| a. | Taroo-ga                    | hottokeeki- <b>ga/?-o</b> | <b>suki</b> -da.  |
|    | Taro-Nom                    | pancake-Nom/-Acc          | fond-Cop.Pres     |
|    | 'Taro is fond of pancakes.' |                           |                   |
| b. | Hanako-ga                   | ninzin- <b>ga/?-o</b>     | <b>kirai</b> -da. |
|    | Hanako-Nom                  | carrot-Nom/-Acc           | dislike.Cop.Pres  |
|    | 'Hanako dislikes carrots.'  |                           |                   |

## 2.2. Adjectival Predicates as Accusative Case Licenser?<sup>2</sup>

Despite the fact that adjectival predicates in Japanese are *not* canonical licensors of accusative Case, as illustrated in (2), the object NP of those adjectival predicates shown in (1) can be marked with the accusative marker.

- (2) *Transitive adjectives do not license the accusative marker*
- |                             |                         |             |
|-----------------------------|-------------------------|-------------|
| Zi-roo-ga                   | obake- <b>ga/*-o</b>    | kowa-i.     |
| Jiro-Nom                    | ghosts- <b>Nom/-Acc</b> | afraid-Pres |
| 'Jiro is afraid of ghosts.' |                         |             |

In Japanese, verbs and adjectives are clearly distinguished in terms of morphology: Only verbs bear *-ru* as the present tense, and adjectival predicates are marked either with *-i* or with *-da* in their present tense form. As shown in (3), *suki-* and *kirai-* are only compatible with *-da*. Hence it is clear that those are instances of adjectives and crucially, not verbs.

- (3)
- |    |               |           |    |                  |              |
|----|---------------|-----------|----|------------------|--------------|
| a. | suki-da       | *suki-ru  | b. | kirai-da.        | *kirai-ru.   |
|    | like-Cop.Pres | like-Pres |    | dislike-Cop.Pres | dislike-Pres |

Given the general status of adjectives as lacking the ability to license accusative Case, and given the non-verbal status of the predicates in question, the data in (1) is quite puzzling. Given this extraordinary ability of the adjectival predicates in (1) to license accusative Case despite their categorial status, I call those predicates "*exceptional*" accusative predicates."

Although being quite exceptional, the theme NP (NP<sub>Theme</sub>) marked with the accusative marker is quite common in colloquial speech with those two predicates. Stative adjectival predicates such as *suki-* 'like' and *kirai-* 'dislike' are acceptable, mainly in colloquial speech (and perhaps in the Western dialects), as shown in (4) and (5).<sup>3</sup>

<sup>1</sup> The abbreviations used in this paper are as follows.

Nom: Nominative	Acc: Accusative	Dat: Dative	Gen: Genitive	Top: Topic
Pres: Present tens	Past: Past tense	Ger: Gerundive	Cop: Copula	
NM: Nominalizer	Pass: Passive	Attr: Attributive	SFP: Sentence final particle	

<sup>2</sup> Since the distinction between adjectives and adjectival nouns is not crucial in this paper, I treat *suki-* and *kirai-*, which are followed by a copular and are strictly speaking adjectival nouns, as adjectival predicates.

<sup>3</sup> I thank Yukinori Takubo for drawing my attention to the Western dialects of Japanese.

- (4) **Koten-o suki-da ga gendai-no mono-mo**  
**classics-Acc like-Cop.Pres** though modern-Gen thing-also  
suki-da.  
like-Cop.Pres  
'(I) like classics, but (I) also like contemporary ones.'
- (5) Musume-wa sakuhin-ni tuite "**Koko-o**  
daughter-Top work-on about **here-Acc**  
**kirai-na-no-de-wa na-i**" to hanas-u.<sup>4</sup>  
**dislike-Cop.Attr.-NM-P-Top neg-Pres** Dec tell-Pres  
'(The) daughter comments on her work: "(I'm not claiming that I) dislike  
this place.'" ((4)-(5) from The Saga Newspaper Database, 1994-2003)

This gives rise to the following question: Why is it the case that those *exceptional accusative adjectives* can mark their theme NP with accusative Case, in spite of the fact that they are categorially not a canonical accusative Case licenser?

- (6) **Puzzle 1:**  
Monomorphemic stative adjectives, despite their categorial status, may allow their object to be marked with accusative Case.

### 3. Biclausal or Monoclausal?

#### 3.1. Monoclausal Intensional Predicates?

The predicate in question exhibit intensionality, as illustrated in (7).

- (7) *Exceptional accusative predicates like suki- 'fond' and kirai- 'dislike' exhibit intensionality.*
- |    |                                  |                       |                         |
|----|----------------------------------|-----------------------|-------------------------|
| a. | Mary-wa                          | Han Solo-ga/-o        | <b>suki-da.</b>         |
|    | Mary-Top                         | Han Solo-Nom/-Acc     | <b>fond-Cop.Pres</b>    |
|    | 'Mary is fond of Han Solo.'      |                       |                         |
| b. | Mary-wa                          | Harrison Ford-ga/-o   | <b>suki-da.</b>         |
|    | Mary-Top                         | HarrisonFord-Nom/-Acc | <b>fond-Cop.Pres</b>    |
|    | 'Mary is fond of Harrison Ford.' |                       |                         |
|    |                                  |                       | --- truth not preserved |
| c. | Mary-wa                          | Pikachu-ga/-o         | <b>suki-da.</b>         |
|    | Mary-Top                         | Pikachu-Nom/-Acc      | <b>fond-Cop.Pres</b>    |
|    | 'Mary is fond of a Pikachu.'     |                       |                         |
|    |                                  |                       | --- can be true         |

As shown in (7)a-b), the truth condition of a sentence is not preserved if we replace the theme NP with a correfering NP. The use of NP denoting a non-existing entity does not render the truth value of the sentence false: (7).

Building on the analysis of intensional transitive verbs by Larson, den Dikken and Ludlow (1997), Endo, Kitagawa, and Yoon (2000) analyze the

<sup>4</sup> The suffix-initial /r/ is deleted when following a stem ending in a consonant, since Japanese in general disallows a sequence of consonants except for the homorganic ones.

seemingly puzzling behaviors of the desiderative construction, which also exhibits intentionality, as involving a hidden biclausal structure as in (8), where the embedded clause headed by a null copula (indicated as  $\emptyset_{BE}$ ) is denoted as the "smaller clause."<sup>5</sup>

- (8) *The "smaller clause" (SRC) analysis of sentences with 'want' and 'necessary' (Endo et al 2000)*  
 ... [NP<sub>1</sub> [SRC pro<sub>1</sub> NP<sub>2</sub>  $\emptyset_{BE}$  T] hosi-/hituyoo-]...'NP<sub>1</sub> wants/needs NP<sub>2</sub>.'

One might thus argue that the peculiar properties of the exceptional accusative predicates as intentional predicates might be explained in terms of the biclausal analysis proposed by Larson *et al.* (1997) for the desiderative construction. If the sentences with *suki-* and *kirai-* can be analyzed as containing an invisible embedded clause with a phonetically null verb, one might analyze the sentences in question as in (9) and claim that the theme NP is marked as nominative when it undergoes raising to the matrix clause (that is, the domain of an adjectival predicate), and as accusative when it remains in the domain of a verbal predicate.

- (9) ... [NP<sub>1</sub> [SRC pro<sub>1</sub> NP<sub>theme</sub>  $\emptyset_{BE}$  T] suki/kirai-]...'NP<sub>1</sub> likes/dislikes NP<sub>2</sub>.'

However, this line of approach encounters several problems. For one thing, the copula, being a stative verb, does not license accusative Case. For another, raising for Case reasons in this configuration amounts to cross-clausal scrambling, which is an instance of A'-movement. As noted in the literature, the employment of A'-movement for Case reasons leads to violations of a ban on improper movement (see Chomsky and Lasnik 1993 and the references cited therein).<sup>6</sup>

Note also that Case alternation for a stative predicates is in general limited to derived stative predicates (see Kuroda 1965, Kuno 1973, Inoue 1976, Shibatani 1978, among many others), as illustrated in (10) and (11).

- (10) *Potential constructions (bimorphemic) (Dubinsky 1992, Tada 1992, Saito and Hoshi 1998, Takano 2003, among many others)*
- |                             |                           |                             |
|-----------------------------|---------------------------|-----------------------------|
| a. Hanako- <b>ga</b>        | tyuugokugo- <b>ga/-o</b>  | <b>hanas-e-ru.</b>          |
| Hanako- <b>Nom</b>          | Chinese- <b>Nom/-Acc</b>  | <b>speak-Potential-Pres</b> |
| 'Hanako can speak Chinese.' |                           |                             |
| b. Hanako- <b>ni</b>        | tyuugokugo- <b>ga/*-o</b> | <b>hanas-e-ru.</b>          |
| Hanako- <b>Dat</b>          | Chinese- <b>Nom/-Acc</b>  | <b>speak-Potential-Pres</b> |
| 'Hanako can speak Chinese.' |                           |                             |

<sup>5</sup> Endo et al's (2000) analysis does not provide a straightforward account for the Case alternation pattern of *hosi-* 'want' and *hituyoo-* 'necessary'. For *hituyoo-*, which exhibit similar synopses as *suki-/kirai-* in that it is an adjectival predicate and in that it also admits both nominative and accusative Case on the theme NP, Endo et al (2000) must stipulate that there are two instances of the phonetically null BE, one licensing accusative Case and the other not being able to license it.

<sup>6</sup> See Bruening (2001) and Hiraiwa (2002) for analyses of the Raising-to-Object constructions in Passamaquoddy and Japanese in terms of A'-movement without violating the ban on improper movement.

- (11) *'tai'-desideratives*  
 Watasi-**ga/\*-ni-** mizu-**ga/-o** **nomi-ta-i.**  
 I-Nom/-Dat water-Nom/-Acc **drink-want**-Pres  
 'I want to drink some water.'

In contrast, the monomorphemic stative predicates do not admit such Case alternation, as shown in (12)-(13).

- (12) *'want' 'necessary'*  
 a. Masami-**ga** hyakka-ziten-**ga/\*-o** **hosi-i**  
 Masami-Nom encyclopedia-Nom/-Acc want-.Pres  
 'Masami needs an encyclopedia.'  
 b. Masami-**ga** hyakka-ziten-**ga/\*-o** **hituyoo-da.**  
 Masami-Nom encyclopedia-Nom/-Acc necessary-Cop.Pres  
 'Masami needs an encyclopedia.'
- (13) *Monomorphemic verb ('can do' and 'understand')*  
 a. Hiroshi-**ni/-ga** sukii-**ga/\*-o** **deki-ru.**  
 Hiroshi-Dat/-Nom sukii-Nom/-Acc **can.do**-Pres  
 'Hiroshi can do skiing.'  
 b. Mariko-**ga** rosiago-**ga/\*-o** **wakar-u.**  
 Mariko-Nom Russian-Nom/-Acc **understand**-Pres  
 'Mariko understands Russian.'

Exceptional accusative predicates are monomorphemic, just like the predicates in (12)-(13), which arguably lack the biclausal structure and thus do not have the ability to license Case alternation. Hence we expect the exceptional accusative predicates to project the same kind of projection as the predicates in (12)-(13) with monoclausal structures. In the remainder of the section, I will show evidence that it is indeed the case; that is, the evidence for the monoclausal structure of the sentence with the exceptional accusative predicate.

### 3.2. Case-marker Drop

It has been noted in the literature (Kuno 1973, Saito 1985, Takezawa 1987, among others) that the Case-marker on the object can be dropped, as long as the object NP is adjacent to the verb.

- (14) Taroo\*(-ga) moo kono hon(-o) yon-da (koto)  
 Taroo-Nom alreadythis book-Acc read-Past fact  
 'Taro has already read this book.'

Case-marker drop is also allowed for the object of a derived stative predicate, as shown in (15), where the site of Case-marker ellipsis is marked with "Ø."<sup>7</sup>

<sup>7</sup> Since Case-marker drop is more frequently observed in colloquial speech (at least in the standard dialect), a sentence-final particle is added to each example in (15).

- (15) a. Taroo-ga rosiago-**ga** yom-e-ru yo.  
 Taro-Nom Russian-**Nom** read-Potential-Pres SFP  
 'Taro can read Russian.'
- b. Taroo-ga rosiago -**o** yom-e-ru yo.  
 Taro-Nom Russian-**Acc** read-Potential-Pres SFP  
 'Taro can read Russian.'
- c. Taroo-ga Russiagio- $\emptyset$  yom-e-ru yo.  
 Taro-Nom Russian read-Potential-Pres SFP  
 'Taro can read Russian.'
- (Adapted from Dubinsky 1992)

Abstracting away from the technical details, what the data in (14)-(15) suggests is that the Case marker on a nominal, be it nominative or accusative, can be omitted as long as the nominal is adjacent to the predicate. With this observation in mind, let us examine the data in (16) with the exceptional accusative predicate.

- (16) Case-marker drop and the exceptional accusative predicate:
- a. Taroo-wa tyuugokugo-ga/-o suki-da yo.  
 Taro-Top Chinese-Nom/-Acc like-Cop.Pres SFP  
 'Taro likes Chinese.'
- b. (?)Taroo-wa tyuugokugo- $\emptyset$  suki-da yo.  
 Taro-Top Chinese like-Cop.Pres SFP  
 'Taro likes Chinese.'

The Case-marker on the theme NP of the exceptional accusative predicate can be as freely omitted as the object of other kinds of predicates. This suggests that the theme NP of the exceptional accusative predicate is postulated in the position adjacent to the predicate.

### 3.3. Quantifier Interpretation

As argued in Kuroda (1970) and Hoji (1985), among others, a sentence such as (17) whose subject and object are quantified expressions, is ambiguous for a subset of Japanese speakers, with either of the quantifier taking scope over the other.<sup>8</sup>

- (17) **Dareka-ga daremo-o aisi-te i-ru.**  
 someone-Nom everyone-Acc love-Ger be-Pres  
 'Someone loves everyone.'  
**someone > everyone, ??-?\*everyone > someone**

<sup>8</sup> It has been argued that sentences with two quantifiers are unambiguous in Japanese unless scrambling is involved (Kuroda 1970, Hoji 1985). However, as Kuno (1976) notes, some native speakers indeed find examples like (17) ambiguous. As extensively discussed in Ueyama 1998, the possibility of having ambiguous interpretation of a sentence with two quantifiers may depend on the choice of quantifiers used; in particular, when the quantifier in the object position is of the kind which easily induces a specific group reading, then the ambiguous interpretation is easier to obtain.

Such scopal interactions of quantifiers are not observed when each of the two quantifiers is postulated in a different clause from the other (Kuno 1976), as in (18).

- (18) **Dareka-ga** [kinoo **daremo-ga** osoku-made  
 someone-Nom yesterday everyone-Nom late-till  
 gakkoo-ni i-ta koto]-o sit-te i-ru.  
 school-at be-Past fact-Acc know-Ger be-Pres  
 'Someone knows that everyone stayed home yesterday.'  
**someone > everyone, \*everyone > someone**

For those speakers who can interpret sentences like (17) as ambiguous, a sentence with an exceptional accusative predicate and two quantifiers such as (19) is also ambiguous, regardless of the choice of the Case-marker on the theme NP.

- (19) **Kodomo sannin-ga zyussyurui-izyoo-no doobutu-ga/-o**  
 child three.CL-Nom ten.kind-Gen animal-Nom/-Acc  
**suki-da.**  
**fond-Cop.Pres**  
 'Three children are fond of more than ten kinds of animals.'  
 three > more than ten, (?)more than ten > three

The existence of scopal interactions in (19) suggests that the two quantifiers are in the same clausal domain, suggesting the lack of biclausal structure for sentences with an adjectival psych predicates.

### 3.4. Scrambling

Takano (2003) notes that nominative objects and accusative objects differ in the ability to undergo scrambling. Unlike the accusative object, which may freely undergo scrambling, as in (20), scrambling of the nominative object results in unacceptability: (21).

- (20) Hon<sub>i</sub>-o John-ga t<sub>i</sub> yon-da.  
 book-Acc John-Nom read-Past.  
 'John read a book/books.'
- (21) ??Doitugo<sub>i</sub>-ga John-ga t<sub>i</sub> yom-e-ru  
 German-Nom John-Nom read-Potential-Pres  
 Lit. 'John can read German.' (Takano 2003)

Taking this contrast in scrambling between the nominative and the accusative objects, Takano (2003) claims that (21) in fact involves a biclausal structure and that the awkward status associated with (21) can be reducible to the impossibility of scrambling a lower subject over the matrix subject, which is noted in Saito (1985).

Applying this scrambling test to the case under consideration, the sentences with psych adjectival predicates pattern with (21) with respect to the possibility of scrambling the theme NP over the subject.

- (22) a. Takako-ga            ninzin-ga        kirai-da.  
          Takako-Nom        carrots-Nom     dislike-Cop.Pres.  
          'Takako dislikes carrots.'
- b. \*Ninzi<sub>i</sub>-ga        Takako-ga     t<sub>i</sub>        kirai-da.  
          carrots-Nom       Takako-Nom       dislike-Cop.Pres.
- c. ?-??Ninzi<sub>i</sub>-o     Takako-ga     t<sub>i</sub>        kirai-da.  
          carrots-Acc       Takako-Nom       dislike-Cop.Pres.

Does this parallelism between (21) and (22) suggest that the theme object of the exceptional accusative predicate originates in a position different from the object of the plain transitive verb?

A closer examination reveals that the difference in scrambling does not indicate the difference between nominative and accusative objects in stative sentences. As extensively discussed in Kuroda (1992) and Saito (1982), the nominative-marked NPs in stative sentences in Japanese receive a 'focus' interpretation, which is subject to some semantic or pragmatic factors. It is thus necessary to avoid such semantic effects by looking at the behavior of nominative objects under scrambling, as in (16).<sup>9</sup>

- (23) a. [Takako-ga kono keeki-ga        suki-na-koto]-wa  
          Takako-Nom this cake-Nom        like-Cop.Attr.-fact-Top  
          yoku sir-are-te            i-ru.  
          well know-Pass-Ger be-Pres  
          'It is well known that Takako likes this cake.'
- b. [Kono keeki-ga Takako-ga     t<sub>i</sub>        suki-na-koto]-wa  
          this cake-Nom Takako-Nom        like-Cop.Attr.-fact-Top  
          yoku sir-are-te            i-ru.  
          well know-Pass-Ger be-Pres  
          'It is well known that Takako likes this cake.'

In embedded contexts, in which semantico-pragmatic factors on NP-*ga* in statives are not in effect, the nominative object *can* be scrambled in front of the subject NP.

### 3.5. Summary

Summarizing the entire section, I have shown that the sentences with an exceptional accusative predicate (*suki/kirai*-), despite exhibiting intensionality, pattern with monoclausal structures in their morphological make-up, Case-marker drop, quantifier interaction, and scrambling of the theme NP. This leads to an

<sup>9</sup> I am indebted to Takao Gunji and Yukinori Takubo for reminding me of the interpretive restrictions on nominative marked NPs in stative sentences in the matrix context.

observational statement that this class of predicates is intensional predicates without biclausal properties.

- (24) Exceptional accusative predicates are intensional predicates without biclausal structures.

This leads to a second puzzle regarding the exceptional accusative predicates, namely, why can a predicate projecting a monoclausal structure can exhibit intensionality, given the analysis of Larson *et al.* (1997), who convincingly argue the biclausal nature of sentences with intentional transitive verbs?

- (25) **Puzzle 2:**

Why does the exceptional accusative predicate exhibit intensionality even though they do not project a biclausal (that is, bi-CP) structure?

In the next section, I propose an account for this seemingly contradictory statement.

#### 4. Proposal

##### 4.1. Exceptional Accusative Predicates as "Bare Predicates"

As we have seen in Section 1, the exceptional accusative predicates are adjectives. At this point, note that they have *verbal* counterparts, shown in (26) and (27).

- (26) Taroo-wa sanpo-o/\*-ga **kira-u.**  
Taro-Top walking-Acc/-Nom dislike-Pres  
'Taro dislikes walking.'

- (27) Hanako-wa mina-ni **suk-are-te** i-ru.  
Hanako-Top everyone-by like-Pass-Ger be-Pres  
'Hanako is liked by everyone.'

Though adjectival and the verbal variants share the root, the latter can be followed by *-ru*, the tense marker exclusively used for verbs in Japanese, as well as the passive morpheme *-rare-*, which never attaches to an adjectival root.

This fact can be well accommodated to the view to syntactic categories in the recent works such as Marantz (1997), Borer (2000), Baker (2003), employed in Chomsky (2005), in which the categorihood for a syntactic element is compositionally determined in the course of syntactic derivations by combining a functional head (such as *v*) with a lexical head. Tying this seemingly extraordinary duality in categorihood of the exceptional accusative predicate and the recent view to categorihood in the syntactic theory, I claim that those roots such as *suk-* and *kira(w)-* may enter into syntactic computation *without* the head (such as *v*) specifying their categorial status.

(28) **CLAIM 1:**

The roots *suk-* and *kira(w)-* enter into syntactic computation without a category-specifying functional head (such as *v*).

Informally speaking, the exceptional accusative predicate can be regarded as a "bare predicate" since they lack the functional category that determines the categorial status.

A next question is at which point the root of the exceptional accusative predicate is combined with the category-specifying morpheme. On both conceptual and empirical grounds, I claim that the process in question takes place in the morphological component, after the syntactic object is formed in the syntactic component.

(29) **CLAIM 2:**

Category-specifying functional heads can be inserted/activated as late as in Morphology in languages without syntactically active functional categories.

The conceptual motivation for (29) lies in the status of the process under consideration: Addition of an affix to a root is best handled in the morphological component. The empirical ground for (29) comes from the existence of a special kind of compounds called "post-syntactic compounds" in Japanese, which are extensively argued in Shibatani and Kageyama (1988). As illustrated in (30), in which the high pitch is indicated by the capital letters, this class of compounds, shown in (30), exhibits a different intonational pattern from the lexical compound, as in (30). Strikingly, (30) exhibits the same intonational pattern as ordinary sentences, in which the object and the verb stem are kept as independent lexical items: (30).

(30) *Pitch patterns of compounds and phrasal constituents*

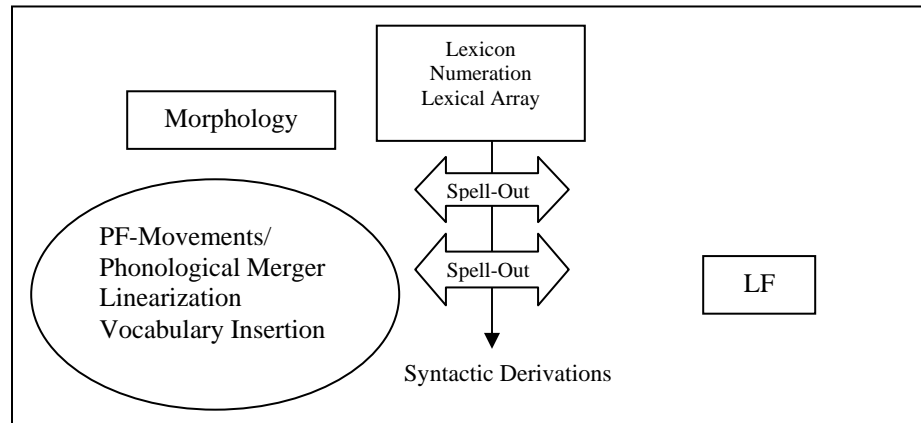
- a. [aMERIKA hoOMON]-no ori (post-syntactic)  
America visit-Gen occasion  
'On the occasion in which (one) visits America'
- b. [aMERIKA-HOomon]-no ori (lexical)  
America visit-Gen occasion
- c. [aMERIKA-o hoOMON]-no ori  
America-Acc visit-Gen occasion  
'On the occasion in which (one) visits America'

Based on this parallelism between (30) and (30), along with other morpho-syntactic evidence, Shibatani and Kageyama (1988) claim that compounds like (30) must be formed *after* phrasal phonology, where intonations of phrasal entities are determined. Leaving aside the question of why post-syntactic compounds exist in Japanese, it is clear that there are processes in the language that form compounds after syntactic operations are completed.

## 4.2. Assumptions

Before providing the analysis of how the exceptional accusative predicate licenses Case on their theme NP, the theoretical assumptions need to be laid out. The organization of the grammar assumed for the analysis is shown in (31), with the enriched morphological components along the lines proposed in Halle and Marantz (1993) and Embick and Noyer (2001).

- (31) *The Organization of the Grammar (Chomsky 2000, 2001, Embick and Noyer 2001, Halle and Marantz 1993)*



There has been an issue of whether morphological Case licensing is a distinct process from syntactic Case licensing (see Kuroda (1992) on this issue for Japanese). Although it is possible to assume a hybrid system with both syntactic and morphological processing for Case (that is, a system in which a nominal expression undergoes two kinds of Case-licensing processes), I assume, for the sake of simplicity, that Case licensing takes place exclusively in the morphological component in languages like Japanese with overt realizations of Case in the form of Case particles.<sup>10, 11</sup> For a concrete mechanism for licensing Case in the morphological component, where the linear configuration (rather than a syntactic structural configuration) matters, I assume an algorithm shown in (32), which is a simplified version of the mechanism proposed in a series of works by Yuki Kuroda and stated in terms of Distributed Morphology (Halle and Marantz 1993).<sup>12</sup>

- (32) *Linear Case Marking (cf. Kuroda 1965, 1978, 1983):*  
 a. Accusative Case licensing: /o/  $\longleftrightarrow$  [CASE] / \_ V#  
 b. Nominative Case licensing: /ga/  $\longleftrightarrow$  [CASE] /#NP\_ (XP\*) T (C) #

<sup>10</sup> For detailed discussion on the view that Morphological Case licensing takes place exclusively in PF, see Aoyagi (1998) and Harada (2002) for Japanese, San Martin and Uriagereka for Basque.

<sup>11</sup> Such an approach to morphological Case in Japanese could be related to the fact that Japanese lacks forced agreement, as suggested in Kuroda (1988), or that Japanese lacks syntactically active functional categories, as proposed in Fukui (1986).

<sup>12</sup> See Yip, Maling, and Jackendoff (1987) and San Martin and Uriagereka (2002) for the necessity of a linear mechanism in licensing morphological Case.

(32) states that the Case-feature of a nominal adjacent to V is realized as *o*. (32) states the condition for the realization of *ga*, namely, that the Case-feature of a nominal in the domain of tense is realized as *ga*.<sup>13</sup>

The rules in (32) do not apply in a random manner. Being part of Morphology, it is natural to assume that they are constrained by the "Elsewhere Condition" (Chomsky and Halle 1968, Kiparsky 1973), which determines the order of the application of rules with different contextual conditions: If a given element satisfies the structural condition for more than one rule, the more specific, marked rule is applied prior to the less specific, default rule. In the case of (32), (32) requiring a more specific context is applied prior to the less marked (32).

Having clarified the theoretical assumptions, let us now move on to the analysis of the sentences with exceptional accusative predicates.

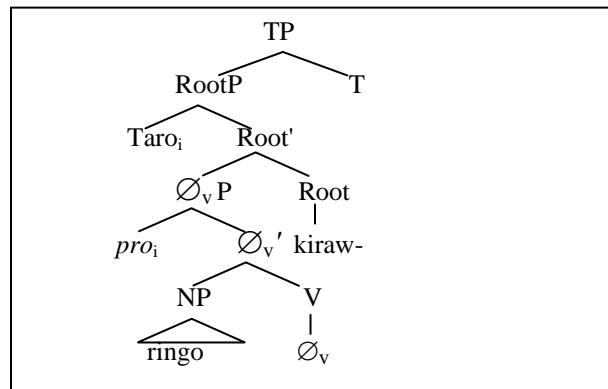
### 4.3. The Exceptional Case Alternation Patterns Explained

#### 4.3.1. An Outline

As the structure of sentences with an exceptional accusative predicate, I propose the one shown in (33).

(33) In narrow Syntax:

...[TP [RootP Taro<sub>o</sub>i] [ $\emptyset_{VP}$  pro<sub>i</sub> ringo  $\emptyset_V$ ] [Root kiraw-]] T] ...  
 Taro apple dislike



The notable characteristics of the structure in (33) are as follows. First, the root of the exceptional accusative predicate selects a proposition headed by  $\emptyset_V$ , a verbal head lacking the phonetic content. This captures the monoclausality of the sentence with exceptional accusative predicate, which lacks canonical properties associated with biclausal structures with two instances of CPs. Although being bipropositional, the structure in (33) crucially contains only one instance of CP, thereby counting as a single clausal domain for the syntactic tests.

After Spell-Out, there are two options for the processes in Morphology to proceed: Either to derive a gerundive form by inserting an epenthetic vowel [i], or

<sup>13</sup> This essentially captures the intuition that nominative Case is assigned in the domain of T, as argued in Kuroda (1965, 1978, 1983), and Fukui and Nishigauchi (1992), among others.



- (36) Taroo-ga ringo-ga kirai-da.  
 Taro-Nom apple-Nom dislike-Cop.Pres  
 'Taro dislikes apples.'

#### 4.3.3. Option 2: Deriving the Variant with NP<sub>Theme</sub>-Acc

Next, let us consider the processes in Morphology for the "exceptional" case, i.e., the adjectival predicate licensing the accusative theme NP. The relevant processes are illustrated in (37).

- (37) a. Spell-Out:  
 ... [TP [<sub>RootP</sub> Taro<sub>o</sub><sub>i</sub> [<sub>VP</sub> pro<sub>i</sub> ringo  $\emptyset_V$ ] [<sub>Root</sub> kiraw-]] T] ...  
           Taro                                  apple                                  dislike
- b. PF Movement  
 ... [TP [<sub>RootP</sub> Taro<sub>o</sub><sub>i</sub> pro<sub>i</sub> ringo  $\emptyset_V$ -kiraw-] T] ...  
           Taro                                  apple                                  dislike
- c. Linearization  
 ... Taro<sub>o</sub><sub>i</sub> pro<sub>i</sub> ringo  $\emptyset_V$ -kiraw T ...  
           Taro                                  apple                                  dislike
- d. Morphological Case Licensing (32) & Vocabulary Insertion<sup>15</sup>  
 ... Taro<sub>o</sub><sub>i</sub>-ga pro<sub>i</sub> ringo-**o**  $\emptyset_V$ -kiraw da...  
           Taro-Nom                  apple-**Acc**          dislike Cop.Pres
- e. Morphophonemic rules  
 Taro<sub>o</sub><sub>i</sub>-ga pro<sub>i</sub> ringo-o  $\emptyset_V$ -kiraw~~i~~-da  
 Taro-Nom                  apple-Acc                  dislike-Cop.Pres

The major difference between (37) and (34) is the step immediately after Spell-Out, illustrated in (37). Assuming that concatenation of verbal morphemes can take place either before or after linearization (Embick and Noyer 2001), nothing prevents this process to take place *before* linearization. With PF-movement (concatenation of verbal heads before linearization), the phonetically null verbal

<sup>15</sup> A question may arise as for the phonetic realization of T in this case: After PF-movement and the determination of the verbal status of  $\emptyset_V$ , why can it not be realized as *-ru*, the present tense morpheme for verbs? I speculate that the phonetic feature of T in this structure is already determined before the syntactic derivation starts, that is, when the set of features for a derivation (numeration or lexical array) is determined. If it were not the case and if the phonetic feature were literally 'inserted' at this point of derivation, it would violate the "inclusiveness condition" (Chomsky 1995) that bans addition of new features in the course of derivations. With the inclusiveness condition observed, what takes place at Vocabulary Insertion should be the activation of the phonetic content of the features, instead of the literal insertion of features. In forming a numeration/lexical array for (37), I assume that the phonetic features for T is not determined, presumably due to the lack of a clear instance of verbal heads. Without the phonetic features (including /ru/), a copula *-da* is used to support the tense features that lack phonetic features.

head  $\emptyset_V$  is combined with *kiraw-*, a head with phonetic contents.<sup>16</sup> This PF movement affects both  $\emptyset_V$  and *kiraw-*: By virtue of concatenation with a root with the phonetic content, the former becomes an element that is visible in Morphology. For *kiraw-*, this concatenation with a verbal head amounts to the specification of the categorial status.

- (38) The effect of PF-movement in (37)
- a. Renders  $\emptyset_V$  a visible object in Morphology.
  - b. Provides a categorial status for *kiraw-*, a root that is unspecified for categorial status.

This affects the Case licensing process; as shown in (37), the theme NP is now immediately adjacent to the (derived) verbal head, which makes it subject to the accusative Case-licensing part of the Case licensing algorithm (32). With morphophonemic adjustments, we obtain the variant with the accusative theme NP: (39).

- (39) Taroo-ga      ringo-o      **kirai-da.**  
 Taro-Nom      apple-Acc      **dislike-Cop.Pres**  
 'Taro dislikes apples.'

#### 4.4. Summary

With the structure proposed in (33) and the assumption on the interactions of processes in Morphology, the exceptional Case alternation with the exceptional accusative predicate is explained: If the structure is linearized prior to morphological Case licensing, the variant with the nominative theme NP is derived. Alternatively, if PF-movement immediately takes place after Spell-Out before Linearization,  $\emptyset_V$  is supplied with the phonetic content and is thus rendered visible in Morphology. In the subsequent step to license Case, the theme NP is in the environment for accusative Case. In this way, the variant with accusative object is derived.

### 5. Explaining the Properties of the Exceptional Accusative Predicate

The analysis of the exceptional accusative predicate in the last section explains both the biclausal nature (i.e., intensionality) and the monoclausal properties of the sentence under consideration.

Under the proposed analysis, exceptional accusative predicates do select a proposition (a verbal projection headed by  $\emptyset_V$ ), which is not as large as CP but still counts as a "clause" qua proposition. This s-selectional information is sent to the interpretive component (informally termed as "LF" in (31)) as part of the

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<sup>16</sup> Assuming Embick and Noyer (2001) that syntactic procedures may take place in the pre-Linearization part of the processes in Morphology,  $\emptyset_V$ , though lacking phonetic contents, can be subject to PF-movement, which can be regarded as a syntactic operation in that it is defined over the *structure* and not over the string of lexical items.

lexical specification of the head, which allows the sentence with this class of predicates to exhibit intensionality associated with the biclausal (bipropositional) structure in the approach assumed in this paper.

As for the monoclausal properties of Exceptional Accusative Predicate, let us first consider Case-marker drop (cf. Section 3.2): By the time morphological Case licensing takes place, the structure has already been linearized in either of the two variants (cf. (34) and (37)), rendering the object of the embedded null V adjacent to the matrix predicate. Hence regardless of the choice of Case for the theme NP, the condition for Case-marker drop is met and *ga* or *o* can be freely omitted, just like the ordinary Case-marker drop discussed in the literature.

Assuming that the output of PF-movement is visible to LF, the structural information sent to LF is that of a single clause. This accounts for the seemingly monoclausal diagnoses for the scrambling and quantifier interpretation tests (Section 3.3-3.4).

## 6. Concluding Remarks

Through the analysis of the sentence with the Syntax-Morphology mismatch (i.e., Adjectives licensing accusative Case), the exceptional Case-alternation pattern with the adjectival predicate was explained. The exceptional accusative adjectives may mark their theme NP with accusative Case since (i) they are devoid of categorial feature-specifying morpheme, and (ii) they select a projection of a null V, which, at PF, can determine the categorial status of the exceptional accusative predicate, which is initially unspecified for the categorial status.

Before concluding the paper, I would like to speculate on the scarcity of the exceptional accusative predicates. Among a number of adjectival roots, *suki-* and *kirai-* are the only ones that exhibit this exceptional Case alternation behavior. One might speculate that this rarity of the exceptional accusative predicate could be due to the burden on the language learner: An option based on a phonologically null element might be more costly for language learners. Another possibility would be based on economy considerations in Morphology. The more exceptional variant, with accusative Case on the theme NP of an adjectival predicate, involves movement in PF. If movement is more costly than epenthesis in PF, employed in the less marked variant with the nominative-marked theme NP, then one might account for the scarcity of this class of predicates by claiming that the grammar avoids roots that invoke a more costly operations. The investigation of the account for the scarcity is beyond the scope of this paper, and is thus left open at this point.

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