

# Unaccusativity in Japanese

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## 1. Introduction

It has not been long since the study of unaccusatives in Japanese was initiated by Japanese linguists (Miyagawa 1989; Takezawa 1991; Tsujimura 1990a, 1990b, 1990c, 1991, 1994, 1996; Terada 1987, 1990; Kishimoto 1996; Kageyama 1993,1996). These researchers have attempted to demonstrate that the “Unaccusative Hypothesis” presented for Dutch and Italian (Perlmutter 1978; Burzio 1986) is also applicable to Japanese. They have also sought diagnostic tests which are suitable to identify unaccusatives in Japanese. Among the various diagnostics presented so far, we shall review seven different phenomena as evidence for unaccusativity in Japanese-floating quantifiers (Miyagawa 1989), resultative constructions (Tsujimura 1990a, 1990b, 1994, 1996), *te-iru* constructions (Takezawa 1991), and case-marker drop<sup>1</sup> (Kageyama 1993), the *takusan* construction, the *kake* deverbial nominalisation, and Sino-Japanese complex predicates. We lead into the review of diagnostic phenomena for unaccusativity by examining the evidence on floating quantifiers.

## 2. Preceding studies on unaccusativity in Japanese

### 2.1 Evidence based on floating quantifiers

Compare the following examples.

- (1) a. Kodomo-ga hutari [<sub>VP</sub> inu-to yukkuri aruita]  
 child - NOM two dog-with slowly walked  
 “Two children walked slowly with a dog”

b.\* Kodomo-ga [VP inu-to yukkuri hutari aruita]  
 child -NOM dog-with slowly two walked  
 “Two children walked slowly with a dog”

(2) a. Kodomo-ga hutari [VP inu-to (gakko-ni) tuita]  
 child -NOM two dog-with school-at arrived  
 “Two children arrived at school with a dog”

b. Kodomo-ga [VP inu-to hutari (gakko-ni) tuita]  
 child -NOM dog-with two school-at arrived  
 “Two children arrived at school with a dog”

Miyagawa (1989) claims that an NP and its numeral quantifier cannot be too distant from each other in Japanese phrase structure, because NP and the numeral quantifier must mutually c-command each other. In (1a), the numeral quantifier, “hutari”, modifies the subject NP. This is grammatical, because both are outside VP, and c-command each other. In (1b), the numeral quantifier is supposed to quantify the subject NP, but this is ungrammatical — the quantified NP is outside the VP, but the numeral quantifier is inside VP. (2a) is grammatical just like (1a). However, (2b) is grammatical in contrast to (1b). Miyagawa explains that this stems from the different syntactic structures in (1) and (2) — the surface subject in (1) originates outside VP, but the surface subject in (2) originates in the direct object position. That is, in (2), the NP which occurs in the direct object position moves into the subject position leaving a trace behind, therefore the mutual c-command relationship with the numeral quantifier is preserved in (2b), as shown below.

(3) a. [IP [VP NP NQ V]  
 b. [IP NP<sub>i</sub> [VP t<sub>i</sub> NQ V]

In contrast, between (1a) and (1b), the mutual c-command relationship with the numeral quantifier is not maintained, as shown in (4a) and (4b).

- (4) a. [IP NP NQ [VP V]]  
 b.\* [IP NP [VP NQ V]]

Miyagawa's account of NP-movement from inside VP to outside VP is similar to Burzio's explanation. Thus, the different syntactic behaviour of numeral quantifiers is one of the pieces of evidence to prove the existence of syntactic unaccusativity in Japanese. In addition, the behaviour of the passive construction with numeral quantifiers confirms Miyagawa's claim. Look at the following sentences.

- (5) a. Dorobo ga [vp hon- o san-satu nusun-da]  
 thief- NOM book ACC three-bound-volumes stole-PAST  
 "A thief stole three books"  
 b. Hon ga [vp doroboo- ni san-satu nusum-are-ta]  
 book-NOM thief by three-bound-volumes steal-PASS-PAST  
 "Three books were stolen by a thief"

In both (5a) and (5b), the relation between the NP (or its trace) and the numeral quantifier is one of mutual c-command within VP. Therefore, both are grammatical. So far, we have observed a distinctive difference with floating quantifiers between unaccusatives and unergatives, but Tsujimura (1991, 1994, 1996) points out that there are unergative verbs that show unaccusative properties when taking additional PPs that denote a "goal" of motion. Look at the following examples.

- (6) a.\* Kodomo-ga [<sub>VP</sub> inu-to yukkuri hutari aruita]  
 child -NOM dog-with slowly two walked  
 “Two children walked slowly with a dog”
- b. Kodomo-ga [<sub>VP</sub> inu-to yukkuri gakkō-made hutari aruita]  
 child -NOM dog-with slowly school-as far as two walked  
 “Two children walked slowly to the school”

(6b) is the same example as (6a). Just adding a PP headed by the postposition *made-gakkō-made* (as far as the school), the judgement greatly improves. Tsujimura explains this phenomenon as a shift in the verb’s properties from unergative to unaccusative. More precisely, unergative manner of motion verbs plus goal phrases such as “*made*” exhibit unergative/unaccusative shift as seen in Italian and Dutch. Tsujimura gives some examples from Italian and Dutch adapted from Rosen (1984) and Zaenen (1993), respectively.

(7) Italian

- a. Ugo ha corso meglio ieri (AVERE selection)  
 “Ugo ran better yesterday”
- b. Ugo e corso a casa (ESSERE selection)  
 “Ugo ran home”

(Rosen 1984:86)

(8) Dutch

- a. Hij heeft/\* is gelopen  
 “He has/is run.”
- b. Hij is/? heeft naar huis gelopen  
 “He is/has run home”

(Zaenen 1993:22)

These examples show that the shift from unergative to unaccusative by

adding goal phrases is observed across a range of languages. However, there still remains a question-why and how can the additional goal phrase *made* bring about the classification shift from unergative to unaccusative? Furthermore, Tsujimura raises another question-why is this change caused only by a particular postposition “*made*”, but not by *ni* or *e*, which are similar types of postposition? Tsujimura posits these two points as the main topics for her discussion, and attempts to give an account for them. Her account is closely related to that for the resultative construction. So, first, we shall look at the next piece of evidence for unaccusativity in Japanese, and then go back to Tsujimura’s discussion later.

## 2.2 Evidence based on the resultative construction.

Simpson (1983) notes that a resultative phrase may only modify an internal argument of the verb. Look at the following examples:

- (9) a. He broke the vase into pieces.  
b. The vase broke into pieces.
- (10) a. John painted the car red.  
b. The car was painted red.

However, the resultative phrase cannot modify the subject of simple intransitive verbs which have no internal argument as shown in (11).

- (11) a.\* He broke the vase tired.  
b.\* John painted the car tired.

In (11a) and (11b), the resultative phrase “tired” cannot modify the external argument of the verb “he”, “John”, in other words, it cannot be

interpreted as being predicated of the subject. Tsujimura (1990a, 1990b) notes that a similar generalisation can be made for Japanese as shown in (12), (13) and (14).

(12) a. Kare ga kabin- o konagona ni watta.  
 he- NOM vase-ACC pieces into broke  
 “He broke the vase into pieces”

b. Kabin ga konagona ni wareta.  
 vase- NOM pieces into broke  
 “The vase broke into pieces”

(13) a. John ga kuruma- o akaku nutta.  
 John- NOM car- ACC red painted  
 “John painted the car red”

b. Kuruma ga akaku nu- rare- ta.  
 car- NOM red paint-PASS-PAST  
 “The car was painted red”

(14) a.\* Kare- ga kutakutani kabin-o watta.  
 he- NOM (dead) tired vase-ACC broke  
 “\* He broke the vase tired”

b.\* John- ga kutakutani kuruma- o nutta.  
 John- NOM (dead) tired car- ACC painted  
 “\*John painted the car tired”

In (12a), the resultative phrase modifies the internal argument. Therefore, the sentence is grammatical. In (12b), the resultative phrase appears to modify the external argument, but the NP in subject position is actually the internal argument which has been moved. In (13a), the resultative phrase modifies the internal argument. In (13b), since the V

is passive, the subject position is occupied by the internal argument and hence the sentence is grammatical. In (14a), the resultative phrase is intended to modify the subject, but this is an external argument, hence it is ungrammatical. Finally, in (14b), the situation is the same. Furthermore, like in English, the resultative phrase cannot modify the subject of simple intransitive verbs which have no internal argument as follows:

- (15) a.\* John-ga kutakuta-ni hasitta  
 John-NOM tired ran  
 “John ran tired”
- b.\* John -ga kutakuta-ni waratta  
 John-NOM tired laugh  
 “John laughed tired”
- c.\* John -ga kutakuta-ni odotta  
 John-NOM tired danced  
 “John danced tired”

To summarise according to McClure (1995:10) again,

(16) Resultatives (Japanese)

a. Direct object

Kuruma- o akaku nutta (=akai kuruma)  
 car- ACC red painted (=red car)  
 “(I) painted the car red”

b. Passive subject

Inu- ga kiree- ni arawareta (=kiree-na-inu)  
 dog-NOM pretty- DAT was washed (=pretty-GEN-dog)  
 “The dog was washed clean”

Here, we return to Tsujimura's discussion, again. Recall that here are two main questions that she is concerned with:

- (17) a. Why and how does the additional goal phrase "*made*" bring about the classification change from unergative to unaccusative?  
 b. Why is this change caused only by one particular postposition "*made*" but not by *ni* or *e*, which are similar types of postposition?

Tsujimura provides an answer for these questions, which can be well summarised with this quotation from her paper.

...*made* phrases that cooccur with manner of motion verbs should be considered as resultative predicates that describe change of location as a result of the motion denoted by the verb; while the postpositions *ni* and *e* do not bear the predicative function, and hence maintain their roles as modifiers.

(Tsujimura 1994: 345)

To start examining her answer to the first question, the crucial point that she makes is that the goal phrase, *made* + NP, should be regarded as a resultative predicate, which means the resultative phrase requires an NP to modify in the internal argument position. This requirement is called Direct Object Restriction by Levin and Rappaport Hovav (1995: 33). However, unergative verbs have only single external argument, so accordingly this sole argument must necessarily leave a trace behind inside VP at D-structure, which is to be modified by the resultative predicate. Tsujimura explains that this is why the addition of a goal phrase exhibits unaccusative properties, and allows floating quantifiers.

With respect to the second question, Tsujimura suggests that the



different syntactic behaviour between “*made*”, and “*ni*” and “*e*” stem from semantic differences, which are subtle but significant. Her claim is that “*made*” marks the endpoint of the motion more clearly than *ni* and *e* (Tsuji-mura 1994: 345). More concretely, she explains that the postpositions *ni* and *e* do not define “goal” in an explicit way, while *made* explicitly denotes the endpoint. Tsujimura (1994: 345) concludes that “(the postpositions *ni* and *e*) do not seem to set the endpoint explicitly to qualify to be a resultative secondary predicate”. Borrowing Tenny’s term, “delimiter”, *made* has the function of *delimiter* -making the endpoint, while *ni* and *e* do not.

### 2.3 Evidence based on the *-te iru* construction.

In Japanese, verbs in the *-te* form may be combined with the auxiliary verb *iru*. This construction can express two main meanings: progressive and resultative. Look at the following examples.

#### (18) Progressive

- a. Taro ga hasitte-iru  
Taro- NOM running-be  
“Taro is running”
- b. Taro ga odotte-iru  
Taro- NOM dancing-be  
“Taro is dancing”

#### (19) Resultative

- a. Chocolate ga tokete-iru  
Chocolate- NOM melted-be  
“The chocolate has melted”

- b. Mado ga kowarete-iru  
 window- NOM broken-be  
 “The window has broken”

As shown by the English translations, the *-te + iru* construction is equivalent to the English construction *be + -ing* in the case of the progressive interpretation, and equivalent to English *be + past participle* in the Resultative interpretation. This means that using the *-te* form of a verb with *iru* can represent two different aspectual states: “telicity” and “atelicity” (Dowty 1979). The question is, which factors decide which interpretation a given verb used in this way may have? At first glance, it seems that the difference is one of unaccusativity versus unergativity. For example, unergative verbs like “*hashiru* (run)”, “*odoru* (dance)” are assumed to have a progressive interpretation, and unaccusative verbs like “*tokeru* (melt)”, “*kowareru* (break)” have a resultative interpretation. Compare the following examples to (20).

- (20) a. Mary ga chocolate o tokasite-iru.  
 Mary- NOM chocolate- ACC melting -be  
 “Mary is melting the chocolate”  
 b. Dorobo ga mado o kowasite-iru.  
 thief- NOM window- ACC breaking-be  
 “A thief is breaking the window”

These examples use the transitive variants of the unaccusative verbs from (19a) and (19b). However, with these verbs only the progressive interpretation is licensed. Takezawa (1991) suggests that the theta-role of the S-structure subject determines which interpretation is allowed. He argues that only when the S-structure subject carries a Theme theta-role, does it allow a resultative interpretation. His explanation applies to all

the examples in (18), (19), and (20) - in (18) and (20), the theta-role of each subject is *Agent*, therefore only a progressive interpretation is allowed; in the examples in (19), the subject theta-role is *Theme*, and hence they can be interpreted as resultative. Unaccusative verbs are verbs which move a D-structure Theme in the Object position to become an S-structure Subject. So unaccusatives allow resultative interpretations. Let us look at other examples to support his argument.

- (21) a. Tom ga nimotu o hakonde-iru (progressive)  
 Tom- NOM luggage- ACC carrying-be  
 “Tom is carrying the luggage”  
 b. Nimotu ga (Tom ni yotte) hakob-are-te-iru (resultative)  
 luggage- NOM (Tom- by) carry- PASS-be  
 “The luggage has been carried (by Tom)”
- (22) a. Tom ga heya o (heater de) atatamete-iru (progressive)  
 Tom- NOM room- ACC (heater- by) heating- be  
 “Tom is heating the room with a heater”  
 b. Heya ga (heater de) atatamer-are-te-iru (resultative)  
 room- NOM (heater- by) heat-PASS-be  
 “The room has been heated by heater”

In (21) and (22), *hakobu* (carry) and *atatameru* (warm) are transitive verbs, with an Agent theta-role assigned to the Subject position, so the interpretation must be progressive. In (21) and (22), *hakobareru* and *atatamerareru* are passive forms, with a Theme theta-role base-generated in Object position and moved to Subject position, thus allowing a resultative interpretation. These examples (21) and (22) also support Takezawa’s (1991) theory — when the Theme appears as S-structure Subject as a result of passivization, the resultative interpretation is

allowed.

To summarise the generalization about the interpretation of the *-te + iru* construction based on Takezawa (1991), we can state the following: the resultative interpretation of the *-te + iru* construction can be licensed only when the Theme which originates in the Object position is moved to the Subject position, leaving behind a trace in the VP. This generalisation can be illustrated as follows:

- (23) a. Resultative  
           [IP NP<sub>i</sub> [VP t<sub>i</sub> V-te-iru]]  
       b. Progressive  
           [IP NP [VP V-te-iru]]

Furthermore, Takezawa (1991) presents an interesting view of the *-te + iru* construction. He suggests this construction may have something common with perfect tense auxiliaries in Italian.

- (24) a. Maria **ha** telefonato (unergative)  
           has telephoned  
           “Maria has telephoned”  
       b. Maria **è** stata accusata (passive)  
           is been accused  
           “Maria has been accused”  
       c. Maria **è** arrivata (unaccusative)  
           is arrived  
           “Maria has arrived” (Takezawa 1991:64-65)

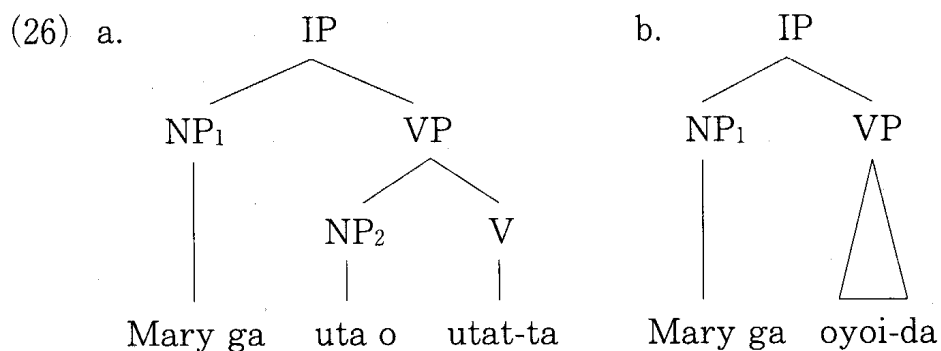
In (24a), *telefonare* is an unergative verb, and hence takes the AVERE auxiliary in the Perfect. In (24b), *stata accusata* is a passive form, and hence takes the ESSERE auxiliary. In (24c), *arrivare* is an unaccusative

verb, and hence takes the ESSERE auxiliary. In Italian, passives and unaccusatives share the property of taking the ESSERE auxiliary, and hence contrast with unergatives and transitives. In Japanese, passives and unaccusatives share the property of allowing a resultative interpretation, and hence contrast with unergatives and transitives. This shows an obvious parallel to Italian.

#### 2.4 Evidence based on the phenomenon of “case-drop”

In Japanese, every NP is marked with a case particle. There are five main case particles, which are the nominative *ga*, the accusative *o*, the dative *ni*, the genitive *no*, and the topic *wa*. Basically, the nominative *ga* is assigned to the subject, while the accusative *o* is to the direct object. Look at the following examples and the simplified diagrams.

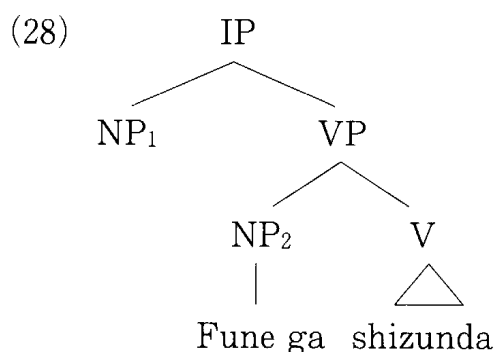
- (25) a. Mary *ga* uta *o* utat- ta  
 Mary NOM song ACC sing PAST  
 “Mary sang a song”
- b. Mary *ga* oyoï- da  
 Mary NOM swim- PAST  
 “Mary swam”



As shown in the diagrams, NP<sub>1</sub> is usually marked with the nominative case *ga*, but NP<sub>2</sub> is marked with the accusative case *o*. However, there are

examples where NP<sub>2</sub> is accompanied by the nominative case *ga* as follows.

- (27) Fune ga sizun- da  
 boat NOM sink-PAST  
 “The boat sank”



Burzio’s Generalization (1986) clearly explains this phenomenon of case assignment.

(29) **Burzio’s Generalization:**

A verb Case-marks its object if and only if it  $\theta$ -marks its subject.

In the Japanese structure, the NP accompanied by the nominative *ga* is always realised, whereas the NP marked with the accusative *o* never exists unless there is NP accompanied by the nominative *ga*. That is, accusative case assignment never precedes nominative case assignment. In (27), it is assumed that the internal argument *fune* moves to the subject position to be assigned the nominative case *ga*, because the external argument does not exist in the D-structure.

In the S-structure, (25b) and (27) are identified as the same intransitive construction, but these sentences display different syntactic behaviour. The phenomenon of “case-drop” is an instance, which is a phenomenon where case particles are omitted in informal speech. This is

quite often seen in Japanese phrase structure. The case particle cannot always be dropped. Under some circumstances, case-drop makes a sentence totally ungrammatical. There seem to be some constraints on it. One of the criteria for case-drop is “retrievability” i.e. whether it is easy to predict the original case.

From a different point of view, Kageyama (1993) presents some interesting data to show that there is a difference of behaviour in case drop between unaccusative and unergative construction. Compare the following examples.

(30) **Unaccusatives**

- a. [Kootuu - ziko - (ga) okoru ] no mi-ta koto aru?  
 traffic accident- (NOM) happen NOML see-PAST thing be  
 “Have you ever seen traffic accidents happen?”
- b. Ano kodomo [nando de oyu-(ga) waku-ka] sira-nai  
 that child what degree at hot water-(NOM) boil-whether know-NEG  
 “That child doesn’t know what degree water boils at.”

(31) **Unergatives**

- a. [Kanzya - \*(ga) abare - ta] no shitte-imasu-ka?  
 Patience -NOM become violent-PAST NOML know- be - Q  
 “Do you know that the patient became violent?”
- b. [Tanaka-kun-\*(ga) sigoto-suru] no mi-ta koto nai  
 Tanaka-title-NOM work-do NOML see-PAST thing not be  
 “Have you ever seen Mr.Tanaka working?”

(Kageyama, 1993:56)

Obviously, the nominative case *ga* is obligatory in unergative constructions, whereas in unaccusative structures, the case can be dropped without any problem. The case-drop can be also seen in the accusative case o

in transitive construction.

(32) **Transitive**

- a. [Kodomo-tati \*(ga) hon (o) yomu] no mi-ta koto nai  
 Child-PL NOM book-(ACC) read NOML see-PAST thing not be  
 “I have never seen the children reading books”
- b. Kono tikaku ni [tabako (o) utteru mise] ari-masen-ka  
 this near by cigarette-(ACC) sell shop be-NEG-Q  
 “Is there any shop near by which sells cigarettes?”

(Kageyama,1993:56)

The accusative *o* in (32a) and (32b) can drop like in (30), while the nominative *ga* in (32a) cannot drop like in (31). These sentences exemplify the fact that the subject in the unaccusative structure shows a parallel behaviour in case-drop with the object in the transitive structure. What is notable is that many errors by learners of Japanese regarding case assignment have been reported. Most of the typical errors stem from taking the nominative *ga* for the accusative *o*. For example, there are many errors resulting from wrongly assigning the accusative *o* to the subject of unaccusatives instead of the nominative *ga*. The following examples are from Teramura (1990).

- (33) a. Jikan \*o [ga] tat-ta  
 time ACC[NOM] pass-PAST  
 “Time has passed”
- b. zyoukyou \*o [ga] okot-ta  
 situation ACC[NOM] occur-PAST  
 “The situation has occurred”



- c. Mondai \*o [ga] deteki- ta  
 problem ACC[NOM] emerge-PAST  
 “The problem has emerged”

### 2.5 Evidence based on the *takusan* construction

The adverb *takusan* basically does not choose which NP to modify. It modifies any NP regardless of whether it is a subject or an object as shown in (34).

- (34) a. Takusan-no hito - ga sono uta-o utat-ta  
 a lot-GEN people-NOM the song-ACC sing-PAST  
 “A lot of people sang the song.”  
 b. Naomi-ga takusan-no uta-o utat-ta  
 Naomi-NOM a lot - GEN song-ACC sing-PAST  
 “Naomi sang a lot of songs.”

Kageyama (1993,1996) observes that when the subject and the object are dropped, the adverb *takusan* modifies not the null subject but the null object. Look at the following examples:

- (35) a. Takusan utat-ta  
 a lot sing-PAST  
 “he/she/we/they sang a lot (of songs)”  
 b. Takusan tui-ta  
 a lot arrive-PAST  
 “A lot of people arrived”  
 c. Takusan ason-da  
 “he/she/we/they played a lot”

There is a difference of meaning manifested between a, b, and c. In (35a)

and (35b), *takusan* modifies the null object of the transitive verb (song), and the null object of the unaccusative (people), respectively. In contrast, the unergative sentence (35c) does not have a null object to be modified by *takusan*, therefore *takusan* just expresses the amount of action which is inherently denoted. Thus, even if the subject and the object are omitted, this is never exhibited in the reading.

## 2.6 Evidence based on the *kake* deverbal nominalization

Kishimoto (1996) proposes another diagnostic for the unergative/unaccusative distinction: the *kake* deverbal nominalization, which is a common pronominal modification in Japanese. The suffix “be about to, do halfway” *kake* is attached to a verbal stem modifying a noun, with the genitive marker *no* between them. The deverbal nominal with *kake* restricts the NP which it modifies to the object of a transitive verb or the subject of an unaccusative as shown in (36a) and (36b), but not the subject of a transitive verb or an unergative verb as in (36c) and (36d).

- (36) a. *kaki -kake -no tegami*  
 write-KAKE-GEN letter  
 “a half-written letter”
- b. *kusari- kake- no tamago*  
 rot-KAKE-GEN egg  
 “a half-rotten egg”
- c. \**kaki- kake- no syonen*  
 write-KAKE-GEN boy  
 “\*a half-written boy”
- d. \**mati - kake- no kanzya*  
 wait-KAKE-GEN patient  
 “\*a half-waited patient”

Kishimoto suggests that apart from the constraints of the noun which is modifies, there are other construction-specific restrictions, which can be summarised in three main constructions. The first and second restrict the semantic properties of verbs which the suffix *kake* is attached to. Since *kake* is derived from a verb whose aspectual function is to express “start” or “begin”, verbs to be suffixed with *kake* have to denote the initial point of an event. For example, stative verbs are not compatible with this construction, because they do not have a discrete initial point. Secondly, verbs to be suffixed by *kake* have to imply some time span, because the entity described by the deverbal nominal expression denotes “some indication (or sign) of the event” (Kishimoto 1996:260).

Thirdly, Kishimoto presents a constraint which involves prosody. Verbs must be longer than one mora in *renyokei* (verbal infinitive) when they are suffixed with *kake*. The following examples are unacceptable, because the verbal infinitive form is only one mora long.

- (37) a. ?\* ne- kake- no     inu  
           sleep-KAKE-GEN dog  
           “a dog, almost sleeping”  
       b. ?\* ki- kake- no     doresu  
           wear-KAKE-GEN dress  
           “a dress, almost wearing”

(Kishimoto 1996:261)

Tsujimura and Iida (1999) review Kishimoto (1996), and give a different view on the readings which the *kake* deverbal nominalization receive. Their claim is that the interpretation of the *kake* construction should distinguish between two different readings: the “halfway” reading and the inception reading, which is not mentioned in Kishimoto (1996). Tsujimura and Iida suggest that these two interpretations are associated

with different aspectual criteria: telicity is captured as the main factor which leads to the “halfway” reading, while the inception point of the action denoted by the verb is the key to the inception reading. The examples are as follows:

(38) **halfway reading**

- a. Kowasi- kake- no biru  
break-KAKE-GEN building  
“a half-destroyed building”
- b. tokasi - kake- no batta  
melt-KAKE-GEN butter  
“half-melted butter”

(39) **inception reading**

- a. sini- kake- no byoonin  
die-KAKE-GEN patient  
“a patient, almost dying”
- b. hazimari- kake- no geki  
begin-KAKE-GEN play  
“a play, almost beginning”

(extracted from Tsujimura and Iida 1999:110)

Tsujimura and Iida point out that the inception reading is available with any verb, while the “halfway” reading is possible only with verbs which denote (non-punctual) telicity. Their analysis is summarized in Table 1. Table 1 shows that the “halfway” reading is possible only with the subset of activity verbs. Tsujimura and Iida explain that this is because there are cases where contextual information delimits eventuality of activity verbs, and make them enable to received the “halfway” reading.

**Table 1: The summary of Tsujimura and Iida's analysis**

	Telic			Atelic
	Achievement	Accomplishment	Activity	Stative
Halfway reading	NO	OK	OK NO	NO
Inception reading	OK	OK	OK	OK

(Tsujimura and Iida 1999:127)

**2.7 Evidence based on the Sino-Japanese complex predicates**

Parallel to Japanese native verbs, Sino-Japanese complex predicates can be classified into subcategories such as intransitive and transitive despite having no morphological manifestations. Examples are presented in (40) and (41).

(40) transitive (without an intransitive counterpart)

a. Syonin-ga nedan-o HIKAKU-sita  
 dealer-NOM price-ACC compare-did  
 "A dealer compared the price."

b. Otoko-ga nimotu-o UNSO-sita  
 man- NOM luggage-ACC carry-did  
 "A man carried the luggage."

c. Gakusei-ga iseki-o TYOUSA - sita  
 student-NOM ruins-ACC investigate-did  
 "A student investigated the ruins."

d. Kyoushi- tachi- ga kaigishitsu -o SIYO-sita  
 teachers- -NOM conference room-ACC use - did  
 "Teachers used the conference room."

(41) intransitive (without a transitive counterpart)

a. Kodomo-ga niwa-de UNDO-sita  
 child-NOM garden-at exercise-did  
 "A child exercised in the garden."

- b. Syonen-ga butai-de ENGI - sita  
 boy- NOM stage-at performe-did  
 “A boy performed on the stage.”
- c. Hikouki- ga umi-ni TUIRAKU- sita  
 airplane-NOM sea-in fall - did  
 “An airplane fell in the sea.”
- d. Densya - ga eki-ni TOTYAKU - sita  
 train - NOM station-at arrive - did  
 “A train arrived at the station.”

Miyagawa (1989) and Tsujimura (1990a, 1990b), among others, claim that the intransitive verbs in (41) are further divided into unergatives and unaccusatives, just like Japanese native verbs. Tsujimura (1990a, 1990b) attests that unaccusativity is observed in Sino-Japanese complex predicates by applying several different diagnostics such as Resultatives, accusative-case assignment, and quantifier floating. As the accusative-case assignment test is widely known as a diagnostic test for Sino-complex predicate, it is closely examined here:

- (42) a. Kodomo-ga niwa-de UNDO-o sita  
 child-NOM garden-at exercise-ACC did  
 “A child exercised in the garden.”
- b. Syonen-ga butai-de ENGI -o sita  
 boy- NOM stage-at perform-ACC did  
 “A boy performed on the stage.”
- c. \*Hikouki- ga umi-ni TUIRAKU-o sita  
 airplane-NOM sea-in fall-ACC did  
 “An airplane fell in the sea.”

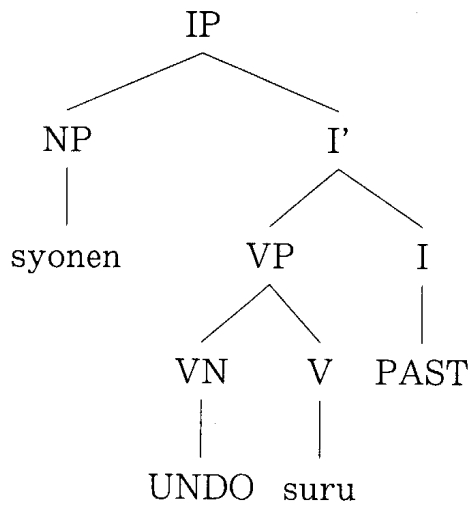
- d. \*Densya - ga eki-ni TOTYAKU-o sita  
 train - NOM station-at arrive-ACC did  
 “A train arrived at the station.”

The example shows a clear contrast between (42a), (42b) and (42c), (42d). This is a test to see whether the verb *suru* has the ability to assign accusative case to the Sino-Japanese compound nouns. All the Sino-Japanese complex predicates in (41a), (41b), (41c), and (41d) share the same ending *suru*, but the meaning of the entire predicate is completely determined by that of Sino-Japanese verbal noun. Likewise, the ability to assign accusative case by the verb *suru* is a property solely of the Sino-verbal noun. Tsujimura (1990a, 1990b) differentiates between Sino-Japanese nouns in (42a), (42b) and (42c), (42d), by calling the former unergative nouns, and the latter unaccusative nouns. The difference between these two types of noun is that an unergative noun has the ability to assign a theta role to the subject argument, which makes *suru* able to assign accusative case to the noun, while an unaccusative noun does not have the ability to assign a theta role to the subject argument, because it lacks an external argument, which is required to assign accusative case. This supports Burzio’s (1986) generalization.

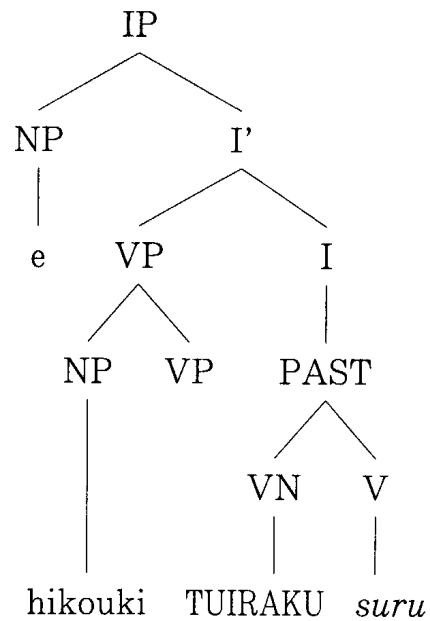
- (43) A verb case-marks its object if and only if it theta marks its subject.

The difference in the syntactic structure between the two types of predicates is illustrated as follows:

(44) a. Unergative



b. Unaccusative



(44a) and (44b) show a clear contrast, that is, (44a) takes an external argument outside the VP, *syonen* 'boy', while (44b) does not have an external argument but an internal argument *hikouki* 'airplane' in the VP.

### 3. Summary

In this paper, seven pieces of evidence for unaccusativity in Japanese were discussed: quantifier floating (Miyagawa 1989), resultative constructions (Tsuji-mura 1990a, 1990b, 1994, 1996), *te-iru* constructions (Takezawa 1991), case-marker drop (Kageyama 1993), the *takusan* construction, the *kake* deverbial nominalization, and the Sino-Japanese complex predicates. Some of the syntactic diagnostics such as quantifier floating allow constructions both with and without QF for unaccusative verbs but not for unergative verbs; unergative verbs are ungrammatical with QF. Case drop exhibits the similar optionality with unaccusative verbs, but this is a phenomenon mainly observed in spoken language, and such data is hard to find in written form. Case drop is therefore less reliable as a diagnostic of the unergative/unaccusative distinction. The *te-iru*



construction and the *takusan* construction are diagnostic tests, which capture two different interpretations between unergatives/unaccusatives. Both these constructions exhibit an ambiguity in the interpretation with the peripheral verbs of the Split Intransitive Hierarchy. The resultative constructions and *hake* deverbal nominalization share the same problem - the acceptability tends to be highly influenced by the predicate which the verb is embedded in. Thus unaccusative sentences are not necessarily accepted unless the verb and the context are compatible. On the contrary, some unergative sentences turn out to be grammatical by attaching an additional phrase. Finally, unlike the other six tests for unaccusativity, use of the Sino-Japanese complex predicate is not characterized as a diagnostic test, but it shows that not only Japanese native verbs but also the verbs derived from imported words are also classifiable under the unergative/unaccusative distinction.

### Note

<sup>1</sup>The phenomenon, case-marker drop is presented as evidence for surface unaccusativity in Japanese, but it is still controversial whether it is valid as a diagnostic test, because this is a phenomenon mainly found in spoken language, and accordingly it is hard to get data from written tests e.g. judgement tests. However, case-marker drop is still a phenomenon which has been widely studied within GB, in relation to topics such as scrambling (Saito 1985), abstract case (Kuroda 1988) and so on. Therefore, it has been included in the review.

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