

Fake Past and a Case Marking Constraint in Japanese Potential Constructions

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1. *O-GA* ALTERNATION AND *-TA* OF DISCOVERY

The object DP in Japanese potential constructions (PCs) is marked either with accusative *-o* or nominative *-ga*. Henceforth I refer to the former type of PCs as *o*-PCs and the latter type as *ga*-PCs. *O-ga* case alternation is observed either in present or past tense PCs.

- (1) Taroo-wa huransugo{-*o*/*ga*} hanas-e ru.
Taroo-Top French{-Acc/-Nom} speak-can Pres
'Taro can speak French.'
- (2) Taroo-wa kodomo-no koro
Taroo-Top child-Gen time
huransugo{-*o*/*ga*} hanas-e ta.
French{-Acc/-Nom} speak-can Past
'Taro could speak French when he was a child.'

It has been known that several factors affect PCs to favor one case over the other (e.g. Kuno (1973)). Here I present one factor that has before gone unnoticed. Consider the following sentence:

- (3) Nanto, Taroo-wa huransugo{??-*o*/*ga*}
wow Taroo-Top French{-Acc/-Nom}
hanas-e ta noka.
speak-can ta M(odal).
'Wow, (I didn't know) Taro can speak French.'

I consulted 27 native Japanese speakers (mostly

non-linguists), and 14 of them sensed a degradation in grammaticality in the *o*-PC in (3). Notice that *-ta* in (3) does not refer to past time. The speaker talks about the subject's present ability. Of several nonpast usages, *-ta* as in (3) is often called *hakken-no ta* '*-ta* of discovery'. It expresses "the speaker's surprise, when finding [...] something" (Nishiguchi (2006: 152)). In (3), the speaker, who has been unaware of Taro's linguistic ability, sees Taro speaking French and becomes aware of it. The use of *-ta* in this context is optional, but preferable when the speaker wants to express his surprise at his/her new discovery.

From the contrast between (2) and (3), it seems that a group of native Japanese speakers bears the following constraint:

- (4) *-Ta* of discovery is compatible only with *ga*-PCs.

The aim of this paper is to account for why (4) is the case. Admittedly, some native speakers do not sense any difference in acceptability between (2) and (3). I briefly consider the reason for the discrepancy in judgment later in the discussion.

The organization of this paper is as follows. In section 2 I demonstrate that *-ta* of discovery occurs only in [+stative] sentences. Then it is suggested that *ga*-PCs are [+stative] in section 3, and that *o*-PCs are [-stative] in section 4. In section 5 I explain how (4) is obtained. Section 6 concludes the discussion.

2. *-TA* OF DISCOVERY SELECTS A [+STATEIVE] PHRASE.

It is well known that *-ta* does not always refer to past time. Researchers have presented various modal usages of fake past *-ta* (e.g. Masuoka (2000), Kudo (2001)). Of those usages, *-ta* of discovery (and *sooki-no ta* '*-ta* of reminiscence') is unique in that it occurs only in [+stative] sentences. Typical examples of *-ta* of discovery are given in (5).

(5) a. A, at *ta*.

oh, be *ta*

‘Oh, here it is.’

b. Are, ame-*ga* hut *tei ta* noka.

oh, rain-Nom fall Prog *ta* M

‘Oh, (I didn’t know) it is raining.’

(Masuoka (2000: 24-25))

As Kudo (2001) points out, when *-ta* appears in [-stative] sentences, it is interpreted either as a past tense or a perfect aspect marker.

The property above can be captured by the following selectional restriction:

(6) *-Ta* of discovery selects a [+stative] phrase.

In the following discussion we will see how (4) and (6) are related.

3. *Ga*-PCs ARE [+STATIVE].

It has often been claimed that *o*-PCs and *ga*-PCs have different syntactic structures. In this section I present an analysis of *ga*-PCs. First, it is suggested, following Takano (2003), that aboutness predication is involved in *ga*-PCs (§3.1). Next, I consider two other constructions involving aboutness predication. Observing the relevant data, it is induced that aboutness predicates must be [+stative] (§3.2). It entails that *ga*-PCs are [+stative] (§3.3).

3.1. *Ga*-PCs and Aboutness Predication

Since Tada (1992) it has commonly been assumed that the *ga*-marked object occupies a syntactic position higher than the position that the *o*-marked object occupies. Evidence comes from the scope relation between the object quantifier and potential morpheme (PM), as exemplified in (7a, b).

(7) a. Taroo-wa migime-dake-*o* tumur-e ru.

Taroo-Top right. eye-only-Acc close-can Pres

‘Taro can only close his right eye.’

(i) can > only; (ii) ?*only > can

b. Taroo-wa migime-dake-*ga* tumur-e ru.

-Nom

(i) *can > only; (ii) only > can

(Tada (1992: 94))

In (7a) the *o*-marked object must be interpreted within the scope of PM *-e* ‘can’, while in (7b) the *ga*-marked object must have scope over PM. Given that scope relation between the two syntactic objects reflects their structural relation, the *o*-object should occupy a position lower than PM, and the *ga*-object a position higher than PM.

Here arises a question concerning the *ga*-marked object. Since it is an internal argument of the stem verb, it should occupy COMP of V, which is lower than PM, as well as its scope position. How are the two positions related? Tada (1992) proposes a movement analysis. According to him, the internal argument has to move to SPEC of AGRo to receive Case. AGRo may appear either above PM or between PM and the stem V. In the former case, the internal argument is assigned nominative *-ga* by [+stative] PM (attached to AGRo). The *ga*-marked object thus occupies a position higher than PM. Therefore the *ga*-marked object in (7b) takes scope over PM.

Apparently simple and attractive, the movement analysis is not without problems. To point out one, A-movement usually feeds reconstruction (cf. Saito and Hoshi (1998)). If the object in (7b) moved over PM for Case reasons, it should have a narrow scope reading as well.

To overcome the difficulty, Takano (2003) proposes what he calls a prolepsis analysis. In his analysis the sentences in (7a) and (7b) are assigned the following structures:

(8) a. [TP_{VP2} Taroo_i-wa [VP₂ [VP₁ PRO_i [VP₁ migime-dake-*o* tumur] v] -e] v] ru]

b. [TP [VP₂ Taroo_i-wa [VP₂ migime-dake-*ga* [VP₁ PRO_i [VP₁ pro_j tumur] v] -e] v] ru]

(adapted from Takano (2003: 800-801))

The scope domain of PM *-e* is shadowed. PM takes a control structure. *Taroo* is base-generated as

an external argument of PM and controls PRO in vP1. The structures in (8a) and (8b) differ as to whether PM also takes an object or not. In (8a) *migime-dake* ‘only (his) right eye’ is an object of the stem V and assigned accusative *-o* in VP1. The *o*-marked object is therefore interpreted within the scope of PM. In (8b), on the other hand, *migime-dake* is a non-thematic object of PM and assigned nominative *-ga* in VP2. Since it occupies SPEC of V2 (PM), it takes scope over PM. The thematic interpretation of the *ga*-object is obtained through binding a null pronominal object (*pro*) in VP1. Takano refers to the *ga*-DP as in (8b) as “proleptic object,” or, “object of anticipation” (p. 781). There is an aboutness relation between the proleptic object and its predicate phrase, i.e. vP1 in this case. Given the prolepsis analysis, the absence of a reconstruction effect in (7b)/(8b) follows straightforwardly: Reconstruction into VP1 is impossible since the *ga*-object is base-generated in VP2.

Takano provides arguments for his prolepsis analysis. Here I present only one of them: The *ga*-object may be non-subjacent to its thematic position. In (9), for example, the thematic position for the *ga*-object *doitugo-ga* ‘German-Nom’ is in the relative clause (RC) adjoined to the *o*-marked object.

- (9) *Watasi-wa doitugo-ga hanasu hito-o*
 I-Top German-Nom speak person-Acc
sagas-e ru.
 search.for-can Pres
 ‘I can search for a person who speaks
 German.’ (Takano (2003: 809))

The *ga*-object should be in the matrix clause to receive nominative Case. Tada’s Case movement analysis would wrongly rule out (9) since A-movement out of an adjunct is illegitimate. Takano’s prolepsis analysis, on the other hand, accounts for the grammaticality of (9). The sentence is assigned the following structure under his

analysis:

- (10) [_{TP} [_{VP2} *watasi_i-wa doitugo_j-ga* [_{VP1} PRO_i
 [_{RC} *pro_j hanasu]-hito-o sagas_j-e*] *ru*]

The *ga*-object is base-generated in the matrix clause as an object of PM *-e*, and assigned nominative *-ga*. Its thematic interpretation is obtained through binding *pro* in the RC. Since binding of *pro* is not subject to locality, (9)/(10) is correctly predicted to be acceptable.

Given this much, I adopt Takano’s prolepsis analysis. The *ga*-PC in (1a) is thus given the following structure:

- (11) [_{TP} [_{VP2} *Taroo_i-wa* [_{VP2} [huransugo_j-ga
 [_{VP1} PRO_i [_{VP1} *pro_j hanas_j v1*] *e*] v2] *ru*]

Aboutness relation is established between the *ga*-object and the embedded vP (vP1). I call the constituent to be predicated of a proleptic subject/object *aboutness predicate* henceforth. In (11), aboutness predication holds between SPEC and COMP of V2 (*-e*).

To recap, we have obtained the following conclusion:

- (12) *Ga*-PCs involve aboutness predication.

In the next section I examine two other constructions involving aboutness predication, and propose a semantic constraint on aboutness predicates.

3.2. Aboutness Predicates Are [+Stative].

This section takes up two constructions which involve aboutness predication. According to Mihara and Hiraiwa (2006: 190), aboutness predication is involved in the following two constructions:

- (13) a. *Multiple nominative constructions:*

Taroo-ga musume-ga kawaii.
Taro-Nom daughter-Nom cute
 ‘Taro’s daughter is cute.’

- b. *Perception verb constructions:*

Watasi-wa Hanako-o tensai da-to
 I-Top Hanako-Acc genius be-that

omot ta.
think Past

'I thought that Hanako was a genius.'

In multiple nominative constructions (MNCs) as in (13a), the first nominative DP is a major subject about which the rest of the sentence is asserted. The sentence in (13b) is an example of perception verb constructions (PVCs) in which the *o*-marked subject of the embedded clause serves as a major object, i.e. a topic of the embedded clause. In sections 3.2.1 and 3.2.2 I demonstrate that (i) either type of construction involves aboutness predication and (ii) the aboutness predicate of either type must be [+stative].

3.2.1. Multiple Nominative Constructions

Let us first examine MNCs. In (13a), the second DP *musume-ga* 'daughter-Nom' is a thematic argument of the lexical predicate *kawaii* 'cute'. The first nominative DP *Taroo-ga* 'Taro-Nom' is understood as a major subject, i.e. a topic for the rest of the sentence. Its thematic interpretation is obtained by relating itself to an empty position in the sentence. In this example *Taroo* is related to the possessor position in the subject as in (14).

(14) *Taroo-ga* [[e]_i *musume*]-*ga* *kawaii*

Researchers have given different analyses on how the major subject and its thematic position are related. Here I present a piece of evidence that supports the prolepsis analysis, following Heycock and Doron (2003; H&D henceforth).

H&D point out that the major subject cannot take scope in the gap position. Compare the (a) and (b) examples in (15). In (15a) the italicized quantifier *minna* 'everyone', which is within the subject DP, takes either narrow or wide scope over *computer*. (A wide scope reading may be obtained by covert quantifier raising (QR).) (15b) is a multiple nominative counterpart, in which *minna* appears as a major subject. In this sentence it can only have a

wide scope (i.e. distributive) interpretation.

- (15) a. [*Minna*-no *computer*]-*ga* *kowarete*
everyone-Gen *computer*-Nom *break.down*
simat ta (*koto*).
finish Past (fact)
'Everyone's computer has broken down.'
(i) every > a PC; (ii) a PC > every
- b. *Minna-ga* [[e]_i *computer*]-*ga* *kowarete*
-Nom
simat ta (*koto*)
(i) every > a PC; (ii) *a PC > every
(adapted from H&D: 111-112)

If the major subject in (15b) were moved from the [e] position, it could be reconstructed to have a narrow scope reading. The absence of a narrow scope reading suggests that the major subject is not generated in [e].

Based on the above observation, I suggest the following structure for (13a):

- (16) $\left[\begin{array}{c} \boxed{\text{CP } \boxed{\text{Taroo-ga}} \left[\begin{array}{c} \boxed{\text{TP } \boxed{\text{pro}_i} \text{musume-ga}} \\ \text{kawai i} \end{array} \right] \text{C} \end{array} \right]$

The major subject is base-generated in SPEC of C as a proleptic subject. Its thematic interpretation is obtained through binding *pro* in TP. Aboutness is established between SPEC and COMP of C.

Let us now consider a semantic constraint on the aboutness predicate. Many researchers have pointed out that MNCs must be [+stative] (e.g. Kuno (1973), H&D). Compare (13a) and the following sentence:

- (17) **Taroo-ga* [[e]_i *musume*]-*ga* *warat ta*.
Taroo-Nom *daughter*-Nom *laugh* Past
'Taro's daughter laughed.'

The example (17), which denotes one specific occurrence of [-stative] event, is not acceptable while the sentence (13a), which describes a property of the major subject, is acceptable. It is therefore concluded that the aboutness predicate (TP) in MNCs must be [+stative].

3.2.2. Perception Verb Constructions

Let us then consider aboutness predication and a semantic constraint in PVCs. Perception verbs such as *omo(w)-u* ‘think’ and *sinzi-ru* ‘believe’ take a clause as their internal argument. The subject of the embedded clause may be assigned either nominative *-ga* or accusative *-o*. I refer to the latter type as PVCs and the *o*-marked subject as the major object. Accusative must be assigned by the perception verb since there is no accusative assigner in the embedded clause in (13b).

As the following example shows, a MNC can be embedded in a PVC, with its major subject marked with accusative *-o*. Therefore *Hanako* is both a major subject of the embedded MNC and also a major object of the PVC.

- (18) Taroo-wa *Hanako*-o [[e], seikaku]-ga
 Taro-Top Hanako-Acc personality-Nom
 warui-to omot tei ru (rasii).
 bad-that think Prog Pres (I’ve heard)
 ‘(I’ve heard that) Taro believes Hanako to be wicked.’

(Takezawa and Whitman (1998: 57))

I have suggested in the previous section that the major subject is base-generated in SPEC of C. Hence *Hanako* in (18) should also be generated in SPEC of the embedded C. (It is assigned accusative *-o* under Agree with the matrix V-v.)

To generalize, the major object of PVCs should be base-generated in SPEC of the embedded C. The PVC in (13b) is therefore assigned the following structure:

- (19) [TP [vP Taroo-wa [vP [CP Hanako-C
 [TP PRO_i tensai da] to] omot] v] ta]

The major object is generated in SPEC of the embedded C as a proleptic argument, and related to its thematic position by binding *pro*. There is aboutness relation between the major object (SPEC of C) and TP (COMP of C).

Given the assumption that the embedded TP of

PVCs is an aboutness predicate, let us now consider a semantic constraint imposed on PVCs. According to Harada (2002) and Sasaki (2010), the embedded predicate of a PVC must be [+stative]. Compare (13b) with (20).

- (20) *Taroo-wa Hanako-o kinoo Tokyo-ni
 Taro-Top Hanako-Acc yesterday Tokyo-Dat
 it ta to omot tei ru.
 go Past that think Prog Pres
 ‘Taro thinks that Hanako went to Tokyo yesterday.’

When a [-stative] predicate appears in the embedded CP, the PVC is excluded. It is therefore concluded that the aboutness predicate in PVCs must be [+stative].

To recapitulate, we have considered two types of constructions that involve aboutness predication. What we have discovered in common is:

- (21) Aboutness predicates must be [+stative].

Is this a general constraint on aboutness predication or just a coincidence? I believe it is reasonable to pursue the former idea. As we will see in section 5, with (21) as a general constraint, we can provide a simple account for the compatibility of *-ta* of discovery and *o/-ga*-PCs ((4)). If we considered the stativity constraint on MNCs and PVCs just a coincidence, we would have to give separate explanation as to why the stativity constraint is imposed on each type of constructions and why (4) is the case.

3.3. Stativity of *Ga*-PCs

Based on the discussion so far, let us now consider the stativity of *ga*-PCs. The configuration of a *ga*-PC, (11), is repeated here as (22).

- (22) [TP [vP2 Taroo-wa [vP2 hurasugoi-ga
 [vP1 PRO_i [vP1 pro_j hanas]] e]] ru]

The *ga*-marked object and the vP1 are related under aboutness predication. Recall that the aboutness

predicate must be [+stative]. I assume that the vP1 is made [+stative] after the null object (pro), which is bound by the proleptic object, undergoes movement to the edge position (i.e. SPEC of v1). (Stativity shift by operator movement is suggested by Chomsky (1977).)

The vP1 is then merged with PM *-e*. In section 4, I demonstrate that PM bears no stativity feature. The [+stative] feature of the vP1 then percolates up to the TP, rendering the whole *ga*-PC [+stative].

4. *O*-PCs ARE [-STATIVE].

In this section I suggest that *o*-PCs are [-stative]. To achieve this, it is necessary to show that PM has no stativity feature.

Stativity of a predicate can be tested by bound morpheme *tei*. It is a suffix expressing a progressive or a resultative aspect of an event. Kindaichi (1950) observes that *tei* is associated only with [-stative] predicates. With this in mind, let us consider the following *o*-PCs. (23) shows that *tei* can follow PM. (24), on the other hand, shows that *tei* cannot follow *tei*+PM.

(23) Cocco-wa kokonotokoro yoi kyoku-o
 Cocco-Top recently good song-Acc
tukur e tei ru
 make can Prog Pres
 ‘Cocco has been able to make good songs recently.’

(24) *Cocco-wa kokonotokoro yoi kyoku-o
 Cocco-Top recently good songs-Acc
tukut tei rare tei ru.
 make Prog can Prog Pres
 ‘Cocco has been able to keep making good songs recently.’

If PM were [+stative], *tei* could not follow PM, and (23) should be deviant. If PM were [-stative], on the other hand, *tei* could follow *tei*+PM, and hence (24) should be acceptable.

How can we rule in (23) and also rule out (24)?

A straightforward explanation follows if we assume that (i) PM has no stativity feature, and (ii) the stativity of the base percolates and determines the stativity of the derived V-complex. In (23), since *tukur* ‘make’ is [-stative], *tukur-e* ‘make-can’ is also [-stative]. Hence *tei* can follow the complex V. In (24), on the other hand, since *tukut-tei* ‘make-Prog’ is [+stative], *tukut tei-rare* ‘make Prog-can’ is also [+stative]. Hence *tei* cannot follow the complex V.

If this is on the right track, it is entailed that *o*-PCs as in (1) and (2) are [-stative]. First, the stem verb to which PM attaches are [-stative]. Second, since PM has no stativity feature, the [-stative] feature of the stem V percolates up. Consequently, the whole *o*-PC is [-stative].

5. AN ACCOUNT

The conclusions given in the previous sections are repeated below:

- (25) a. §2: *-Ta* of discovery selects a [+stative] phrase.
 b. §3: *Ga*-PCs are [+stative].
 c. §4: *O*-PCs are [-stative].

Now it is evident why the generalization (4) holds. First, *-ta* of discovery is compatible with *ga*-PCs since they are [+stative]. Second, *-ta* of discovery is not compatible with *o*-PCs since they are [-stative]. Consequently, *-ta* of discovery is compatible only with *ga*-PCs. Compatibility between *-ta* of discovery and PCs are thus accounted for in terms of stativity of PCs.

Before closing this section, I briefly consider discrepancy in grammaticality judgment. As mentioned in section 1, nearly half of the informants find *-ta* of discovery compatible with either *ga*- or *o*-PCs. I tentatively assume that these informants can reanalyze *-ta* in (3) as some other modal *-ta*. For example, *-ta* of confirmation (*kakunin no -ta*) appears in [-stative] sentences.

(26) Kirin-te tasika nai ta yone?
giraffe-Top I.believe make.sound ta M
'Giraffes, I believe, have a voice, right?'

(Sadanobu (2004: 39))

Presumably, some informants reanalyze the *o*-PC in (3) as involving *-ta* of confirmation. The speaker, who has been unfamiliar with Taro's linguistic ability, may not be able to believe his/her ears, and want to confirm it by addressing the hearer. In such a situation, the fake past may be analyzed as *-ta* of confirmation, and hence compatible with [-stative] *o*-PCs.

6. CONCLUSION

This paper has pointed out the fact that *ga*-PCs are preferred when *-ta* of discovery appears and accounted for why this is the case. First, we have seen that *-ta* of discovery selects a [+stative] phrase. Then I have suggested that *ga*-PCs are [+stative] whereas *o*-PCs are [-stative]. Consequently, *-ta* of discovery is compatible only with *ga*-PCs.

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