On Japanese Desiderative Constructions [*]

Akira Ohtani [ab] and Mark Steedman [a]

[a]School of Informatics, University of Edinburgh,
Informatics Forum, 10 Crichton Street, Edinburgh EH8 9AB, Scotland, UK
[b]Faculty of Informatics, Osaka Gakuin University,
2-36-1 Kishibe-minami, Suita, Osaka 564-8511, Japan
{aotani, steedman}@inf.ed.ac.uk

Abstract. This paper describes desiderative constructions in Japanese with the main focus on *ta(i)* 'want' desideratives. In spite of the morphological one-word status, desiderative constructions have been claimed to have a complex structure at some abstract level of representation. We claim that there are two types of desideratives, and that their predicates have different lexical representations within the framework of Combinatory Categorial Grammar. Building on the proposed analysis, we also discuss the difference between the two types of desideratives in terms of adverbial modification and passivizability.

Keywords: Japanese Desideratives, *Ta(i)* 'want' Morpheme and Particle, Adverbial Modification, Passivizability, Combinatory Categorial Grammar (CCG)

1. Introduction

Ranging across a number of differing expressions in differing languages, there are various constructions described as complex predicates. Japanese also abounds in such predicates, which consist of a stem verb or gerundive expression followed by another morpheme. Passives and causatives, for example, have been a focus of attention in many linguistic studies. However, only few attempts have so far been made at desideratives by comparison. In this paper we conduct a detailed examination of desiderative constructions in Japanese with the main focus on the suffix, *ta(i)* 'want'.

Ta(i) 'want' is suffixed to a stem verb and forms an adjective as exemplified in (1):

(1) Boku-wa eego-{ga/wo}   hanasi-tai.
    I-TOP   English-NOM/ACC speak-want

    'I want to speak English.'

The active counter part for (1) is the following (2):

(2) Boku-wa eego-{*ga/wo}   hanasi-ta.
    I-TOP   English-NOM/ACC speak-PAST

    'I spoke English.'

As shown in (1), the object argument of the stem verb can be marked with either nominative *ga* or accusative *wo*, though the stem verb originally marks its object by only accusative as in (2).

We call the type with nominative object *ga*-desiderative, and the type with accusative object *wo*-desiderative.

One question here is why the object of desiderative construction can be marked with either nominative or accusative. Under the previous approaches based on series of transformations or movements, the desideratives have been claimed to have different complex structures at some abstract level of derivation or representation. However, there are some data that cannot be accounted for in terms of the only structural distinction.

In this paper we discuss the syntactic and semantic properties of desideratives with the main focus on *ta(i)* 'want', show the lexical representation of the suffix, and answer to the question.

2. Previous Analyses and Adverbial Modification

Kuno treats *ta(i)* as a sentential predicate (Kuno 1973) and then as a 'transitive' Deep Structure predicate (Kuno 1983). The latter predicate, for example, creates a biclausal control-type Deep Structure, which is reduced to a monoclausal Surface Structure by Predicate Raising and Tree Pruning. Inoue (1989a, 1989b) and Nishigauchi (1993) propose that complex predicates such as desideratives are formed by the process of Verb Incorporation, following Baker (1988). Inoue, for example, proposes that the two desideratives share the same D-structure but two patterns of incorporation available for the structure derive two types of S-structure, whose object NP is marked with nominative and accusative, respectively.

There are, however, some problems in those analyses both empirically and theoretically. Putting aside the theoretical problems, we point out that all the above analyses fail to capture adverbial modification. See (3):[1]

(3) Boku-wa { asita-kara / tonari-no heya-de } eego-{(?)?ga/wo} hanasi-tai.
    I-TOP   tomorrow-from next-GEN room-LOC   English-NOM/ACC speak-want

    'I want to speak English {from tomorrow / in the next room}.'

One prediction resulting from their view is that both *ga*-desideratives and *wo*-desideratives should allow the same range of time and place adverbials, *asita-kara* 'tomorrow-from' and *tonari-no heya-de* 'in the next room', to be modifiers of the stem verb. Such adverbials, however, are restricted in the case of *ga*-desideratives as shown in (3). Thus, the contrast on adverbial modification in (3) cannot be explained by their analyses.

Sugioka (1984) claims that *ta(i)* is suffixed to a V' as an instance of syntactic suffixation, thereby producing a *wo*-desiderative predicate. She also notes certain monoclausal properties of *ga*-desiderative predicates regarding adverbial modification. Adverbials that modify the stem verb alone cannot be placed between a nominative NP and a desiderative predicate as shown in (4) below:

(4) Boku-wa eego-{(?)*ga/wo} {asita-kara / tonari-no heya-de } hanasi-tai.
    I-TOP   English-NOM/ACC tomorrow-from next-GEN room-LOC   speak-want

    'I want to speak English from tomorrow.'

This observation, together with other considerations, has led her to propose that the nominative case marking results from the restructuring of a complex complement structure to a simplex structure at Surface structures as in (5):[2]

---

[1] One reviewer pointed out that some native speakers judge (3) (and some other examples) as not so bad and the degree of naturalness of (3) is the same as that of (i) for such people.

(i) Boku-wa { asita-kara / tonari-no heya-de } igirisu eego-{ga/wo} hanasi-tai.
    I-TOP   tomorrow-from next-GEN room-LOC   BritishEnglish-NOM/ACC speak-want

    'I want to speak British English {from tomorrow / in the next room}.'

The reviewer also offered the comment that the relevant difference between (3) and (i) is that the former tends not to carry focus, whereas the latter does. Although a kind of focus theory (of *ga*) may be responsible for the (un)naturalness of the examples, such a theory should be inquired with respect to pragmatics and is beyond our study that investigates the syntactic and semantic properties of desideratives.

[2] The case alternation of the desideratives can be accounted for in terms of 'reanalysis' (Kageyama 1982).

(5) a. [$_{A'}$ [$_{V'}$ [$_{NP}$ eego-wo] [$_V$ hanasi]] [$_A$ ta(i)]]

   b. [$_{A'}$ [$_{NP}$ eego-ga] [$_{A'}$ [$_V$ hanasi] [$_A$ ta(i)]]]

This restructuring converts a structure like (5a) into one like (5b), and therefore an adverbial cannot intervene between an NP and a stem verb.

    There are also some empirical problems in her analysis. We only point out here that the analysis fails to capture adverbial modification. Compare (3) with (4), and note the position of adverbials as indicated in (6):[3]

(6) a. NP-wa (Adv) NP-wo (Adv) V-tai

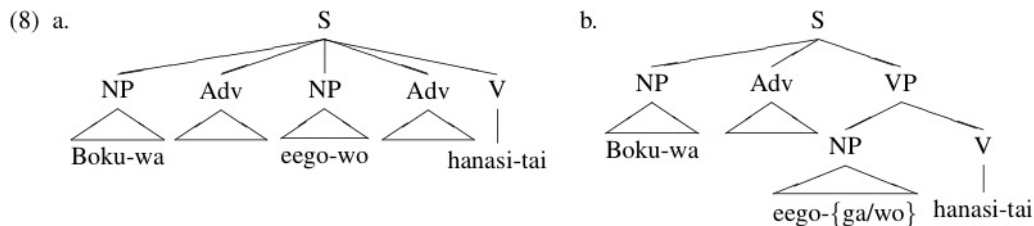   b. NP-wa (??Adv) NP-ga (*Adv) V-tai

    The ungrammaticality of (3) also suggests that adverbials modifying the stem verb alone are restricted in the case of *ga*-desideratives. Note that such adverbials do not interrupt the surface restructuring shown in (5) because they do not intervene between a nominative object NP and a stem verb. Thus, the restructuring analysis cannot straightforwardly account for the restriction observed in (3).

    Sugioka's analysis also misses the semantic restriction on the kind of verbs that can be used in *ga*-desideratives (Matsumoto 1996). See (7) below:

(7) a. Boku-wa hurui kitte-{ga/wo}   {atsume/koonyuu-si}-tai.

      I-TOP   old   stamp-NOM/ACC collect/buy-do-want

      'I want to collect/buy old stamps.'

   b. Boku-wa Naomi{(?)?ga/wo} {nagusame/tasuke}-tai.

      I-TOP   Naomi-NOM/ACC console/help-want

      'I want to console/help Naomi.'

   c. Boku-wa Naomi{*ga/wo} machi-tai.

      I-TOP   Naomi-NOM/ACC wait-want

      'I want to wait for Naomi.'

    In (7), while all of the desiderative predicates can take an accusative object, only some can take a nominative object. Matsumoto (1996) points out that those verbs whose meaning allow the object of the stem verb to be the target of the desire to obtain something (e.g., wanting to collect the old stamp means wanting the stamp itself) sound better with a nominative object than do other verbs. Within the restructuring account, it is not clear how such a restriction on *ga*-desiderative predicates could be stated.

    For explaining the variable patterning of adjunct modification in (4), Sells (1990) proposes another account in which the two kinds of desiderative predicates may differ in the phrase structure position of their object NP, as shown in (8) below:

(8) a.

S — NP (Boku-wa) Adv NP (eego-wo) Adv V (hanasi-tai)

b. S — NP (Boku-wa) Adv VP[NP (eego-{ga/wo}) V (hanasi-tai)]

According to Sells's analysis, an accusative object NP in Japanese can appear in two different positions as shown in (8a) and (8b). A nominative object NP, on the other hand, can only appear within a VP governed by a stative predicate *hanasi-tai* 'want to speak' as in (8b). He also assumes that adjuncts such as *asita-kara* and *tonari-no heya-de* are S-level adjuncts and

---

[3] There is a slight difference in the acceptability of the adjuncts in (4) and (i):

(i) Asita-kara   (boku-wa) eego-{??ga/wo} hanasi-tai.

    tomorrow-from I-TOP   English-NOM/ACC speak-want

    'From tomorrow, I want to speak English.'

Some adjuncts are more clearly ruled out. This can be attributed to a surface constraint disfavoring a long distance interruption between a nominative object and a predicate (Shibatani 1978).

suggests the reason why they cannot intervene between a nominative object and a stative predicate is because the nominative object occurs only under a VP.

Sells's analysis has the same problem as Sugioka's. The contrast found in (3) and (4) also cannot be attributed to constituency difference in (8), since the adjuncts that are excluded in the case of *ga*-desiderative in (4) cannot appear even in sentences where they do not intervene between a nominative object and a stative predicate as shown in (3).

Moreover, the following sentence shows that it is possible to place the adjuncts between a nominative object NP and a desiderative predicate: See (9):

(9) Boku-wa (hontooni) eego-ga　　　 (hontooni) hanasi-tai.
　　 I-TOP　　 truly　　 English-NOM truly　　　 speak-want
　　 'I want to speak English truly.'

Hontooni 'truly' in (9) modifies the whole desiderative predicate, while *asita-kara* 'from tomorrow' in (4) modifies the stem verb only. Thus, Sells's analysis cannot account for the restriction on adjunct modification.

In this section we have discussed that the nominative and accusative case distinctions of the object of desideratives plays a crucial role for licensing adjunct modification. We have also argued against several previous analyses since they cannot explain the behavior of adverbials.

3. *Gar(u)* Verbalization and Passivizability

3.1.Passivizability of Complex Predicates

Gar(u) is a verbal suffixal element that turns an adjective denoting 'an internal feeling' into a verbal expression which behaves as an ordinary predicate with the meaning 'showing the feeling x' (Sugioka 1984). Consider the following:

(10) a. Ken-wa　Naomi-ga　　urayamasii.
　　　　 Ken-TOP Naomi-NOM envious

　　　　 'Ken is envious of Naomi.'

　 b. Ken-wa　Naomi-wo　urayamasi-gatte iru.
　　　 Ken-TOP Naomi-ACC envious-VBZ　　 is

　　　 'Ken shows the signs of being envious of Naomi.'

(11) a. Ken-wa　Naomi-wo　{ sasot-ta.　　 / sasoi-tai　　 rasii. }
　　　　 Ken-TOP Naomi-ACC　ask.out-PAST　　ask.out-want seem

　　　　 'Ken asked out Naomi (e.g. for a date). / Ken seems to want to ask Naomi out.'

　 b. Ken-wa　Naomi-wo　sasoi-ta-gatte　　 iru.
　　　 Ken-TOP Naomi-ACC ask.out-want-VBZ is

　　　 'Ken shows the signs of wanting to ask Naomi out.'

Since *ta(i)* is an adjectival suffix forming an adjective as *sasoi-ta(i)* 'want to ask out' in (11a), the newly created predicate with *gar(u)* also turns the adjective into the verb as *sasoi-ta-gar(u)* 'is envious of' in (11b) through verbalization.

With regard to *gar(u)*-verbalization, there is an interesting contrast which is first brought to attention by Sugioka (1984). Note that the verbalized predicates in (10b) and (11b) show the difference in passivizability. See (12) below:[4]

(12) a. Naomi-wa　(Ken-ni) urayamasi-gar-arete iru.
　　　　 Naomi-TOP Ken-by　 envious-VBZ-PASS　is

　　　　 'Naomi is being envied (by Ken).'

　 b.*Naomi-wa　(Ken-ni) sasoi-ta-gar-arete　　　 iru.
　　　 Naomi-TOP Ken-DAT ask.out-want-VBZ-PASS is

　　　 'Naomi is being wanted (by Ken) to ask out.'

---

[4] Note that (12b) is acceptable as the so called adversative passive. In this paper, we make a distinction between the adversative passive and the direct passive, and the relevant passive is the latter. See also fn. 6.

One question here is why the sentence with "an adjective + *gar(u)*" in (10b) is passivizable as in (12a) while the one with "a desiderative + *gar(u)*" in (11b) is not as shown by the ungrammaticality of (12b).

The question here is, however, not so simple. There are verbalized desiderative predicates that can undergo passivization (Nishigauchi (1993), Matsumoto (1996)). Consider (13):

(13) a. Hurui kitte-wa   minna-ni   atsume-ta-gar-arete   iru.
      old   stamp-TOP everyone-by collect-want-VBZ-PASS is

      'Old stamps are in such a state that everyone wants to collect them.'

    b. Minna-wa   hurui kitte-wo   atsume-ta-gat-te iru.
      everyone-TOP old   stamp-ACC collect-want-VBZ is

      'Everyone wants to collect old stamps.'

(13a) is a passive counterpart of a desiderative in (13b). Thus, another question here is why (11b) cannot be passivized as shown in (12b) while (13b) can as shown in (13a).

3.2. Conditions on Passivization

As Nishigauchi (1993) argues, one crucial difference between (10a) and (11a) is that the complex predicate *urayamasii* 'envious' in (10a) is derived lexically by combining the verb *urayam* 'envy' with the 'adjectival morpheme' *-asi*, while the predicate *sasoi-tai* in (11a) is a syntactically complex predicate. The resulting expression of the former as a whole is syntactically a simple adjectival predicate *urayamasii*, and the verb *sasow* 'ask out (for a date)' and the desiderative adjectival element *ta(i)* originate as distinct syntactic elements.

For explaining the passivizability in (12), Nishigauchi claims that NP-movement is subject to a locality condition, which is claimed to be Subjacency defined on maximal projections. Consider below:

(14) a. [$_{VP}$ NP$_i$ [$_{V'}$ [$_{VP}$ [$_{V'}$ [$_{AP}$ PRO [$_{A'}$ t_i urayam-asi]]] gar]] are]
    b. *[$_{VP}$ NP$_i$ [$_{V'}$ [$_{VP}$ [$_{V'}$ [$_{AP}$ PRO [$_{A'}$ [$_{VP}$ PRO [$_{V'}$ t_i sasoi]]] ta]]] gar]] are]

Except the VP headed by *gar(u)*,[5] the object NP-movement in (14a) skips only one projection, AP, while that in (14b) skips two projections, AP and VP headed by *sasoi*. Since NP-movement across one projection is permissible but that across two projections causes violation of Subjacency, only (14b) is ungrammatical.

One prediction resulting from Nishigauchi's account is that syntactically complex *ga-* and *wo*-desideratives should not allow their verbalized form to be passivized, since those have the uniform structure shown in (14b). However, this is the wrong prediction. Remember the semantic restriction on *ga*-desideratives in (7), repeated with slight modification as (15), and then compare them with their passive counterparts with *gar(u)* shown in (16):[6]

(15) a. Boku-ga hurui kitte-{ga/wo}   atsume-tai (koto)
      I-NOM   old   stamp-NOM/ACC collect-want the thing that

      '(that) I want to collect old stamps.'

    b. Boku-ga Naomi{(?)?ga/wo} nagusame-tai (koto)
      I-NOM   Naomi-NOM/ACC   console-want the thing that

      '(that) I want to console Naomi.'

    c. Boku-ga Naomi{*ga/wo} machi-tai (koto)
      I-NOM   Naomi-NOM/ACC wait-want the thing that

      '(that) I want to wait for Naomi.'

---

[5] This VP does not count as a projection crossed by the object NP-movement. See Nishigauchi (1993).

[6] Another reviewer pointed out that the adversative passive may be more widespread than the direct passive in Japanese and passive sentences as in (12), (16), etc. get marginal readings on that basis. Our claim here is as follows: if the distribution of nominative object exemplified by judgment as in (15) is clear, (16a) is acceptable as the direct passive but unacceptable as the adversative passive because of the animacy requirement for its subject, and (16b) and (16c) do not make a sense as any passives, then a desiderative sentence that has a nominative object can have a direct passive counterpart. Thus, we get the condition in (17).

(16) a. Hurui kitte-ga   (minna-ni) atsume-ta-gar-arete   iru (koto)
        old   stamp-NOM everyone-by collect-want-VBZ-PASS is   the thing that
        '(that) old stamps are in such a state that everyone wants to collect them.'

     b.??Naomi-ga   (minna-ni) nagusame-ta-gar-arete   iru (koto)
        Naomi-NOM everyone-by console-want-VBZ-PASS is the thing that
        '(that) Naomi is in such a state that everyone wants to console her.'

     c.*Naomi-ga   (minna-ni) machi-ta-gar-arete   iru (koto)
        Naomi-NOM everyone-by wait-want-VBZ-PASS is the thing that
        '(that) Naomi is in such a state that everyone wants to wait for her.'

As (16) suggests, passivization of the whole verbalized desiderative predicate is possible only when the non-passivized plain desiderative can take a nominative object. In other words, *ga*-desiderative predicates but not *wo*-desiderative predicates are passivizable. Thus, the condition on passivization of desideratives is as follows:[7]

(17) Only the *ga*-desiderative is passivizable.

Now compare the grammaticality of (12b) with that of active counterpart whose object NP is marked with nominative *ga* and accusative *wo* shown in (18):

(18) Ken-ga   Naomi-{*ga/wo} sasoi-tai   (koto)
     Ken-NOM Naomi-NOM/ACC ask.out-want the thing that
     '(that) Ken wants to ask Naomi out.'

(18) cannot take a nominative object and therefore it is not passivizable.

It is worth noting that the object of (10a) occurs in the nominative case like other simple stative predicates. Thus, the contrast between (12a) and (12b) is accounted for by our claim that the passivization of the verbalized stative predicate is possible when the non-verbalized plain stative predicate can take a nominative object.

In this section we have discussed that the nominative and accusative distinction of the base object NP plays a crucial role for licensing the passivization of the verbalized desiderative predicates. That also accounts for the contrast between (12a) and (12b), because such a distinction also depends on the semantic restriction which is placed on the kind of predicate that can have a nominative-marked object.

4. Lexical and Syntactic Desideratives

In this section we seek the answer to the following questions posed in the previous sections examining how the desiderative constructions can be dealt with within the framework of Combinatory Categorial Grammar (CCG) (Steedman 1996, 2000).

(19) a. Why is the object of desideratives able to be marked with either nominative or accusative? (in Section 1)

      b. Why is the range of some adverbials restricted in *ga*-desideratives, but not in *wo*-desideratives? (in Section 2)

      c. Why are the sentences with "an adjective + *ta(i)*" passivizable while the certain sentences with "a desiderative + *ta(i)*" not? (in Section 3)

To answer the first question in (19a), we propose two types of predicates with desiderative constructions, i.e., *ga*-desiderative and *wo*-desiderative constructions in Japanese. These desideratives are correlated with the difference not only in the case marking of the object but also in a number of differences that we have shown in the previous sections. Based on those data, we discuss the lexical entries and the derivations for *ta(i)* 'want' in the following sections.

4.1.Lexical Entries of Desiderative Suffix *Ta(i)*

We claim that *ga*-desideratives are derived via lexical operations with the morpheme *ta(i)* where the crucial operations are the change of the value of case feature of the object NP, the value of

---

[7] It is worth noting that the syntactic condition in (17) is also related with the semantic constraint on *ga*-desideratives discussed in Section 2. See (7) and the following discussion.

sentential feature and semantics of the original predicate. The following is the lexical entry that we propose for such a derivational morpheme:

(20) The Morpheme -*ta(i)* for *Ga*-Desideratives:

$$-ta(i) := ((S_{[+stative]} \backslash NP_{nom}) \backslash NP_{nom}) \backslash ((S_{[-stative]} \backslash NP_{nom}) \backslash NP_{acc})$$
$$: \lambda P_{tv} \lambda x \lambda y \; want'(P'_{tv}xy)x$$

See the following derivation, where the input verb is *hanas(u)* 'speak':

(21) a. $hanas(u) := (S_{[-stative]} \backslash NP_{nom}) \backslash NP_{acc} : \lambda x \lambda y \; speak'xy$
    $hanasi - ta(i) := (S_{[+stative]} \backslash NP_{nom}) \backslash NP_{nom} : \lambda x \lambda y \; want'(speak'xy)x$

b.
$$
\begin{array}{ccc}
\text{Boku ga} & \text{eego ga} & \text{hanasi} - \text{tai} \\
\hline
NP_{nom} & \overline{NP_{nom}} & \overline{(S \backslash NP_{nom}) \backslash NP_{nom}} \\
& & \underline{}_{<} \\
& & S \backslash NP_{nom} \\
\hline
& & S
\end{array}
$$

The valence is not affected by the derivation but the object NP is marked with nominative for the lexically derived predicate. The change of the value of sentential feature tentatively referred to as [+/-stative] is important. The feature indicates the stativity referring to the semantics of the predicate.

In Japanese, an object NP of stative predicates is generally marked with nominative:

(22) a. Boku-wa eego-{ga/*wo}   wakaru.   (pure predicate)
       I-TOP   English-NOM/ACC understand
       'I understand English.'

   b. Ken-wa   Naomi-{ga/*wo} urayamasii.   (lexically derived predicate)
      Ken-TOP Naomi-NOM/ACC envious
      'Ken is envious of Naomi.'

In the previous sections, we also argued that the nominative case marking of an object in desiderative constructions is restricted to be the object of the stem verb that can be the target of *the desire to obtain something*. The pattern appears here is determined by the stativity of the predicate, and thus we claim that the generalization for the nominative marking of an object in Japanese is as follows:

(23) An object is marked with nominative if and only if it is subcategorized for by a stative predicate.

(23) is certainly consistent with the obligatory nominative case marking of the object of stative predicates as in (22).

In contrast with *ga*-desideratives, *wo*-desideratives involve syntactic embedding. Namely, the desiderative suffix *ta(i)* of the *wo*-desiderative functions as a word with its own lexical contents. The following is the relevant part of the lexical entry and the derivation of the *wo*-desiderative with the syntactic particle *ta(i)*:

(24) The Particle *ta(i)* for *Wo*-Desideratives:

$$ta(i) := (S_{[+stative]} \backslash NP_{nom}) \backslash (S_{[-stative]} \backslash NP_{nom}) : \lambda P_{iv} \lambda x \; want'(P'_{iv}x)x$$

(25)
$$
\begin{array}{cccc}
\text{Boku ga} & \text{eego wo} & \text{hanasi} & \text{tai} \\
\hline
NP_{nom} & \overline{NP_{acc}} & \overline{(S \backslash NP_{nom}) \backslash NP_{acc}} & \overline{(S \backslash NP_{nom}) \backslash (S \backslash NP_{nom})} \\
& & \underline{}_{<} & \\
& & S \backslash NP_{nom} & \\
& & \underline{}_{<} \\
& & S \backslash NP_{nom} & \\
\hline
& & S
\end{array}
$$

We propose that the *wo*-desiderative suffix is a predicate subcategorizing for one NP and a VP, i.e., $S \backslash NP_{nom}$. The embedded VP intuitively corresponds to a sentence headed by the stem verb. The reason for positing a VP-embedding structure instead of a S-embedding is the facts that the former is not available for passivization. Here we do not go into the detail of the passive morpheme and particle but the point is that there is no accessible object NP which is promoted by passivization once $S \backslash NP_{nom}$ is derived with *ta(i)*. Thus, the *wo*-desiderative has no passive counterparts.

One of the crucial points of our approach concerns the advantage of CCG as a lexical grammar formalism. Because of the way pieces of lexical information are put together in constructing successively larger linguistic objects, when the *wo*-desiderative particle *ta(i)* is combined with its VP-complement, the information about the stem verb is supplied. Notice that the semantics in (25) is identical to that of the output of the *ga*-desiderative in (21b) at the end of derivation.

4.2. Adverbial Modification and Complex Constituency

As shown in Section 2, some adverbials are restricted in the case of *ga*-desideratives. *Wo*-desideratives, on the other hand, do not have such a restriction. We have discussed the differing patterns of adverbial modification in the two types of desiderative constructions. This provides support for our analysis in which the two types of desiderative derivation exist. The crucial data is repeated below:

(26) Boku-wa { asita-kara   / tonari-no heya-de   / Naomi-ga   ki-tara   }
     I-TOP   tomorrow-from   next-GENroom-LOC   Naomi-NOM come-when

eego-{(?)?ga/wo} hanasi-tai.
English-NOM/ACC speak-want

'I want to speak English {from tomorrow / in the next room / when Naomi comes}.'

(3), repeated as (26) with additional data *Naomi-ga ki-tara* 'when Naomi comes' suggests that both adverbials and an adverbial clause are acceptable in the case of *wo*-desideratives but not *ga*-desideratives.

Note that the acceptability of adverbial modification is also observed in the case of non-stative predicate *hanasi-masu* 'speak'. See (27) below:

(27) Boku-wa { asita-kara   / tonari-no heya-de   / Naomi-ga   ki-tara   }
     I-TOP   tomorrow-from   next-GENroom-LOC   Naomi-NOM come-when

eego-wo   hanasi-masu.
English-ACC speak-POLITE

'I will speak English {from tomorrow / in the next room / when Naomi comes}.'

We claim the acceptability found in these data can be attributed to the compatibility of time and place adverbials with non-stative predicates and the complex constituency of *wo*-desideratives. Since the predicate of *ga*-desiderative is lexically derived with the stative specification, it is not compatible with such adverbials. The predicate of *wo*-desiderative, on the other hand, maintains non-stative stem verb in the embedded VP and the adverbials can modify it although desiderative *ta(i)* itself is stative.

Then, consider the difference between (26) and (28):

(28)   a. Boku-wa hontooni eego-{ga/wo}   hanasi-tai.
          I-TOP   truly   English-NOM/ACC speak-want
          'I want to speak English truly.'

       b. Boku-wa hontooni eego-wo   hanasi-masu.
          I-TOP   truly   English-ACC speak-POLITE
          'I will speak English truly.'

The adverb *hontooni* 'truly' in (9), repeated as (28a) can modify both the stem *hanasi* 'speak' and *ta(i)* 'want' and hence the *ga*-desiderative of (28a) is acceptable, while the adverbials in (26) is intended to modify only the stem.

This is the reason for the difference between *ga*-desideratives and *wo*-desideratives in terms of adverbial modification, and this is the answer to the second question in (19b).

4.3. Gar(u)-Verbalization and Passivization

This section is devoted to answer to the third question in (19c) examining *gar(u)*-verbalization and passivization. The objects of the verbalized adjective in (29b) and desiderative in (30b) obligatorily occur in the accusative below:

(29) a. Ken-ga   Naomi-{ga/*wo} urayamasikat-ta (koto)
     Ken-NOM Naomi-NOM/ACC envious-PAST   the thing that

     '(that) Ken was envious of Naomi.'

  b. Ken-ga   Naomi-{*ga/wo} urayamasi-gat-ta. (koto)
     Ken-NOM Naomi-NOM/ACC envious-VBZ-PAST the thing that

     '(that) Ken showed the signs of being envious of Naomi.'

(30) a. Boku-ga Naomi-{*ga/wo} machi-takat-ta   (koto)
     I-NOM   Naomi-NOM/ACC wait-want-PAST the thing that

     '(that) I wanted to wait for Naomi.'

  b. Boku-ga Naomi-{*ga/wo} machi-ta-gat-ta   (koto)
     I-NOM   Naomi-NOM/ACC wait-want-VBZ-PAST the thing that

     '(that) I showed the signs of waiting for Naomi.'

It is also worth noting that *gar(u)* is also attached to intransitive verbs. See below:

(31) a. Boku-wa samukat-ta.
     I-TOP   cold-PAST

     'I was cold.'

  b. Boku-wa samu-gat-ta.
     I-TOP   cold-VBZ-PAST

     'I showed the signs of being cold.'

Based on these observation, we claim that *gar(u)*-verbalized forms are derived by lexical operations with the following derivational morphemes:

(32) a. The Morpheme *-Gar(u)* for Verbalization   (for Transitive):

$$-gar(u) := ((S_{[-stative]} \backslash NP_{nom}) \backslash NP_{acc}) \backslash ((S_{[+stative]} \backslash NP_{nom}) \backslash NP_{nom})$$
$$: \lambda P_{tv} \lambda x \lambda y \ show\_signs\_of'(P'_{tv}xy)x$$

  b. The Morpheme *-Gar(u)* for Verbalization   (for Intransitive):

$$-gar(u) := (S_{[-stative]} \backslash NP_{nom}) \backslash (S_{[+stative]} \backslash NP_{nom})$$
$$: \lambda P_{iv} \lambda x \ show\_signs\_of'(P'_{iv}x)x$$

In (32), the valence of stem verb is not affected by the morphemes but the object NP is marked with accusative for a lexically derived predicate. The change of the value of sentential feature is specified as non-stative.

Next let us see how the derivational morphemes in (32) change the lexical entries of the predicates in (29b) and (30b):

(33) a. $urayamasii := (S_{[+stative]} \backslash NP_{nom}) \backslash NP_{nom} : \lambda x \lambda y \ be\_envious\_of'xy$
    $urayamasi - garu := (S_{[-stative]} \backslash NP_{nom}) \backslash NP_{acc}$
      $: \lambda x \lambda y \ show\_signs\_of'(be\_envious\_of'xy)x$

  b.

Ken ga	Naomi wo	urayamasi $-$ gat $-$ ta
NP_{nom}	NP_{acc}	$(S \backslash NP_{nom}) \backslash NP_{acc}$

$$\frac{\quad NP_{acc} \quad \quad (S \backslash NP_{nom}) \backslash NP_{acc} \quad}{S \backslash NP_{nom}}<$$
$$\frac{NP_{nom} \qquad\qquad S \backslash NP_{nom}}{S}<$$

(34) a. $ta(i) := (S_{[+stative]} \backslash NP_{nom}) \backslash (S_{[-stative]} \backslash NP_{nom}) : \lambda P_{iv} \lambda x \ want'(P'_{iv}x)x$
    $ta - garu := (S_{[-stative]} \backslash NP_{nom}) \backslash (S_{[-stative]} \backslash NP_{nom})$
      $: \lambda P_{iv} \lambda x \ show\_signs\_of'(want'(P'_{iv}x)x)x$

  b.

Ken ga	Naomi wo	machi	ta $-$ gat $-$ ta
NP_{nom}	NP_{acc}	$(S \backslash NP_{nom}) \backslash NP_{acc}$	$(S \backslash NP_{nom}) \backslash (S \backslash NP_{nom})$

$$\frac{NP_{acc} \quad (S \backslash NP_{nom}) \backslash NP_{acc}}{S \backslash NP_{nom}}< \quad (S \backslash NP_{nom}) \backslash (S \backslash NP_{nom})$$
$$\frac{\qquad\qquad\qquad\qquad}{S \backslash NP_{nom}}<$$
$$\frac{NP_{nom} \qquad\qquad S \backslash NP_{nom}}{S}<$$

The remarkable difference on the derivations between (33) and (34) is the valence of the matrix predicate. The former *urayamasi-gar(u)* involves an accusative NP, but the latter *ta-gar(u)* does not. It is also involved in the embedded predicate *machi*.

Based on this difference, we can account for the difference between *ga*-desideratives and *wo*-desideratives in terms of passivizability. Since *gar(u)*-verbalization in the case of both stative predicate and *ga*-desideratives take a lexically derived predicate, the whole complex predicate can be passivized through the promotion of the object NP of the predicates. *Wo*-desideratives, on the other hand, involve VP-embedding structure. The object NP cannot be the target of the passivization, since it is located within the valence of embedded stem verb where the passive morpheme or particle cannot access. This is why the passivizability difference exists.

5. Some Implications of the Present Approach

5.1. The Range of Adverbials and Monoclausality

One prediction resulting from our approach is that simple stative predicates should allow the same range of adverbials as *ga*-desideratives. In Section 2, we discussed that adverbials modifying the stem verb alone are restricted in the case of *ga*-desideratives. The crucial data is repeated below:[8]

(35) a.(?)* Boku-wa eego-ga   { asita-kara   / tonari-no heya-de} hanasi-tai.
          I-TOP   English-NOM   tomorrow-from   next-GEN room-LOC speak-want

      'I want to speak English {from tomorrow / in the next room}.'

    b.??{ Asita-kara   / tonari-no heya-de} boku-wa eego-ga   hanasi-tai.
         tomorrow-from   next-GEN room-LOC I-TOP   English-NOM speak-want

      'I want to speak English {from tomorrow / in the next room}.'

This restriction is also observed in the case of simple stative predicate. See (36) below:

(36) a.*Ken-wa Naomi-ga   { asita-kara   / tonari-no heya-de} urayamasii.
        Ken-TOP Naomi-NOM   tomorrow-from   next-GEN room-LOC envious

      'Ken is envious of Naomi {from tomorrow / in the next room}.'

    b.*{ Asita-kara   / tonari-no heya-de} Ken-wa Naomi-ga   urayamasii.
        tomorrow-from   next-GEN room-LOC Ken-TOP Naomi-NOM envious

      'Ken is envious of Naomi {from tomorrow / in the next room}.'

The unacceptability shown in (36) also cannot be attributed to constituency as Sugioka (1984) and Sells (1990) assume because the predicate has the status of a single word syntactically. In addition to this, time and place adverbials cannot co-occur with stative predicate in general. Thus, not only the nominative case-marking of an object NP but also the incompatibility of such adverbials support the analysis that the *ga*-desiderative sentence involves a lexically derived stative predicate, which consists of the derivational morpheme *ta(i)*.

The restriction on adverbial modification of the stem verb is also reflected in the lack of the ambiguity of adverbial scope interpretation in *ga*-desideratives (Matsumoto 1996). Consider (37) below:

(37) a. Boku-wa zutto   sono ko-wo   dakisime-takat-ta.
        I-TOP   for.a.long.time the   child-ACC embrace-want-PAST

      '(i) For a long time, I wanted to embrace the child.'
      '(ii) I wanted to embrace the child for a long time.'

    b. Boku-wa zutto   sono ko-ga   dakisime-takat-ta.
       I-TOP   for.a.long.time the   child-NOM embrace-want-PAST

      '(i) For a long time, I wanted to embrace the child.'

The *wo*-desiderative sentence in (37a) is ambiguously interpreted, with *zutto* 'for a long time' modifying either the desire to embrace the child, interpreted as (i) or the action of embracing a child, interpreted as (ii). The *ga*-desiderative sentence in (37b), on the other hand, does not allow such ambiguity. The time adverb can only be interpreted as indicating the duration of the desire to embrace the child, interpreted as (i).

---

[8] Compared with (35b), (35a) sounds worse because of a surface constraint disfavoring a long distance interruption between a nominative object and a stative predicate. See fn. 3.

5.2.Constituency Tests

Japanese has a structure corresponding to English *do*-support. It is triggered by emphatic particle *mo* 'also'. *Mo* can be attached to the stem of desiderative predicate, but when this happens, an interesting difference turns up between *ga*- and *wo*-desideratives. See (38) below:

(38) a. Boku-wa hurui kitte-{ga/wo}   atsume-tai-kedo,   okane-ga   nai.
        I-TOP   old   stamp-NOM/ACC collect-want-although money-NOM have.no

        'Although I want to collect old stamps, I have no money.'

     b. Boku-wa hurui kitte-{(?)?ga/wo} atsume-mo si-tai-kedo,   okane-ga   nai.
        I-TOP   old   stamp-NOM/ACC collect-also do-want-although money-NOM have.no

        'Although I also want to collect old stamps, I have no money.'

As shown in (38b), the emphatic particle *mo* and the supportive *s(u)* 'do' can intervene between the stem verb and the desiderative suffix only in the *wo*-desiderative.

   The differing pattern of the verbal anaphora in the two types of desideratives also provides support for the analysis in which the two types of desiderative predicates exist. Consider (39):

(39) Boku-wa hurui kitte-{?ga/wo}   atsume-takat-ta.   Naomi-mo soo si-takat-ta   rasii.
     I-TOP   old   stamp-NOM/ACC collect-want-PAST Naomi-too so do-want-PAST seem

     'I wanted to collect old stamps, and Mary seems to have wanted to do so, too.'

The desiderative predicate with an accusative object, i.e., *wo*-desiderative in (39) allows the replacement of the complement predicate and its argument by *soo suru* 'do so', but this is not fully possible with those when there is a nominative object, i.e., the *ga*-desiderative.

   Asymmetries in the two types of desideratives with these putative 'coordinated VPs' as in (40) provide further support for the present approach (Sugioka 1984):

(40) a.*Boku-wa [koohii-ga   non-de   ][keeki-ga   tabe]-tai.
        I-TOP   coffee-NOM drink-GER   cake-NOM eat-want

     b.*Boku-wa [koohii-ga   non-de   ][keeki-wo   tabe]-tai.
        I-TOP   coffee-NOM drink-GER   cake-ACC eat-want

     c.?Boku-wa [koohii-wo   non-de   ][keeki-ga   tabe]-tai.
        I-TOP   coffee-ACC drink-GER   cake-NOM eat-want

     d. Boku-wa [koohii-wo   non-de   ][keeki-wo   tabe]-tai.
        I-TOP   coffee-ACC drink-GER   cake-ACC eat-want

        'I want to drink coffee and eat cake.'

In (40) above, only *wo*-desideratives allow coordination.

   The data (38)-(40) suggest that the *ga*-desiderative predicate as a whole is morphologically a single word where it is not possible to separate the two morphemes by inserting a particle, replacing and coordinating only its stem verb. The *wo*-desiderative, on the other hand, has no such restrictions. These observations support for the present analysis, whereby the *wo*-desiderative predicate subcategorizes for a syntactic complement structure, while the *ga*-desiderative predicate is a lexically derived word.

6.   Concluding Remarks

The Japanese desiderative construction has been claimed to have a complex structure at some abstract level of the representation in spite of its morphological one-word status of the predicate. In this paper we have conducted a detailed examination of the constructions with the main focus on the suffix *ta(i)*, and then have made the argument that there are two types of *ta(i)*, a morpheme suffixed to the stem verb and a particle which adjoins to VP. The object argument of such complex predicates is marked with nominative *ga* or accusative *wo*, respectively. Building on the CCG analysis proposed, we also discussed the difference of *ga*- and *wo*-desideratives in terms of adverbial modification and passivizability. We believe that our study will be helpful to explore other complex predicates at which only few attempts have so far been made.

References

Baker, M. C. 1988. *Incorporation: A Theory of Grammatical Function Changing.* University of Chicago Press.

Inoue, K. 1989a. Shugo to Bun-koosei ('The Subject and Sentence Structure'). In K. Inoue, ed., *Nihon Bunpoo Shoo-jiten ('A Small Dictionary for Japanese Grammar')*, pp. 79-101. Taishukan, Tokyo..

Inoue, K. 1989b. Shugo no Imi-yakuwari to Kaku-hairetsu ('Semantic Roles of Subject and Case Arrangement'). In Kuno, S. and M. Shibatani, eds., *Nihongogaku no Shintenkai ('New Developments in Japanese Linguistics')*, pp. 130-147. Kuroshio Publishers, Tokyo.

Kageyama, T. 1982. Word Formation in Japanese. Lingua, 57, 215-258.

Kuno, S. 1973. *The Structure of the Japanese Language*. The MIT Press.

Kuno, S. 1983. *Sin-Nihon Bunpoo Kenkyuu ('New Study of Japanese Grammar')*. Taishukan, Tokyo. In Japanese.

Matsumoto, Y. 1996. *Complex Predicates in Japanese: A Syntactic and Semantic Study of the Notion 'Word'*. CSLI Publications.

Nishigauchi, T. 1993. Long Distance Passive. In N. Hasegawa, ed., *Japanese Syntax in Comparative Grammar*, pp. 79-114. Kuroshio Publishers, Tokyo.

Sells, P. 1990. VP in Japanese: Evidence from *-Te* Complements. In Hoji, H. ed., *Japanese/Korean Linguistics,* Vol.1, pp. 79-114. CSLI Publications.

Shibatani, M. 1978. *Nihongo no Bunseki: Seiseibunpoo no Hoohoo ('An Analysis of Japanese: The Method of Generative Grammar')*. Taishukan, Tokyo. In Japanese.

Steedman, M. 1996. *Surface Structure and Interpretation*. The MIT Press.

Steedman, M. 2000. *The Syntactic Process*. The MIT Press.

Sugioka, Y. 1984. *Interaction of Derivarional Morphology and Syntax in Japanese and English*. Ph.D. thesis, University of Chicago.