

Some Notes on the Reflexive Verb Construction in Japanese*

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1. Introduction

Although the so-called *zi*-verb construction in Japanese, where the reflexive prefix *zi*- ‘self’ attaches to a Sino-Japanese verbal noun stem (= VN) *suru* ‘do,’ has received some attention in the literature (e.g. Tsujimura and Aikawa 1999 (= T&A), Kishida and Sato 2012 (= K&S)), the researchers have reached conflicting conclusions over its syntactic properties.¹

In Noguchi (2013), I surveyed some of the issues involved in the construction. The goal of this paper is to follow up on the analysis I presented there, in which I argued that the *zi*-verb construction divides into two types—either lexically or syntactically formed. I will slightly modify the proposal vis-à-vis the so-called light verb construction in the sense of Grimshaw and Mester (1988). I will also discuss the construction from the general perspective of reflexivity, by exploring the way the properties exhibited by the *zi*-verb construction are accommodated into the reflexive system of Japanese.

I will make a brief summary of the previous accounts suggested by T&A and K&S in Section 2. I will make an alternative proposal in Section 3 and turn to the more general discussion of reflexivity in Section 4. The paper concludes in Section 5.

2. Previous Accounts

In this section, I will briefly summarize the proposals made by T&A and K&S and clarify what is at issue behind the *zi*-verb construction in Japanese.

T&A’s basic proposal is to classify the construction into two types, i.e. the unaccusative and the inalienable types. This is illustrated by the following examples:²

(1) Unaccusative Type (T&A: 30)

a. Taroo-ga *zi*-ritu-si-ta.

Taro-Nom self-establish-do-Past ‘Taro established himself.’

b. Hanako-ga *zi*-satu-si-ta.

Hanako-Nom self-kill-do-Past ‘Hanako killed herself.’

(2) Inalienable Type (T&A: 35)

a. Taroo-ga hankoo-o *zi*-kyoo-si-ta.

Taro-Nom crime-Acc self-confess-do-Past

‘Taro confessed his own crime(s).’

- b. Hanako-ga musuko-o zi-man-si-ta.

Hanako-Nom son-Acc self-boast-do-Past

‘Hanako boasted (about) her own son.’

The major characteristics of the unaccusative type is that it does not cooccur with an overt object (T&A: 30).

- (3) a. *Taroo-ga sigoto-o zi-ritu-si-ta.

Taro-Nom career-Acc self-establish-do-Past

‘Taro established his career.’

- b. *Hanako-ga Ziroo-o zi-satu-si-ta.

Hanako-Nom Jiro-Acc self-kill-do-Past

‘Hanako self-killed Jiro.’

T&A argue that the unaccusativity of *zi*-verbs like *zi-ritu-suru* ‘self-establish’ and *zi-satu-suru* ‘self-kill’ in (1) can be revealed by means of diagnostics such as resultative predication and numeral quantifiers.

- (4) a. Taroo-ga rippa-ni zi-ritu-si-ta. (T&A: 27)

Taro-Nom finely self-establish-do-Past

‘Taro established himself well.’

- b. Kyonen gakusei-ga [_{VP} abekku-de zyuu-nin zi-satu-si-ta]. (T&A: 33)

last.year students-Nom in.pairs 10-Cl self-kill-do-Past

‘10 students killed themselves in pairs last year.’

In (4a), the result state denoted by the predicate *rippa* ‘fine’ is predicated of the subject and in (4b), the numeral quantifier is construed with the subject *gakusei* ‘students.’ These facts suggest that the subject in (4) originates in the direct object position (cf. Miyagawa 1989, Tsujimura 1990a,b). According to T&A, in addition to *zi-ritu-suru* and *zi-satu-suru*, verbs like *zi-kai-suru* ‘self-destroy,’ *zi-ten-suru* ‘self-rotate,’ *zi-tyoo-suru* ‘laugh at oneself,’ and so on belong to this type, whereas verbs like *zi-nin-suru* ‘self-admit’ and *zi-san-suru* ‘self-praise’ belong to the inalienable type.

K&S critically review T&A’s analysis of the construction based on unaccusative type *zi*-verbs, which they call “objectless *zi*-verbs,” and argue that the construction can be associated with a full range of transitivity properties.

- (5) a. Transitive: *zi-satu-suru* ‘kill oneself,’ *zi-ritu-suru* ‘establish oneself’

- b. Unergative: *zi-sui-suru* ‘cook for oneself,’ *zi-syuu-suru* ‘study for oneself’

- c. Unaccusative: *zi-kai-suru* ‘collapse by oneself,’ *zi-ten-suru* ‘rotate by oneself’

K&S’s basic point is that the unaccusativity diagnostics T&A use are the tests of internal argumenthood and as such are independent of the presence/absence of an external argument. K&S instead use diagnostics such as the accusative case marking on VNs, passivized causativization, V-V compounds headed by a subject control verb for external argumenthood

and the resultative interpretation in the *-teiru* construction and the *kake*-modification for internal argumenthood. (See K&S for discussions and references.) This leads them to the claim that VNs such as *zi-satu* ‘kill oneself’ and *zi-ritu* ‘establish oneself,’ both of which are categorized as unaccusative by T&A, are transitive instead. Although I do not go into the details of K&S’s account here (see Noguchi 2013), I will assume that this is basically correct, although I also assume that T&A’s inalienable type should be included in the transitive type.³

(6) Transitive: *zi-satu-suru*, *zi-ritu-suru*; *zi-kyoo-suru*, *zi-man-suru*

Unergative: *zi-sui-suru*, *zi-syuu-suru*

Unaccusative: *zi-kai-suru*, *zi-ten-suru*

Note that, as I pointed out in Noguchi (2013), K&S’s use of the term “objectless *zi*-verbs” for the *transitive* as well as intransitive use of *zi*-verbs is rather misleading, and this problem does not arise under the current proposal: *zi*-verbs are simply transitive, unergative, or unaccusative.

K&S’s claim that I would like to take up in this paper is their claim that the internal argument of transitive *zi*-verbs is mapped onto the direct object position and is “obligatorily incorporated into the verbal complex due to its affixal nature” (p. 214). Specifically, they argue that the correspondence between the lexical semantics of the transitive *zi*-verb construction and its syntactic realization is parallel to that of *zibun* anaphora. (The following examples are slightly adapted from K&S (p. 214) and the judgment is theirs.)

(7) a. John-ga *zi-satu-si-ta*.

John-Nom self-killing-do-Past

b. John-ga *zibun-o korosi-ta*.

John-Nom self-Acc kill-Past (a-b) ‘John killed himself.’

Thus, K&S argue that the morpheme *zi-* is based-generated in the direct object position just like *zibun* and is incorporated into the VN because it is affixal. I will return to this point in Section 4 and show that this analysis is misguided.

3. The Reflexive Verb Construction and the Light Verb Construction

Since the *zi*-verb construction has the light verb *suru* in the sense of Grimshaw and Mester (1988) as one of its core ingredients, we have to ensure that it is compatible with the general characteristics of the *suru* construction. The general characteristics of the *suru* construction are rather elusive, however. Opinions divide as to whether the VN+*suru* complex is formed in the lexicon (cf. Miyagawa 1987), in the overt syntax (cf. Kageyama 1982, 1993), or at LF (cf. Saito and Hoshi 2000 (= S&H)).

An examination of the behavior of the *zi*-verb construction suggests that a mixed version of these proposals seems to be on the right track: some types of verbal complex show the behavior characteristic of items formed in the lexicon, while the other types of verbal complex show the behavior characteristic of items formed in the overt syntax or at LF. Specifically, I argue that the lexical analysis presented by Miyagawa (1987) is correct for the unaccusative *zi*-verbs, whereas

the syntactic analysis presented by Kageyama (1982, 1993) holds for the unergative/transitive types, but in order to accommodate the accusative-marked *zi*+VNs, incorporation at LF as proposed by S&H is needed as well. In this section, I will elaborate on what kind of facts lead us to this approach to the phenomena.

The picture I have in mind for the *zi*-verb construction is schematized below, here focusing on the overt syntactic representations. I assume for the sake of argument that the subject moves to Spec TP, but abstract away from the question of whether the verbal complex attaches to T.

(8) a. Unaccusative

[_{TP} ____ [_{VP} DP *zi*+VN+suru] T] →
 [_{TP} DP_i [_{VP} t_i [*zi*+VN+suru]_V] T] (Overt Syntax)

b. Unergative/Transitive

[_{TP} ____ [_{VP} DP [_{VP} [_{DP} *zi*+VN] suru] Ø] T] →
 [_{TP} DP_i [_{VP} t_i [_{VP} [_{DP} t_{VNj}] t_{Vj}] [*zi*+VN+suru+Ø]_{Vj}] T] (Overt Syntax)

The unaccusative verbal complex is formed in the lexicon and inserted into the main verb position “as is,” while the *zi*+VN complex and the main verb stem are inserted separately in the case of unergative and transitive verbs. This type of non-uniform treatment may at first look undesirable on the general grounds of parsimony. There is, however, evidence to suggest that there are indeed two types of *suru*. Consider the following examples from Miyagawa (1987: 39):

(9) a. Taroo-ga benkyoo-si-ta-no-wa suugaku-da.

Taro-Nom study-do-Past-Nml-Top math-Cop
 ‘What Taro studied was math.’

b. Taroo-ga si-ta-no-wa suugaku-no benkyoo-da.

Taro-Nom do-Past-Nml-Top math-Gen study-Cop
 ‘What Taro did was study of math.’

These sentences are interpreted in a different manner. As Miyagawa notes (p. 40), (9a) means that “of the possible things that Taro could have studied, Taro studied math,” whereas (9b) means that “of all the things Taro could have done, he engaged in the study of math.” It should be noted that (9b), but not (9a), involves the verb *suru* as a θ -role assigner. In Miyagawa’s terms, the verb *suru* in (9a) is “purely a verbalizer, with no theta-role assigning capability” (p. 38).

In (9a), the verbal complex has the VN stem *benkyoo* ‘study.’ This type of VNs can have an accusative Case marker, and thus has the unergative/transitive syntax as illustrated in (10).

(10) a. Taroo-ga (suugaku-no) benkyoo-o si-ta.

Taro-Nom math-Gen study-Acc do-Past ‘Taro did a study of math.’

b. Taroo-ga (piano-no) rensyuu-o si-ta.

Taro-Nom piano-Gen practice-Acc do-Past
 ‘Taro did practice on the piano.’

As pointed out by Miyagawa (1987, 1989) and Tsujimura (1990a,b), there is a class of items that does not have the same characteristics. Miyagawa (1989: 664) lists the following VNs:

(11) a. tanzyoo ‘birth’ : tanzyoo-suru/?*tanzyoo-o suru

- b. kaitoo ‘thaw’ : kaitoo-suru/?*kaitoo-o suru
- c. zyoohatu ‘evaporation’ : zyoohatu-suru/?*zyoohatu-o suru
- d. tootyaku ‘arrival’ : tootyaku-suru/?*tootyaku-o suru
- e. ryuukoo ‘popularity’ : ryuukoo-suru/?*ryuukoo-o suru

As the researchers point out, these items are all nonagentive and unaccusative.

When we turn to *zi*-verbs, the following nonagentive VNs show the similar pattern (cf. K&S):

- (12) a. *zi-kai-suru*/**zi-kai-o suru* ‘collapse’
- b. *zi-ten-suru*/**zi-ten-o suru* ‘rotate’
- c. *zi-sei-suru*/**zi-sei-o suru* ‘grow’

In contrast, the following items exhibit the behavior similar to that of *benkyoo-suru* ‘study’ (cf. K&S):

- (13) a. *zi-satu-suru*/*zi-satu-o suru* ‘kill oneself’
- b. *zi-ritu-suru*/*zi-ritu-o suru* ‘establish oneself’
- c. *zi-sui-suru*/*zi-sui-o suru* ‘cook for oneself’
- d. *zi-syuu-suru*/*zi-syuu-o suru* ‘study for oneself’

Clearly, these verbs are all agentive. As Miyagawa (1989) and Tsujimura (1990a,b) have demonstrated, this contrast falls under Burzio’s Generalization (Burzio 1986): a predicate that does not assign a θ -role to its external argument does not assign accusative Case.⁴

The analysis I proposed in Noguchi (2013) and would like to slightly modify in what follows is that the properties exhibited by these data point to the mixed system as indicated in (8). The unergative/transitive *zi*-verbs are incorporated into the main verb *suru*, which is in turn supported by the little verb *v*, whereas the unaccusative *zi*-verbs are formed in the lexicon and base-generated as such, which I take to be the null hypothesis, given the unaccusative hypothesis proposed by Perlmutter (1978) and Burzio (1986), and their internal argument is base-generated in the direct object position. Note that this analysis is not allowed in the uniform treatment of the *suru* construction. The uniform syntactic analysis advocated by Kageyama (1982, 1993) has a problem in base-generating the internal argument of unaccusative VNs since it is the verbal complex that occupies the direct argument position. The only possibility is to generate it within the object, which is clearly not a desirable move.⁵

A similar remark applies to the LF incorporation approach advocated by S&H, who propose to base-generate the internal argument of the unaccusative VN in a V'-adjoined position simply because the verbal noun occupies the direct object slot. Again, this contradicts the general insight behind the unaccusative hypothesis.

I mention here another problem with S&H. They follow Chomsky (1995) in assuming that both D-structure and S-structure are eliminated from the levels of syntactic representations, and this leads them to the claim that the θ -Criterion is an interface condition applying at LF. They state that “[t]he only requirement on θ -roles...is that they be properly assigned at LF” (p. 268). According to S&H, this requirement in effect drives incorporation of a VN stem into the main verb *suru* at LF. I do not intend to take issue on this point. However, they move on to make

the following claim. Since they assume that D-structure does not exist to which the θ -Criterion applies, arguments of a predicate do not have to occupy a θ -position until the derivation reaches LF. Consider the following example:

(14) (= S&H's (52))

Mary-ga John-ni/e [_{NP} toti-no zyooto]-o si-ta.
 Mary-Nom John-to/-to land-Gen giving-Acc do-Past
 'Mary gave a piece of land to John.'

If the subject *Mary-ga* is base-generated in Spec VP, as is standardly assumed, then it does not receive a θ -role in that position because the θ -role assigner is inside an object NP. This violates the following condition:

(15) (= S&H's (51))

An argument NP cannot move from a non- θ position to a Case position.

They argue that this condition is independently necessary to explain the ungrammaticality of the following example:

(16) (= S&H's (45a))

?*Ya-ga mato-ni [_{NP} meityuu]-o si-ta.
 arrow-Nom target-to strike-Acc do-Past
 'The arrow struck the target.'

As mentioned above, the argument of an unaccusative VN is base-generated as a V' adjunct, and this violates their condition in (15). (S&H (p. 282) assume that the same problem does not arise if the VN incorporates overtly, as in *Ya-ga mato-ni* [_{NP} *t_i*] *meityuu_i-si-ta*, where the subject is θ -marked when it moves.) S&H are thus led to conclude that the subject of unergative/transitive predicates is directly base-generated in Spec TP, in contradiction to the VP-internal subject hypothesis. Thus, S&H's argument sharply conflicts not only with the unaccusative hypothesis but also with the VP-internal subject hypothesis. This is unfortunate, since, as I mentioned, their basic assumptions concerning the interpretive mechanism behind the *suru* construction are plausible on theoretical grounds. I will try to incorporate their insight into my analysis of the *zi*-verb construction below.

One might raise an objection to the current proposal by bringing in the fact that the unaccusative *zi*-verb construction may have its argument saturated within the DP.

(17) [_{DP} Tatemono-no zi-kai]-ga hazimat-ta.

Building-Gen self-destroy-Nom start-Past
 'The building started to collapse.'

Here, the sole argument of the VN form is realized within the DP, as expected under Tsujimura's (1990b) analysis. This fact does not pose any problem to the current proposal, however. The *zi*+VN complex here behaves as a head of an NP and as such can project its argument inside the NP, as is the case with *the growth of tomatoes* in English and its Japanese counterpart *tomato-no seetyoo*, for example. What is important is that the DP in question cannot enter into the *suru* construction, unless the argument of the unaccusative VN is realized *outside* the object position.

- (18) a. *Tatemono-no zi-kai(-o) si-ta.
 building-Gen self-destroy(-Acc) do-Past
 b. Tatemono-ga zi-kai(*-o) si-ta.
 building-Nom self-detroy(-Acc) do-Past
 (a-b) ‘The building collapsed.’

This is correctly captured by the current proposal: the unaccusative *zi*+VN+*suru* must be base-generated as a main verb and its argument is base-generated in the object position in accordance with the unaccusative hypothesis. Thus, (17) is not a counterexample to the current proposal; it can rather be taken as support to the current analysis of the unaccusative *zi*-verb construction.

The unergative/transitive type is completely different in this respect: the type of structure represented in (8b) has an alternant where the *zi*+VN itself stays in situ and is assigned an accusative marker, in which case its internal argument is assigned a genitive Case.⁶

- (19) a. Hanako-ga [musuko-no zi-man]-o si-ta.
 Hanako-Nom son-Gen self-boast-Acc do-Past
 b. Hanako-ga [musuko t_i]-o zi-man_i-si-ta.
 Hanako-Nom son-Acc self-boast-do-Past
 (a-b) ‘Hanako boasted about her son.’
 (20) a. Hanako-ga [yuusyoku-no zi-sui]-o si-teiru.
 Hanako-Nom supper-Gen self-cook-Acc do-Prog
 b. Hanako-ga [yuusyoku t_i]-o zi-sui_i-si-teiru.
 Hanako-Nom supper-Acc self-cook-do-Prog
 (a-b) ‘Hanako is cooking supper for herself.’

The *zi*+VN complex in (19-20b) incorporates into the main verb *suru* in the overt syntax, keeping the Case-assigning potential of the main verb intact. This is generally the case with the possessor raising structure (cf. Baker 1988).

- (21) Mohawk (Baker 1988: 20)
 a. Ka-rakv ne sawatis hrao-nuhs-a?
 3N-be.white Det John 3M-house-Suf
 b. Hrao-nuhs-rakv ne sawatis.
 3M-house-be.white Det John (a-b) ‘John’s house is white.’

Turning to the examples in (19-20a), I argue that this is the case where LF incorporation in the sense of S&H applies. Here, the *zi*+VN incorporates into the main verb *suru* at LF. The problem I pointed out for S&H concerning the VP-internal subject hypothesis does not arise, because I assume that the subject originates in Spec vP as in Chomsky (1995). If we also assume with S&H that the θ -Criterion is an interface condition applying at LF, the facts in (19-20a) follow: the *zi*+VN incorporates into *suru* and further into the little *v* at LF. I do not adopt S&H’s claim that VNs are not associated with an external argument, however. The following examples suggest that the exact nature of an external argument depends on the thematic properties of the VN.

- (22) Taroo-ga ude-no kosettu-o si-ta.

Taro-Nom arm-Gen fracture-Acc do-Past ‘Taro broke his arm.’

While the VNs assign an agent role to the external argument in (19-20a), the external argument in (22) has an experiencer role. Thus, it is necessary for an external argument to wait until LF in order to have its thematic properties properly identified.

LF incorporation is also necessary in order to account for the fact that the VN can have an argument in addition to the internal theme argument and the external agent argument, as in S&H’s (14) above. This type of facts is exactly what originally motivates Grimshaw and Mester’s (1988) *argument transfer*, but as pointed out by many researchers, it is a descriptive mechanism that must be captured by an independently-motivated one. LF incorporation does just that.

Thus, the pattern as illustrated in (8b) has in fact two realizations, i.e. in the overt and covert components. The *zi*+VN complex can leave its base-generated position in the overt syntax, in which case the remnant element, if there is any, is accusative-marked. The *zi*+VN complex can stay in its original position in the overt syntax, in which case it is accusative-marked. The fact that sentences in (19) and (20) are paraphrases of each other needs to be captured on general theoretical grounds, which is achieved only if the sentences in (19-20a) involve incorporation at LF.⁷

Thus, the overall pattern exhibited by the *zi*-verb construction falls out quite naturally under the current proposal. One might wonder why the *zi*-verb construction (or the *suru* construction for that matter) splits into the patterns as characterized in (8). My answer to this is that the VN base has the general characteristics of nouns (cf. Miyagawa 1987) and it behaves syntactically as such, i.e. base-generated as an object, as a default case. The unaccusative VN base, however, has to discharge its internal θ -role in a direct object position. This conflict can only be resolved by making it a part of a verbal complex in the lexicon, i.e. by verbalizing it with the help of a verbalizer *suru*. Japanese makes full use of the resources available in the grammar in order to fit verbal nouns into the clausal architecture and the verb *suru* plays a big role in doing it either lexically or syntactically.⁸

4. Reflexivity of *Zi*+VNs

In order to understand the nature of the reflexive verb construction as I call it, I need to discuss it in a more general context. In this section, I would like to discuss the nature of *zi*+VN predicates in relation to the reflexive system of Japanese. Let us return to K&S’s examples in (7), repeated here as (23).

(23) a. John-ga zi-satu-si-ta.

John-Nom self-killing-do-Past.

b. John-ga zibun-o korosi-ta.

John-Nom self-Acc kill-Past (a-b) ‘John killed himself.’

Although K&S claim that these sentences are paraphrases, this is not a correct observation. As already pointed out by Oshima (1979), two-place predicates can be divided into two types

as to whether they allow a local binding of *zibun*, and the verb *korosu* ‘kill’ is not the kind of predicates that have that option. Consider the following contrast:

- (24) a. John-ga zibun-o bengo-si-ta.
 John-Nom self-Acc defend-do-Past ‘John defended himself.’
 b. John-ga zibun-o seme-ta.
 John-Nom self-Acc blame-Past ‘John blamed himself.’
- (25) a. *John-ga zibun-o arat-ta.
 John-Nom self-Acc wash-Past ‘John washed himself.’
 b. *John-ga zibun-o korosi-ta.
 John-Nom self-Acc kill-Past ‘John killed himself.’

As Oshima (1979) observes, we have to resort to strategies other than *zibun* to indicate what is intended by (25), i.e. the *zi*-verb construction as in (23a) or the use of a body-part noun as in (26).

- (26) John-ga karada-o arat-ta.
 John-Nom body-Acc wash-Past
 ‘John washed (his body).’

I noted in Noguchi (2013) that this pattern is quite generally the case with reflexive anaphora in local contexts: body-part nouns such as *karada* ‘body,’ *mi* ‘body’ and the *zi*+VN usually block the reflexive use of *zibun*. To the extent that (23b) is allowed, it is only taken to mean ‘John suppressed his feelings,’ as noted by Hoji (1990: 193). Hoji also points out that while (25a) is disallowed, the following sentence is perfect.

- (27) John-wa (zibun-de) zibun-o kiyome-ta.
 John-Top (self-by) self-Acc purify-Past
 ‘John purified himself.’

As indicated by the phrase in parentheses, *zibun* in this example is more naturally interpreted as a focus anaphor at least for the current author; the sentence can be a natural response to a question like *John-wa dare-o kiyome-ta-no?* ‘Who did John purify?’ If no such contexts are given, then the use of *mi* or *karada* is more natural.

- (28) John-ga mi/karada-o kiyome-ta.
 John-Nom body-Acc purify-Past ‘John purified himself.’

The use of body-part expressions is to a large extent idiosyncratic, as one might have noticed. Consider also the following examples:

- (29) a. mi-o kogasu ‘torment oneself’
 b. mi-o sasageru ‘devote oneself’
 c. mi-o tukusu ‘devote oneself’
 d. mi-o katameru ‘get married’

These expressions are more or less idiomatic and are considered as frozen forms that have survived in the history of Japanese.⁹

Despite the observation I made in Noguchi (2013), the use of *zibun* or *zibun-zisin* is not always blocked.

- (30) a. *zibun(-zisin)-o kogasu* ‘burn oneself’
 b. *zibun(-zisin)-o sasageru* ‘offer oneself’
 c. **zibun(-zisin)-o tukusu*
 d. *zibun(-zisin)-o katameru* ‘make oneself solid’

It is clear from the translation, however, that these expressions are not equivalent to those in (29). Here, the use of *zibun* or *zibun-zin* is allowed only if it contributes to the literal sense of the predicate; (30c) is unacceptable because the literal meaning of the verb *tukusu* is ‘consume’ and one cannot consume oneself. The observation made in Noguchi (2013) must therefore be slightly modified along the following lines: body-part expressions and idiomatic phrases block the use of *zibun(-zisin)* only if the intended meaning is identical.

As this discussion suggests, the reflexive anaphora in coargument contexts in Japanese is rather delicate and has to be investigated with great care. Although it is beyond the scope of the present work to fully investigate the issue, I believe that the discussion so far points to the direction we should take. I would like to list some further properties of reflexive verb constructions that have to be accommodated into the overall picture.

First, the reflexive verb construction is not limited to the *suru* construction. Consider the following examples:

- (31) a. *zi-sin-o motu/eru/usinau* ‘have/gain/lose self-confidence’
 b. *zi-ti-o okonau* ‘manage self-government’
 c. *zi-bara-o kiru* ‘pay the bill by oneself’
 d. *zi-sei-o motomeru* ‘demand self-restraint’

The *zi*+VN stem is used as an object of a variety of verbs, including the verb *motomeru* ‘demand’ in (31d), where its external argument is realized as a goal argument in the clause.

- (32) Taro-ga Ziroo-ni zi-sei-o motome-ta.
 Taro-Nom Jiro-to self-restraint-Acc demand-Past
 ‘Taro demanded that Jiro show self-restraint.’

This is because the verb *motomeru* is a three-place predicate and can assign a goal θ -role independent of the VN.

- (33) Taro-ga Ziroo-ni syooko-o motome-ta.
 Taro-Nom Jiro-to evidence demand-Past ‘Taro asked Jiro for evidence.’

Thus, the anaphoric relation that holds between the goal argument and the *zi*+VN in (32) does not seem to be syntactically encoded.

Second, reflexivity does not have to be overtly marked. This point at least dates back to Jespersen (1933: 111).

- (34) I washed, dressed and shaved, and then felt infinitely better.

Jespersen remarks that “[t]here is a tendency to get rid of these pronouns [= reflexive pronouns—TN] whenever no ambiguity is to be feared.” This point is taken up by Reinhart and Reuland (1993) (= R&R), who try to provide a theoretical framework that substantiates Jespersen’s insight. Reinhart and Siloni (2005) go a step further and propose that an operation of reflexivization

bundling applies to the θ -grids of verbs such as *wash*, *dress* and *shave*, which operates on two-place predicates and bundles an external and an internal argument into a θ -role amalgam $[\theta_i-\theta_j]$.¹⁰ (See also Chierchia 2004, Reuland 2011.) What these works have shown is that reflexivity is a property of predicates. If predicates can denote reflexivity on their own, it is not necessary to add any extra marker to them. Thus, I believe that R&R's (1993) claim that reflexive predicates must be either reflexive-marked by a SELF morpheme or inherently reflexive captures the essence of the notion of reflexivity.

Although the notion of inherent reflexivity in Japanese has not become the target of much discussion in generative literature (cf. Aikawa 1993), we have already seen in the contrast between (24) and (25) that this deserves careful attention. Some work in Japanese linguistics (cf. Takahashi 1975, Nitta 1982, Katayama 2005) has already paid much attention to this issue. Takahashi (1975) and Nitta (1982) are seminal work on the notion of reflexivity in Japanese; the latter is perhaps the first to introduce the term “reflexive verb” into the grammar of Japanese. Katayama (2005) also contains an interesting discussion of verbs such as *kiru* ‘dress,’ *nugu* ‘undress,’ *haku* ‘put on’ and noun-verb combinations such as *boosi-o toru* ‘take off one’s hat,’ *netu-o dasu* ‘have a fever,’ *kokoro-o hiraku* ‘open one’s mind,’ *kuti-o toziru* ‘close one’s mouth,’ among many others. Many of these phrasal combinations contain body-part nouns, but there are also some that do not as in *boosi-o toru*. It is not the verb *toru* ‘take’ that is associated with reflexivity; for example, *bin-no futa-o toru* ‘take the cap off the bottle’ is not reflexive. Consider the following examples, some of which are taken from the references cited above:

- (35) a. kao-o araw ‘wash one’s face’
 b. ha-o migaku ‘brush one’s teeth’
 c. seikaku-o kaeru ‘change one’s characters’
 d. te-o tataku ‘clap one’s hands’
 e. ki-o usinaw ‘lose one’s consciousness’

There is clearly a sense of reflexivity in these cases, where one acts on one’s own body, has some psychological experiences, or has some feelings toward one’s own mind, even if neither a reflexive form nor an inherently reflexive predicate is used. This is truly a matter of lexical choice, but I would like to emphasize that these kinds of cases affect the entire reflexive system of Japanese and certainly should not be marginalized to the periphery of the Japanese grammar.

5. Conclusion

I have been mainly concerned in this paper with the *zi*-verb construction in Japanese. However, it has turned out that the construction is only one type of the reflexive verb construction in Japanese. I have shown that the *zi*+VN complex can be formed in the lexicon, in the overt or covert syntax, and suggested that the reflexivity of the verbal complex should be treated on a par with a variety of reflexive predicates. How such a complex system has arisen in the grammar of Japanese is something I wish to leave for future research.

Endnotes

* The research reported here was supported in part by Grants-in-Aid from Japan Society for the Promotion of Science (#22520493).

- 1 The categorial status of the verbal noun stem is a source of controversy. I assume with Miyagawa (1987) that it is syntactically a noun but semantically predicative (hence verbal). The following discussion glosses over this point, however, and I will stick to the term verbal noun (= VN), as it is useful to characterize the dual nature of the stem.
- 2 The following abbreviations are used in this paper: Acc = accusative, Cl = classifier, Cop = copula, Det = determiner, Excl = exclamative, Foc = focus, Gen = genitive, M = masculine, Mod = modal, N = neuter, Neg = negative, Nml = nominalizer, Nom = nominative, Past = past tense, Prog = progressive, Suf = suffix, Top = topic.
- 3 Details about the facts reported in (4) remain to be worked out.
- 4 Kageyama (1982: 245) points out that some type of VNs can have a nominative (rather than accusative) Case marker.
 - (i) a. Kono yane-wa ama-mori-ga suru. (→ ama-mori-suru)
 this roof-Top rain-leak-Nom do 'This roof has a bad leak.'
 - b. Watasi-wa muna-sawagi-ga suru. (→ muna-sawagi-suru)
 I-Top presentiment-Nom do 'I have an uneasy feeling.'

The current analysis treats this type of examples on a par with the accusative-marked VNs. See Kageyama (1993: 285-288), who suggests that nominative Case in (i) is an inherent Case and is generally associated with [+native] Yamato unaccusative VNs. It follows that there is no *zi*+VN that can occur in this pattern since the VN stem must be of Chinese origin.

- 5 This is in fact the proposal made by Tsujimura (1990b), who argues that the internal argument of the unaccusative VN is base-generated *within* the object argument and moves into the subject position. Note that this poses a problem for the standard version of the unaccusative hypothesis, since what is base-generated in the direct object position is the internal argument of a VN and a VN itself.
- 6 The distinction between transitive VNs and unergative VNs has to do with the question of whether an anaphoric relation obtains between the subject of the clause and the internal argument of VNs: such a relation obtains in (19), while it does not in (20). In the latter case, the reflexive *zi* is interpreted as an adjunct 'for oneself.'
- 7 On the question of how the incorporated structure is interpreted, see Noguchi (2005), Reuland (2011), and references cited there.
- 8 The three-way distinction concerning the derivation involved in the *zi*-verb construction is parallel to the claim I made in Noguchi (2010), where I argued that the reflexive form *zisin* undergoes incorporation at LF, and the reflexive prefix *ziko-* is its overt counterpart. These items as well as *zibun* all contain the reflexive morpheme *zi-*, which is itself of Chinese origin. They were all introduced to the grammar of Japanese in the Late Middle Japanese period, and in this respect are newer than body-part nouns that had been in use as early as Old Japanese. It is beyond the scope of this paper to fully integrate the results concerning *zisin* and *ziko-* into the current picture.
- 9 Phrases such as *mi-o kogasu* and *mi-o tukusu* are attested in *The Tale of Genji* written in the early 11th century. (Romanization and the chapter/section numbering are due to Shibusawa's 2003 corpus; the translation is taken from Tyler 2001.)

- (i) Kowe-ha se-de mi-wo nomi kogasu hotaru koso,
 voice-Top do-Neg body-Acc only burn firefly Foc
 ihu yori masaru omohi naru-rame. (*Hotaru* 1.5.6.)
 say than superior thought become-Mod.Excl
 ‘Rather, the firefly, who burns with an inner flame and utters no cry, is the one whose devotion passes all that words can say.’

The other combinations attested in the same novel include *mi-wo sutu* ‘abandon oneself,’ *mi-wo mamoru* ‘protect oneself,’ *mi-wo waku* ‘separate oneself,’ *mi-wo tumu* ‘pinch oneself (so that one compares one’s own circumstances to the others),’ many of which find their way into the Modern Japanese lexicon.

- 10 It is interesting to see if the *zi*+VN has the same property. But one thing to be noted is that the prefix *zi*- does not reduce accusative Case, unlike the cases discussed by Reinhart and Siloni.

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