

# Some Notes on Reflexive and Emphatic Forms in Japanese\*

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## 1. Introduction

The vocabulary in Japanese, including basic words, consists not only of native words but also of words taken from many other languages. Prominent among those that have influenced the Japanese language is of course Chinese, whose vocabulary items have penetrated deeply into the core of the language. When we look at the area of reflexive anaphora, it is almost surprising to note that even the most basic items are of Chinese origin, i.e. reflexive forms such as *zibun*, *zisin*, and *ziko*, and that forms of native origin such as pronominal *ware* and *onore*, nominal *mi* 'body' and *kokoro* 'mind,' etc. are mostly confined to idioms.

In Noguchi (2015, 2016, 2017), some issues related with these forms are addressed: how they contribute to the reflexivity of a predicate they are combined with and how they interact with the principles of grammar. An overall result is that while Sino-Japanese forms are more or less characterized in grammatical terms, native forms are relics of once productive processes of reflexivization and are associated with a variety of idiosyncratic properties. The proposal, however, has raised many issues that have still remained unresolved. The purpose of this paper is to discuss them, especially with respect to the relationship between reflexive forms and emphatic ones, and point out possible solutions.

The paper is organized in the following manner. In Section 2, the head movement analysis of *zisin* will be briefly reviewed. The main properties of the emphatic *zisin* will be presented in Section 3. We will turn to the issues concerning the ECM subject in Section 4 and discuss *zibun* anaphora in Section 5. An issue concerning reflexive anaphora in the coordinate structure will be addressed in Section 6. The paper will conclude in Section 7.

## 2. The Head Movement Analysis of *Zisin*

Let us start with the complex anaphor *zibun-zisin*. In Noguchi (2005, 2016, 2017), it was proposed that the complex anaphor *zibun-zisin* contributes to reflexivity by means of head movement of *zisin* into a verb at LF (cf. Reuland 2001, 2011).<sup>1</sup>

- (1) a. Taro-ga            zibun-zisin-o        hihan-si-ta.  
       Taro-Nom        SE-self-Acc        criticism-do-Pst

‘Taro criticized himself.’

- b. Taro-ga [[zibun-zisin] hihan-si]-ta]  
 → Taro-ga [[zibun-zisin] zisin+hihan-si]-ta]  


If head movement is a syntactic process, then it must be the case that it is subject to syntactic conditions defined in terms of notions such as c-command and locality. In cases like (1), the verb c-commands the head of its complement *zisin* and the movement is therefore legitimate; the sentence is interpreted as a proposition in which John stands in a relation of self-criticism with himself. In the works cited above, this analysis has been extended to the reflexive prefix *ziko-*; *ziko-* also undergoes head movement to a verb, although the movement here is an overt one, as we will see immediately.

Let me mention some pieces of evidence in favor of the head movement analysis of *zisin*. One piece of evidence in its favor is the fact that *zibun-zisin* is construed in a local clausal domain, unlike *zibun* which can be bound long-distance.

- (2) a. Taro<sub>i</sub>-ga [Ziro<sub>j</sub>-ga zibun<sub>i/j</sub>-o bengo-si-ta-to] omot-ta.  
 Taro-Nom Jiro-Nom SE-Acc defend-do-Pst-C think-Pst  
 ‘Taro thought that Jiro defended himself/him.’  
 b. Taro<sub>i</sub>-ga [Ziro<sub>j</sub>-ga zibun-zisin<sub>\*i/j</sub>-o bengo-si-ta-to] omot-ta.  
 Taro-Nom Jiro-Nom SE-self-Acc defend-do-Pst-C think-Pst  
 ‘Taro thought that Jiro defended himself.’

While *zibun* can be referentially anchored to the matrix argument *Taro* as well as to the embedded argument *Ziro* in (2a), the first reading is not available with *zibun-zisin* in (2b). This contrast follows immediately from the head movement analysis of *zisin*: *zisin* in (2b) reflexive-marks the embedded predicate by moving into it in the covert syntax; hence it only affects the argument structure of the embedded predicate by imposing an identity condition on it ( $x = y$ ). *Zibun*, on the other hand, is not a reflexive-marker and can be anchored to an element that is “prominent” in a discourse. (See Section 5 for discussion.) Thus, its referential potential is not necessarily confined to its local domain.

Second, while *zibun* allows a sloppy reading as well as a strict reading in the comparative construction, *zibun-zisin* only allows a sloppy reading in the same configuration.

- (3) a. Taro-ga Ziro-yorimo umaku zibun-o bengo-si-ta.  
 Taro-Nom Jiro-than better SE-Acc defend-do-Pst  
 ‘Taro defended himself better than Jiro.’  
 b. Taro-ga Ziro-yorimo umaku zibun-zisin-o bengo-si-ta.  
 Taro-Nom Jiro-than better SE-self-Acc defend-do-Pst  
 ‘Taro defended himself better than Jiro.’

The contrast follows because *zisin* reflexive-marks the verb and Condition A of the Binding Theory (cf. Reinhart and Reuland 1993) requires the predicate to be reflexive as well—the sentence involves comparison between two reflexive predicates, i.e. Taro’s self-defense and

Jiro's.<sup>2</sup> The reflexive prefix *ziko-* is similar to *zisin* and only allows a sloppy reading.<sup>3</sup>

- (4) Taro-ga      Ziro-yorimo      umaku      **ziko**-bengo-si-ta.  
 Taro-Nom      Jiro-than      better      self-defend-do-Pst  
 'Taro defended himself better than Jiro.'

The similarity between *ziko-* and *zisin* lends support to the claim made in Noguchi (2005, 2016, 2017) that *ziko-* and *zisin* are both reflexive-markers.

### 3. The Emphatic *Zisin*

This proposal is faced with several problems, however. First, there are cases where *zibun-zisin* can occur in the subject position, e.g. in a complement clause, either finite as in (5a) or non-finite as in (5b).

- (5) a. Taro<sub>i</sub>-ga      [**zibun-zisin**<sub>i</sub>-ga      erab-are-ru-to]      omot-ta.  
 Taro-Nom      SE-self-Nom      choose-Pass-Pres-C      think-Pst  
 'Taro thought that he himself would be chosen.'
- b. ?Taro<sub>i</sub>-ga      [**zibun-zisin**<sub>i</sub>-o      kasikoku]      omot-ta.  
 Taro-Nom      SE-self-Acc      smart      think-Pst  
 'Taro considered himself smart.'

If the *zisin* part of the complex form *zibun-zisin* always undergoes head movement, the sentences in (5) should be ruled out; *zisin* is a head of DP that is in a Spec position rather than in a complement position, and should be inaccessible to head movement to a higher head (cf. Baker 1988). In the works cited, it was suggested that these cases are well-formed because *zisin* can be an emphatic element (or an intensifier) and as such does not undergo head movement. The question arises, however, as to exactly what conditions regulate the distinction between the reflexive-marker *zisin* and the emphatic *zisin*.

Let us consider some of the general characteristics of emphatic forms relevant to our discussion. It is well known that reflexive forms are diachronically related to emphatic forms in many languages (cf. Faltz 1977). In the history of English, for example, the lexical item *self* was originally an emphatic adjunct in Old English, an adjective agreeing with a modified DP in  $\phi$ -features, gradually started to behave as a nominal head in Middle English, and finally came to be morphologically fused with a pronominal element in Early Modern English (cf. Van Gelderen 2000; see also Noguchi 2015 for some facts in Japanese).

The use of *self* as an emphatic form of course continues to this day. König and Siemund (2000) (henceforth, K&S) classify emphatic forms into two types—adverbial and adnominal. These are illustrated in (6) and (7) (K&S, pp. 44-45).

- (6) a. I have swept this court **myself**.  
 b. I have **myself** swept this court.
- (7) a. The Queen **herself** will come to the final.  
 b. The minister **himself** will give the opening speech.

c. Even George **himself** is against the plan.

The sentences in (6) contain an adverbial emphatic *myself*. As K&S (p. 44) demonstrate, the sentence-final emphatic in (6a) is interpreted as exclusive and “roughly paraphrasable by *alone, without help,*” while the sentence-medial one in (6b) is interpreted as inclusive and “similar in meaning to *also* or *too.*” Since these two uses do not contradict each other, it is possible to have a multiple occurrence of *myself* in a single clause (K&S, p. 44).

(8) I have **myself** swept this court **myself**.

The adnominal emphatic use as illustrated in (7) is more relevant to our current discussion, and this is similar to focus particles such as *even, also, only,* etc. K&S point out differences between these particles and adnominal emphatics in question in the following manner: “In contrast to other focus particles or focus markers, which exclude or include alternatives as possible values for the predication in their scope, adnominal intensifiers only take scope over the NP to which they are adjoined and therefore neither include nor exclude alternative values.” K&S’s proposal is given in (9).

(9) Adnominal intensifiers relate a center X (referent of the focus) to a periphery of alternative values.

Thus, in (7a), the referent of *The Queen* is related to alternative values such as her subordinates and is chosen as a center X for the predication. K&S summarize conditions that govern the relationship between center and periphery as follows. (Here X is to be understood as a center, and Y as a periphery.)

(10) *Conditions for the use of adnominal X-self:*

- a. X has a higher position than Y in a hierarchy;
- b. X is more significant than Y in a specific situation;
- c. Y is defined in terms of X;
- d. X is the center of perspective (logophoricity).

Let us return to the sentences in (5) in light of these conditions. Since *zisin* is part of the subject DP *zibun-zisin*, it is clearly adnominal, which leads us to expect that it must obey the conditions in (10). In fact, it seems plausible to assume that the form is taken to relate a center (i.e. the referent of *zibun* = Taro) to a periphery of alternatives. Thus, in (5a), Taro is a center related to a periphery of alternatives such as his classmates or colleagues, and he thought that he would be elected. The use of *zisin* in (5) is clearly emphatic in this sense and does not serve as a reflexive marker, and it does not pose any problem for the head movement analysis in (1). In other words, the complex form *zibun-zisin* is ambiguous—reflexive and emphatic. If it satisfies structural conditions such as c-command and locality, it may behave as a reflexive-marker. If it doesn’t, there is still a chance to survive as an emphatic marker, by satisfying the conditions in (10).

It is interesting to note in this context that the adnominal use of English *self*-forms seems to be most felicitous in the subject position. The following contrast is taken from K&S (p. 52):

- (11) a. He **himself** is not in favor of it.  
b. \*I would not like to talk to him **himself**.

Whether this restriction is a structural matter or not needs to be carefully worked out, however,

since as K&S point out (p. 52), the adnominal emphatic can marginally modify an object DP, and when the object is a full DP, the result is much better.

- (12) a. I saw 'im **himself**.  
 b. I saw the man **himself**.

The fact that the emphatic *self* modifies the subject relatively easily may be due to the discourse prominence inherently associated with a referent in the subject position in general, which more readily satisfies the conditions for X in (10) than in the other positions.

Note that the Japanese *zisin* is more or less parallel in behavior to the English *self* in relevant respects. (Translations of these sentences correspond to those in (11) and (12).)

- (13) a. Kare-**zisin**(-wa) sore-ni sansei-de-wa nai.  
           he-self-Top it-Dat in.favor-be-Top Neg  
 b. \*Watasi-wa kare-**zisin**-to hanasi-taku-nai.  
           I-Top he-self-to talk-want-Neg
- (14) a. ?Watasi-wa kare-**zisin**-o mi-ta.  
           I-Top he-self-Acc see-Pst  
 b. Watasi-wa sono otoko-**zisin**-o mi-ta.  
           I-Top that man-self-Acc see-Pst

The emphatic *zisin* is most felicitous when it modifies an element that satisfies the conditions in (10); *kare* in (13a) is a typical example in this regard in parallel to the English counterpart in (11a). Because of the deixis in (14b), the phrase *sono otoko* is qualified to be a center more easily than *kare* in the object position in (14a). Within the scope of negation, *kare* in the object position in (13b) is not qualified as such. This example therefore illustrates a case where neither the reflexive use nor the emphatic use of *zisin* is licensed. Note that the subject in (13a) does not have a Case-marker; it is possible to mark it with a topic marker *-wa*, but it is more natural to drop it altogether. I take this to indicate that *kare-zisin* in (13a) is in Topic position and outside the scope of negation. These data indicate that the element *zisin* in Japanese is indeed emphatic and is subject to the same conditions that apply to the English emphatic *self*. I believe that the sentences in (5) with *zibun-zisin* can be accounted for along the same lines, given some qualifications with regard to the licensing conditions on *zibun* and the status of embedded subjects. Let us consider these issues in reverse order.

#### 4. The ECM Subject

The complement subject position has raised quite a number of controversies in anaphora studies, and I do not intend to provide a comprehensive survey of the phenomena in this paper. Let us focus on the sentences in (5), repeated here as (15).

- (15) a. Taro<sub>i</sub>-ga [**zibun-zisin**<sub>i</sub>-ga erab-are-ru-to] omott-a.  
           Taro-Nom SE-self-Nom choose-Pass-Pres-C think-Pst  
           'Taro thought that he himself would be chosen.'

- b. ?Taro-ga [zibun-zisin<sub>i</sub>-o kasikoku] omot-ta.  
 Taro-Nom SE-self-Acc smart think-Pst  
 ‘Taro considered himself smart.’

My claim is that these cases both involve an emphatic *zisin* because it is not in a position to reflexive-mark a predicate. However, parallelism with the English emphatic *self* is realized only partially.

- (16) a. John<sub>i</sub> believes that he **himself<sub>i</sub>** is in danger.  
 b. \*John<sub>i</sub> believes him **himself<sub>i</sub>** to be in danger.

(Bickerton 1987, p. 346)

These sentences indicate that the English *self* can be used as an adnominal emphatic marker when it adjoins to the nominative subject but not when it adjoins to the ECM subject. Thus, while it is reasonable to some extent to assume that *zisin* in (15a) is emphatic as well, this leaves a question as to the status of *zisin* in (15b). If we assume that *zisin* in this example is also emphatic, it is somewhat mysterious why its English counterpart in (16b) is ungrammatical. Although an adequate proposal has not been fully worked out, this is perhaps due to the difference between the ECM subject in English and that in Japanese.

Let us consider Reuland’s (2011) approach to the ECM subject in English, as exemplified in (17).

- (17) a. John<sub>i</sub> considers [**himself<sub>i</sub>** smart].  
 b. John<sub>i</sub> believes [**himself<sub>i</sub>** to win].

There is no sense in which *himself* is understood to be emphatic in these sentences. Reuland (2011, pp. 251-253) assumes that an ECM subject raises out of the clause that it originates in for Case reasons (cf. Postal 1974) and attaches to a functional head *v* (or *v*\* in the sense of Chomsky 1995); thus, the *self*-form in cases like (17) “syntactically” reflexive-marks the matrix predicate in the manner defined configurationally.

- (17’) a. John<sub>i</sub> v\*<sub>considers</sub> himself<sub>i</sub> [H<sup>0</sup><sub>considers</sub> [(himself<sub>i</sub>) smart]]  
 b. John<sub>i</sub> v\*<sub>believes</sub> himself<sub>i</sub> [H<sup>0</sup><sub>believes</sub> [(himself<sub>i</sub>) to win]]

The complex anaphor *himself* reflexive-marks the V-v\* complex in the matrix clause. Technical details aside, it is certainly true that there is something syntactic about the relation between the antecedent and the anaphor in (17), and this is perhaps the reason that the emphatic form in (16b) is excluded: *him himself* does not qualify to be a syntactic reflexive-marker. The question is if we can extend this analysis to the Japanese examples in (15b).

What is crucial here is that the Japanese sentence has an anaphoric element *zibun* as part of the complex form *zibun-zisin*. This is in contrast to the English complex anaphor, in which the first element is a pronominal. To get to the correct picture, it is therefore necessary to consider the status of the first element of the complex anaphor. A natural candidate to consider in this connection is the so-called SE (simplex expression) anaphor such as Dutch *zich*. Note first that the embedded subject in (15b) is fine without *zisin*, and is therefore represented more precisely as follows:

- (15b’) Taro-ga [zibun(-zisin)-o kasikoku] omot-ta.

Consider the following examples in Dutch:

- (18) a. \*Oscar<sub>i</sub> voelde **hem**<sub>i</sub> wegglijden. (Reuland 2011, p. 100)  
       Oscar felt him slide-away  
       b. Oscar<sub>i</sub> voelde **zich**<sub>i</sub> wegglijden.  
       Oscar felt SE slide-away
- (19) Jan<sub>i</sub> hoorde [**zichzelf**<sub>i</sub> **zich**<sub>i</sub> bespreken]. (Reuland 2011, p. 107)  
       Jan heard himself SE review

These examples indicate that the SE *zich* is available in addition to the complex form *zichzelf*, just like the Japanese counterpart in (15b'). Reuland argues that the complex form is an option due to the same mechanism he assumes for the English *himself* in cases like (17), i.e., *zichzelf* moves out of the complement clause and syntactically reflexive-marks the predicate in the matrix clause.

For the contrast in (18), the relevant notion is A-Chain. Reuland (pp. 151-152) gives the following definitions:

(20) *Chain definition*

- ( $\alpha$ ,  $\beta$ ) form a Chain if (i)  $\beta$ 's features have been (deleted by and) recovered from  $\alpha$ , and (ii) ( $\alpha$ ,  $\beta$ ) meets standard conditions on chains such as uniformity, c-command, and locality.

(21) If ( $\alpha$ ,  $\beta$ ) is a Chain, and both  $\alpha$  and  $\beta$  are in A-positions, ( $\alpha$ ,  $\beta$ ) is an A-Chain.

The basic intuition behind these definitions is the idea that each member of a Chain is indistinguishable from the other members of the same Chain. Reuland (p. 137) characterizes SE anaphors like Dutch *zich* in the following manner: "SE anaphors have unvalued  $\phi$ -features, including unvalued number, which means that they can be made nondistinct from their antecedent and successfully form chains." This is in contrast to pronouns, which have "fully valued  $\phi$ -features, including grammatical number, which prevents identification." Since *zich* is only associated with a categorial (i.e. nominal) feature and a third person feature, these features can be deleted when they form an A-Chain with the other member in an A-position, i.e. *Oscar* in (18b), in accordance with the principle of recoverability of deletion (PRD) (cf. Chomsky 1995). The pronoun *hem* in (18a) cannot form an A-Chain because third person pronouns are fully specified for  $\phi$ -features (person, number, and gender) and structural Case, and deleting these features would violate PRD.

Let us return to the question addressed above: Can we extend Reuland's proposal to the Japanese counterpart in (15b')? The answer seems to be in the negative. First, Reuland (2011, p. 108) discusses a sentence like (22) and notes that it is "indistinguishable" from (19).

- (22) Jan<sub>i</sub> hoorde [**zich**<sub>i</sub> **zichzelf**<sub>i</sub> bespreken].  
       Jan heard SE himself review

In contrast, the sentence in (15b') with *zisin* is not semantically equivalent to the one without it: with *zisin*, the referent of *zibun* is a center with respect to its alternatives, while this reading is not available without *zisin*. This semantic effect cannot be captured if we assume that *zibun-zisin* in (15) behaves as a reflexive-marker.

Second, consider the question whether Reuland's analysis can be extended to (15b') without *zisin*. Hara (2002, pp. 49-50), building on Aikawa's (1993) observations, notes that *zibun* is specified for a number feature [+singular]. ((23a) is taken from Aikawa (1993, p. 49).)

- (23) a. ?\*John<sub>i</sub>-to    Mary<sub>j</sub>-ga    **zibun**<sub>i,j</sub>-o    hagemasi-ta.  
           John-and    Mary-Nom    SE-ACC    encourage-Pst  
           ‘John and Mary encouraged themselves.’
- b. John<sub>i</sub>-to    Mary<sub>j</sub>-ga    **zibun-tati**<sub>i,j</sub>-o    hagemasi-ta.  
           John-and    Mary-Nom    SE-PI-Acc    encourage-Pst  
           ‘John and Mary encouraged themselves.’

Hara argues that (23a) is deviant because *zibun* is singular and cannot give rise to a collective reading. In order to obtain such a reading, *zibun* has to be suffixed with *-tati* as in (23b). This observation, if correct, entails that *zibun*, an item specified with a [+singular] feature, cannot form an A-Chain with its antecedent since that would violate the PRD. Thus, even if *zibun* can be morphologically simplex, it is not strictly equivalent to the Dutch *zich*.

To summarize the discussion so far, we have seen that the complex form *zibun-zisin* is not a reflexive-marker and should be considered an emphatic expression. However, since *zibun* can be used independently of *zisin*, we have tried to identify the nature of *zibun*, which, as we have shown, is not at least equivalent to the SE anaphor *zich* in Dutch.

## 5. The Logophor *Zibun*

It has been well known since Kuno’s work in the early 70’s (cf. Kuno 1972, 1973; see also Kuno 1987, Sells 1987) that *zibun* is sensitive to discourse factors such as awareness, point of view, empathy, etc. This suggests that forming a chain with *zibun* is not a viable option in the first place since forming an A-Chain with it would involve deletion of semantic contents, which are of course not recoverable. Let us focus on the use of *zibun* as exemplified in (15b’), repeated here as (24).<sup>4</sup>

- (24) Taro<sub>i</sub>-ga    [**zibun**<sub>i</sub>-o    kasikoku]    omot-ta.  
           Taro-Nom    SE-self-Acc    smart    think-Pst  
           ‘Taro considered himself smart.’

Nishigauchi (2014), building on works such as Speas (2004) and Tenny (2006), proposes that what has been described about *zibun* from a discourse perspective may in fact be restated in syntactic terms and that the binding of *zibun* involves binding by an element in Spec of the POV (point of view) projection, which in turn may be controlled by a higher argument (in the case of the so-called long-distance binding). Thus, Nishigauchi (2014, p. 159) points out that a sentence like (25) is ambiguous and that *zibun* can be anchored either to the subject *Taro* or to the speaker of the sentence.

- (25) Taro-ga    **zibun**-o    home-ta.  
           Taro-Nom    SE-Acc    praise-Pst  
           ‘Taro praised himself.’

The ambiguity can be captured by positing two distinct representations.

- (26) a. [<sub>POVP</sub> Taro(-ga) [<sub>VP</sub> (Taro-ga) **zibun**-o home-ta] POV]  
       b. [<sub>POVP</sub> pro [<sub>VP</sub> Taro(-ga) **zibun**-o home-ta] POV]

Nishigauchi (p. 175) assumes that the POV projection constitutes a Modal projection that hosts a syntactic head characterized in terms of such notions as evidentiality, evaluation, deixis, and so on, and sits between the tense and the aspect systems: TP > POVP > AspP.<sup>5</sup> It is *Taro* that is in Spec of the POV in (26a), which accounts for the reading where *Taro* binds *zibun*, while it is a null pronominal that is in Spec of the POV in (26b), which accounts for the reading where *zibun* is anchored to the speaker of the sentence.

This proposal might lead us to posit the following representations for the sentence in (24):

- (27) a. [<sub>POVP</sub> Taro(-ga) [<sub>VP</sub> (Taro-ga) [*zibun*-o kasikoku] omot-ta]]  
 b. [<sub>POVP</sub> pro [<sub>VP</sub> Taro(-ga) [*zibun*-o kasikoku] omot-ta]]

However, the verb here is *omow* ‘think,’ which is known to be a logophoric licenser (cf. Culy 1994, Speas 2004). This forces the sentence to be interpreted as Taro’s belief about himself (*de se* belief), essentially excluding the option represented in (27b). In fact, I believe that it is much harder to obtain the speaker reading with this sentence than with (25). Although precise details must be left for future work, the anaphoric properties of *zibun* should be captured along the lines suggested here.

We saw in Section 2 that *zisin* in the subject position is an emphatic marker, and the discussion in Section 3 suggests that *zibun-zisin* in the same position is an emphatic form as well. If we adopt the term “logophor” for an element that is anchored to the POV projection, we can now identify *zibun-zisin* in a non-reflexivizing configuration as an emphatic logophor. Consider again (15b), repeated here as (28).

- (28) ?Taro<sub>i</sub>-ga      [*zibun-zisin*<sub>i</sub>-o      kasikoku]      omot-ta.  
 Taro-Nom      SE-self-Acc      smart      think-Pst  
 ‘Taro considered himself smart.’

This sentence is interpreted in basically the same manner that the sentence in (24) is, although it has to further satisfy the conditions on emphatic items because of the presence of *zisin*. This needs additional contextual support, which may be the reason that it is slightly awkward.

## 6. A Coordination Puzzle

Let us turn now to another problem for the head movement analysis of *zisin*. Hara (2002, p. 52) notes that an example like the following (slightly modified) is well-formed and that it is a problem for the head movement analysis of *zisin*.

- (29) Taro-to      Hanako-wa      [Ziro-to      *zibun-zisin*]-o      keiryoo-si-ta.  
 Taro-and      Hanako-Top      Jiro-and      SE-self-Acc      weigh-do-Pst  
 ‘Taro and Hanako weighed Jiro and themselves.’

As Hara states, this sentence is well-formed only under the distributive reading—Taro weighed Jiro and himself and Hanako did the same, and the collective reading where Taro and Hanako weighed Jiro and themselves (= Taro and Hanako) together is not available. However, if the distributive reading is a result of a syntactic operation of head movement, it will involve

movement out of a coordinate structure in violation of the Coordinate Structure Constraint (CSC) of Ross (1967). The question is if this really poses a problem for the head movement analysis. Note first that (29) is equally well-formed under the distributive reading with *zibun* instead of *zibun-zisin*.

- (30) Taro-to Hanako-wa [Ziro-to **zibun**]-o keiryoo-si-ta.  
 Taro-and Hanako-Top Jiro-and SE-Acc weigh-do-Pst  
 ‘Taro and Hanako weighed Jiro and themselves.’

Since (30) is equivalent to (29) except for the emphasis in the latter, it is not correct to associate the head movement of *zisin* with the distributive reading. Consider the following example from Reuland (2011, p. 218):

- (31) Alice<sub>i</sub> expected the king to invite Rabbit and herself<sub>i</sub> for a drink.

Since *herself* cannot reflexive-mark the verb *invite* (because of CSC), it is not subject to the Binding Theory and can find its antecedent in a non-local domain, as is often the case with the so-called “exempt anaphors” (cf. Pollard and Sag 1992). The same thing holds in Japanese.

- (32) Taro-wa [Hanako-ga [Ziro-to **zibun(-zisin)**]-o shootai-suru-to] omot-ta.  
 Taro-Top Hanako-Nom Jiro-and SE-self-Acc invite-do-C think-Pst  
 ‘Taro thought that Hanako will invite Jiro and herself/himself.’

This sentence is ambiguous: *zibun(-zisin)* can be anchored to the matrix subject *Taro* as well as the embedded subject *Hanako*. Thus, the distributive reading must be independent of the head movement of *zisin*; *zisin* in (29) must be an emphatic marker instead.

Let us consider if the proposal developed by Nishigauchi (2014) can be extended to (30).

- (33) [<sub>POVP</sub> Taro-to Hanako-wa [<sub>VP</sub> (Taro-to Hanako-wa) [Ziro-to zibun]-o keiryoo-sita] POV]

Here, the POV holder Taro and Hanako both have the same properties. This is captured by applying  $\lambda$ -abstraction to VP and distributing the  $\lambda$ -predicate over the two individuals in the subject position.

- (34) Taro  $\lambda x$  (x weighs Ziro and x) & Hanako  $\lambda y$  (y weighs Ziro and y)

Here, *zibun* is construed as a bound variable in both conjuncts, which yields the distributive reading. The collective reading is ruled out because *zibun* is singular (cf. Hara 2002) and conjunction distribution is obligatory.

Basically the same thing can be said about *zibun-zisin* in (29), where *zisin* cannot undergo head movement and the only option is to take it to be an emphatic marker. Since the sentence has a plural subject containing two proper names, *Taro* and *Hanako*, it is natural to take either one to be a center, with its alternatives supplied by the context.

## 7. Conclusion

In this paper, I have attempted to make somewhat tentative solutions to issues that have arisen with the head movement analysis of the reflexive-marker *zisin* in Japanese. We have seen that *zisin* can be emphatic as well as reflexive, which, without sufficient criteria, would cause much

confusion in discussion. I have shown that *zisin* can (but does not have to) be reflexive when it satisfies the relevant syntactic conditions on head movement in general. This in effect limits the reflexive use of *zisin* to the canonical object position. The emphatic use of *zisin* is licensed in terms of the center/periphery conditions as proposed by König and Siemund (2000), while *zibun* is a logophor whose properties are syntactically encoded along the lines of Nishigauchi (2014). Many issues still remain, of course, to which I will return in future work.

#### Endnotes

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  - 1 Here and throughout, *zibun* will be glossed as a SE (simplex expression) anaphor, mostly for expository reasons. See Section 4 and Noguchi (2017) for related discussion. The other abbreviations used in the gloss are as follows: Acc = accusative, Dat = dative, Neg = negative, Nom = nominative, Pass = passive, Pl = plural, Pres = present, Pst = past, Top = topic.
  - 2 Reinhart and Reuland's (1993) Binding Conditions and the definitions of relevant notions are provided below (pp. 670-671).
    - (i) *Conditions*
      - A : A reflexive-marked predicate is reflexive.
      - B : A reflexive predicate is reflexive-marked.
    - (ii) *Definitions*
      - a. A predicate is *reflexive* iff two of its arguments are coindexed.
      - b. A predicate (formed of P) is *reflexive-marked* iff either P is lexically reflexive or one of P's arguments is a SELF anaphor.
- For an update on Reinhart and Reuland's view, see Reuland (2011).
- 3 See Kishida (2011), who makes a similar remark on *ziko-* (but not on *zisin*).
- 4 This sentence in fact sounds slightly better than its counterpart with *zibun-zisin* in the subject position, but the distinction is very subtle, and I will leave the matter here.
- 5 This assumption does not seem to coincide with the claim made by Speas (2004) and Tenny (2006), who assume that functional projections related to sentience such evidentiality form the highest part of the clausal structure, following Cinque (1999). I will abstract away from this issue in what follows.

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