Some Notes on Reflexivity in Japanese*

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1. Introduction

Reflexive anaphora is one of the issues in the grammar of Japanese that has been a target of extensive discussion. This is due in part to the fact that a number of factors—morphological, syntactic, semantic, pragmatic, and even prosodic—are involved in the behavior of canonical items such as *zibun* and *zibun-zisin*, thus obscuring the whole picture. Further, these forms as well as *ziko-* and *zi-*, which are also of Chinese origin, are apparently in competition with native forms such as archaic pronominals *ware* and *onore*, body-part nominals such as *mi* and *karada* 'body.' Following the guidelines proposed by Reinhart and Reuland's (1993) (= R&R) seminal work, some attention has been paid to the Sino-Japanese forms (cf. Aikawa 1993, Hara 2002, among others), but not to these native forms, thus leaving many issues unsettled. (See Noguchi 2015, 2016 for discussion.) The goal of this paper is to shed light on some of the central issues in reflexive anaphora in Japanese, especially those involving the Sino-Japanese forms, by focusing on the question of how reflexivity is licensed in the language. For reasons of space, the discussion will be mainly descriptive, although I will try to point out the reasonable direction that the future investigation will need to take.

This paper is organized in the following manner. The basic notion of reflexivity and reflexive-marking in R&R is introduced in Section 2. We will discuss basic facts in Japanese reflexive anaphora in Section 3. We turn to the operation of reflexivization bundling in Section 4 and discuss the syntax and semantics of *zibun* in detail in Section 5. We will return to the issue of reflexivization bundling in Section 6 before we conclude in Section 7.

2. Binding Conditions

One of the most important insights presented by R&R is that reflexivity is not simply derived from the property of reflexive pronouns but must be attributed to the role played by predicates and the way they interact with anaphoric expressions, which they divide into two types—SE anaphors and SELF anaphors. The first type is morphologically simplex (e.g. Dutch zich, Norwegian seg, etc.) and can often be bound in a non-local domain. The second type is morphologically complex (e.g. English himself, Dutch zichzelf) and is typically bound in a local

domain. This leads R&R (p. 678) to formulate the Binding Conditions A and B in the following manner:

- (1) Conditions
 - A: A reflexive-marked syntactic predicate is reflexive.
 - B: A reflexive semantic predicate is reflexive-marked.

The relevant definitions are given in (2) (R&R: 678).

- (2) Definitions
 - a. The *syntactic predicate* formed of (a head) P is P, all its syntactic arguments, and an external argument of P (subject).
 - The *syntactic arguments* of P are the projections assigned θ -role or Case by P.
 - b. The semantic predicate formed of P is P and all its arguments at the relevant semantic level.
 - c. A predicate is reflexive iff two of its arguments are coindexed.
 - d. A predicate (formed of P) is *reflexive-marked* iff either P is lexically reflexive or one of P's arguments is a SELF anaphor.

Some examples might be helpful to illustrate the effect of the Binding Conditions.

- (3) a. John; saw himself;.
 - b. *John; saw him;.
 - c. *I saw himself.

In both (3a) and (3b), the predicate is reflexive (by definition (2c)) since two of its arguments are coindexed. The predicate therefore must be reflexive-marked in accordance with Condition B, which is satisfied in (3a) but not in (3b). (3c) is ruled out by Condition A because the predicate is reflexive-marked (by definition (2d)), but two of its arguments are not coindexed.

Dutch cases in (4) illustrate some of the fundamental distinctions between SE and SELF anaphors (R&R: 661-666).

- (4) a. Jan haat zichzelf/*hem.
 - Jan hates himself/*him
 - b. *Max haat zich. c. Max wast zich.
 - Max hates SE Max washes SE
 - (4a) is just like its English counterparts in (3a) and (3b): the predicate must be reflexive-marked by *zichzelf* but not by a pronominal *hem*. (4b) is ruled out for the same reason, i.e. the reflexive predicate is not correctly reflexive-marked. (4c), on the other hand, is well-formed because the verb *wassen* 'wash' inherently denotes a reflexive action; hence, the predicate counts as lexically reflexive (by definition (2d)) and satisfies Condition B.

The notion of "syntactic predicate" in Condition A is necessary in cases like ECM subjects, for example (R&R: 680).

- (5) a. Lucie expects [herself to entertain herself].
 - b. *Lucie expects [myself to entertain myself].
 - c. *Lucie_i expects [her_i to entertain herself].

An ECM subject is not a semantic argument of the matrix predicate and therefore does not

form a semantic predicate with it. The contrast between (5a) and (5c), however, indicates that an anaphoric relation must be established between a matrix argument and the ECM subject. The definition in (2a) allows such a relation to be formed because the ECM subject is Caserelated to the matrix predicate. The unacceptability of (5b) shows that the ECM subject cannot be construed as a logophor, i.e. a pronominal element whose reference is fixed by accessing the discourse.

3. Some Basic Facts in Japanese

As mentioned at the outset of this paper, there is a relatively large set of reflexive forms in Japanese and a question arises as to whether they reflexive-mark a predicate in the manner proposed by R&R. I will focus on the use of Sino-Japanese forms *zibun*, *zibun-zisin* and others in what follows, and cannot go into the native forms for lack of space. Consider the following examples:¹

- (6) John-ga zibun-o seme-ta.
 John-Nom Refl-Acc blame-Pst 'John blamed himself."
- (7) John-ga zibun-zisin-o seme-ta.

 John-Nom Refl-Refl-Acc blame-Pst 'John blamed himself.'

These sentences are semantically equivalent to each other, although (7) may also be associated with a reading where the second argument bears a contrastive stress and is construed as a focus anaphor, i.e. in cases where it is uttered with a background assumption that John might have blamed someone other than himself and it is asserted that John blamed none other than himself.²

Aikawa (1993: 41) notes that a sentence like (6) is well-formed but does not sound as natural as (7). Her claim is that *zibun* is a SE anaphor and as such cannot reflexive-mark a predicate. Consider the following example slightly adapted from Aikawa (p. 42) (the judgment is hers):

(8) ?*Daremo-ga zibun-o hagemasi-ta.

everyone-Nom Refl-Acc encourage-Pst
'Everyone encouraged himself.'

First of all, I do not share the judgment with Aikawa and do not find the contrast between (6) and (8) as sharp as she claims it to be. To the extent that (8) is not as good as (6), I think it is due to the nature of the verb *hagemasu* 'encourage,' which is typically used to express a non-reflexive relation: when a person x encourages a person y, the values of x and y are in general not expected to be identical. But suppose that Aikawa's judgments are correct. How does she resolve the alleged distinction? She argues that *zibun* cannot be construed as a bound variable but can only be coreferential. Thus, there is some leeway in interpreting *zibun* when its antecedent is referential as in (6) but not when its antecedent is quantificational as in (8).³

Hara (2002) questions Aikawa's view that *zibun* is coreferential and suggests instead that it is interpreted either as a variable bound by a λ -operator or as a free variable whose value is fixed by accessing the discourse context. Hara suggests that a sentence like (6) can be construed in the

following manner (p. 55):

(9) John ($\lambda x (x_{John} blamed y_{zibun})$)

$$\Rightarrow$$
 John ($\lambda x (x_{John} blamed y_{zihun})) & y = John$

Here, *zibun* is interpreted as a variable distinct from that of its antecedent, although the value eventually assigned to it from the discourse is the same. Hara (pp. 47-48) further notes that there is evidence to show that *zibun* in a local context can be interpreted as a bound (rather than free) variable, thus contradicting Aikawa's claim. Consider the following examples:

- (10) a. Daremo-ga zibun-de zibun-o hagemasi-ta.

 everyone-Nom Refl-with Refl-Acc encourage-Pst
 'Everyone encouraged himself on his own.'
 - b. Chris-dake-ga zibun-o hagemasi-ta.
 Chris-only-Nom Refl-Acc encourage-Pst
 'Only Chris encouraged himself.'

Hara notes that with the help of an adjunct expression zibun-de 'by oneself,' Aikawa's example in (8) greatly improves as in (10a) and that (10b) is fine with zibun being interpreted as a bound variable, i.e. $only\ Chris\ \lambda x$ ($x\ encouraged\ x$), which is false if there is anybody other than Chris that encouraged himself. I agree with Hara in his judgment and take these facts to support his claim that zibun can be construed as a bound variable as well, thus circumventing the issue raised in endnote 3 regarding Rule I.

On the other hand, Oshima (1979: 426) pointed out that with verbs such as *araw* 'wash' and *korosu* 'kill,' local binding of *zibun* is not allowed even if *zibun-de* is added.

- (11) a. *John_i-wa (zibun_i-de) zibun_i-o arat-ta.

 John-Top Refl-by Refl-Acc wash-Pst

 'John washed himself.'
 - b. *John;-wa (zibun;-de) zibun;-o korosi-ta. John-Top Refl-by Refl-Acc kill-Pst

'John killed himself.'

As Oshima (p. 426) notes, these sentences are ruled out because there are lexical items specifically designed for reflexive-marking.

- (12) a. John_i-wa (zibun_i-de) zibun_i-no karada-o arat-ta.

 John-Top Refl-by Refl-Gen body-Acc wash-Pst

 'John washed himself.'
 - b. John-wa zi-satu-si-ta. John-Top Refl-kill-do-Pst

'John killed himself.'

The native form *karada* is used with the predicate *araw* 'wash,' and the lexical reflexive verb *zi-satu-suru* must be invoked instead of *zibun* as an argument of the predicate *korosu* 'kill.' Noguchi (2015) suggests that this fact falls out naturally under the notion of blocking: *zibun* is an elsewhere reflexive and is invoked only if no other specific alternative exists.

Returning now to the original question posed by examples (6) and (7), we need to ask how reflexivity of these sentences is licensed. Specifically, if Aikawa (1993) is correct in assuming that *zibun* is a SE anaphor, which is prima facie natural given its morphological make-up and the fact that it can be bound non-locally, how does (6) conform to the Binding Theory?

4. Reflexivization Bundling

The question that has just been raised also applies to a Dutch sentence in (4c), repeated here as (13).

(13) Max wast zich.

Max washes SE

In contrast to (4b) (*Max haat zich (Max hates SE)), (13) is well-formed. As noted in Section 2, R&R reduce the contrast to the lexical property of predicates involved: the verb wassen 'wash' is lexically reflexive and the verb haten 'hate' is not.

Reinhart and Siloni (2005) (= R&S) shifted the focus of attention from the grammatical factors involving two types of anaphors to those involving intrinsic reflexives, as in (14a). (See also Faltz 1977, Kemmer 1993.)

(14) a. Max washed. b. *Max killed.

(14a) means that Max washed himself, a reading that arises without the use of a reflexive pronoun unlike its Dutch counterpart in (13). This type of reading is not available in (14b), and it is clear that intrinsic reflexivity is lexically governed. R&S argue that a valency-changing operation which they call "reflexivization bundling" applies to the verb's θ -grid, combining an internal θ -role with the external one (R&S: 401).

- (15) a. Verb entry: wash_{acc} [Agent] [Theme]
 - b. Reflexivization output: wash [Agent-Theme]
 - c. Syntactic output: Max[Agent-Theme] washed.

The syntactic output in (15c) is interpreted at the C-I interface as in (16a), which is in turn interpreted as in (16b) as a "distributive conjunction of θ -roles" (p. 401).

- (16) a. ∃e [wash (e) & [Agent-Theme] (e, Max)]
 - b. ∃e [wash (e) & Agent (e, Max) & Theme (e, Max)]

R&S argue that the operation of reflexivization bundling applies either in the lexicon or in the syntax, and that the option is subject to what they call "the lex-syn parameter" (R&S: 398).

(17) The lex-syn parameter

Universal grammar allows thematic arity operations to apply in the lexicon or in the syntax. R&S claim (p. 398) that the parameter is set to "lexicon" in languages such as English, Dutch, Hebrew, Russian and so on, and to "syntax" in Romance languages, German, Serbo-Croatian, Greek and so on. (18) is an example from French that illustrates the effect of syntactic reflexivization (R&S: 404).

- (18) a. Jean se lave. (French)

 Jean SE washes 'Jean washes.'
 - b. VP: [se lave $_{\theta \text{ i-Agent, }\theta \text{ k-Theme}}$]
 - c. IP: [Jean< $_{\theta i, \theta k}$ > [se lave, [$_{VP}$ t,]]]]
 - d. ∃e [wash (e) & Agent (e, Jean) & Theme (e, Jean)]

Here, reflexivization bundling "applies to unassigned θ -roles, upon merger of the external θ -role" (p. 404), as in (18c), while the accusative Case of the verb is reduced by the clitic se.⁵

R&S's proposal has uncovered a lot of empirical facts that were previously either simply unnoticed or left unexplained, but at the same time the status of the lex-syn parameter has been somewhat controversial, especially because it cannot be reduced to a property of functional heads. Marelj and Reuland (2016) (= M&R), for example, raise the following question: "How could such a global parameter be encoded in the grammar at all? More specifically, if Universal Grammar makes it possible to perform certain valence-changing operations in the lexicon, how could such operations be blocked from being performed in the lexicon of 'syntax' languages?" (pp. 187-188) M&R propose an alternative and try to derive the effect achieved by the lex-syn parameter from the availability of syntactic clitics: the "syntax" languages have a syntactic clitic that is merged separately from the verb, delaying the effect of bundling until syntax.

The issue concerning the status of the lex-syn parameter becomes sharp when we turn to a language like Japanese. The question that needs to be addressed is: Is reflexivization bundling available in Japanese? I will return to this issue in Section 6, but some preliminary remark is in order.

Let us go back again to the question posed by (6) and (7), repeated here as (19) and (20) respectively.

(19) John-ga zibun-o seme-ta.

John-Nom Refl-Acc blame-Pst 'John blamed himself.'

(20) John-ga zibun-zisin-o seme-ta.

John-Nom Refl-Refl-Acc blame-Pst 'John blamed himself.'

Starting with (20), I assume that the complex anaphor in (20) is a SELF anaphor (cf. Aikawa 1993) and that its second part *zisin* undergoes covert head movement to the verb, and is interpreted as a predicate modifier that imposes an identity restriction on the predicate (cf. Noguchi 2005). Following Hara's claim that *zibun* can be a free variable, the sentence is interpreted at the C-I interface in the following manner:

(21) John-ga zibun-zisin-o seme-ta.

→ John-ga [zibun t_i]-o zisin_i-seme-ta.

John ($\lambda x (x_{John} blamed y_{zibun})) & y = x$

Since the value of the free variable is semantically restricted by the identity predicate, we get an apparent local-binding effect without invoking binding mechanisms. On the other hand, one might wonder if *zibun* in (19) is an element that triggers reflexivization bundling when it composes with a certain type of predicates. In addition to the blocking effect discussed in the

previous section, the type of predicates seems to be semantically (or pragmatically) conditioned.

(22) a. John-ga zibun-o eran-da/bengosi-ta/yurusi-ta.

John-Nom Refl-Acc choose-Pst/defend-Pst/forgive-Pst

'John chose/defended/forgave himself.'

b. ??John-ga zibun-o nagut-ta/sewasi-ta/sikat-ta.

John-Nom Refl-Acc hit-Pst/take.care.of-Pst/scold-Pst

'John hit/took care of/scolded himself.'

The contrast between (22a) and (22b) may not be very sharp and I assume that it is determined on the basis of whether the predicate involved is stereotypically "other-directed" or not in the sense of König and Vezzosi (2009). Thus, one can easily imagine a situation where somebody votes for oneself in an election, whereas the prototypical use of verbs denoting hitting, taking care of, scolding, etc. is not reflexive but other-directed. The crucial question for us is whether the contrast in question arises from reflexivization bundling as defined by R&S. The fact that the occurrence of *zibun* is lexically governed as in (22) prima facie suggests that this is the case. If this is so, (19) would be interpreted at the C-I interface in the following manner:

(23) ∃e [blame (e) & [Agent-Theme] (e. John)]

Here, the reflexive form zibun is semantically inert in the manner R&S and M&R have proposed for the Dutch zich. The problem that immediately arises is that zibun in these sentences is accusative Case-marked and there is no evidence of Case reduction, which immediately casts doubt on any attempt to treat the Case property of zibun distinctly from that of run-of-the-mill objects. I will show in what follows that zibun DOES have characteristics of a θ -marked argument and that reflexivization bundling does not apply to zibun.

5. The Proxy Reading

As first pointed out by Jackendoff (1992), a reflexive pronoun like English *himself* allows a reading where it refers to a physical or mental aspect of its antecedent—the so-called "proxy" reading (cf. Reuland 2011, M&R) or "dissociation" reading (cf. Rooryck and Vanden Wyngaerd 2011). In (24), in addition to the pure reflexive reading, the proxy reading is available when Ringo Starr visits a wax museum and starts to take off clothes from his statue.

(24) All of a sudden Ringo started undressing himself.

Reuland (p. 220) proposes that the proxy reading arises when a pronoun denotes a Skolem function, as defined in (25).

(25) A function f of type (ee) with a relational parameter PR is a *Skolem function* if for every entity x: PR $(x, f_{PR}(x))$ holds.

Informally, this function applies to an entity to pick out one of its proxies whose range is determined by the parameter PR. Ringo and his statue may be taken to stand in a proxy relation to each other in (24), giving rise to the reading in question.

It has been observed by many researchers that in Dutch it is the SELF anaphor zichzelf but

not the SE anaphor *zich* that allows a proxy reading. The following examples are taken from Reuland (2011: 222):

- (26) a. Jan waste zich. ('Jan washed'—no proxy reading)
 - b. Jan waste zichzelf. ('Jan washed himself'—proxy reading possible)

The generalization is that proxy readings are available only if a pronoun is construed as an argument. As M&R (p. 189) state, "if a particular derivation makes a proxy reading available, it cannot involve a bundling operation, since the two θ -roles land on two different syntactic and semantic objects." Bundling applies to the predicate *wassen* in (26a), making the proxy reading unavailable, whereas the same operation doesn't apply in (26b) and the proxy reading is possible like its English counterpart *himself* in (24) .

When we turn to Japanese, it may come as a surprise that it is *zibun* but not *zibun-zisin* that allows a proxy reading. Consider a context where John Lennon enters a wax museum, finds his own statue, and puts his jacket on it. In this context, (27a) is acceptable, whereas (27b) is not.

(27)a. John-ga zibun-ni huku-o kise-ta. John-Nom Refl-Loc clothes-Acc put.on-Pst b. *John-ga zibun-zisin-ni huku-o kise-ta. John-Nom Refl-Refl-Loc clothes-Acc put.on-Pst 'John dressed himself.'

The verb *kiseru* 'put clothes on' is only allowed in a context where someone acts on someone else and is clearly other-directed. This forces (27a) to be associated with a proxy reading; (27b) is ruled out because *zibun-zisin*, as already discussed in Section 4, either imposes an identity restriction on the predicate at the C-I interface or is construed with contrastive focus, leading to a contradiction in either case. Recall from (22) that *zibun* does not occur naturally with other-directed (= [+OD]) predicates. Now that (27a) is fine, we need to ask if this is also the case under the proxy reading. In fact, (22b) and even (11) seem to improve greatly when uttered in a wax museum context. This means that *zibun* can occur with a [+OD] predicate if it is forced to receive a proxy reading and the result is pragmatically coherent.

Does this mean that *zibun* is a SELF anaphor rather than a SE anaphor? As we saw in Section 3, Aikawa (1993) and Hara (2002) assume that *zibun* is unambiguously a SE anaphor. Since *zibun* can be construed as a variable, either bound or free, it must be the case that *zibun* has properties characteristic of a SE anaphor, and as far as the pure reflexive reading is concerned, this must be true. On the other hand, we have just seen that *zibun* may be associated with a proxy reading, which suggests that it has the characteristics of a SELF anaphor as well. This suggests that *zibun* behaves either as a SE anaphor or as a SELF anaphor; it is a syncretism between the two ⁶

Is there any way to predict how the two uses of *zibun* are distinguished? There are four combinations that need to be considered.

- (28) a. *zibun_{SE}+V_[+OD] (ruled out by Condition B)
 - b. $zibun_{SE}+V_{[-OD]}$ (intrinsic reflexive)
 - c. zibun_{SELE}+V_[+OD] (proxy reading)
 - d. $zibun_{SELF}+V_{[-OD]}$ (proxy reading)

As we have seen, *zibun* as a SE anaphor is fine only if the predicate is lexically reflexive (or [-OD]) because of Condition B. This accounts for (28a,b), as illustrated by the contrast in (22). However, *zibun* as a SELF anaphor can occur with a [+OD] predicate (28c) if it can receive a proxy reading, as illustrated by (27a). Rather tricky is (28d), where the predicate is non-other-directed (i.e. lexically reflexive) and is further reflexive-marked by *zibun*_{SELF}. Let us focus on (19), repeated here as (29).

- (29) John-ga zibun-o seme-ta.
 - a. John-ga zibun_{SE}-o seme_[-OD]-ta. (pure reflexive reading)
 - b. John-ga zibun_{SELF}-o seme_[-OD]-ta. (proxy reading)

Since *zibun* as a SELF anaphor is redundant when it combines with a lexical reflexive, i.e. the predicate is doubly reflexive-marked, it is not available under the pure reflexive reading and it has to be used as a SE anaphor as in (29a). (29b) is similar to (28c), although the predicate here is [-OD]. I assume that this is also the configuration that allows a proxy reading; (29b) might be associated with a reading slightly different from the pure reflexive reading, e.g. when *zibun* refers to a certain aspect of John, either temporal or mental, and John felt responsible for what he did or what he was. The generalization is that *zibun* is construed as a proxy of its antecedent if and only if it is a SELF anaphor, regardless of whether the predicate is lexically reflexive or not.

I will provide some evidence for the claim that *zibun* can be a SE anaphor as well as a SELF anaphor. First, consider the following example involving an ECM construction:

(30) John-ga [zibun-o kasikoku] omot-ta.

John-Nom SE-Acc smart think-Pst

'John considered himself smart.'

Here, *zibun* occurs as a subject of an ECM complement clause, which cannot reflexive-mark the matrix predicate and can only enter into an anaphoric dependency with its antecedent by forming a chain (R&R, Reuland 2001, 2011). This suggests that *zibun* has the characteristics of a SE-anaphor. Note that *zibun-zisin* may occur in the same position as well.

(31) John-ga [zibun-zisin-o kasikoku] omot-ta. ohn-Nom SE-SELF-Acc smart think-Pst

'John considered himself smart.'

However, this sentence is necessarily construed with contrastive focus, as expected from the assumption treating *zibun-zisin* as a focus anaphor.

Second, Sells, Zaenen, and Zec (1987) have shown that English *himself* allows a sloppy reading as well as a strict reading in the comparative construction, while Dutch *zich* only allows a strict reading.

- (32) a. John defends himself better than Peter. (sloppy/strict)
 - b. Zij verdedigde zich beter dan Peter. (sloppy only)

She defended SE better than Peter

The behavior of zibun in the same context is parallel to that of English himself.

(33) John-ga Bill-yorimo zibun-o umaku bengosi-ta. (sloppy/strict)

John-Nom Bill-than SELF-Acc better defend-Pst

'John defended himself better than Bill.'

This indicates that *zibun* can be construed as a SELF anaphor as well. Although a more thorough investigation is certainly desirable, this brief consideration supports the claim that *zibun* can be either of the two anaphor types.⁷

6. Is Bundling Possible in Japanese?

The question remains whether reflexivization bundling is available in a language like Japanese. Consider whether this operation applies to a limited class of verb stems prefixed with zi- (cf. Tsujimura and Aikawa 1999, Kishida and Sato 2012). (For reasons to be discussed, I will gloss zi- as SELF.)

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

John-Nom SELF-kill-do-Pst 'John committed suicide.'

b. John-ga zi-ritu-si-ta.

John-Nom SELF-stand-do-Pst 'John established himself.'

At first blush, (34a) might look like the case where bundling is involved, i.e. *John* is assigned a composite θ -role [Agent-Theme] and the accusative Case is reduced, although this apparently does not hold in (34b), where the verbal noun stem means 'stand' and is intransitive. ⁸ The following examples illustrate the same point:

(35) a. John-ga zi-sei-si-ta.

John-Nom SELF-control-do-Pst 'John controlled himself.'

b. John-ga zi-tyoo-si-ta.

John-Nom behave.onself-do-Pst 'John behaved himself.'

While (35a) preserves the transitivity of the verbal noun stem, the stem in (35b) tyoo does not have a clear sense on its own and can only have one when it is combined with the prefix zi-, and just like its English counterpart, in which bimself is semantically inert, the predicate zi-tyoo-suru is one-place.

However, what is crucial with zi- reflexives is that the prefix does not always reduce the accusative Case.

(36) John-ga musuko-o zi-man-si-ta.

John-Nom son-Acc SELF-boast-do-Pst

'John boasted about his son.'

Without going into details, I assume with Noguchi (2014) that the prefix zi- reflexivizes a certain

type of predicates in the lexicon. The process of reflexivization is not bundling but reflexive-marking in the lexicon. Since the operation is lexical, it does not always produce a reflexive predicate; thus, while the verbal noun is prefixed with zi- in (36), the two arguments (John and musuko) are not identical, although there is a clear semantic connection between them, especially since the internal argument is a relational noun. It seems reasonable to assume that reflexivization by zi- reflexive-marking may come to be associated with idiosyncratic semantics.

Reflexivization is also available in the syntax either overtly (ziko-) or covertly (ziko- or zisin), for reasons discussed in Noguchi (2016). This leads us to the question of whether reflexivization bundling is at work with these forms. We already saw the case of a covert reflexivization with zisin in Section 4 and analyzed it as a type of SELF incorporation in (21). Reflexivization with ziko- is illustrated by the following examples:

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(37) a. John-ga (zibun-o) ziko-hihan-si-ta.
John-Nom SE-Acc SELF-criticize-do-Pst
b. John-ga ziko-o hihan-si-ta.
John-Nom SELF-Acc criticize-do-Pst
'John criticized himself.'
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Note that (37a) immediately excludes the bundling analysis of ziko-reflexivization; the accusative Case is not necessarily reduced and may be realized overtly on zibun. This suggests that reflexivization involved in (37) is not bundling but reflexive-marking. Crucially, the focus reading aside, the two sentences in (37) are semantically equivalent, which follows if we assume that ziko- either overtly or covertly incorporates into the predicate, i.e. the sentences are equivalent at the C-I interface. Noguchi (2014) argued that the following examples support this claim:

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(38) Zibun-ga/*Ziko-ga hihan-s-are-ta.

SE-Nom/SELF-Nom criticize-do-Pass-Pst

'He himself was criticized.'
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The lexical item *ziko* can be used as an independent argument only if it occurs in a direct object position as in (37b) but not in the subject position as in (38). The contrast follows if we assume that *ziko* is a SELF anaphor and obligatorily incorporates into a predicate. Consider also the following examples:

- (39) a. John-ga [zibun-o kasikoku] hyooka-si-ta. John-Nom SE-Acc smart evaluate-do-Pst 'John evaluated himself as smart.'
 - b. John-ga kasikoku ziko-hyooka-si-ta.

 John-Nom smart SELF-evaluate-do-Pst

'John evaluated himself in a smart manner.'

(39a) is ambiguous: *kasikoku* may be interpreted as an adverbial modifier or as a predicate that constitutes a small clause with *zibun* as its subject. The translation provided for (39a) reflects the second option. This option is available because *zibun* can be a SE anaphor and as such can occur as an ECM subject. (39b), on the other hand, can only be associated with the first

reading in (39a), i.e. the adverbial reading of *kasikokoku*; *ziko* has to be interpreted as a semantic argument of the predicate *byooka-suru* 'evaluate' in the manner suggested for (37b). This is because *ziko* must be incorporated into a predicate, which is impossible if it occurs as an ECM subject. This is a minimal pair that falls out naturally under the current proposal.

This leads us to conclude that reflexivization bundling does not seem to be available in Japanese, either lexically or syntactically. Instead, a variety of morphemes such as zi-, ziko, zisin, and zibun help to cover the effects achieved by reflexivization bundling in other languages. Note that if this is on the right track, it casts further doubt on R&S's lex-syn parameter as it is originally stated unless the parameter recognizes a third option "or neither," but this of course weakens the rationale behind it.

7. Conclusion

This paper tries to address one of the central issues in reflexive anaphora in Japanese, i.e. how reflexivity is licensed in the language. I have shown that while a variety of SELF markers reflexivize a predicate in a modular manner (in the lexicon, in the overt syntax, or in the covert syntax), zibun behaves as an elsewhere form to achieve the effects that would not be available with the other forms, e.g. the proxy reading. Space limitations prevent us from going into the discussion of reflexivization by native forms including body-part nominals such as mi 'body,' kokoro 'mind,' which had been much more prevalent until the Late Middle Japanese period (1200-1600) when Sino-Japanese reflexive forms were borrowed from Chinese, even though their use was much more limited. Some discussion is found in Noguchi (2015), but this issue deserves a careful study and is left for future investigation.

Endnotes

- * The research reported here was supported in part by Grants-in-Aid from Japan Society for the Promotion of Science (#16K02758).
- 1 For reasons to be discussed in Section 5, I will remain neutral for a while regarding the status of *zibun* and *zisin* and gloss both of them as Refl. The other abbreviations used in the gloss are as follows: Acc = accusative, Gen = genitive, Loc = locative, Nom = nominative, Pst = past, Top = topic.
- 2 This reading is in fact not impossible in (6) if a contrastive stress is placed on *zibun*. For the sake of simplicity, I will abstract away from this point.
- 3 This of course raises the question of how coreference would be licensed in (6), especially in view of Grodzinsky and Reinhart's (1993) Rule I, which essentially rules out coreference in favor of variable binding.
- 4 Doron and Rappaport Hovav (2007) have shown that (14a) is not entirely equivalent to *Max washed himself*, because focusing on the internal argument is not possible with (14a). This is shown by the following examples (p. 5):

- (i) a. John doesn't shave (by himself).b. John does not shave himself.The object focus is possible in (ib) but not in (ia).
- 5 The Case property of French se has been called into question by Labelle (2008), who argues that the clitic is introduced as a Voice head in the syntax and is not itself a Case reducer.
- 6 Syncretism of reflexive forms is quite widespread, as the literature in grammaticalization has amply demonstrated (cf. Faltz 1977 and Kemmer 1993). See also Doron and Rappaport Hovav (2007), who suggest that French *se* is a syncretism between an anaphor and a reflexive marker, and Reuland (2011), who suggests that German *sich* can function as a SE anaphor as well as a SELF anaphor.
- 7 The question of whether the two uses of *zibun* have syntactic correlates is an important issue that needs to be left for future research. It might be instructive to note that Reuland (2011: 273-277) suggests that German *sich* may occupy two distinct syntactic positions—a head of NP or a head of $DP/\pi P$ (PersonP), and that this correlates with its stress pattern.
- 8 Kishida and Sato (2012) do not give evidence to support the claim that *zi-ritu-suru* belongs to the same class as *zi-satu-suru*, i.e. what they call "transitive type," and I do not find any of their diagnostics that they claim are applicable to the latter as easily applicable to the former.
- 9 Similar remarks apply to English. Thus, as noted for the translation of (35b), *John behaved himself*, the SELF anaphor *himself* does not operate on the verb's θ -grid in the way that it does with transitive predicates. Some further examples in English noted by Chomsky (1970: 213) indicate that lexical reflexive-marking in English can be idiosyncratic as well.
 - (i) a. John's remarks are self-congratulatory.
 - b. John's actions are self-destructive.
- 10 It might be worth noting that zibun can be incorporated overtly into a predicate as well, as in (i).
 - (i) John-ga zibun-sagasi-o si-ta.

 John-Nom SELF-search.for-Acc do-Pst

'John searched for his own self.'

Although this use is available only to a limited extent, it suggests that *zibun* as a SELF anaphor can have the potential of undergoing the same operation that applies to the other SELF forms discussed in the main text.

11 Some speakers may not find the use of *ziko* in the subject position unacceptable. This is not unexpected if *ziko* is a SELF anaphor and as such can in principle be associated with a proxy reading. The claim in the text is that the contrast applies without any contextual support.

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