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A NOTE ON WEAK CROSSOVER IN JAPANESE*

In an important paper published in this journal, Saito and Hoji (1983) formulated the following condition, which is deducible from a general principle that accounts for the so-called "weak crossover effect" (see Higginbotham, in preparation):

(1) A variable cannot be the antecedent of a pronoun or an anaphor that it does not c-command (Saito and Hoji, 1983, = original (30)).

Thus, for example, the trace in the English sentence (2) below cannot serve as the antecedent of the possessive pronoun his. That is to say, the sentence cannot receive an interpretation according to which the reference of the object (of the verb chase) co-varies with that of the pronoun. The trace, a variable (bound by who), does not c-command his. By virtue of (1), therefore, the former cannot be the antecedent of the latter.

(2) Who did his dog chase t?

In the theoretical framework of Saito and Hoji (essentially that of Chomsky, 1981), the importance of condition (1) consists, partly at least, in the fact that it functions as a diagnostic for constituent structure and for the presence of traces. Under the assumption that a Wh-word, which is not in an A(rgument)-position, binds a trace which is in an A-position, we know that there must be a trace in (2). This yields the weak crossover effect if the pronoun his is coindexed with the Wh-trace. If we assume that (2) is ill-formed due to the violation of condition (1), it must be the case that English has a VP, since only then is it the case that the object trace in (2) fails to c-command the pronominal contained in the subject NP. By contrast, the most closely comparable sentence of Warlpiri (of Central Australia) must have different syntactic properties, because the test fails there. In (3) below, the possessive pronoun can have the object as its antecedent – thus, either there is no trace in syntax, or there is no VP, or both (and, of course, other possibilities exist, though the contrast with English remains clear):

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We turn now to Japanese. It is well known that Japanese does not utilize syntactic movement in the formation of content questions. That is, unlike the English example (2), an ‘operator’-trace relation is not defined at S-structure. In order to demonstrate the utility of condition (1) in Japanese, LF movement is employed instead (Lasnik and Saito, 1984). The weak crossover effect is observed in LF movement – as expected, given both (1) and the assumption that Japanese has a VP.\(^1\)

Saito and Hoji argue that Ross' Scrambling rule (Ross, 1967) involves syntactic movement of NPs from A-positions to non-A-positions, setting up a NP-trace relation. They claim that this relation gives rise to configurations which are of the type needed for the diagnostic use of (1) – i.e., s-structures in which a trace functions as a variable bound by an operator. Of course, this argument only works if we assume that there is a VP in Japanese. The pronoun or anaphor, which must be anteceded by the variable (i.e., by the trace, in the structures of interest here), must itself be able to be construed as a variable. For some reason, the elements normally understood to be pronouns in Japanese (e.g., kare, kanozyo) cannot be so construed, as has been demonstrated by Kitagawa (1981) and by Saito and Hoji. While the reflexive anaphor zibun can, apparently, be construed as a variable, it normally requires a subject antecedent (which c-commands the object). Cases of c-commanding subjects serving as the antecedent of zibun do not give rise to the illicit configuration. For these reasons, Saito and Hoji appeal to examples involving ‘backward reflexivization’ (Akatsuka, 1969). This involves cases in which zibun is in an embedded clause and is construed with an object which follows it in the main clause. Saito and Hoji observe that leftward scrambling of this object (across the clause containing zibun) gives rise to a configuration which is directly relevant to (1) and which, furthermore, demonstrates that the weak crossover effect is observable in Japanese. They cite, for example, (4) below (their (24b), on the reading according to which Zirō is construed with zibun):

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\(^1\) Cf. Whitman (1984) and references cited there for arguments against positing a VP in Japanese.
Saito and Hoji claim that (4) violates (1). In order to maintain this claim they assume (see their p. 255) that zibun, as a true anaphor, must have an antecedent in an A(rgument)-position. Note, that the trace, and not Zirō-o, is in an A-position. The trace, then, is the antecedent for zibun. Given all of this, (4) is in clear violation of (1).

In the present note, we would like to discuss certain apparent counterexamples to (1) – one of which is, in fact, mentioned by Saito and Hoji (fn. 6, p. 250) – in an effort to determine more narrowly the configurations in which condition (1) may be applicable.

First, there are certain structures in which zibun does not have an A-position antecedent. One such example is (5) below (from Farmer and Tsujimura, 1984):

(5) Taro-wa zibun-no tuma-ga yōso-no
\( \text{NOM self GEN wife NOM some GEN} \)
\( \text{otoko-to kakeotisita.} \)
\( \text{man COM ran away} \)

As for Taro, his wife ran away with some other guy.

In (5), zibun is construed with Tarō-wa, which is the topic NP. A topic is presumably not in an A-position.²

A second example (also from Farmer and Tsujimura, 1984) is the following:

² Saito (1985), building on the argument in Saito and Hoji, offers a definition of A-position which, coupled with assumptions about the base-generation of some topics, could well result in Tarō-wa being in an A-position. The following is the definition of A-position from Saito (1985): “An A-position is, roughly speaking, a position in which an NP can appear at D-structure (e.g., Subject, Object position). (An A’-position is a position that is not an A-position).” Furthermore, all NP-gas and some Topics are base-generated (i.e., topics that are not moved by Move-alpha), which would seem to mean that they are A-position by definition. This point is not made explicitly in Saito (1985). While this line may prove profitable for cases like (5), it would (in relation to zibun) be problematic for other examples involving, say, the “Multiple Subject” NP-gas (Kuno 1974).
(6) Go -zibun-ga sono e -o okaki-ni natta sōyo.

I hear that self painted the picture.

While (go)-zibun in this instance is not construed with an overt topic NP in syntax, there is a discourse antecedent. We would like to suggest that (5) and (6) are actually instances of the same phenomenon – they are cases of discourse anaphora. Condition (1) is inapplicable here, since no antecedent-anaphor relation is represented. We feel that what we have suggested concerning (5) and (6) is essentially what Saito and Hoji are appealing to in their brief discussion of (7) below (see their (ii), fn. 6, p. 250):

(7) ?[s Hirosii-o [NP zibun]-ga gan kamo sirenai

koto]-ga [VP t, nayamaseta]]

Lit: Hirosi, the fact that self may have cancer worried.

Sentence (7) apparently violates (1), and thus, it should be ungrammatical. However, it is only slightly odd (due, perhaps, to the length of the sentential subject over which movement has taken place). In order to explain this apparent counterexample to (1), Saito and Hoji imply that (7) does not come under the purview of (1), suggesting that zibun is being used emphatically here. We are in essential agreement, but would maintain that zibun, rather than being emphatic, is in fact a discourse anaphor in this case. That is to say, it is not bound by Hirosi (in the technical sense; see Chomsky, 1981, and Higginbotham, 1983). We understand, then, that the construal of zibun with Hirosi is mediated by discourse principles and not by principles defined over the syntax (narrowly

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3 Actually, it appears that ‘binding’ is too strong a notion for the relation between zibun and its antecedent. It cannot be the case that the antecedent must c-command zibun, because of cases like (4'), restored from (4) of the text (cf. (12) of Saito and Hoji):

(4') [[Hanako-ga zibun,-o kiratteiru koto]-ga [VP Zirō,-o

NOM self ACC dislike fact NOM ACC

yuutu-ni siteiru]]

depressed make

The fact that Hanako dislikes self has depressed Ziro.

Notice that Zirō-o is in the VP and does not c-command zibun, therefore, it cannot be said to bind zibun.
defined). That is to say, there is in the discourse an individual that can be said to be the topic of that discourse. Such a discourse topic can be represented overtly in the sentence (i.e., ‘resumed’, so to speak) either by a name (e.g., Hirosi) or by zibun. The interpretation of (7), in which Hirosi and zibun are coreferential, is simply the case in which the syntactic representation of the discourse topic is by both Hirosi and zibun. Note, in particular, this interpretation of (7) does not entail that zibun is bound by Hirosi-o.

What the three examples which we have just examined have in common is the property that zibun is either itself a subject NP – or else is a possessor NP which, together with a head noun, forms a subject NP. It could be that this is relevant to the issue and that zibun is free, in some sense yet to be made precise, in that environment, having the character of a pronominal, rather than that of a variable. If this were correct, then the structures which are properly relevant to (1) would be those in which zibun is not, in the sense described above, a subject or part thereof. Therefore, let us examine some apparent counterexamples to (1) in which zibun is an object, as in (4), or, with a-head noun, forms an object NP, (as in examples (9) and (10) below). It is possible, in fact, to construct such an apparent counterexample to (1) on the basis of (4) itself, simply by introducing a modal into the sentential subject, leaving the essential structure properties intact. Interestingly, this does not yield an oddity (Farmer, in press):

(8) $[\text{s Zirō-o} [\text{NP Hanako-ga zibun-i-o kiratteiru} \text{ ACC NOM self ACC dislike}]$

\[\text{kamo sirenai to iu koto-ga} [\text{VP t_i yūtu-ni siteiru}]]]\]

Lit: Ziro, that Hanako might dislike self has depressed.

Since the only difference between (4) and (8) is the presence of a modal, we must conclude that the construal of zibun with Zirō here is not constrained by (1).

Sentences (9) and (10) below (from Farmer and Tsujimura, 1984), like (4) and (8) respectively, contrast with respect to (1) while crucially sharing the relevant structural properties:

(9) *Kobonno -no John-i-o [aizin-no Mary-ga child-loving GEN ACC lover GEN NOM zibun-i-no musume -o kamatte yara-nai] self GEN daughter ACC care for not
koto-ga t, kanasimi-no donzoko-e oiyatta.

Lit: Child-loving John, that Mary, his lover, does not care for self's daughter drove to despair.

(10) Kobonno-no Johni-o [aizin-no Mary-ga zibun, no musume-o kamatte kure-nai] koto-ga t, kanasimi-no donzoko-e oiyatta.

(same translation as (9))

These sentences differ only in the ‘auxiliary verbs’ they employ – (9), with the auxiliary verb yaru, conforms to (1) and is ill-formed, as predicted, while (10), with kureru, fails to conform to (1). The two auxiliary verbs, attached to the continuative form kamatte ‘caring for’ in (9) and (10), have different pragmatic properties. According to Kuno and Kaburaki (1975), yaru is “subject-centered”, while kureru is “nonsubject-centered”. This can be reflected in what these authors refer to as “speaker’s empathy”. Thus, in an appropriate linguistic context, yaru signals speaker’s empathy with the subject of the minimal clause containing it, whereas kureru signals speaker’s empathy with a nonsubject. It is quite evident that this plays a role in the construal of zibun in (9) and (10); thus, we have another instance in which discourse factors mask the operation of (1). With kureru, indicating speaker’s empathy with a nonsubject, zibun can be construed with a topic; with yaru, on the other hand, it cannot be so construed (unless the topic happens also to be the subject of the minimal clause containing yaru). Kuno and Kaburaki (pp. 18–19) give the following pair, which illustrates just this point (perspicuously so, since movement is not involved):

(11) with kureru:
John-wa Mary-ga zibun-ni kasite kureta zidōsha-o syūzensita.
(with zibun = John)

Lit: John repaired the car that Mary had lent self.

(12) with yaru:
*John-wa Mary-ga zibun-ni kasite yatta zidōsha-o syūzensita.
(with zibun = John)

If the acceptability of (11) is due to pragmatic factors, as is suggested by Kuno and Kaburaki, then this points to the possibility that (10) is acceptable for these reasons as well. That is to say, in (10) the NP
kobonno-no John-o does not (technically) bind zibun. This means that (1) is not applicable in the case of (10).4

We have examined a number of putative counterexamples to condition (1), including that cited by Saito and Hoji. We have, however, come to the conclusion that (1) is, in fact, inapplicable in these cases, because the relevant structural relations are not present in them. In arriving at this conclusion, we have appealed to the concept discourse antecedent, which we have implied might be identified with the notion topic.

If the notion topic is relevant to the construal of zibun in apparent counterexamples to (1), as we have argued, then we must explain why structures which appear to conform to (1) – e.g., (4) – are not licensed in the same manner as, say, (5), or (7), etc. It should be mentioned, however, as Chisato Kitagawa has pointed out to us (personal communication), that even for a supposedly clear example, such as (4), there are contexts in which the effect disappears. In this light, compare (8) with (4). Let us assume that some principle of discourse is involved, hoping that its proper definition will emerge eventually from future research.5

An example which is relevant to this question is (13) below.

(13) ?*[s [NP Hanako-ga zibun-o kiratteiru koto]-ga
   NOM self ACC dislike fact NOM
   [VP daremo -o yūtu-ni siteiru]]
   everyone ACC depressed make

Lit: The fact that Hanako dislikes self has depressed everyone.

Sentence (13) (their example (13a)) is accounted for by Saito and Hoji in the following way. The quantifier, daremo, moves in Logical Form, leaving a trace in the VP. Since zibun requires an A-position antecedent, and since daremo-o is in an A-bar-position, the trace of daremo-o is designated the antecedent of zibun. While this satisfies the A-position

4 We were reminded by a reviewer of other apparent violations of the weak crossover principle. These involve the following examples in English:

(1) John, his mother loves.
(2) This is the man who his mother loves.

The question is, are these cases to be handled in a similar fashion to the Japanese examples (e.g., (8))? The judgement of the authors who are native speakers of English is that coreference between John and his is attainable in context, but out of context it is strange. This suggests that his is not 'picking up its reference' from the NP, John, that is, coreference is not to be represented structurally.

5 Cf. Kamayama (1984) for discussion of data which is similar to that discussed here. She offers a rather different analysis as a solution, however.
antecedent requirement for zibun, it violates condition (1). Once again, we are faced with our question: Why is it the case that there appears to be no discourse antecedent for which daremo and zibun are viewed simply as overt representatives (i.e., 'resumptives') in the syntactic structure, rendering (13) acceptable? One possibility is that, since daremo is not a referring expression, it never has a discourse antecedent. This may well tie into another property of Japanese, the fact that quantifiers do not appear in topic position (cf. Akmajian and Kitagawa, 1976). They also cannot be resumptives. Quantifiers are never in argument position in LF, while resumptives (e.g., resumptive pronouns, and the like) are, by definition, always in argument position.

However, the picture is never quite so clear. Example (14) below is left unexplained both by condition (1) and by our discussion, so far, of the notion discourse antecedent:

(14) Hanako-ga zibun-o kiratte iru kamosirenai to iu
     NOM self ACC dislike might
     koto-wa daremo o yūutu-ni surudarō
     fact TOP anyone ACC depressed would make

That Hanako might dislike self would depress anyone.

Clearly, zibun cannot be coindexed with daremo, since condition (1) would then incorrectly rule (14) out. Our speculation that daremo, being a quantifier, is not a 'resumption' of a discourse antecedent needs qualification. It appears that the presence of the modal affects the interpretation in some manner. That is, it could be the case that the intended addressee can recognize the speaker's intentions to refer here, thus establishing a discourse antecedent for the relevant argument. It is not necessary for the purposes of recognizing a speaker's referential intentions that a speaker use a referring expression. It is interesting to note that (8), in which condition (1) appears to have been overridden, also involves a modal.

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6 It was suggested to us by a reviewer that this instance of daremo might more properly be identified as an instance of a 'generic' or non-quantificational NP on a par with names, similar, perhaps, to anyone in English. That is also the opinion of one of the authors (N. Tsujimura).

7 The idea that quantifiers can be used referentially has been explored by Reinhart (1983). Example (14) might well be fruitfully explored along similar lines.
Concluding Remarks

There are a number of conclusions that one can draw from the above observations. We will briefly explore two possibilities.

A reasonable line to pursue would be one based on the following assumptions:

(i) there is a VP in Japanese;
(ii) scrambling is an instance of move alpha (i.e., defines a NP-trace relation);
(iii) variables can be antecedents;
(iv) zibun must have an A-position antecedent;
(v) condition (1).

The apparent counterexamples to condition (1) would constitute an apparent overriding of a grammatically based condition, a condition which does account for the difficulty of construing zibun with the moved NP as in example (4). Perhaps the construct "empty topic", posited by Huang (1984) for Mandarin, would be a possibility worth pursuing in explaining the use of zibun in cases where (1) precludes an antecedent internal to the sentence.

Another interesting avenue to explore would be one based on a different set of assumptions.

(i) there may or may not be a VP in Japanese;
(ii) scrambling may or may not be an instance of Move-alpha;
(iii) variables may or may not be antecedents;
(iv) zibun does not have to have an A-position antecedent;
(v) subject can be the antecedent for zibun;
(vi) zibun may have a discourse antecedent;
(vii) condition (1) does not hold.

This approach claims that the grammar underdetermines the interpretation of zibun. That is to say, even when zibun is interpreted as 'coreferential' with some other NP in the sentence, it is possible that it is not linked to that NP by rules and principles of grammar, but rather by discourse or pragmatic principles. In this approach, there is no overriding operative in (4) when zibun and Zirō are construed as 'coreferential'.

It would be interesting and fruitful to explore both approaches. Doubtless neither of them will turn out to be entirely correct, and it is to be expected that future research will shed the required light on the precise nature of zibun-interpretation in Japanese and similar languages.
References


Kameyama, Megumi: 1984, 'Subjective/Logophoric Bound Anaphor Zibun', in CLS.


Ross, John R.: Constraints on Variables in Syntax, unpublished Ph.D. dissertation, MIT.


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