An Island Effect in Japanese

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DRAFT, 10/98: comments welcome

1. Islandlessness, and some approaches to it

Japanese is famous for appearing to lack certain kinds of island effects which are observable in other languages. Two examples of this are given below:

(1) Nakamura –san -wa [yakuza -ga **dare** -o korosita tatemono -o

Nakamura HON TOP gangster NOM who ACC killed building ACC

kaimasita ka?

bought Q

'Who did Nakamura-san buy a building [where gangsters killed t]?'

(2) [Taroo -ga **doko** -ni itta kara] umaku iku no?

Taroo NOM where DAT went because well go Q

'Where are things going well [because Taroo went t]?'

A number of approaches to these data have been proposed. Here I will concentrate on two. One maintains that the wh-phrases in these examples are simply not subject to the relevant island constraints, either because these constraints hold only of overt movement (Huang 1982 and much subsequent work) or because these wh-phrases never undergo movement at any point in the derivation (Reinhart 1995, Cole and Hermon 1994, 1997).

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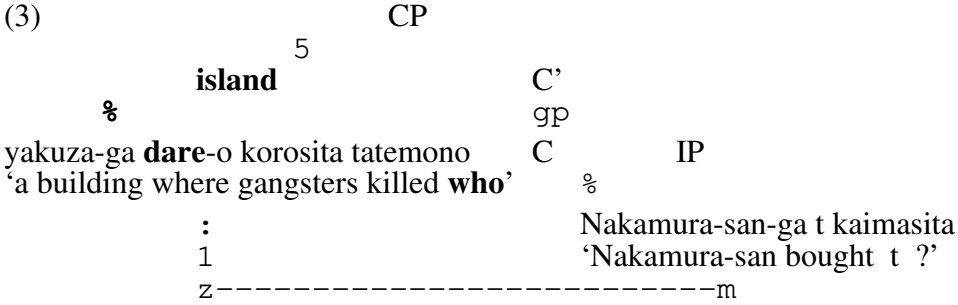
A second class of approaches maintains that covert wh-movement is in fact subject to island effects, but that islands may be circumvented in covert movement if movement operations affect not only wh-phrases but the islands containing them. In (1) above, for example, the covertly moved constituent is not *dare* 'who', on this view, but the entire complex NP *yakuza-ga dare-o korosita tatemono* 'a building where gangsters killed who'; thus, movement of *dare*'who' never crosses an island:



Accounts of this type have been developed by Nishigauchi (1990) and (in a somewhat different form) by Watanabe (1992) and Hagstrom (1998)[1]. In this paper I will give evidence in favor of this second kind of approach; to the extent that the evidence is convincing, it commits us to a theory which postulates covert movement, and in which overt and covert movement are subject to similar kinds of island constraints.

2. Where Approaches Diverge: Distinct-Scope Readings

Suppose we consider Japanese sentences containing two wh-phrases and two potential landing sites (represented schematically in (3a), and exemplified in (3b)):

[1] Strictly speaking, Watanabe and Hagstrom's approaches do not involve pied-piping of the island. They develop theories in which covert movement involves movement not of entire wh-phrases but of scope markers associated with them. In cases of covert wh-movement out of islands, they argue, the relevant scope marker is one associated with the island, rather than with the wh-phrase inside it. Thus, these approaches are similar to Nishigauchi's in that it is the island, rather than the wh-phrase, which enters into a movement relation. I will continue to discuss these facts from the perspective of a pied-piping approach, but I believe that everything I will say will be consistent with scope-marker-movement approaches as well.

(3) a. $[_{CP\ [+wh]}$ $[_{CP\ [+wh]}$ **wh** $_1$ **wh** $_2$]]

b. Keesatu-wa [**dare** -ga **dare** -o korosita ka] sirabeteiru no?

police TOP who NOM who ACC killed Q are-investigating Q

Sentences like (3) are multiply ambiguous in Japanese (cf Nishigauchi 1990, Saito 1994, Grewendorf and Sabel 1996, Richards 1997 for some discussion). They may have readings in which both wh-phrases take the same scope, with the other interrogative C being interpreted as a yes-no question:

(4) a. For which x and which y are the police investigating [whether x killed y]?

b. Are the police investigating [for which x and which y, x killed y]?

Sentences like (3) can also have a reading in which the two wh-phrases take distinct scopes; for many speakers, at least, this reading is not as good as the ones in (4), but is still available[2]:

(5) For which x are the police investigating [for which y, x killed y]?

Next, let us complicate the situation in (3) somewhat by placing both wh-phrases in an island:

[2] Speakers generally agree that the reading in (5), in which the paths of the two wh-phrases cross, is more acceptable than the other logically possible reading in (i), in which the paths nest:

(i) For which y are the police investigating [for which x, x killed y]?

I attempt to account for the distinction between (5) and (i) in Richards (1997).

(6) a. $[_{CP\ [+wh]}$ $[_{CP\ [+wh]}$ **wh**$_1$ **wh**$_2$]]

b. Keesatu-wa [Nakamura -san -ga

police TOP Nakamura HON NOM

dare -ga **dare** -o korosita tatemono-o katta ka

who NOM who ACC killed building ACC bought Q

sirabeteiru no?

are-investigating Q

(literally): 'Q the police are investigating Q Nakamura-san bought [a building where who killed who]?'

Here the predictions of the two accounts sketched above diverge. In an account in which wh-in-situ is simply not subject to island effects, either because covert movement need not obey island conditions or because there is no covert movement, (6) is not relevantly different from (3), the simpler case discussed above.

Consider, on the other hand, an account in which covert movement circumvents islands by allowing the island, rather than the wh-phrase, to undergo movement. In accounts of this type, we expect examples like (6) to lack readings in which the two wh-phrases take distinct scopes. The island should undergo movement to one or another of the possible landing sites, and this should be the scope position for both wh-phrases. For the wh-phrases to have distinct scopes, at least one of them would have to move out of the island, and on this class of accounts, extraction from islands is barred in Japanese, just as it is in English[3]. Speaking somewhat more precisely, then, what we expect is that

[3] Here I am crucially assuming that the scope of a wh-phrase is determined by its position at LF. In particular, it must be impossible for a wh-phrase which moves successive-cyclically from one Spec CP to another to reconstruct and take scope in one of its previously occupied positions. If scope reconstruction of this kind were possible, then a derivation like the one in (i) could yield a distinct-scopes reading:

distinct-scope readings in structures like that in (6a) should be degraded to the extent to which extraction from the corresponding island is degraded in a language like English.

In fact, the prediction of this second class of accounts seems to be correct. (6b) above, for example, has only the readings in (7a-b), not the distinct-scopes reading in (7c):

(7) a. For which x and which y are the police investigating [whether Nakamura-san bought a house where x killed y]?

b. Are the police investigating [for which x and which y Nakamura-san bought a house where x killed y]?

c.*For which x are the police investigating [for which y Nakamura-san bought a house where x killed y]?

Similarly, (8) has only the readings in (9a-b), not the distinct-scopes reading in (9c):

(8) Keesatu-wa [Nakamura -san -ga **dare**-ga **nani** -o katta kara
police TOP Nakamura HON NOM who NOM what ACC bought because
kaisya-o yameta ka] sirabeteiru no?
firm ACC quit Q are-investigating Q

(i) a. $[_{CP}$ $[_{CP}$ $[_{island}$ **wh$_1$** **wh$_2$** **]**]]
b. $[_{CP}$ $[_{CP}$ $[_{island}$ **wh$_1$** **wh$_2$** **]$_j$** t_j]]
c. $[_{CP}$ $[_{island}$ **wh$_1$** **wh$_2$** **]$_j$** $[_{CP}$ t'$_j$ t_j]]

Scope reconstruction of *wh$_2$* could then apply to the representation in (i.c), allowing this wh-phrase to take scope in its previous position in the Spec of the lower CP. This type of scope reconstruction will have to be blocked.

(9) a. For which x and which y are the police investigating [whether Nakamura-san quit the firm because x bought y]?

b. Are the police investigating [for which x and which y Nakamura-san quit the firm because x bought y]?

c. *For which x are the police investigating [for which y Nakamura-san quit the firm because x bought y]?

Thus, the prediction of the pied-piping approaches would appear to be correct; if two wh-phrases are both situated in an island, they must take the same scope. I offered an explanation for this based on covert pied-piping; wh-phrases contained in islands must pied-pipe the island with them to their scope position, and two wh-phrases contained in a single island must therefore take the same scope, since a single island can only be in one of the possible scope positions at LF. In the next section I will offer some additional evidence for this interpretation of these facts.

3. Long-distance scrambling and additional-wh effects

The previous section focused on the fact that sentences like (10) have only two meanings, not three as might be expected:

(10) syatyoo -wa [Yamada-san -ga **dare** -o **doko** -ni yatta kara

president TOP Yamada HON NOM who ACC where DAT sent because

umaku itteiru ka] siritagatteiru no?

well are-going Q is-wondering Q

(10) has the meanings in (11a-b), but not the one in (11c):

(11) a. For what x and what y is the president wondering [whether things are going well because Yamada-san sent x to y]?

b. Is the president wondering [for what x and what y, things are going well because Yamada-san sent x to y]?

c. *For what x is the president wondering [for what y, things are going well because Yamada-san sent x to y]?

(10) differs in this regard from (12), which lacks (10)'s CED island, and which has readings corresponding to all three of the readings in (11):

(12) syatyoo-wa [Yamada-san -ga **dare**-o **doko** -ni yatta ka]
president-TOP Yamada-HON-NOM who ACC where DAT sent Q
siritagatteiru no?
is-wondering Q

(13) a. For what x and what y is the president wondering [whether Yamada-san sent x to y]?

b. Is the president wondering [for what x and what y, Yamada-san sent x to y]?

c. For what x is the president wondering [for what y, Yamada-san sent x to y]?

On the other hand, (13c) is the least accessible of the three readings, at least for many speakers. One can imagine an alternative account of the effect exemplified in (10-11), which might capitalize on this in the following way: what is special about sentences containing islands is not that the island places restrictions on covert pied-piping, the account might say, but rather that it places an additional burden on the parser, which

causes the least accessible of the readings to vanish. Of course, an account of this kind would encounter certain difficulties. Sentences containing islands are apparently not especially difficult to parse, according to native speakers; they simply lack one of the logically possible readings.

A more serious problem for the parsing account might arise from sentences like (14), in which one wh-phrase has been long-scrambled out of an island:

(14) **Dare**-o$_i$ syatyoo -wa [Yamada -san -ga ___$_i$ **doko** -ni yatta kara

who ACC president TOP Yamada HON NOM where DAT sent because

umaku itteiru ka] siritagatteiru no?

well are-going Q is-wondering Q

(14) differs from (10) in that one of the two wh-phrases which began in the island has been scrambled out of it. This degrades the grammaticality of the sentence; long-distance scrambling is generally awkward for many speakers, and scrambling out of an island especially so. Thus, we might reasonably expect the parser to be under a special burden here, on any theory of parsing. But in fact (14) has a distinct-scopes reading; that is, it has all three of the readings in (11), repeated here as (15):

(15) a. For what x and what y is the president wondering [whether things are going well because Yamada-san sent x to y]?

b. Is the president wondering [for what x and what y, things are going well because Yamada-san sent x to y]?

c. For what x is the president wondering [for what y, things are going well because Yamada-san sent x to y]?

Recall that (15c) (=(11c)) was unavailable for (10). The distinction between (10) and (14) is expected under the theory developed here; in (14), the two wh-phrases are no longer both contained in the same island, since one of them has been removed by long-distance scrambling, and there is therefore no obstacle to their taking distinct scopes.

Finally, let us consider one last argument that the phenomenon under consideration here should be explained in terms of island effects of a familiar kind. It is well-known that island effects are subject to additional-wh effects of various kinds. Watanabe (1992) observes, for example, that wh-island effects in Japanese may be obviated by an additional wh-phrase which is outside the island and c-commanded by it:

(16) a. *John-wa [Mary -ga **nani** -o katta ka dooka] siritagatteiru no?
John TOP Mary NOM what ACC bought whether want-to-know Q
'What does John want to know whether Mary bought t?'

b. John-wa [Mary -ga **nani** -o katta ka dooka] **dare**-ni tazuneta no?
John TOP Mary NOM what ACC bought whether who DAT asked Q
'Who did John ask t whether Mary bought what?'

We might expect to find a similar effect with regard to the ban on distinct-scope readings discussed here. The relevant judgments are extremely subtle, apparently, but seem to go in the desired direction. (17) is another example of a sentence in which an island prevents multiple wh-phrases from having distinct scopes:

(17) [**dare**-o **doko** -ni yatta kara] Nakamura-san -ga kaisya-o
who ACC where DAT sent because Nakamura-HON-NOM firm ACC
kubi -ni natta ka] tazuneta no?
neck DAT became Q asked Q

(17) can mean (18a) or (18b), but not (18c):

(18) a. For what x and what y did they ask [whether Nakamura-san got fired from the firm [because he sent x to y]]?

b. Did they ask [for what x and what y Nakamura-san got fired from the firm [because he sent x to y]]?

c.*For what x did they ask [for what y Nakamura-san got fired from the firm [because he sent x to y]]?

Next let us consider an example with an additional wh-word in a position c-commanded by the island:

(19) [**dare**-o **doko** -ni yatta kara] **dare**-ga kaisya-o
who ACC where DAT sent because who-NOM firm ACC
kubi -ni natta ka] tazuneta no?
neck DAT became Q asked Q

Judgments on this kind of sentence are very difficult. But for some speakers, at least, (19) apparently does have a reading in which the two wh-phrases in the island take distinct scopes; in particular, (19) can mean (20)[4]:

(20) For what x did they ask [for what y and what z, z got fired from the firm because he sent x to y]?

This additional-wh effect is subject to the same structural conditions as the one discussed by Watanabe; in particular, the additional wh-phrase must be c-commanded by the island. Thus, for those speakers for which (19) can mean (20), (21) cannot:

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[4] Interestingly, (19) cannot have the meaning in (i), where the two wh-phrases in the island take distinct scopes and the additional wh-phrase takes wide scope:
(i) For what x and what z did they ask [for what y, z got fired from the firm because he sent x to y]?

(21) **dare**-ga [**dare**-o **doko** -ni yatta kara] kaisya-o

who NOM who ACC where DAT sent because firm ACC

kubi -ni natta ka] tazuneta no?

neck DAT became Q asked Q

The fact that the ban on distinct-scope readings exhibits island-like additional-wh effects suggests that this ban is in fact an island effect of a familiar kind. We should expect the existence of such an effect on a pied-piping analysis of the apparent absence of islands for covert movement; the existence of the effect is thus support for this type of analysis.

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The distinction between (i) and (20) might be made to follow from the general preference for crossed over nested paths in Japanese (cf. footnote 2). Thanks to Junko Shimoyama for pointing this out to me.

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