

Ellipsis and the Island*

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Abstract

In this article the nature of short answers is examined. Issues of *wh*-questions involving (apparent) violations of the relative clause island constraint (RCIC) will be re-examined at length. It is shown that short answers to such *wh*-questions derive from focus constructions which indeed involve the relevant violations but are saved by island-repair due to ellipsis. Functional answers provide compelling evidence for this analysis.

1. Ellipsis and *Wh* in complex NP

1.1 The pied-piping analysis

Question sentences like (1), in which a *wh*-phrase appears inside a relative clause, have given rise to an important issue in the current linguistic theory.

- (1) Minna-ga [Akira-ga doko-de tor-ta syasin]-o mi-ta ka osiete.
all-Top Akira-Nom where-at take-Past picture-Acc see-Past Q tell me
'Lit. Everyone saw a picture that Akira had taken where?'
- (2) a. (Kare-ga) Tokyo-de tor-ta {syasin / no}(-o) desu.
he-Nom Tokyo-at take-Past picture / one Cop
'The picture/one that he had taken in Tokyo.'
- b. Tokyo(-de) desu.
Tokyo-at Cop
'(In) Tokyo.'

The acceptability of answers like (2b) has been taken to indicate the lack of the effect of relative clause islands in Chinese, Japanese, Korean and other '*wh* in-situ' languages. Huang (1982) specifically argued that no island constraint applies to LF-movement and subsequently approaches have been developed under which some non-movement operation licenses *wh* in-situ (Reinhart (1998), Tsai (1994), among others).

*This article represents part of an ongoing research in collaboration with Tomohiro Fujii. The materials presented in this article are discussed at greater length in Nishigauchi and Fujii (2006a, 2006b). We would like to thank Norbert Hornstein, Jim Huang, and Howard Lasnik for comments and discussion. Research leading to the present article has been supported by a grant-in-aid from Japan Society for the Promotion of Science, and the Fulbright Scholar Program.

On the other hand, the fact that (2a) is a possible answer to questions like (1) is one of the reasons that led Nishigauchi (1990) to hypothesize that in Japanese (and other languages in which *wh*-questions exemplified by (1) are permissible) the entire complex NP containing the *wh*-phrase can be moved and occupy the operator-position at LF. ('Large-scale Pied-Piping at LF.') This idea has later been modified by Watanabe (1992) so that the *wh*-feature of the entire complex NP, instead of the whole NP itself, is moved to the operator position either in overt syntax or at LF. We'll call this the LF Pied-Piping (LFPP) approach.

According to this latter approach, the large constituent containing the *wh*-phrase, which itself moves inside the relative clause island, thereby making it [+*wh*], is moved to SpecCP in the covert syntax.

- (3) [CP [DP_[+wh]a pic that Akira took where_[+wh]] [TP everyone saw *t*]]
-

The derivation of this structure involves no island violations.

Assuming that short answers involve movement of the answer fragment plus deletion under identity, the analysis of the question-answer pair, (1)–(2a) would be captured in the following way: (2a) must be derived by movement of the complex NP out of the FinP to the Spec-FocP, followed by deletion of the FinP which contains the trace of the large NP. Deleted material is represented by < ... > here.

- (4) [FocP [DP_[+foc]a pic that Akira took in Tokyo_[+foc]] <[FinP [TP everyone saw *t*] Cop]>]
-

The corresponding focus construction, as predicted, is acceptable.

- (5) [Akira-ga Tokyo-de tor-ta syasin]-o minna-ga mi-ta no desu.
Akira-Nom Tokyo-in take-Past pic-Acc all-Top see-Past C Cop
'A picture that Akira took in Tokyo, everyone has seen.'

As expected, corresponding to (2a), the following cleft sentence is also grammatical, again suggesting the strong parallelism between *wh*-questions and their answers.

- (6) Minna-ga mi-ta no wa [Akira-ga Tokyo-de tor-ta syasin](-o) desu.
all-Nom see-Past C Top Akira-Nom Tokyo-at take-Past picture-Acc Cop
'Lit. It was a picture that Akira had taken in Tokyo that everyone saw.'

1.2 Whence short answers?

Given that a LFPP option exists and a 'pied-piping' answer (2a) is available, let us ask why a short answer like (2b) is a possible answer to (1).

Nishigauchi (1990) claimed that short answers like (2b) are obtained by 'truncating' the 'Pied-Piping answers' like (2a) via some discourse-deletion process that operates in discourse such as:

- (7) Q: Is it the picture that you took in Tokyo?
A: No, in Washington DC.

We'll turn to this possibility later on.

Now, if we pursue the idea of the present work that short answers are derived by focus movement plus deletion, it appears that we must derive (2b) from the following focus construction.

- (8) *[Tokyo-de]_{PP} minna-ga [Akira-ga *t*_{PP} tor-ta syasin]-o mi-ta no desu.
Tokyo-in all-Nom Akira-Nom take-Past pic-Acc see-Past C Cop
'In Tokyo, everyone has seen a picture that Akira took.'

This sounds like a grammatical sentence, but it is ungrammatical on the intended reading on which Tokyo was the place where the pictures were taken (not where everyone saw the pictures), so we cannot view it as the source of (2b), so it seems.

2. Island repair by deletion

There has been a growing body of literature in which (at least some class of) island violations are viewed as PF-phenomena. In this subsection, we will re-examine the problem of short answers presented in the previous subsection in light of island-repair.

Merchant (2004) develops an analysis of the problem posed by sentences like (9), in which he invokes the PF theory of islands.

- (9) They hired someone who speaks a Balkan language — guess which!

In this theory, island violations are considered to be due to properties of pronounced syntactic structure, not to constraints on derivation or representations of LF themselves.

According to this theory, intermediate traces created by crossing syntactic islands are defective and cannot remain in a structure that gets pronounced. These traces are assigned *, a PF-uninterpretable feature. Alternatively, * may be assigned to XPs that form islands, as in Fox and Lasnik (2003). If ellipsis can apply, the structure which contains the * feature(s) are eliminated from the PF object.

As Merchant (2004) proposes (see also Fox and Lasnik (2003), Merchant (2001)), this analysis not only accounts for (9), but also captures the well-known asymmetry between sluicing and VP-ellipsis:¹

- (10) They want to hire someone who speaks a Balkan language, but
a. I don't remember which.
b. *I don't remember which (language) they do.

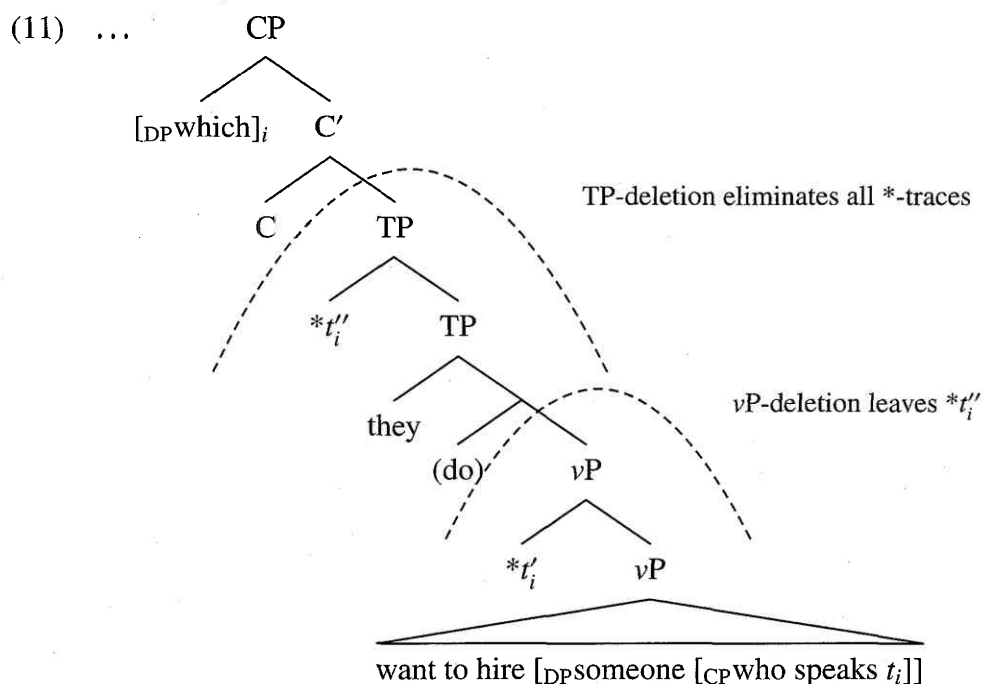
Assuming that *wh*-movement targets every intermediate maximal projection along the way, deletion of TP (sluicing) and *v*P (VP-ellipsis) are shown to have different consequences.

¹ Note that MaxElide may also be violated in (9b) (Takahashi & Fox, 2005). We would like to mention here one alternative that analyzes the difficulty of VP-ellipsis in cases that involve no island as a case of "failure of island repair".

- (i) *They said they heard about a Balkan language, but I don't know which they did.

Fox and Lasnik propose that their Parallelism requirement for ellipsis forces the *wh*-phrase in (i) to move in one-fell-swoop fashion, because there is no intermediate binders in the antecedent clause. They argue that this one-fell-swoop movement causes a Subjacency violation in Chomsky's (1986) sense, and that deletion of the VP, unlike deletion of the TP, does not help to remove the cause of the Subjacency violation that results from the 'long' movement.

A couple of questions arise. Is a principle like MaxElide needed independently from island repair? If it is, when is the condition active and when is it not? Why is it active (or inactive) when it is (or when it is not)? We will not address these issues in detail here. The reader is referred to Takahashi and Fox (2005) for relevant discussion and a wider range of data. See also footnote 2.



With the type of approach to islands just outlined in mind, let us turn to Japanese. This analysis is plausible as an account of the acceptability of the short answer (2b) as a reply to (1).

- (1) Minna-ga [Akira-ga doko-de tor-ta syasin]-o mi-ta ka osiete.
 all-Nom Akira-Nom where-at take-Past picture-Acc see-Past Q tell me
 'Lit. Everyone saw a picture that Akira had taken where?'
- (2) b. Tokyo-de desu.
 Tokyo-at Cop
 'In Tokyo.'

As we have seen above, the 'full' focus construction (8) from which (2b) is supposed to be obtained by deletion displays the island effect. The following cleft construction shows the same effect.

- (12) *[[Minna-ga Akira-ga tor-ta syasin]-o mi-ta no]-wa Tokyo-de desu.
 all-Nom Akira-Nom take-Past picture-Acc see-Past C-Top Tokyo-in Cop
 Lit. 'It is in Tokyo that everyone saw a picture [that Akira had taken t_i].'

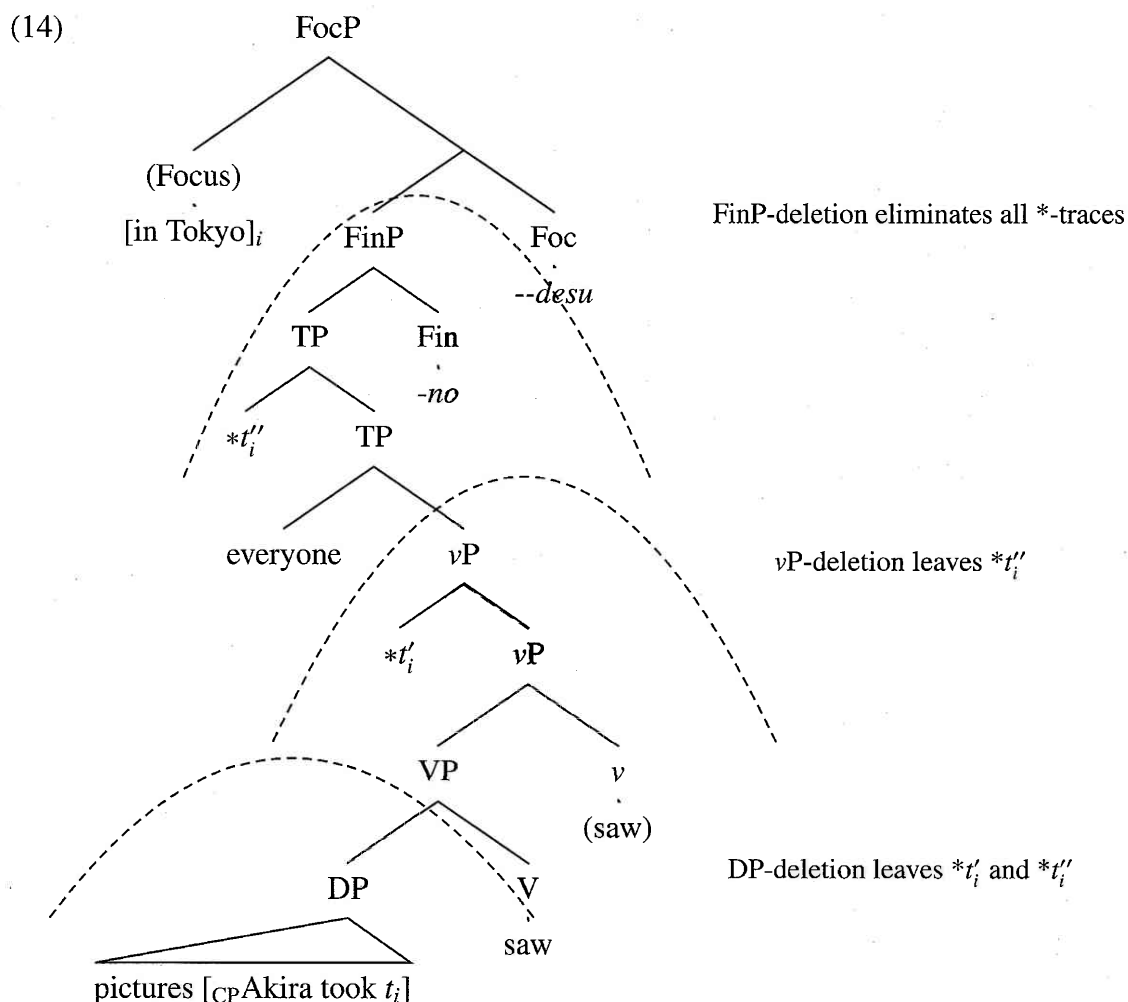
Thus the contrast between (2b) and (8)/(12) follows if ellipsis ameliorates the island violation.

Furthermore, this analysis also predicts, correctly, that argument deletion, which deletes the remnant of the relative clause from which the answer fragment has moved, yields a bad answer to (1).

- (13) a. *Tokyo-de (minna-ga) \emptyset mi-ta no desu.
 Tokyo-in all-Nom see-Past C Cop
 'Lit. In Tokyo, everybody saw \emptyset .'
- b. *(minna-ga) \emptyset mi-ta no wa Tokyo-de desu.
 all-Nom see-Past C Top Tokyo-in Cop
 'Lit. It was in Tokyo that everybody saw \emptyset .'

The answer in these sentences only means Tokyo was the place where they saw the pictures, never where the pictures were taken.

The following structure shows how this analysis makes the distinction between (2b) and (13) as an answer to (1).



As the structure indicates, deletion of FinP erases all the offending traces, and this explains why the short answer (2b) is an acceptable answer to (1). In contrast, if (13) is derived by deletion of DP (argument deletion), then both the offending traces created by the movement of the answer fragment, $*t'_i$ and $*t''_i$, remain in the structure, which ends up being ungrammatical. Cf. Saito (2004) for the arguments that argument deletion exists in Korean and Japanese. Alternatively, if the analysis in Otani and Whitman (1991) is correct, what we see in (13) is VP-ellipsis, with head V raised to v or T, so that either VP or v P is deleted. In this latter case, $*t''_i$ is left in the structure. In either case, deletion as seen in (13) leaves some offending trace, and this accounts for their ungrammaticality in contrast to (2b). As the reader must have noticed, the ungrammaticality of (13) also involves a violation of MaxElide, discussed in footnote 1.²

² The unacceptability of cases like (13a,b) can be accounted for as a violation of MaxElide, independently from island repair (see footnote 1). This is perfectly compatible with our story about island repair. As alluded to in footnote 1, the Fox and Lasnik type theory may treat bad examples like the following as instances of failure of island repair.

3. Alternative solutions

There are at least two potential interfering factors with the analysis depicted in subsection 2.. First, it is not self-evident that the ellipsis site does contain an island to begin with. Merchant (2001) discusses this possibility for sluicing in English.

Let us first review Merchant's (2001, chapter 5) answer to the puzzle posed by the fact that sluicing can be grammatical even when its source structure involves an island violation. Consider a well-known case of the CNPC violation, which we repeat.

- (9) They hired someone who speaks a Balkan language — guess which!

Sluicing in (14) is acceptable although the sentence from which it can be derived is ungrammatical because of the CNPC.

- (15) *Guess which Balkan language_i they hired someone who speaks t_i .

Merchant's (2001) answer to this puzzle is that the CNPC may not be violated even when ellipsis yields a grammatical output. Merchant (2001) argues that the source structure of the sluiced portion in (9) is the following:

- (16) Guess [which ~~s/he speaks~~]

This structure involves a portion within the island which itself does not constitute an island. Also, this portion contains an E-type pronoun referring to the head of the relative clause. In the case of (16), the pronoun *s/he* is an E-type pronoun that refers to *the person who speaks a certain language*.

Although this idea appears to work for the range of the sluicing data involving relative clause island violations, it does not provide a real solution to the problem posed by the fact that (2b) is a possible answer to (1) — A non-elliptical answer that has an E-type pronoun referring to the head of the relative clause in the question and does not involve an island in the

- (i) A. Hanako-wa [kyoozyu-ga nani-o koogi-su-ru tokoro]-o rokuon sita no?
Hanako-Top prof.-Nom what-Acc lecture-Pres C-Acc tape-rec do-Past Q
'Lit. What did Hanako tape-record the professor lecturing?'
B. Hanako-ga [kyoozyu-ga koogi-su-ru tokoro]-o rokuon sita
Hanako-Nom prof.-Nom lecture-Pres C-Acc tape-rec do-Past
no wa gengogaku-o desu.
C Top linguistics-Acc Cop
'It was linguistics that Hanako tape-recorded the professor lecturing.'

Fox and Lasnik report that, in English, when overt A'-movement takes place in the antecedent clause, deletion of a smaller constituent becomes easier. Sentences (iia,b) are from Fox and Lasnik (2003), with their judgments (cf. Takahashi and Fox (2005)).

- (ii) a. *I know John said that Mary read a certain book, but YOU don't know which one he did.
b. ??I know which book John said that Mary read, but YOU don't know which one he did.

We observe that the effect in question seems to hold for Japanese as well. The status of (iB) seems to improve when it follows the question in (iii), compared to when it follows (iA).

- (iii) Hanako-ga [kyoozyu-ga koogi-su-ru tokoro]-o rokuon sita
Hanako-Nom prof.-Nom lecture-Pres C-Acc tape-rec do-Past
no wa nani-o desu ka?
C Top what-Acc Cop Q
'What was it that Hanako tape-recorded the professor lecturing?'

We cannot discuss exactly how "MaxElide" works in Japanese question-answer pairs for space reasons. More research and groundwork needs to be done; see Kuno (1978, 1980) for relevant data from Japanese.

answer, which the type of analysis represented by Merchant (2001) would posit for (1), does not function as an appropriate answer to the question because it does not satisfy some of the pragmatic conditions imposed on question–answer pairs.

- (1) Minna-ga [Akira-ga doko-de tor-ta syasin]-o mi-ta ka osiete?
 all-Nom Akira-Nom where-at take-Past picture-Acc see-Past Q tell me
 ‘Lit. Everyone saw a picture that Akira had taken where?’
- (17) #Tokyo-de Akira-ga sorera-o tor-ta no desu.
 Tokyo-in Akira-Nom those-Acc take-Past C Cop
 ‘It was in Tokyo that Akira took them.’

So even if (17) provides a good antecedent for the ellipsis site in the sense that it does not involve an island, that must not be the source for (2b), because it is not a good answer.

The second factor that may interfere with the ‘island repair’ analysis of (2b), which we will defend, has to do with what we call the bare-copular strategy, discussed in Saito (2004). Examining the absence of the island effect in examples like (2b), Saito (2004) proposes the possibility that the subject of (2b) is occupied by a phonologically empty pronoun (as in (18a)) and therefore it does not have to involve either movement or deletion. The empirical basis of this claim is that an overt version of that pronoun is available in Japanese, *sore* ‘it’, which is illustrated in (18b):

- (18) a. *pro* Tokyo-de desu.
 Tokyo-at Cop
- b. *Sore-wa* Tokyo-de desu.
 it-Top Tokyo-at Cop

(18b) is acceptable as an answer to question (1), as Saito observes based on the same type of example. It is worth stressing here that when the derivation of (2b) utilizes the bare-copular strategy, the identity condition for ellipsis is trivially satisfied. The argument for island repair based on the contrast between (2b) and (8)/(12) is considerably weakened if (18) is a source. For the sake of discussion, we assume that the null version of *sore* is available.

Now it is clear from the discussion so far that, in order to show that deletion can fix an island violation in short answers in Japanese, we have to find an environment where *sore/pro* is not available and that short answers do not exhibit the island effect that their non-elliptical counterpart exhibit in that environment.

Functional answers are not compatible with the bare-copular strategy. Observe that when an answer contains a bound variable inside, the bare-copular frame with *sore* cannot be used.

- (19) A: Minna-ga John-ga dare-to atta to omotteiru ka osiete.
 All-Nom John-Nom who-with meet-Past that think Q tell me
 ‘Who does everyone think that John saw?’
- B: a. *Sore-wa* Hanako-to desu.
 it-Top Hanako-with Cop
- b. **Sore-wa* soitu-no hahaoya-to desu.
 it-Top the guy-Gen mother Cop

The contrast seen in the a- and b-examples of (19) suggests that the presence of *sore* prevents the binder for the bound pronoun from occurring in the structure. Thus functional answers help us to force the derivation of a short answer to involve deletion.

4. Functional answers

Now let us consider (1) again, in light of the possibility of functional answers.

- (1) Minna-ga [Akira-ga doko-de tor-ta syasin]-o mi-ta ka osiete.
all-Nom Akira-Nom where-at take-Past picture-Acc see-Past Q tell me
'Lit. Everyone saw a picture that Akira had taken where?'
- (20) a. (Akira-ga) soitu_i-no kokyoo-de tor-ta {syasin / no} desu.
Akira-Nom the guy-Gen hometown-at take-Past pic / one Cop
'The picture/one that he had taken in his or her_i hometown.'
- b. ?Soitu_i-no kokyoo*(-de) desu.
the guy-Gen hometown-at Cop
'In his or her_i hometown.'

Answer (20a) is a functional answer derived by LFPP, in which, if all the people concerned are from different areas, each person saw a different picture taken in his or her home town. The acceptability of this answer corresponds with the acceptability of the following focus sentence, also derived by 'large-scale pied-piping'.

- (21) [Akira-ga soitu_i-no kokyoo-de tor-ta syasin]-o minna_i-ga *t*
Akira-Nom the guy-Gen hometown-at take-Past pic-Acc all-Nom
mi-ta no desu.
see-Past C Cop
'Lit. It was the picture that Akira had taken in his or her_i home town that everyone_i saw.'

The availability of the functional answer (20a) finds its basis on the fact that the pronominal (epithet) *soitu* appearing in the complex NP is bound, as desired, by the quantificational subject *minna* 'all, everyone' in the position designated by *t* of the cleft sentence (21), from which (20a) is derived.

The status of short answer (20b), which we find quite good, is very significant. As we will show shortly, this example provides a very important piece of evidence that island-repair is the only solution available in the derivation of this short answer.

As the asterisk outside the parentheses indicates, the omission of the postposition *-de* 'at' leads to total ungrammaticality to all speakers. This is a sign of connectivity, and we take it as indicating that we cannot find the source of (20b) in the bare-copular strategy, discussed in 3.. In fact, such a putative source is itself ungrammatical.

- (22) *Sore-wa soitu_i-no kokyoo-de desu.
it-Top the guy-Gen hometown-at Cop
'It was in his or her_i hometown.'

This also shows that the analysis suggested in Nishigauchi (1990), according to which (20b) is derived from (20a) by a discourse deletion rule, is on the wrong track, for this approach presupposes what is similar to the bare-copular frame.

The only possible source for (20b) is (8), which we have shown to be ungrammatical for the violation of the relative clause island even when its focus portion contains an individual name. As expected, the following focus and cleft sentences are also ungrammatical.

- (23) a. *[Soitu_i-no kokyoo-de]_{pp} minna-ga [Akira-ga *t*_{pp} tor-ta syasin]-o
 the guy-Gen hometown-at all-Nom Akira-Nom take-Past pic-Acc
 mi-ta no desu.
 see-Past C Cop
 'In his or her home town, everyone saw a picture that Akira took.'
- b. *Minna-ga [Akira-ga *t*_{pp} tor-ta syasin]-o mi-ta no wa
 all-Nom Akira-Nom take-Past pic-Acc see-Past C Top
 [soitu_i-no kokyoo-de]_{pp} desu.
 the guy-Gen hometown-at Cop
 'It was in his or her hometown that everyone saw a picture that Akira took.'

Thus, the grammaticality of (20b) can only be accounted for by island-repair. We consider this a very important result. This consideration provides a compelling piece of evidence that *wh*-movement in covert syntax is free from the relative clause island constraint effect and that the derivation of the relevant answer involves focus or cleft construction plus ellipsis, where island repair plays a crucial role.

References

- Chomsky, Noam (1986). *Barriers*. The MIT Press.
- Fox, Danny & Lasnik, Howard (2003). Successive Cyclic Movement and Island Repair: The Difference Between Sluicing and VP Ellipsis. *Linguistic Inquiry*, 34, 143–154.
- Huang, Cheng-Teh James (1982). *Logical Relations in Chinese and the Theory of Grammar*. Ph.D. thesis, MIT.
- Kuno, Susumu (1978). *Danwa-no bunpoo*. [Grammar of discourse]. Taishukan, Tokyo.
- Kuno, Susumu (1980). Discourse deletion. In Kuno, Susumu (Ed.), *Harvard studies in syntax and semantics*, vol. 3, pp. 1–144. Harvard University.
- Merchant, Jason (2001). *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford University Press.
- Merchant, Jason (2004). Fragments and ellipsis. *Linguistics and Philosophy*, 27(6), 661–738.
- Nishigauchi, Taisuke (1990). *Quantification in the theory of grammar*. Kluwer Academic Publishers, Dordrecht.
- Nishigauchi, Taisuke & Fujii, Tomohiro (2006a). Short Answers: Ellipsis, Connectivity, and Island Repair. Ms., Kobe Shoin Graduate School and University of Maryland.
- Nishigauchi, Taisuke & Fujii, Tomohiro (2006b). Where the Island Remains (Unrepairable). Ms., Kobe Shoin Graduate School and University of Maryland.
- Otani, Kazuyo & Whitman, John (1991). V-Raising and VP-Ellipsis. *Linguistic Inquiry*, 22, 345–358.
- Reinhart, Tanya (1998). *Wh*-in-situ in the Framework of the Minimalist Program. *Natural Language Semantics*, 6, 29–56.

- Saito, Mamoru (2004). Ellipsis and Pronominal Reference in Japanese Clefts. *Nanzan Linguistics, 1*, 21–50.
- Takahashi, Shoichi & Fox, Danny (2005). MaxElide and the Re-binding Problem. In *SALT 15*.
- Tsai, Wei-Thein Dylan (1994). *On Economizing the Theory of A-bar Dependencies*. Ph.D. thesis, MIT.
- Watanabe, Akira (1992). Subjacency and S-Structure Movement of *WH*-in-situ. *Journal of East Asian Linguistics, 1*, 255–291.

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