The Partial and Complete Island Repair Of Stripping

Ross (1969) observed that certain island effects are ameliorated under sluicing; this paper examines the amelioration in English of an island effect in another type of ellipsis — stripping. The principal empirical claims, supported by three acceptability judgment experiments, are 1. that non-contrastive stripping (1b) completely ameliorates the effects of a definite relative clause island violation, and 2. that a type of contrastive stripping, corrective stripping (2b), *partially* ameliorates definite relative clause island effects, whether the correlate was utterance final or not. The partial island sensitivity of corrective stripping I argue not to be due to ungrammaticality, but rather to be a *garden path* processing effect (Frazier 1978, Sturt 2007), which does not affect non-contrastive stripping. The grammaticality of island-violating corrective and non-contrastive stripping runs counter to prior claims in the literature, as Griffiths & Lipták (2014) have recently claimed that non-contrastive ellipsis ameliorates certain island effects and that contrastive ellipsis does not. In addition, these results speak to the debate on the nature of island constraints: can they be reduced to processing effects (Hofmeister & Sag 2010), or is there some irreducible grammatical aspect to these locality constraints (Fox & Pesetsky 2005)? I argue that the amelioration of island effects by ellipsis provides strong evidence against fully reductionist processing accounts of island constraints.

(1)   Island Violating Non-Constrastive Stripping and It-Clefts
    a.   James met the student who speaks *a foreign language*.
    b.   Yeah, *Farsi*.
    c.   * Yeah, it was Farsi that James met the student who speaks.

(2)   Island Violating Corrective (Contrastive) Stripping and It-Clefts
    a.   James met the student who speaks *Arabic*.
    b.   No, *Farsi*.
    c.   * No, it was Farsi that James met the student who speaks.

Previous research on the island sensitivity of stripping, and of the arguably related *fragment answers*, provides a variety of contradictory empirical claims. It has been claimed that such elliptical fragments are sensitive to island effects (Merchant 2004), that only corrective ellipsis is sensitive to islands (Griffiths & Lipták 2014), and that object elliptical fragments are insensitive to islands, as opposed to subject elliptical fragments (Barros et al. 2013). In light of these various claims, the importance that island ameliorations effect in the debate over the identity condition on ellipsis (Abels 2017), and the implications of ellipsis island amelioration for the broader explanations for island effects, three formal investigations into the island sensitivity of stripping were conducted.

Experiment 1 compared the sensitivity of non-contrastive stripping and of it-clefts to definite relative clause islands. In an aurally presented acceptability judgment experiment, participants (N=41) were asked to rate the acceptability of corrective stripping continuations to antecedents in which the correlate was contained within an island, as in (1b), or within a complement clause, as in (3b). They were also asked to rate the acceptability of non-reduced it-cleft continuations, as in (1c) and (3c). It-clefts were used as controls as they involve overt movement, are declarative, and have information structural properties similar to those of stripping. Results found a reliable island effect in the it-cleft conditions (β:3.67+/-0.43; p=<0.001), and no island effect in the stripping conditions (β:0.41+/-0.35; p>=0.26); island violating non-contrastive stripping in English is just as acceptable as non-island violating non-contrastive stripping. These results are consistent with the findings of Potter (2017), for similar written studies.

(3)   a. James heard that the student speaks *a foreign language*.
     b. Yeah, *Farsi*.
     c. Yeah, it was Farsi that James heard that the student speaks.

Experiment 2 examined corrective stripping and it-clefts, with participants (N=44) rating corrective stripping and it-cleft continuations with correlates in definite relative clauses (2b & 2c) and complement clauses (4b & 4c). Results found reliable island effects in both it-cleft (β:2.73+/-0.36; p=<0.001) and stripping (β:1.37+/-0.31; p=<0.001) conditions, with a reliable interaction such that the island effect in the stripping conditions (0.47pt difference on 7pt scale) was smaller than that in the it-cleft conditions (1.67pt difference). English corrective stripping exhibits a partial sensitivity to island effects, results which are also consistent with those of Potter (2017). Further, the results of Experiment 3, a written experiment which additionally manipulated the clause-finality of corrective remnants, revealed no effect of finality on stripping island sensitivity (N=53, β:0.18+/-0.11; p=<0.1); whether final or not, corrective stripping is at most partially sensitive to islands, contrary to the claims in Barros et al. (2013), Griffiths & Lipták (2014), and Griffiths (to appear).

(4) a. James heard that the student speaks *Arabic*.

　　　b. No, *Farsi*.

　　　c. No, it was Farsi that James heard that the student speaks.

It is unlikely that the reduced acceptability of island-violating corrective stripping reflects their ungrammaticality, as such an analysis would leave unexplained why their reduction in acceptability relative to non-island violating examples is so small compared with the island effect in the it-cleft cases. Grammaticality contrasts in stripping are not generally small in scale. An additional written study, on voice mismatch in stripping and it-clefts, found large reductions in acceptability when corrective stripping continuations mismatched in voice with their antecedents (e.g, (5-6); 2.83pts on 7pt scale, p=<.001), with a much smaller effect for it-clefts (0.16pt difference). Instead, I suggest that the slight island effect in corrective stripping is due to a garden path effect: the contrastive focus on the correlate *Bill* could be initially parsed as having spread from the correlate to the entire relative clause, as illustrated in (7) (Selkirk 1996). Such a parse might be initially preferred, as it would not require a focus to scope out of the island; the entire island could be taken to be the focus instead. However, upon encountering the stripping continuation, a reanalysis would be necessary; the only parse of the antecedent which is compatible with an island-violating stripping continuation is one in which focus has not spread (Rooth 1992), as otherwise, the remnant, *Farsi* and the (misparsed) correlate *the student who speaks Arabic* would not be coherent alternatives to each other.

(5) Match Conditions

　　　a. The cake was taken to Catherine by Breanna.

　　　b. No, by *Mitchell*. // No, the cake was taken to Catherine by *Mitchell*.

(6) Mismatch Conditions

　　　a. Breanna took the cake to Catherine.

　　　b. No, by *Mitchell*. // No, the cake was taken to Catherine by *Mitchell*.

(7) a. Focus spreading: James met [the student who speaks *Arabic*]$_F$.

　　　b. Narrow focus: James met the student who speaks [*Arabic*]$_F$.

If, as I have argued, English stripping is generally insensitive to definite relative clause islands, this has strong implications for the proper analysis of island effects. Some have claimed that island effects can be reduced to the sum of a variety of processing effects (Hofmeister & Sag 2010). If this were the case, and if the ellipsis site were populated with elided syntactic structure isomorphic to the antecedent, as argued by e.g. Potter (2017) and Yoshida et al. (2018), the ellipsis island amelioration effect of stripping would be completely unexpected. Any movement of a remnant from within an island in the ellipsis site would involve structures and dependencies identical to those in their non-elliptical counterparts, and so such processing accounts of island effects would therefore predict equivalent processing difficulty in both; there should be no ellipsis island amelioration effect. An alternative for such processing accounts would be to assume that island-violating ellipsis involves no actual island violating movement, either because there is no structure within the ellipsis site (Culicover & Jackendoff 2005), or because the silent structure contains no island (Abels 2017). Non-isomorphic accounts face trouble not only explaining the facts presented in Potter (2017) and Yoshida et al. (2018), but also the facts surrounding the ungrammaticality of voice mismatch in stripping presented above. Such non-isomorphic accounts require that the syntactic structures within the ellipsis site radically mismatch those of the antecedent, yet unambiguous examples of syntactic mismatch between antecedent and ellipsis site, such as the voice mismatch paradigm above, yield severe ungrammaticality. Thus, the ellipsis island amelioration effects provide strong evidence that islands are a grammatical phenomenon, sensitive to grammatical phenomena like ellipsis. In sum, non-contrastive stripping demonstrates at complete island insensitivity, and corrective stripping shows a partial sensitivity, whether the correlate is utterance final or not, which I argue to result from extra-grammatical factors. Finally, I argue this pattern of insensitivity to island effects is strong evidence against in favor of grammatical approaches to island effects.

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