Island Sensitivity in Multiple Sluicing: Experimental Evidence from German Adjectival Sluices

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Background. According to the sententialist approach to ellipsis (Merchant 2001, 2004), clausal ellipsis involves the non-pronunciation of a TP to the exclusion of one phrase, i.e. the remnant, as in (1). The 'island evasion' approach (Merchant 2001, Barros et al. 2015) assumes that ellipsis does not repair syntactic islands, but ellipsis sites (E-sites) can be structurally non-isomorphic, which can give rise to the illusion of island-insensitivity under sluicing, as in (2). Schiele (2024) provided support for this approach from German sluicing, as declined *wh*-AP remnants are significantly less acceptable. This result is only compatible with the conclusion that declined *wh*-AP remnants undergo illicit Left Branch Extraction (LBE) from the left branch of an NP (an island position; Ross 1967) in isomorphic E-site (2a), whereas undeclined *wh*-AP remnants are extracted from a non-isomorphic, copular clausal E-site without an island (2b).

In this study, the investigation of *wh*-AP remnants in German is extended to multiple sluicing (MS) configurations, as in (3). A central theoretical question concerns the status of the second *wh*-remnant: The 'silent structure' literature assumes the second *wh*-remnant to undergo phrasal movement to the left periphery of the clause (Abels & Dayal 2023 and references therein). Considering that this movement is not permitted in non-elliptical contexts in single wh-movement languages such as English and German and requires 'tucking-in' (which violates Chomsky's 1995 Extension Condition), this assumption remains contentious. To assess whether movement is indeed involved, a well-established diagnostic is used: island sensitivity. If the second wh-remnant can be experimentally demonstrated to display island-sensitivity, then strong empirical support is obtained for this assumption. Accordingly, we hypothesize that (**H1**) the second *wh*-remnant exhibits island sensitivity. This hypothesis provides a testable empirical prediction: island violations should degrade acceptability in MS just as they do in overt movement, non-elliptical constructions.

In addition, MS obeys the Clause-mate Condition (CMC), which requires both remnants to originate in the same finite clause (Takahashi 1994). Violating the CMC causes degradation in acceptability equivalent to island violations (Cortés Rodríguez 2022) and is suspended only when a verbal complement clause contains a bound subject pronoun (Grano & Lasnik 2018). These effects are comparable in strength to classical island violations (Cortés Rodríguez 2022) and thus offer an additional lens into the structure of the ellipsis site. We examine cases where *wh*-AP remnants are extracted from the left-branch of an NP in embedded clauses with and without bound subject pronouns. These configurations allow to test the core assumption that MS involves silent structure (Merchant 2001). Previous work in non-elliptical contexts shows that super-additive island effects arise when multiple *wh*-dependencies and/or binding dependencies interact (Keshev & Meltzer-Asscher 2020). If such effects emerge when both LBE and CMC violation occur, this will provide evidence not only for the presence of syntactic structure in the E-site, but also for the existence of such effects under ellipsis. We hypothesize that (**H2**) a CMC violation reduces acceptability, (**H3**) but is ameliorated by using a pronoun, and (**H4**) the combination of LBE and CMC violation leads to a super-additive effect, replicating the results from non-elliptical patterns mentioned above.

Procedure. 54 German monolinguals were sourced via Prolific (online, unsupervised) for an acceptability judgment task, employing a 1-7 Likert-type scale. The study tested CMC (unembedded, embedded, or pronoun) and ISLAND (none or LBE), with 3 repetitions per condition from 18 lexical sets, leading to 162 items per condition. Stimuli included sentences such as (4)-(6) as well as their equivalents without LBE. Each participant saw 18 critical stimuli, 36 filler items, and 3 attention checks. Figure 1 shows the raw ratings per condition. Participants' ratings were z-scored and analyzed using a linear mixed model in R's *lmer*.

Results. Both the LBE (t = -12.33, p < 0.01) and the CMC violation (t = -5.48, p < 0.01) independently reduce acceptability, with the pronoun ameliorating the violation only in the condition without LBE (t = 5.09, p < 0.01). The acceptability of the double-violation condition did not show a super-additive effect. Although the interaction is significant (t = 3.86, p < 0.01), the effect of CMC violation is attenuated when acceptability is already reduced due to LBE.

Discussion. The data provide strong empirical support for the 'island evasion' approach to ellipsis, in line with Barros et al. (2015) and Schiele (2024). The island-sensitivity of the second *wh*-remnant indicates that it undergoes phrasal movement in MS. The effect of LBE is much stronger than the effect of other islands under MS (Cortés Rodríguez 2024, and Cortés Rodríguez & Griffiths 2024), providing further evidence for the analysis that the LBE is a strong syntactic island (Culicover et al. 2022, Lu et al. 2024). These results are crucial for the ellipsis literature, as they provide compelling evidence for genuine movement of the second *wh*-remnant in MS.

The results also confirm that the CMC holds in German and is mitigated by a pronoun. Surprisingly, the penalty for CMC violations is reduced in the LBE condition, likely due to a floor effect, where the extreme unacceptability of LBE prevents additional penalties from embedding violations. In the talk, I will discuss effects of LBE and CMC and the potential underlying clauses in the E-site.

Examples

(1) Lucy ate something, but I don't know what <Lucy ate>. (chevrons = ellipsis)

(2) Lena hat einen groß**en** Mann geheiratet, aber ich weiß nicht…
'Lena married a tall.**ACC** man but I don't know…'

a. [wie groß**en**]$_1$ <Lena hat [$_{\text{left branch island}}$ einen t_1 Mann] geheiratet> *isomorphic E-site*
literal: 'how tall.**ACC** (Lena married a man)'

b. [wie groß]$_1$ <er ist t_1> *copular clausal E-site*
literal: 'how tall (he is)'

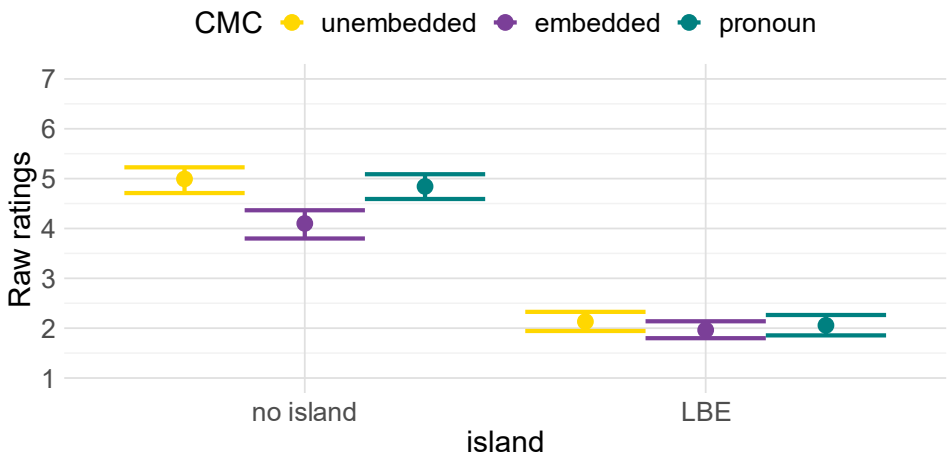
(3) Every woman married a tall man, but I don't know which women how tall.

(4) Jeder Koch hat einen faulen Kellner getadelt, aber ich weiß nicht, welcher Koch wie faulen.
'Every chef blamed a lazy.ACC waiter, but I don't know which chef how lazy.ACC.'

(5) Jeder Koch hat behauptet, dass der Chef einen faulen Kellner getadelt hat, aber ich weiß nicht, welcher Koch wie faulen.
'Every chef claimed that the boss reprimanded a lazy.ACC waiter, but I don't know which chef how lazy.ACC.'

(6) Jeder Koch hat behauptet, dass er einen faulen Kellner getadelt hat, aber ich weiß nicht, welcher Koch wie faulen.
'Every chef claimed that he reprimanded a lazy.ACC waiter, but I don't know which chef how lazy.ACC.'

Figure 1



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