Subject islands do not reduce to construction-specific discourse function

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Research Question

- Is there a truly syntactic component to islandhood, which **cannot be reduced to pragmatic or semantic factors**?
- We argue **yes:** when controlling for the independent costs that arise in island stimuli, we observe **degraded acceptability of sub-extraction from subjects vs. objects** across **multiple** construction types (WHQ, RC, TOP), each with different information structure (IS) characteristics.

- Recent experimental and theoretical work questions the traditional syntactic view of subjects as strong islands, instead attributing "island effects" to information structure (Abeillé et al 2020; Winckel et al 2025; Goldberg 2006; Cuneo & Goldberg 2023).
- **The Subject Condition (SC)** (Ross 1967; Chomsky 1973; Pesetsky 1982; Huang 1982; Privoznov 2021), asserts that constituents within a syntactic subject cannot be targeted for movement.

  (1) *Who did [a friend of _] invite Sue to the party ?
  (2) Who did Sue invite [a friend of _] to the party ?
- Under a syntactic lens, the source must be configurational or structural: in **(1)**, a wh-word is sub-extracted from a DP in subject position (SpecTP), whereas in **(2)** it is sub-extracted from a DP in the object position.
- A genealogy of research (Erteschik-Shir 1973; Kuno 1987; Ambridge & Goldberg 2008, a.o.) challenges the claim that the source of the (un)acceptability of **(1)** vs. **(2)** is syntactic.
- Abeillé et al (2020), based on findings that PP sub-extraction is rated less acceptable out of subjects vs. objects in WHQs, but not in RCs, propose that unacceptable sub-extraction arises from a "clash" in IS:
  - **The Focus Background Constraint (FBC)**:
    - "a focused element should not be part of a backgrounded constituent."
- To test whether sub-extraction is constrained by IS, rather than by a syntactic constraint on subject sub-extraction, we investigate the acceptability of subject and object sub-extraction **across three constructions (WHQ, RC, TOP) whose IS profiles differ w.r.t the FBC.**
- **WHQs**: the extracted element is the focus, characterized as containing prominent or "at-issue" content which is otherwise nonrecoverable from the utterance, standing in contrast to the backgrounded content of an utterance (Gundel & Fretheim 2006; Lambrecht 1994).
- **RCs:** the extracted element is compatible with backgroundedness, topicality, or focus (Gundel, 1988; Lambrecht, 1994), as RCs apply some property to an entity (Kuno, 1976) without necessarily specifying a discourse function.
- **TOPs:** the extracted element is marked as already "backgrounded" in the discourse. A topicalized constituent is characterized as an "established matter of concern", about which new information is added (Lambrecht 1994; Reinhart 1981; Strawson 1964).

Measuring Island Effects in 3 Constructions

- Factorial design for investigating the acceptability of islands (Sprouse 2007; Sprouse et al. 2012).

Gap Position (Object, Subject) × **DP Complexity** (Simple, Complex) × **Extraction Type** (No Extraction, Full Extraction, Sub-extraction)

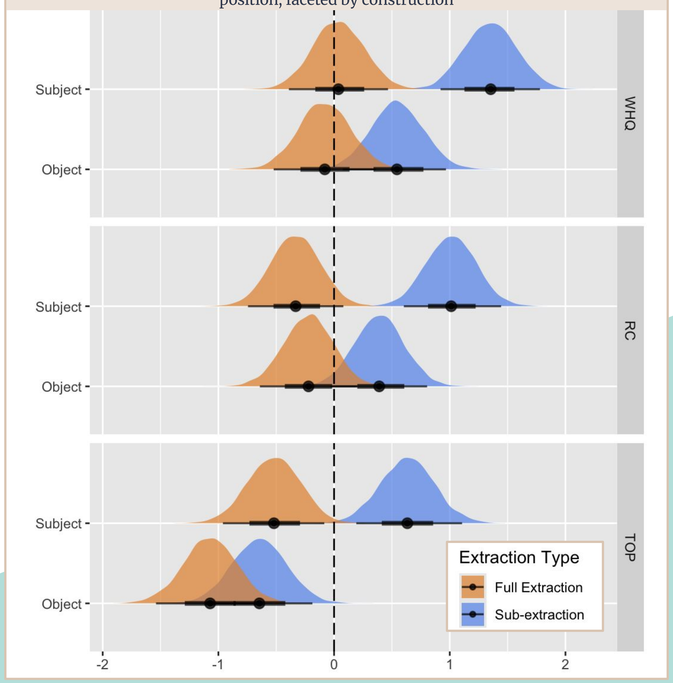
- Three experiments on English (**WHQ**, **RC**, **TOP**) (see Kush et al. 2018, 2019; Kobzeva et al. 2022 for Norwegian)
- For each experiment, 72 participants rated the acceptability of 36 items and 72 fillers on a 6pt scale
- Calculating a "cost" of **DP complexity**: **No Extraction Simple{O, S} - No Extraction Complex{O, S}**
- Calculating a "cost" of movement, i.e. **Extraction**: **No Extraction Simple{O, S} - Full Extraction Simple{O, S}**

Sample Topicalization Itemset

No Extraction	*Simple (O, S)*	Mary realized [**the news** had completely shocked **the member**.]
	Complex O	Mary realized [the news had completely shocked **the member of the council**.]
	Complex S	Mary realized [**the news about the city** had completely shocked the member.]
Full Extraction	*Simple O*	**That member**$_i$, Mary realized [the news had completely shocked ___$_i$.]
	Complex O	**That member of the council**$_i$, Mary realized [the news had completely shocked ___$_i$.]
	Simple S	**That news**$_i$, Mary realized [___$_i$ had completely shocked the member.]
	Complex S	**That news about the city**$_i$, Mary realized [___$_i$ had completely shocked the member.]
Sub-Extraction	*Complex O*	**That council**$_i$, Mary realized [the news had completely shocked the member of ___$_i$.]
	Complex S	**That city**$_i$, Mary realized [the news about ___$_i$ had completely shocked the member.]

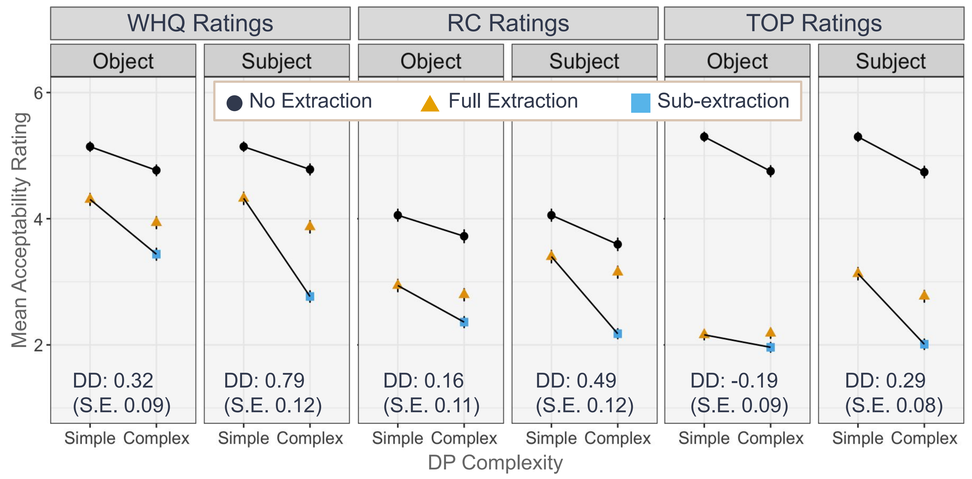
Stable difference b/t sub- and full extraction in each construction

Sampled posterior distributions (with 95% HPDI) of standardized extraction costs by position, faceted by construction



- An **island effect**: the extent to which the **actual** rating of the {S, O} sub-extraction condition exceeds the **predicted** rating, based on "costs" of DP complexity and extraction.
- **Across constructions, we found a larger sub-extraction penalty for subjects vs objects**
- Though the absolute ratings for subjects vs. objects in RCs and TOP were comparable, the "cost" analysis approach shows that the dip in acceptability for subject vs. object sub-extraction has a significantly **larger DD Score (predicted - actual)** across all three constructions.
- Ordinal m/e regression in `brms` (Bürkner 2021):
  - WHQ Pos*Comp*Ext: β = −0.94, 95%CrI = [−1.54, −0.32], Pr(β < 0) = 0.99
  - RC Pos*Comp*Ext: β = −0.58, 95%CrI = [−1.17, 0], Pr(β < 0) = 0.98
  - TOP Pos*Comp*Ext: β = −1.24, 95%CrI = [−1.90, −0.59], Pr(β < 0) = 1.00

Mean acceptability ratings per experiment, faceted by Position and DP Complexity



Comparing Constructions

- Comparing the costs of full and sub-extraction in each construction:
  - **Consistently greater difference in extraction costs for subjects vs objects across constructions**
- Within Subjects, we observe **stable differences** between the costs of sub- and full extraction (within position) across each construction.
  - WHQ $\text{Diff}_{\text{SubExt - FullExt}}$ = 1.32 (95% HPDI: 1.02,1.61)
  - RC $\text{Diff}_{\text{SubExt - FullExt}}$ = 1.34 (95% HPDI: 1.04,1.64)
  - TOP $\text{Diff}_{\text{SubExt - FullExt}}$ = 1.15 (95% HPDI: 0.85,1.45)

Conclusion

- **Subjects are islands** across **TOP**, **WHQ**, and **RC** constructions, despite the information structural differences between them.
- Our findings are **incompatible with the FBC**, which predicts that only WHQs give rise to a subject island effect.
  - The ban on sub-extraction out of syntactic subjects cannot be solely attributed to the discourse function specific to individual constructions.
- What is sensitive to locality is not IS profile, but a **movement dependency**.

- We do not rule out the possibility that **IS notions** like "backgroundedness" **may play a role** in the characterization of locality phenomena:
  - For example, our results are compatible with a number of theories that have linked **presuppositionality** to the (non-)movement of a subject to a higher position (Diesing 1992; Sichel 2018; Bianchi & Chesi 2014).
- Under this perspective, the IS property of presuppositionality correlates with these different positions, **making the link between IS and sub-extraction indirect.**

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