

Examining the Role of Information Structure in In-Situ Interrogatives

Elodie Winckel¹, Ruihua Mao², Harry Yu, Anne Abeillé², Barbara Hemforth² & Edward Gibson³
¹Friedrich-Alexander Universität Erlangen-Nürnberg, elodie.winckel@fau.de ²Université Paris Cité,
³Massachusetts Institute of Technology

Keywords: in-situ interrogatives, islands, information structure, pragmatics

This paper examines “syntactic islands” and the implications of the Focus-Background Conflict constraint (FBC) for understanding them. Generative accounts posit that syntactic islands provide evidence for the existence of Universal Grammar (Schütze et al., 2015). However, functional accounts like “Backgrounded Constituents are Islands” (Goldberg 2013) and the FBC constraint (1) suggest that some islands can be explained by a clash in information structure, which can be learned from exposure, thus eliminating the need for a Universal Grammar account.

(1) Focus-background conflict (FBC) constraint (gradient version):

The more focused an element, the more focused the constituent it is part of.
(Abeillé et al. 2020)

Abeillé et al. (2020) applied the FBC to the “subject island”, where extractions out of subjects are less acceptable than extractions out of objects:

- (2) a. Which book do they criticize [the author of _]?
b. *Which book does [the author of _] face criticisms?

This contrast only occurs if the extracted element is focused, as in interrogatives, but not, for example, in relative clauses (with pied piping, in English, French and Italian; Sprouse et al. 2016, Abeillé et al. 2020). The FBC explains this: the subject is by default a topic and therefore backgrounded, while the extracted element is focused in interrogatives. In relative clauses, the extracted element is not focused, so there is no conflict.

We tested the predictions of FBC on in-situ interrogatives in two online studies. The FBC does not take extraction into account, so in-situ interrogatives should not differ from ex-situ interrogatives, and display a “subject island effect”. In Experiment 1, we tested in-situ interrogatives in French (2x2 design with yes/no questions as control conditions, 24 items and 42 distractors, 1-10 Likert-scale), and found no island effect. Conditions with a wh-phrase in a subject were rated as highly as conditions in an object (Figure 1).

An explanation could be that in-situ interrogatives in French are used when the proposition is presupposed - meaning the wh-phrase is not focused. However, in situ Interrogatives have become dominant in spoken French (Thiberge et al. 2021), and our materials were not presented in an echo context, so this is not likely.

In contrast, in situ interrogatives are much less common in English and are mostly used for quiz questions and clarification requests. Unlike information questions, quiz questions are addressee-centered: the speaker is not interested in the answer, but in whether the addressee knows the answer (Postal 1972:50-54). Experiment 2 tested in-situ interrogatives in English, as quiz questions, with stimuli translated from Experiment 1. The task combined forced-choice and acceptability judgment. Participants saw a context sentence (4a) and had to answer a comprehension question (one among 4b-e), then rate the formulation (4b-e) on a 1-7 Likert scale. Results were similar to the French experiment (Figure 2). The results of our experiments are not as predicted by the FBC as it stands. One possible reformulation is to target only extracted elements:

(4) A focused element should not be more focused than its non-local governor.

Alternatively, “focused element” in the FBC may be too general, and other pragmatic factors, such as addressee-centeredness, may play a role rather than syntactic factors. This explanation aligns with a cognitive perspective and does not require the assumption of the influence of syntactic factors in a discourse constraint.

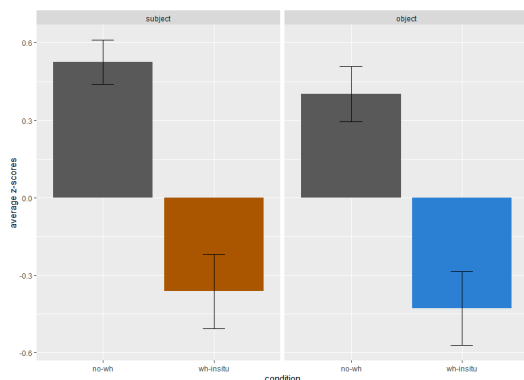


Fig. 1: Results of Experiment 1 on French in-situ interrogatives.

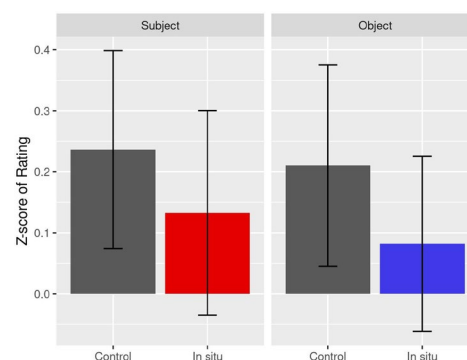


Fig. 2: Results of Experiment 2 on English in-situ "quiz" interrogatives.

(3) Materials for the French experiment:

- a. La forme de quelle fenêtre trouble le maçon ? [subject + in situ]
the shape of which window disturbs the contractor
- b. Est-ce que la forme de la fenêtre trouble le maçon ? [subject + control]
INTER the shape of the window disturbs the contractor
- c. Le maçon désapprouve la forme de quelle fenêtre ? [object + in situ]
the contractor disapproves the shape of which window
- d. Est-ce que le maçon désapprouve la forme de la fenêtre ? [object + control]
INTER the contractor disapproves the shape of the window

(4) Materials for the English experiment:

- a. After struggling for so long with the strangely shaped window frame, the contractor was relieved to move on to the bathroom and be finally done with the kitchen. **[Context]**
- b. [The shape of which window frame] confounded the contractor because of its irregularity? (The window frame in the kitchen / The window frame in the bathroom) [subject + in situ]
- c. Did the shape of the window frame in the kitchen confound the contractor because of its irregularity? (Yes / No) [subject + control]
- d. The contractor disliked [the shape of which window frame] because of its irregularity? (The window frame in the kitchen / The window frame in the bathroom) [object + in situ]
- e. Did the contractor dislike the shape of the window frame in the kitchen because of its irregularity? (Yes / No) [object + control]

References

- Abeillé, Anne, Barbara Hemforth, Elodie Winckel & Edward Gibson. 2020. Extraction from subjects: Differences in acceptability depend on the discourse function of the construction. *Cognition* 204. 104293. <https://doi.org/10.1016/j.cognition.2020.104293>.
- Goldberg, Adele E. 2013. Backgrounded constituents cannot be extracted. In Jon Sprouse & Norbert Hornstein (eds.), *Experimental Syntax and Island Effects*. Cambridge University Press.
- Postal, Paul M. 1972. A Global Constraint on Pronominalization. *Linguistic Inquiry*. The MIT Press 3(1). 35–59.
- Schütze, Carson T., Jon Sprouse & Ivan Caponigro. 2015. Challenges for a theory of islands: a broader perspective on Ambridge, Pine and Lieven. *Language* 91(2). 31–39.
- Sprouse, Jon, Ivano Caponigro, Ciro Greco & Carlo Cecchetto. 2016. Experimental syntax and the variation of island effects in English and Italian. *Natural Language and Linguistic Theory* 34(1). 307–344.
- Thiberge, Gabriel, Flora Badin & Loïc Liégeois. 2021. French partial interrogatives: a microdiachronic corpus study of variation and new perspectives in a refined pragmatics framework. *Faits de langues* 51. 179–202.