# Subject islands are not caused by information structure clashes: evidence from Topicalization



Subject

Position

Object

Nikolas **Webster**<sup>1</sup> • Matthew **Kogan**<sup>1</sup> • Mandy **Cartner**<sup>2</sup> • Matt **Wagers**<sup>1</sup> • Ivy **Sichel**<sup>1</sup> UC Santa Cruz<sup>1</sup>, Tel Aviv University<sup>2</sup>

# Subject Islands

Syntactic subjects cannot contain a gap in a filler-gap dependency [1-3]

(1) \*Which artist did [the book about \_\_\_] sell out?

The islandhood of subjects has been claimed to derive from syntactic constraints [1, 3] and information-structure constraints [4-8]

## FOCUS-BACKGROUND CONSTRAINT (FBC):

A focused element should not be part of a backgrounded constituent [8]

• Filler-gap dependencies into subjects create an **information structure clash**, as subjects are typically given or backgrounded in discourse while fillers are often focused or foregrounded, as in *wh*-extraction

However, not all filler-gap dependencies introduce focus:

**Topicalization** involves a dependency in which the filler is discourse given or backgrounded [9, 10]

(2) That artist, [the book about \_\_\_ ] sold out.



The FBC predicts **no information structure clash** for Topicalization out of a complex subject, as the filler is not extracted into a focused position

# Present Study (n = 72)

We test this prediction using an **acceptability judgment task** with a factorial design, where an island effect is indicated by an interaction between Complexity and Extraction Type [11-15]

Gap Position (Object, Subject) X

DP Complexity (Simple, Complex) X

Extraction Type

(No extraction, Full DP extraction, DP sub-extraction)

• Participants rated 36 items (+ 72 fillers) on 6pt scale

#### No extraction

Simple	Mary realized the news had completely shocked the member.
Complex Obj	Mary realized the news had completely shocked the member of the council.
Complex Subj	Mary realized the news about the city had completely shocked the member.

#### **Full DP Extraction**

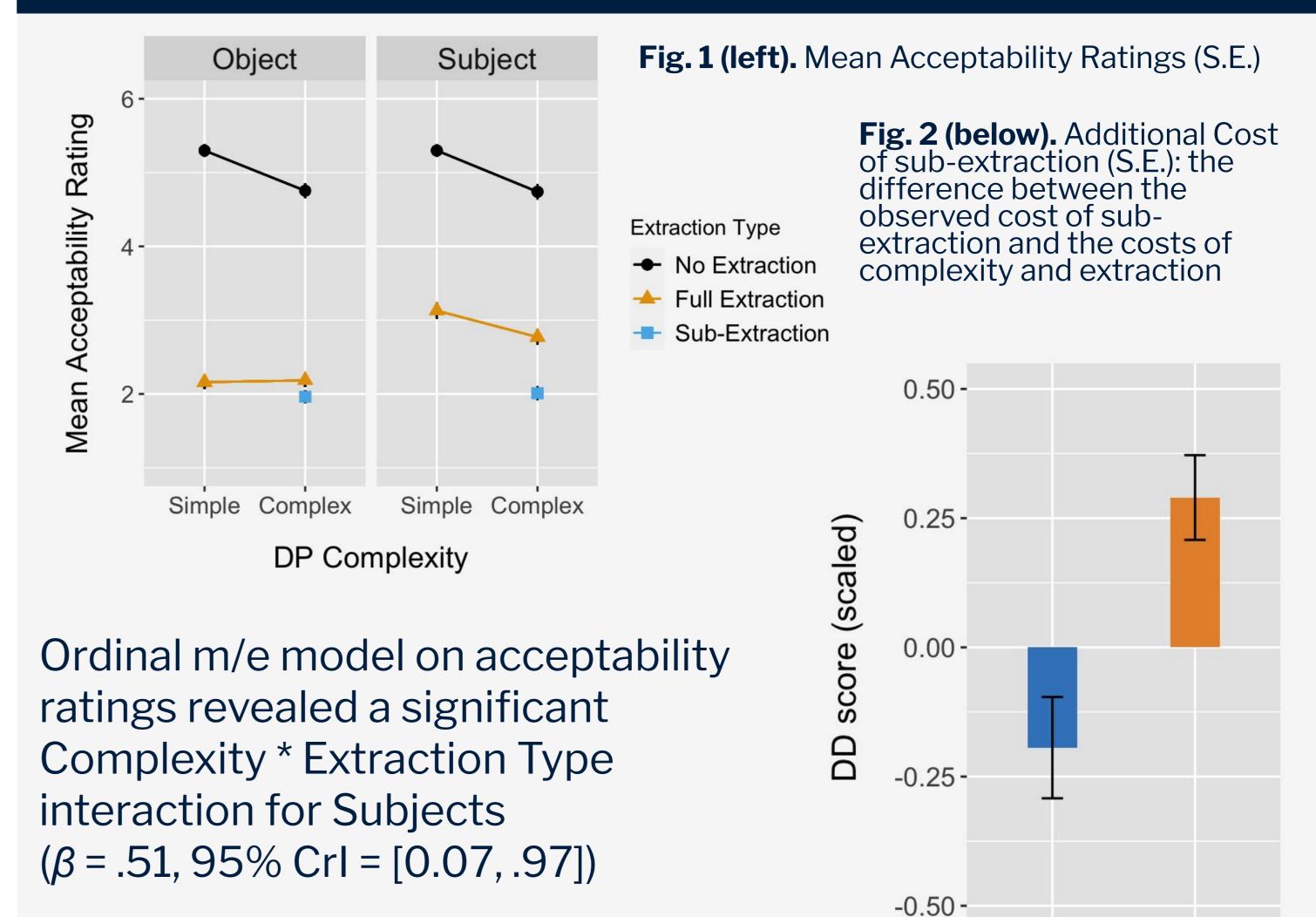
Simple Obj	That member, Mary realized the news had completely shocked
Complex Obj	That member of the council, Mary realized the news had completely shocked
Simple Subj	That news, Mary realized _ had completely shocked the member.
Complex Subj	That news about the city. Mary realized had completely shocked the member.

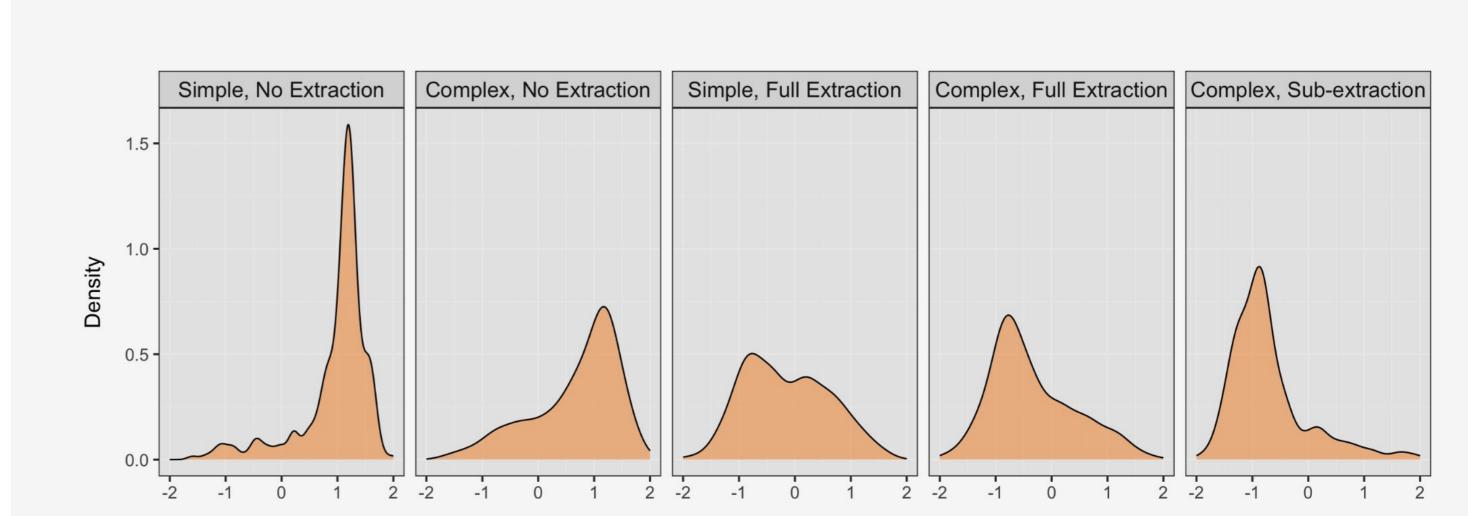
#### **Sub-extraction**

Complex Obj That council, Mary realized the news had completely shocked the member of \_.

Complex Subj That city, Mary realized the news about \_ had completely shocked the member.

## Results





Evidence for a Subject island effect

with Topicalization

Fig. 3. Scaled rating distributions for Subject conditions

• Judgments of topicalization from complex Subjects are unimodally clustered around -1, indicating consistent rejection of sub-extraction from Subjects [14, 15]

## Discussion

The experiment provides evidence that subjects, but not objects, incur a sub-extraction cost that exceeds the predicted costs of subject complexity and extraction

## **Subjects are islands for Topicalization**

Topicalized fillers are not focused, but given, like subjects

Even when the filler is topicalized, a gap inside a subject is degraded, as previously observed in Norwegian [15]

→ Subjects are islands despite the absence of an information structure clash

The present results suggest that the Focus-Background Constraint does not fully capture the islandhood of Subjects

In ongoing research, we use a similar design to probe for subject island effects with **relative clause extraction** and **wh-extraction**, which differ in their information structure

**Acknowledgments:** This work was supported by NSF BCS #2019804 to UC Santa Cruz. Thank you to Jake Vincent, members of UCSC's s/lab, and the broader Linguistics community at UCSC for valuable feedback. We would like to thank our research assistants Lisa Pham, Alison Sun, and Matthew Vasser for their various contributions to this project.

**References:** [1] Ross (1967), *MIT*; [2] Huang (1982), *Linguist. Rev*; [3] Privoznov (2021), *MIT*; [4] Erteschik-Shir (1973), *MIT*; [5] Ambridge & Goldberg (2008), *Cognitive Linguistics*; [6] Hofmeister & Sag (2010), *Language*; [7] Kluender (1992), *Island Constraints: Theory, Acquisition and Processing*; [8] Abeillé et al. (2020), *Cognition*; [9] Erteschik-Shir (2007), *Oxford Univ. Press*; [10] Miyagawa (2017), *Journal of the Linguistic Society of Japan*; [11] Sprouse (2007), *UMD*; [12] Sprouse et al. (2012), *Language*; [13] Vincent et al. (2018), *Languages*; [14] Kush et al. (2018), *NLLT*; [15] Kush et al. (2019), *Language*.