## The structural source of English Subject Islands

David Potter & Katy Carlson (Morehead State University; davidkpotter@gmail.com)

We argue that the islandhood of complex subjects, (1), arises from their syntactic properties <sup>1;2</sup>, rather than their information structure or processing constraints<sup>3;4;5</sup>. Key to this claim is the comparison between the behaviour of complex subjects in the context of it-clefts (1a) and the type of ellipsis known as *stripping* (1b). Previous research has argued that ellipsis is insensitive to island constraints that derive from structural sources while remaining sensitive to islands deriving from non-structural sources <sup>6;7</sup>. The meaning and information structure of stripping fragments and it-clefts are very similar, and consequently if subject islands were ultimately the result of the backgrounded status of complex subjects, we would expect no difference in island sensitivity between these two constructions. On the other hand, if the islandhood of complex subjects were the result of their structural properties, we would expect stripping to be insensitive to island effects. We show, in two acceptability experiments, that stripping is indeed insensitive to subject islands, while it-clefts exhibit these island effects. We conclude that complex subjects are islands as a result of their syntactic properties.

- (1)  $[_{DP}$  Two paintings of Iggy Pop] were in the musician's office.
  - a. No, it was Sting who two paintings of \_\_] were in the musician's office.
  - b. No, Sting  $[_{DP}$  two paintings of  $\_$ ] were in the musician's office.

In experiment 1, participants (N=28) listened to short dialogues, in which an antecedent, containing a complex subject, e.g. (1), or the corresponding existential expletive, e.g. (2), was followed by a corrective it-cleft or a stripping fragment, e.g. (1a, 1b). Participants rated the acceptability of the continuation. Experimental paradigm and average ratings by condition are found in table 1. We found that stripping continuations were rated more acceptable than it-cleft continuations ( $\beta$ :-3.56+/-0.62; p=<0.001) and that complex subject conditions were rated worse than existential expletive conditions ( $\beta$ :1.91+/-0.28; p=<0.001). The interaction between these factors was also significant ( $\beta$ :4.32+/-0.73; p=<0.001): the complex subject it-clefts were rated worse than the existential expletive it-clefts ( $\beta$ :3.73+/-0.54; p=<0.001), while the ratings given to the complex subject stripping continuations were no different from those given to the existential expletive stripping continuations (p>0.47).

- (2) There were  $[_{DP}$  two paintings of Iggy Pop] in the musician's office.
  - a. No, it was Sting who there were  $[_{DP}$  two paintings of  $_{--}]$  in the musician's office.
  - b. No, Sting there were  $[_{DP}$  two paintings of  $\_\_]$  in the musician's office.

Experiment 2 again had participants (N=62) listen to dialogues and to rate the naturalness of the continuation. See table 2 for full paradigm and average ratings by condition. In contrast to experiment 1, these are *sprout*-type continuations, in which the correlate to the cleft pivot and the stripping fragment, e.g. *Iggy Pop* above, is implicit rather than explicit<sup>8</sup>. Additionally, we manipulated whether the preposition was stranded or pied-piped. We found all main effects of continuation type, islandhood, and preposition position to be significant, as was the three way interaction ( $\beta$ :1.02+/-0.4; p=0.01). In the stripping continuations, the p-stranding conditions were rated worse than the pied-piping conditions providing experimental support for the "no new words" constraint on sprout-type ellipsis<sup>9</sup>. The stripping conditions, corroborating non-experimental claims that sprout-type ellipsis is insensitive to subject islands<sup>10</sup>. The cleft conditions showed an interaction between islandhood and p-stranding; both p-stranding and pied-piping conditions rated worse than the complex subject conditions rated worse than the complex subject conditions rated worse than the existential expletive conditions, but with a larger island effect in the p-stranding conditions ( $\beta$ :1.89+/-0.22; p=<0.001) than in the pied-piping conditions ( $\beta$ :0.42+/-0.20; p=0.038).

In summary: long distance dependencies, in the form of it-clefts, consistently show subject island effects, though the magnitude of this effect varies with the type of extracted element (PP vs. DP). Stripping, on the other hand, does not exhibit any subject island effects. This contrast is unexpected under processing and information structural accounts yet predicted by structural accounts of subject islands.

Experiment 1					
Complex Subject	Antecedent	Two paintings of Iggy Pop were in the musician's office.			
	lt-Cleft	No, it was Sting who two paintings of were in the musician's office.	2.90		
	Stripping	No, of Sting.	5.64		
Existential Expletive	Antecedent	There were two paintings of Iggy Pop in the musician's office.			
	lt-Cleft	No, it was Sting who there were two paintings of in the musician's office.	4.56		
	Stripping	No, of Sting.	5.61		

## Table 1: Average Acceptability Ratings, Experiment 1

## Table 2: Average Acceptability Ratings, Experiment 2

Experiment 2					
lt-Cleft	PS	Yeah, it was Sting who two paintings of were in the musician's office.	3.06		
	PP	Yeah, it was Sting of whom two paintings were in the musician's office.	3.44		
Stripping	PS	Yeah, Sting.	3.91		
		PP	Yeah, of Sting.	6.15	
Existential Expletive	Antecedent		There were two paintings in the musician's office.		
	lt-Cleft	PS	Yeah, it was Sting who there were two paintings of in the musician's office.	4.13	
		PP	Yeah, it was Sting of whom there were two paintings of in the musician's office.	3.68	
	Stripping	PS	Yeah, Sting.	3.68	
		PP	Yeah, of Sting.	6.10	

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