Using Syntactic Satiation to Investigate Subject Islands
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The nature of the syntactic satiation effect, or increase in acceptability of certain syntactic violation types over time, is a topic of debate. Snyder (2000) claims that satiation is a property inherent to some violations and not others. For example, whether islands (1) commonly show satiation effects, but adjunct islands (2) never do (Hiramatsu 2000, Braze 2002, Goodall 2005).

(1) Context: Henry wonders whether George discovered a cure.
    What does Henry wonder whether George discovered? (whether island)

(2) Context: You think Mary threw trash in the garbage after cleaning the house.
    What do you think Mary threw trash in the garbage after cleaning? (adjunct island)

Because previous studies have presented more ungrammatical items than filler items, Sprouse (2009) suggests that syntactic satiation effects (in experimental studies) are a result of a response strategy in which participants attempt to equalize yes and no responses. Using a balanced design, he does not find significant satiation for any violation tested. Yet, Francom (2009) finds significant satiation of whether islands even with a balanced design. In this paper, I provide further evidence that satiation can occur with a balanced design.

For accounts that tie satiation to specific violation types, what is predicted for subject islands (SI's, (3)-(5))?  

(3) Context: Peter suspects a team of scientists liked the new research.
    What does Peter suspect a team of liked the new research? (transitive subject island)

(4) Context: The guide believes that a crowd of tourists arrived late.
    Who does the guide believe a crowd of arrived late? (unaccusative subject island)

(5) Context: Jack claims a crowd of shoppers walked into the store.
    What does Jack claim a crowd of walked into the store? (unergative subject island)

Traditional subjacency/CED and Barriers accounts predict SI's to form a natural class with adjunct islands, because they both involve crossing two barriers (Chomsky 1986, Huang 1982). Whether islands only involve a single barrier. Other accounts of SI's point to predicate type as playing an important role in extraction and presumably satiation. Erteschik-Shir (2007) argues that topics are difficult to extract; subjects of unaccusatives are predicted to be easier to extract because they are typically non-topics. Merchant (2001) argues that extraction targets the base position of a chain; on this account, unaccusative subjects extract easily because the base position of their chain is an internal argument. In previous satiation studies, the results for SI's have been more variable than other violations. One reason may be that previous studies did not control for type of SI (e.g., NP from PP, ECM, infinitival) or predicate type.

22 Native English speakers participated in a Likert acceptability task. Test items included whether (1) and adjunct islands (2), and three types of SI's: transitive (3), unaccusative (4) and unergative (5) All SI items were NPs extracted from PPs. Items were presented in a 7 block design, with 5 test items and 5 grammatical filler items per block.
To reduce individual differences in the use of rating scales, each subject’s responses to test items were standardized based on their responses to filler items. Satiation was determined by comparing the z-score responses in Block 7 with responses in Block 1. We found significant satiation of whether islands ($t(21)=2.23$, $p < .05$), and no satiation of adjunct islands ($t(21)=1.45$, $p=.16$). None of the SI types showed satiation effects (all $p>.2$).

These findings from a balanced design replicate Francom (2009), and challenge the results of Sprouse (2009). The present findings also corroborate several satiation studies that used non-rating tasks (eye tracking, Braze 2002; reading times, Francom 2009). The lack of SI satiation support a subjacency/CED or Barriers account of SIs. However, post-hoc evaluations of individual SIs show not all SIs pattern with adjunct islands equally, suggesting a possible role of predicate type in the satiation effect.

References


Kravtchenko, Ekaterina., Polinsky, Maria., and Xiang, Ming. 2009. Are all subject islands created equal? Poster presented at the CUNY conference, UC Davis, Davis, CA.

