

Staum Casasanto and Sag (2008) report that repeating the complementizer 'that' can help comprehenders understand the complement clause in verb-complement structures, when the subject of the embedded clause is displaced from the first complementizer by a long adverbial. They propose that rather than being generated by the grammar, repeated complementizers are a production strategy for reducing processing difficulty by reactivating syntactic expectations for a complement clause and its constituents immediately before the embedded subject appears. However, extra 'that' also appears before the subjects of clauses that were not originally introduced by 'that':

- (1) It seems like, theoretically, that it would be possible to travel along in the middle of a tornado and survive. (Google)

In these cases, the extra 'that' is also ungrammatical, but it cannot be interpreted as a repetition – it must be independently generated. Is this extra complementizer also motivated by reducing processing difficulty in the embedded clause?

A moving-window self-paced reading experiment investigated whether an extra that would help comprehenders read the embedded clause even when it did not match the original clause-introducer. Participants read sentences like (2), in which the clause was originally introduced by either 'because' or 'like'; each sentence appeared either with or without an extra 'that' (in parens):

- (2) She lived in mortal terror because after undergoing the experimental surgical procedure after her fourteenth birthday party celebration (that) she became paranoid of massive medical conspiracies.

The extra complementizer helped participants read the embedded clause, resulting in faster reading times on the embedded subject compared to the standard, single-complementizer version of the sentence ( $t(1,45)=1.73$ ,  $p<.05$ ).

This pattern of results suggests that an extra complementizer may be independently generated to reduce difficulty in the embedded clause. Extra 'that' increases the activation of the syntactic representation of an upcoming embedded clause, thus making the subject of this clause more predictable

when it appears and causing a reading time advantage following the extra complementizer. Because any complementizer can fulfill this function, the original clause-introducer does not need to be repeated, and 'that,' the most common complementizer, will suffice. Thus, although it is not licensed by standard grammars, an extra 'that' may be generated in response to processing pressure because it is an effective strategy for reducing difficulty in the embedded clause.