Information structure, Implicatures, and Discourse Connectives*

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We describe our work in progress on how **information structure** (IS) influences the interpretation of discourse connectives. The notion of IS we employ originates in Mathesius's work [12], and is elaborated by Sgall *et al.* [15], Firbas [2], Halliday [3] and Steedman [16–18].

Discourse connectives assert a relation holding between two units of discourse. The arguments of the relation may be given **structurally** (as with subordinate clause connectives such as *because, so, if, although*), or one of them may be provided through an **anaphoric link** with the previous discourse, either directly or through bridging (as with *too, otherwise, then, for example*) [19–21]. In addition, some connectives can convey more than what they assert, by means of implicatures. For example, negative polarity causal connectives like *although, however, nevertheless* can implicate a denied expectation [4, 5, 9–11].

We show that IS affects both what is implicated by a connective (e.g., *although*) and what is available as an antecedent for an anaphoric connective (e.g., *otherwise*). Consider the differences between (a) and (b) below. SMALL CAPITALS indicate words carrying pitch accents, i.e., phonologically prominent elements in each sentence.

(1) a. Although Clyde married BERTHA, he did not inherit ANYTHING.
b. Although Clyde MARRIED Bertha, he did not inherit ANYTHING.

(2) a. Clyde married BERTHA. Otherwise he would not have inherited ANYTHING.
b. Clyde MARRIED Bertha. Otherwise he would not have inherited ANYTHING.

(1a) and (1b) can be interpreted as either **denial of expectation** or **concessive opposition**. As denial of expectation, (1a) and (1b) deny different expectations, paraphrasable as follows:

(1a′) i. Normally, if it is Bertha who Clyde marries, he inherits something.
ii. Normally, if it is someone other than Bertha who Clyde marries, he does not inherit anything.

(1b′) i. Normally, if what Clyde does with Bertha is to marry her, he inherits something.
ii. Normally, if what Clyde does with Bertha is something other than marrying her, he does not inherit anything.

Similar observations hold for concessive opposition. Consider (1a) and (1b) as responses to the question *Is Clyde* HAPPY?: the conclusion to be drawn from the main clause is the same (i.e., Clyde isn't happy) in both (1a) and (1b). But the opposite conclusion (i.e., Clyde is happy) drawn from the subordinate clause has a different source in (1a) and (1b).

Likewise, a difference is manifested in (2a) and (2b), where IS influences the condition defining the modal context for interpreting the sentence with *otherwise*:

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(2a′) If it was someone other than Bertha who Clyde married, he did not inherit anything.

(2b′) If what Clyde did with Bertha was something other than marrying her, he did not inherit anything.

We argue that the differences in interpretation demonstrated above can be captured formally in terms of **alternative sets** [13, 14], the **alternative-set semantics of IS** [18], and **IS-sensitive context updating** [6, 7, 18]. This supercedes the analysis we presented in [8].

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