Bonnie Webber: Concurrent Discourse Relations

The Penn Discourse Treebank (PDTB) was released to the public in 2008 and remains the largest manually annotated corpus of discourse relations -- both ones that are explicitly cued (e.g., by a coordinating or subordinating conjunction, or by a discourse adverbial or other construction) and ones that otherwise appear implicit.

An interesting property of Penn Discourse TreeBank arises from the fact that annotators were allowed to annotate more than one discourse relation as holding concurrently. They could do this by assigning multiple sense labels to an explicit connective, to imply that these senses all held concurrently. Or, in those cases where adjacent sentences had no intervening connective, annotators could indicate that more than one discourse relation held concurrently between the sentences by either associating a single implicit connective with multiple senses or indicating that multiple discourse connectives were needed to convey the relation(s) they took to be concurrently expressed. Subsequent to this, experiments were carried out using Mechanical Turk that showed that, when a discourse adverbial cued a discourse relation between sentences, that there was often a separate concurrent relation that could be associated with an implicit coordinating or subordinating conjunction.

There are different circumstances in which different sets of concurrent discourse relations seem to be taken to hold. I will go through these, and conclude with what I take the implications of this for the analysis of communication and argumentation in text.