Discourse Relations, Discourse Structure, Discourse Semantics

Bonnie Webber

Institute for Language, Cognition and Computation
School of Informatics, University of Edinburgh
10 Crichton Street, Edinburgh EH8 9AB, Scotland, UK
bonnie@inf.ed.ac.uk

It is generally accepted that a discourse connective expresses a semantic and/or pragmatic relation between its matrix sentence or clause and something in the previous discourse. Usually the sense of this relation is expressed as a label, often within a hierarchy of sense labels. But the meaning of these labels may vary from system to system, and the same connective may be assigned different labels in different systems. Given this, we might learn more and make better predictions if (i) sense labels were associated with (some of) their entailments and (ii) connectives were characterized in terms of both their formal properties and their use conditions. I'll give examples of both.

The above-mentioned predictions tie in with an interesting property of Penn Discourse TreeBank annotation. Annotators were allowed to assign multiple sense labels to a single connective, to imply that all the senses held simultaneously. For those cases where adjacent sentences lacked an intervening connective, annotators were instructed to try to insert one or more connectives that (together) expressed the relation(s) between the sentences. Here too, in many cases, annotators inserted a single connective to which they assigned multiple meanings, Other times they inserted multiple connectives to convey the relation(s) they took as being expressed. Some of this will be shown to make more sense in terms of the entailments and formal properties of the connectives than in terms of any sense labels.

I'll close by trying to distinguish discourse connectives that are associated with coordinating or subordinating relations between sentences or clauses, which is an feature of discourse structure, from those connectives that simply convey additional relevant semantic or pragmatic content.

Proceedings of the SIGDIAL 2013 Conference, page 1,
Metz, France, 22-24 August 2013.