The Persuasive lexicon: linking word meaning to argumentation

As life started emerging billions of years ago, the capability of affecting other organisms by means of interaction was already essential for the succes of a lifeform (Torday, 2021; Serres, 1982). Throughout history and prehistory the ability to influence our environment and other lifeforms has been important for how animals have fared from an evolutionary perspective, and in this context it is not surprising that there has been an evolutionary preassure on abilities like brute force, communication skills and a talent for persuasion. Similarly, dialogue systems often receive higher ratings (and perform better in Turing-test-like challenges) when they include a rhetorical component (Miller, 2003).

The relevance of an argumentative perspective for pragmatic interpretation and semantics beyond the sentence has been demonstrated by several researchers in the past 3-4 decades (Asher & Lascarides, 2003; Breitholtz, 2020). Some have also pointed out how the meanings of particular lexical items are linked to argumentation (Anscombre & Ducrot, 1983). However, these lexical analyses are – with some exeptions for particular words like the conjunction ”but” (Winterstein, 2012) – not precise enough to be implemented in a computational model, or a formal account of dialogue or interaction.

In this work we show how a general theory of argumentative meaning in interaction can be extended to subjective and inter-subjective notions of conceptual meaning.
This approach combines techniques from linguistics and computational linguistics with ideas from fields such as classical rhetoric, conversation analysis and prototype theory to form a precise model of how an individual’s interactions with the world and other agents shape not only how she interprets and produces utterances and other interactive moves, but the concepts she has access to.

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