Identifying Enthymematic Conflict in Logos and Ethos Structures through Conventional Implicatures

Dissent in dialogue is a property that is manifested as local conflicts between participants. These conflicts are normally explicit disagreements and ethotic attacks, however argumentation in real, naturally occurring communication is often implicit, with speakers expecting arguments to be decoded by the hearer without necessarily asserting all relevant information. Conventional implicatures (CIs) [1, 2, 3, 4] are a class of meaning that allows us to open up the analysis of dissent in dialogue to implicated information, uncovering enthymematic conflicts on the level of logos and ethos. We present examples from public debates in which participants' conflicts happen via conventional implicatures, and discuss an analytical framework for handling dialogical ethos and argumentation with the means to expose this type of dissent.

Example (1) showcases an logotic enthymematic structure that is triggered by a CI, extending (1a) of [4, p. 139] with the dialogical response in (1b). In (1a), Alice uses the adverb 'luckily' to conventionally implicate that Willie winning the pool tournament is positive. Bob, in (1b), attacks this aspect of (1a): not that Willie won the pool tournament (the at-issue content), but that him winning is positive, thus showing dissent with Alice's implicature.

(1) a. [Alice:] *Luckily*, Willie won the pool tournament.

 b. [Bob:] That's not good, though.

Example (2) is taken from a deliberation on fracking. By using 'realistically' in (2b), Daisy conventionally implicates that Christian is not looking at the situation realistically. This is an implicated attack on Christian's credibility, i.e. dissent not in terms of the logotic content but in terms of Christian's ethos.

(2) a. [Christian:] In the third world, people don't have water. And we pump it back in the earth with chemicals.

 b. [Daisy:] If you look at it *realistically*, we don't have untouched nature.

We analyse these enthymematic structures by incorporating CIs in Inference Anchoring Theory (IAT^{CI}) [5], a theoretical scaffolding to systematically identify inferential and ethotic structures in dialogue. Figure 1 shows the IAT^{CI} diagram for example (1): the dialogical structure and ordering (Default Transition) are on the right-hand
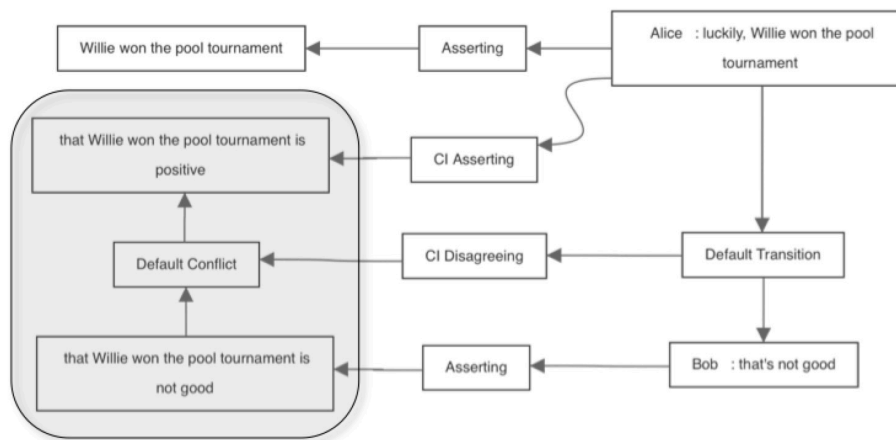
Figure 1: IAT^{CI} diagram of an logotic conflict with conventional implicatures

side, whereas the logical structure, i.e. propositions and the relations between them, are on the left-hand side. The logical structure is "anchored" in dialogical structure via illocutionary connections [6]. The enthymematic structure is exposed by unpacking the contribution of 'luckily': in (1a), Alice implicates ('CI Asserting') that Willie winning the pool tournament is positive, which is attacked ('Default Conflict') by the proposition of (1b). The attack is anchored in the transition ('CI Disagreeing'), capturing that the disagreeing can only be recognized by also considering (1a). The whole implicit structure triggered by the CI is highlighted in grey in Figure 1.

Figure 2 shows the the IAT^{CI} diagram for example (2). Here the enthymematic ethotic attack (Default Confilct) is between the implicted content (CI Asserted) and Christian's ethos. The conflict is anchored (CI Criticising) to the dialogical element containing 'luckily'.

In sum, CIs equip IAT with an empirically-motivated means to process enthymematic conflicts and attacks in natural language argumentation, which allows for the identification of dissent which is otherwise covert, paving the way to further formal and computational treatment.

References

[1] H.P. Grice, Logic and conversation, in: *Speech Acts*, P. Cole and J.L. Morgan, eds, New York: Academic Press, 1975, pp. 41–58.

[2] L. Karttunen and S. Peters, Conventional Implicature, in: *Syntax and Semantics, Volume 11*, C. Oh and D.A. Dinneen, eds, New York: Academic Press, 1979, pp. 1–56.

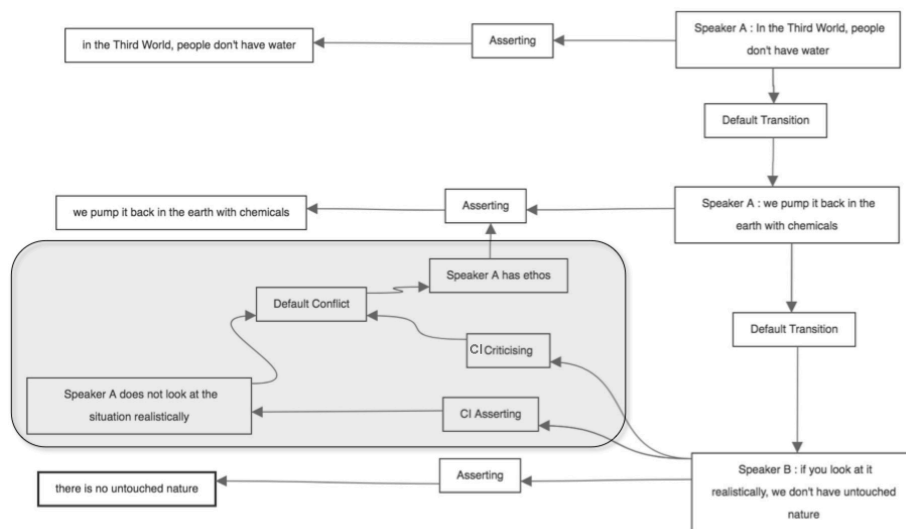[3] K. Bach, The Myth of Conventional Implicature, *Linguistics and Philosophy* **22** (1999), 367–421.

Figure 2: IAT^{CI} diagram of an ethotic attack with conventional implicatures

[4] C. Potts, *The Logic of Conventional Implicatures*, Oxford: Oxford University Press, 2005.

[5] K. Budzynska, M. Janier, C. Reed and P. Saint-Dizier, Theoretical Foundations for Illocutionary Structure Parsing, *Argument and Computation* (2016).

[6] J. Searle and D. Vanderveken, *Foundations of Illocutionary Logic*, Cambridge: Cambridge University Press, 1985.