Implicit Logos, Implicit Ethos: Inference Anchoring Theory with Conventional Implicatures

Brian Plüss[1], Annette Hautli-Janisz[2], Katarzyna Budzynska[1,3], and Chris Reed[1]

[1]Centre for Argument Technology, University of Dundee, UK
[2]University of Konstanz, Germany
[3]Centre for Argument Technology, Polish Academy of Sciences, Poland

Argumentation in naturally-occurring communication is often implicit, without speakers necessarily asserting all relevant information explicitly. Conventional implicatures (CIs) [1, 2, 3, 4] allow us to open up the analysis of dialogue to implicated information, uncovering enthymematic supports and attacks.

Figure 1 showcases logos and ethos structures triggered by CIs (adapted from [4, p. 139]). In (1a), through the adverb 'luckily' Alice conventionally implicates that Willie winning the tournament is positive. Bob, in (1b), attacks this aspect: not that Willie won the tournament, but that him winning is positive. Also, with 'realistically' in (1b), Bob conventionally implicates that Alice is not looking at the situation realistically. This is an implicated attack on Alice's ethos.

(1)	a. [Alice:]	Luckily, Willie won the pool tournament.
	b. [Bob:]	If you look at it realistically, that's not good, though.
		He will end up gambling the entire prize money.

Figure 1: Example of enthymematic logos and ethos attacks

We analyse these structures by incorporating CIs in Inference Anchoring Theory (IAT) [5], a theoretical scaffolding to systematically identify inferential and ethos structures in natural dialogue. Figure 2 shows the IAT_{CI} diagram for (1): dialogical structure on the right; logical structure on the left. The logical structure is "anchored" in the dialogical structure via illocutionary connections [6]. The first enthymematic structure is exposed by unpacking the contribution of 'luckily': in (1a), Alice implicates ('CI Asserting') that Willie winning is positive, which is attacked ('Default Conflict') by the proposition of (1b), anchored in the transition ('CI Disagreeing'). The enthymematic ethos attack ('Default Confilct') is between the implicated content of Bob ('CI Asserting') and Alice's positive ethos to CI assert that winning is positive, which in turn is linked (and affects negatively) her implication that Willie winning the tournament is positive.

In this talk, we will present further examples from public debates in which participants' supports and attacks on ethos and logos happen via conventional implicatures. We will also discuss how CIs equip IAT with an empirically-motivated means to process enthymematic supports and attacks in natural language argumentation, analytical framework for handling dialogical ethos and argumentation.

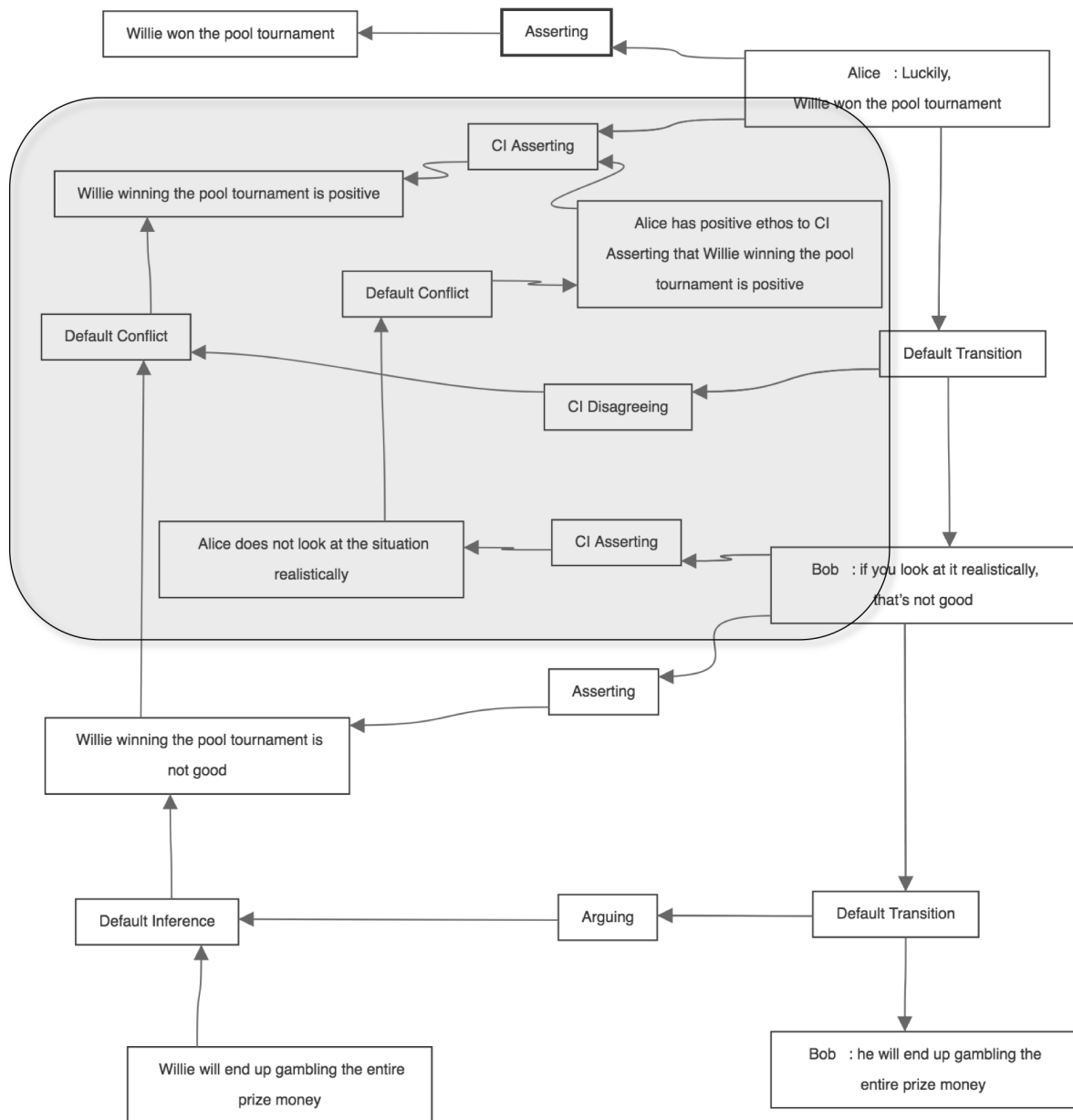**Keywords:** ethos, logos, argumentation, conventional implicatures, inference anchoring theory.

Figure 2: IAT$_{CI}$ diagram of logos and ethos attack with conventional implicatures

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