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Chatbots in Online Environments – A Linguistic Analysis

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Abstract

This presentation discusses a corpus-based analysis of user behavior towards differently sophisticated chatbots and embodied conversational agents (ECAs) form the perspective of conversational linguistics. The interaction with artificial intelligences (human computer interaction, HCI) is becoming a common form of computer mediated dialogue. The study shows how users interact with these entities on different linguistic levels – lexis, syntax, dialogue structure and alignment in interaction – using a quantitative corpus-based approach as well as qualitative analysis based on conversation analysis (CA). We compared the users' linguistic behavior towards the different chatbots which vary in their complexity from a diachronic perspective and with the language used by two human interlocutors. We found that HCI differs not only from user to user and from system to system, but also from dialogue sequence to dialogue sequence. Therefore, subsuming all these types of interaction under only one register, namely computer talk, may be an overgeneralization. However, it is still possible to find certain general interactional patterns, which in turn can be used as the basis for a functional model of HCI specifically developed in this study. In a second step, these interactional patterns could be implemented in advanced agents to support innovative dialogue designs.