Here are some fundamental questions about linguistic meaning: What is it, and where does it come from? How is word meaning related to utterance meaning? How are the meanings of words and utterances related to the world and our perception of it? We are working towards a formal semantics that aims to provide answers to these and related questions, starting from the notion of situated interaction between agents, i.e., dialogue.

By interacting using language, agents coordinate on the meanings of linguistic expressions. The meanings of many expressions can be modeled as classifiers of real-world information. Expressions can be individual words, but they can also be phrases and sentences whose meanings are composed from the meanings of their constituents. To make formally explicit the notions of coordination, compositionality and classification, and to relate these notions to each other, we use TTR (a type theory with records).