Name: Daniela Inclezan

TITLE: Modeling a Theory of Second Language Acquisition in Answer Set Prolog

ABSTRACT:
A substantial number of scientific theories are of a qualitative nature. Such theories are generally formulated in natural language in the form of default statements (i.e., statements of the type: “Normally, …”). Modeling these theories in a precise mathematical language would allow scientists to accurately study and test their claims. In recent years, Answer Set Prolog was successfully used to model theories from the fields of linguistics and psychology. In this work, we investigated the suitability of Answer Set Prolog for modeling one of the dominant theories about second language acquisition: Input Processing. Based on our formalization, we created a system that can assist language instructors in designing teaching materials for a specific grammatical structure: the English passive voice.