Abstract

This thesis concerns methods of rendering human language expressions into mathematical logic as a means of representing meaning in a computational manner. In particular, the work aims to show how rendering into Montague's intensional logic can circumvent some of the problems with rendering into first-order predicate logic. The first part presents some necessary preliminaries regarding formal grammar in computational linguistics. The second part considers first-order predicate logic for semantic representations of human language and includes comments both on its advantages and its disadvantages for such purposes. In the third and final part, Montague's intensional logic is presented together with a Montagovian grammar AGr. Rules for rendering human language into the logic are introduced and are used to resolve some of the problems with rendering into first-order predicate logic.