Nowadays, your phone is probably a reasonable interpreter, an opinionated copy editor and even an interesting conversational partner. By that, I mean that it runs software that can perform automated translation, spell checking, or ‘auto-correct’ and question answering. But while most other software innovations can be used by everyone equally, those that pertain to languages need to be adapted, or localized, to each linguistic community.

In this thesis, we explore some ways to automate the creation and maintenance of linguistic tools and resources in the hope that it will make it easier to adapt language-processing applications to new languages. We study for example smart paradigms, a method allowing computers to generate all the inflected forms of a word, given just its dictionary form.