In this talk I will discuss the most important properties on natural language, the knowledge representation language humans use for thousand of years, namely:

- vagueness

- context dependence

- reference to implicit knowledge

- dynamic: evolution and creativity

- used for communication

I will also emphasize the fact that there are many natural languages, a "detail" far from irrelevant in my view, and will illustrate abundantly with examples from English and Portuguese.

After discussing these questions (often comparing with programming languages), I will try to sketch what this implies for the processing of natural language. I will not try to provide a final theory of NLP, but list problems and desiderata that have to be solved to deal adequately with NL.