

Project: Non-lexical sounds in dialogue utterances

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Course: *Machine Learning 2 (LT2326)*

Due date: *November 30th, 2022*

Background

In one of their papers, Edlund and his colleagues describe human interaction with machines using metaphors on a spectrum. On the one side of the spectrum is the so called *interface metaphor*. The interface of the machine is built in a way that users are aware, they are talking to a machine. Consequently, they also adapt their language, and use more command like utterances (e.g. "Call John", "Set the timer") as they would fill slots in an imaginary web form. On the other end of the spectrum resides the *human metaphor*. Here, the users don't really know, they are talking to a machine and therefore use a "normal" language in the sense of utterances, they would use in a human-human dialogue. While the interface metaphor is still used very commonly, many dialogue systems like *Alexa* or *Siri* lie somewhere in between these extremes. The human metaphor is implemented rarely and is seen more often in science fiction.

Nevertheless, there are a few strong reasons for using the human metaphor and let the users talk in natural language. Natural language is

easy to use. Since we use natural language all the time in all human interactions, it is very natural for us, to also use it in machine interaction.

flexible. Natural language allows us to express everything we want to express. We can express for instance thoughts, feelings or facts with different certainties or also for example talk about things that were, things that are, and some things that have not yet come to pass. There are only very few things in a human mind that cannot be represented in natural language (partly in combination with mimic and gestures).

resilient to error handling/

Data resource

Methods

Results

Discussion