

Anselm Rothe – Abstract

### **Asking and Evaluating Natural Language Questions**

The ability to ask questions during learning is a key aspect of human cognition. In this project we explore how people generate and evaluate free-form questions in the context of a simple reasoning task. In a first experiment we gave people the ability to ask any question they like in natural language and analyzed the content and context-sensitivity of these questions. In a second experiment we had people evaluate natural language questions, which they did not themselves have to generate. Our results show that people can invent natural language questions that have high information value according to common mathematical measures of information quality. Across the two experiments, we show that people are far better at evaluating the quality of questions than they are at generating the questions in the first place. This suggests one major bottleneck on the effectiveness of information gathering in humans.