

Scalar implicatures in legal contexts - a study in experimental legal philosophy

- **The objective of the project**

While uttering sentences in natural language we often want to convey more than just the amalgam of the meanings of words that we utter. The question: 'Could you pass me the salt?' is not just an inquiry into the capabilities of the speaker. Rather, it is a polite request to pass over the right condiment. What is meant through an utterance but not quite said is called a **conversational implicature**. Quantifiers such as '**some**' also convey implicatures. The lexical meaning of 'some' allows it to include 'all'. However, when you hear 'some of the apples are red' you will infer that 'not all of the apples are red'. This inference is based on the reasoning that if the speaker had wanted to convey 'all' he would have used the word 'all' instead of 'some'. This is called a **scalar implicature** because the words are placed on scale in terms of their strength. Using 'some' implicates that the speaker wants to convey neither a stronger word on the scale (all) nor a weaker word on the scale (few). Analogously, **numerals** in natural language convey scalar implicatures. For instance 'three' implicates 'not more than three' etc. N. Goodman and A. Stuhlmüller have made an experiment to confirm a model that was supposed to predict the probability of implicature formation in contexts where speaker and hearer do not have full knowledge of the situation. During the experiment the speaker saw three apples. However, he had information concerning the color of only two of the apples (red). The hearer was aware of the speaker's state of knowledge. The utterance 'some of the apples are red' generated a very high probability of the hearer grasping that 'not all of them are red'. By contrast, the utterance 'two of the apples are red' generated a low probability of the hearer grasping the implicature 'not more than two'. **This project aims at verifying whether a similar mechanism would occur in a courtroom and formulating its model.** Imagine the following situation: we have three suspects A, B, and C. We know that A and B were at the crime scene the day it was committed. We don't know, whether C was at the crime scene. If the probability of omitting scalar implicature cancellation is higher when using expressions like some, rather than numerals, C's defendant should rather say: "Some of the suspects were at the crime scene" rather than "two were at the crime scene". The latter formulation, according to Goodman and Stuhlmüller calculations, would boost the probability of the court inferring the implicature that C was also at the crime scene that day.

- **The research**

The project has both a philosophical and empirical character. To complete it, two methods need to be used. First, a traditional philosophical method of conceptual analysis will be employed. Second, I will use an experimental methodology characteristic of empirical research. The study will be carried out on two, Polish speaking, separate samples: of laymen and lawyers. The participants will be asked to answer multiple questions and perform tasks that will aim at verifying the probability of formation and cancellation of scalar implicatures in contexts where speaker and hearer do not dispose of full knowledge.

- **The reasons for choosing the research topic**

The results of this experiment could provide at least a preliminary answer to the following questions:

1. **Does the choice of using one expression associated with scalar implicatures rather than another enables us to manipulate the beliefs generated by our hearers?**
2. **Are the mechanisms of such manipulation identical or different depending on whether they are used in legal or non-legal contexts?**

Finally, the awareness of such 'cognitive traps' could allow formulating mechanism of adjudication freed from such traps. It could allow building a theory of more 'objective' adjudication.