

Project: Interview study with set theorists

Deborah Kant (University of Konstanz)

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In a three-part talk, I present an interview study with set theorists, which is part of my PhD thesis "Independence and Naturalness in Set Theory". After giving an overview of the project, I describe the method of conducting the interviews and suggest a way to systematise the interplay of the involved disciplines (philosophy, mathematics and Social Science). The aim of the talk is to present the interview project in its current state and to give an insight in the use of a sociological method in philosophy.

Given the presence of independent statements in mathematics, an obvious question is: Is it possible that there are mathematical statements which are neither true nor false? We want to deepen our understanding of the underlying independence phenomenon by an analysis of set-theoretic practices. The independence phenomenon appears in the set theorists' work on a daily basis. Therefore, we can hope to learn from their experiences with independence since they have all found a practical way to settle or avoid the problems arising from it. Moreover, we can discover the wide spectrum of different views about independence. These considerations led to the set-up of an open qualitative interview study with professional set theorists (approx. 30 interview partners).

The first challenge we encountered was the formulation of interview questions which are easily understandable and answerable. We argue that this is possible by avoiding philosophical notions. Another challenge is to be clear about the merits and the limits of the empirical results for the philosophical analysis, which we address with a careful systematisation of the shifts from one to another discipline.