

Tentative Title of Dissertation:

Scientific Representation and Human Action

Abstract:

There are a large number of pragmatic accounts of scientific representation, which give an irreducible place to the intentions, actions, and activities of a scientist in explaining the nature of representation in science. While I think pragmatic accounts of scientific representation have much to recommend for themselves, very little has been said about what in particular is meant by the terms action, intention, or activity. The nature of agency, which is an essential component of the pragmatic account of representation, is, for the most part, unexplained. In my dissertation, I turn to the philosophy of action to better ground, explain, and expand upon the already existing pragmatic accounts of scientific representation. I begin with an overview of the literature, contextualizing the way in which pragmatic accounts developed and relate to other accounts (sociology of science and structuralist). Responding to an influential article, I next argue that representation in science cannot be understood without reference to the understanding of the broader scientific community. To understand representation in science, we need an account of representational actions. As such, I offer an account of representational actions which relies on the work of G.E.M. Anscombe and explains how it is that action can bridge the representational gap. It is a similar reference to Anscombe's account of intentional action which, I argue, helps to explain the consistency between the many differing pragmatic accounts of representation. Finally, my approach allows me to describe the many forms of representational actions as they occur within scientific practice.