

# **Truth in Explanation**

by

**Bernhard Nickel**

Submitted to the Department of Linguistics and Philosophy  
on September 2, 2005, in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

## **ABSTRACT**

My thesis consists of three papers on truth and explanations in science. Broadly, the question I ask is semantic. Should the best account of certain bits of our scientific practice focus on the concept of truth? More specifically, should the crucial distinctions between good and bad aspects of that practice be drawn in terms of truth? My thesis consists of three case studies: *ceteris paribus* laws in the special sciences, appeals to idealizations in the application of theories, and the analysis of explanations quite generally, exemplified in the asymmetry of explanation. In each case, prominent philosophers have argued that a proper treatment does not focus on truth. In each case, I argue that truth should play a central role. And in each case, the issue turns, at least in part, on the connection between the scientific practice in question and explanations.

Thesis Supervisor: Edward J. Hall  
Title: Professor of Philosophy

Thesis Supervisor: Robert C. Stalnaker  
Title: Laurence S. Rockefeller Professor

Thesis Supervisor: Stephen Yablo  
Title: Professor of Philosophy