

理論選擇：一個理性論的解釋與辯護

摘要

本論文目的在於說明科學理論選擇的合理性。此議題的中心問題是：我們如何與為何接受或拒絕一個理論？本文主張，我們依據某種近似普遍的判準（方法、規範，等等）做理論選擇決定。學界對此問題的研究大致可分為兩種進路：理性論與實用論。傳統理性論如邏輯實證論與波柏從哲學邏輯的分析角度，認為科學方法論有其先驗性，理論選擇或變遷的說明是規範的、客觀的。這種看法遭到實用論的挑戰。實用論者韓森、孔恩、費耶阿本和許多知識社會學家認為，理論變遷牽涉科學家的心理、歷史和社會背景，理論選擇判斷沒有普遍的規範可循。實用論再走遠一點，即導致知識的相對主義立場，否定科學家是依據公認判準做理論選擇判斷，因而否定科學事業的合理性和客觀性。本文將批判這種相對主義立場，並檢討傳統理性論的缺失，進而提出一個溫和的理性論立場。本文論證的三個主要方向如下：一、表明實用論攻擊理性論關於科學的觀察、理論、方法的見解多數是失敗的，科學知識社會學的因果說明面臨困難；二、指出傳統理性論的先驗觀點的缺失，論證方法論事業是經驗的研究而科學史是其中關鍵；三、提出內在多元的「公認判準」作為溫合理性論的方法論核心，各種方法論規則（方法）是其具體化的成果，而成為理論選擇的嘗試性規範。最後討論公認判準的證成，並回應本文觀點可能面臨的困難。

關鍵字：科學哲學、科學史、理論選擇、理性、進步、方法論、理性論、實用論、公認判準、相對主義、科學知識社會學、強方案、伽利略、反思平衡

Theory Choice: A Rationalistic Interpretation and Defense

Abstract

The aim of this dissertation is to offer an account of the rationality of theory choice. The central question in this issue is: *how* and *why* we accept or reject a theory? In this dissertation, I claim that most scientists make their choice of theories in accordance with some nearly general criteria (such as methods, norms, etc.) when they are in the situation of theory choice. With regard to my claim, there are traditionally two research approaches: Rationalism and Pragmatism. Rationalism mainly represented by Logical Positivists and Popper who consider science from logically analytic perspective. They hold that scientific methodology is *a priori* and the explanation of theory choice or theory change must be normative and objective. Pragmatists including Hanson, Kuhn, Feyerabend and many sociologists of knowledge challenge rationalism with a sociological and psychological view of scientific knowledge. With this view, they claim that there is no universal methodology for theory choice. At times, the pragmatists go even further leading ahead to relativism by entirely denying the rationality and objectivity of science. In this dissertation I criticize this position of relativism, examine the fault of traditional rationalism and propose a moderate rationalistic position. My argument consists of three aspects. First, I show the failure of pragmatists' attacks on rationalistic notion about scientific observation, theory, and method. The sociological-psychological approach of scientific knowledge faces difficulties. Secondly, opposing to *a priori* methodological view held by traditional rationalists, I argue that methodological enterprise is an empirical research which has to take into account the history of science. Thirdly, I propose a sort of "moderate rationalism" which holds some accepted criteria as the methodological cores of theory choice. These criteria would be further developed to *methodological rules* (or methods) as tentative norms in scientific practice if we carry out a closer look at the history of science.

Keywords: philosophy of science, history of science, theory choice, rationality, progress, methodology, rationalism, pragmatism, accepted criteria, relativism, sociology of scientific knowledge, strong programme, reflective equilibrium