Euro Jnl Phil Sci (2012) 2:157–159
DOI 10.1007/s13194-012-0052-z

EDITORIAL ARTICLE

The future of philosophy of science: introduction

Stephan Hartmann · Jan Sprenger

Published online: 25 April 2012

Philosophy, perhaps more than any other academic discipline, likes to reflect upon itself. Thus, it is no surprise that philosophers regularly ask questions such as: What is the scope of philosophy, what are its important questions, and what are the proper methods to address them? Asking these questions also means to take stock and to enquire where the discipline is going.

This is an especially worthwhile activity in contemporary philosophy of science as this field has been changing rapidly since its institutional consolidation in the 1950s. For present purposes we may very roughly, but still usefully, describe this change as having three phases. In the first phase, which lasted until the mid 1960s, philosophy of science was dominated by Logical Empiricism and formal approaches to philosophically analyzing science. The second phase began in the late 1960s and lasted until the second half of the 1980s. It brought the naturalistic turn, a critique of the Logical Empiricist's picture of science as too far away from the actual practice of science, a focus on the history and the social structure of science, a shift from theories as the primary target of philosophical analysis to models and experimental practices, and many detailed case studies.

While the Logical Empiricists gave us a grand general picture of science, the naturalists' working assumption has been that aiming at such a picture underappreciates the complexity and diversity of real science. Moreover, the naturalists moved normative questions into the background. In the third

S. Hartmann (✉) · J. Sprenger
Tilburg Center for Logic and Philosophy of Science, Tilburg University,
PO Box 90153, 5000 LE, Tilburg, The Netherlands
e-mail: S.Hartmann@uvt.nl
URL: http://www.laeuferpaar.de

J. Sprenger
e-mail: j.sprenger@uvt.nl

phase, which began in the late 1980s, the dichotomy between normative and descriptive approaches in philosophy of science still persists, but the picture has become even more complex. So we can only list a number of novel trends: Metaphysical questions, which were famously dismissed by the Logical Empiricists, are gaining a considerable interest. Philosophies of the special sciences are booming, and more and more subdisciplines are emerging. Formal epistemologists are applying a variety of mathematical methods to address normative questions in general philosophy of science. Social aspects of science are systematically studied and mathematically modeled. Another interesting development is the rise of experimental approaches to problems from philosophy of science (e.g., causation) and its combination with formal approaches.

This (incomplete) list shows that contemporary philosophers of science address a large variety of topics. They also use many different methods, quite similar to scientists who often use a combination of methods, or import a method from another field to solve their problems. This is, to our mind, a fruitful way of conducting "scientific philosophy": a proper combination of conceptual analysis, historical or contemporary case studies, formal modeling, and experimental work that will lead to many new and exciting insights.

To find out whether our views were shared by our colleagues, and to explore their expectations about the development of our discipline, we organized two events at the Tilburg Center for Logic and Philosophy of Science (TiLPS) in April 2010. The first event was a one-day workshop on "Scientific Philosophy—Past and Future"; the second event was the three-day Sydney-Tilburg conference "The Future of Philosophy of Science" with invited lectures by Michael Friedman, Christopher Hitchcock, Hannes Leitgeb and Samir Okasha. It is fair to say that the conference exceeded our expectations, and that it was a full success. Not only because of the surprisingly high quality of the papers and presentations, but also because of the cheerful atmosphere that the participants brought to Tilburg, and because of the memorable volcano eruption in Iceland that tied some guests involuntarily to the Netherlands, leading to several fruitful collaborations.

The present special issue gathers five papers that were presented at the conference. All of them address the conference topic from a different perspective, and all of them represent a specific way of doing philosophy of science. *James Justus* engages in a defense of Carnapian explication as a normative account of concept determination for complex concepts in empirical science. In support of his argument, Justus presents a case study from theoretical biology. *Sebastian Lutz* defends artificial language philosophy—the view that philosophical problems are best solved by the conventional prescription of a new language—and explores the methodological implications of this position for philosophy of science. *Chris Hitchcock* critically evaluates the status and promise of philosophical experiments in philosophy of science and argues that the *expertise objection*—the appeal to the privileged intuitions of professional philosophers—is unsatisfactory in a number of ways. *Markus Eronen* blends perspectives from philosophy of science and philosophy of mind: he argues

that adopting explanatory pluralism as well as the interventionist account of causation—two positions that have recently become very popular—leads to a novel, pluralistic variant of physicalism. Finally, *William Bechtel* expects that mechanistic accounts of explanation must be expanded to incorporate computational modeling, yielding *dynamical* mechanistic explanations.

We conclude with some words of thanks. First of all, to Mark Colyvan and Paul Griffiths for co-organizing the conference. Second, to the Netherlands Organization for Scientific Research (NWO) and TiLPS for generous financial support. Third, to the authors and referees of the papers in this special issue for their intellectual devotion and their generous advice. Last but not least, thanks to Carl Hoefer, the editor-in-chief of EJPS, for his invaluable assistance with editorial decisions, and for his continuous encouragement and support.