Explanatory Pluralism

Explaining phenomena is one of the main activities in which scientists engage. This book proposes a new philosophical theory of scientific explanation by developing and defending the position of explanatory pluralism with the help of the notion of “explanatory games”. Mantzavinos provides a descriptive account of the explanatory activity of scientists in different domains and shows how they differ from commonsensical explanations offered in everyday life by ordinary people and also from explanations offered in religious contexts. He also shows how an evaluation and a critical appraisal of explanations put forward in different social arenas can take place on the basis of different values. Explanatory Pluralism provides solutions to all important descriptive and normative problems of the philosophical theory of explanation as illustrated in sophisticated case studies from economics and medicine but also from mythology and religion.

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Explanatory Pluralism

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Στήν μητέρα μου Νίκη

πού μ’ ἔμαθε ν’ ἀγαπᾶ τὰ γράμματα
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Preface and Acknowledgments

The Alte Burse is a wonderful dusky pink building with a symmetrical facade in Tübingen. Built in 1480, it is the domicile of the Philosophy Department. It borders the Tübinger Stift in the west where Hegel, Schelling and Hölderlin passed their years as students and the Hölderlinturm in the east where Hölderlin spent the last years of his life. The two separate entrances to the Alte Burse, which can be reached through two separate staircases built in opposite directions to each other, show how a lively philosophical dispute can leave its track on a building. This architectonic peculiarity goes back to the early modern Universalienstreit, which led, in Tübingen, to the erection of a wall in the building that separated the Alte Burse in two halves and so created a separate entrance respectively for the two “ways”, the Via antiqua and the Via moderna, left for the “Nominalists” and right for the “Realists”. The wall was removed only during the Reformation when conflicts of a more rebellious character broke out. But the two entrances remained, a memorial to the irreconcilable controversy between two competing approaches to what constitutes scientific knowledge, a controversy which has taken new turns and manifestations during the centuries and still calls for arbitration today.

Hörsaal X overlooking the Neckar River is the focal point of the intellectual activity in the Alte Burse today. It was in this room that I attended in the Sommersemester 1991 the Hauptseminar on Popper’s “Logik der Forschung” offered by Professor Keuth which also included the analysis of Hempel’s “Aspects of Scientific Explanation”. The discussions on scientific explanation in this room, overlooking the Platanenallee on the Neckarinsel, have had a lasting impression on me. Although I have turned my attention to
other problems over the years, I have always retained a keen interest in explanation as the core theoretical activity in science. About a decade ago, I set out to develop my own theory of explanation which has taken preliminary shape in my essay entitled “Explanatory Games”, published in the Journal of Philosophy in 2013. The present book contains a more complete treatment of my proposal on how to think about the core theoretical activity, explanation.

I cannot pretend that my endeavour has been a successful one, if judged according to what I originally set out to accomplish. The contrary is the case. What I set out to accomplish was to develop my own model of explanation which would ideally share the positive features of the Popper-Hempel view: rigour, simplicity and universal scope. But, through the years, it has become increasingly clear to me that the development of such a unitary model of explanation would be yet another philosophical fiction vis-à-vis the actual explanatory activities in which scientists engage. And that in the end, it would share the fate of all such philosophical fictions: to be – rightly – ignored. I gradually became aware, thus, that the main task to be accomplished was to develop a general framework capable of accounting for the plurality and variety of explanatory activities in science and in everyday life. The philosophical theory that I offer in this book consists of my proposal of how this task can be best accomplished.

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