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**The Relevance of Judgment
for Philosophy of Science**

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Preface

The papers in this volume are revised versions of presentations delivered at the annual conference of the *Académie Internationale de Philosophie des Sciences* (Brussels), held during the COVID pandemic at the University of Zadar, in Croatia, from 12 to 16 October 2021. Of the fifteen conference participants, ten prepared their presentations for publication. Due to the risks posed by COVID, AIPS members Mario Alai, Reinhard Kahle, and Fabio Minazzi, as well as invited speakers Johan van Benthem and Chen Bo, gave their talks online.

The conference title, “*The Relevance of Judgment for Philosophy of Science*”, was formulated in close connection with my research project “*Hermeneutical Relevance of Judgment*” (2016–2020), funded by the Croatian Science Foundation. The Croatian Science Foundation also supported this conference, and I wish to extend special thanks to the Foundation’s then-president, Prof. Nikola Ružinski.

I am equally grateful to the then-president of the Académie Internationale de Philosophie des Sciences, Prof. Gerhard Heinzmann, for generously endorsing both the proposed theme and the choice of venue at the University of Zadar. This was especially significant given that the phenomenon of judgment has often been overlooked within the Philosophy of Science. I was personally surprised by the enthusiasm with which the theme was embraced at the conference; despite the physical distancing mandated by the regulations of the Ministry of Health of the Republic of Croatia and the University of Zadar, a remarkable sense of closeness and a form of communicative sociability emerged among the participants. Regrettably, the thoughts and opinions expressed by the conference participants during the discussions were not documented. As a gesture of appreciation to the participants, the program is nevertheless presented here.

Wednesday, 13 October 2021.

9.00–9.15. Welcome of Participants. Ceremonial Hall of the University of Zadar. Dijana Vican, President of the University of Zadar. Marko Vučetić, Head of the Department of Philosophy. Gerhard Heinzmann, President of the AIPS.

9.15–10.00. Jure Zovko. *The role of judgment in scientific method.*

10.00–10.45. Michel Ghins. *The relevance of judgment for philosophy of science.*

10.45–11.00. Coffee Break.

11.00–11.45. Evandro Agazzi. *The ontological commitment of judgment in science.*

11.45–12.30. Alberto Cordero. *Judgment and diachronic assessment in objective science.*

12.30–13.45. Lunch Break.

13.45–14.30. Jean-Guy Meunier (online). *Conceptual models and judgement in computer engineering sciences.*

14.30–15.15. Mario Alai (online). *How should we judge current scientific theories?*

15.15–15.30. Coffee Break.

15.30–16.15. Johan van Benthem (online). *The surplus of judgment in logic.*

16.15–17.00. Gerhard Heinzmann. *The relevance of judgment for mathematical reasoning: Poincaré against the logicians, revisited.*

19.30. Dinner.

Thursday, 14 October 2021.

9.30–10.15. James McAllister. *The role of emotion in scientists' judgement: a rationalist account.*

10.15–11.00. Gino Tarozzi. *Does neo-empiricist refutation of Kant's synthetic a priori judgments rule out the possibility of meaningful philosophical principles?*

11.00–11.15. Coffee Break.

11.15–12.00. Fabio Minazzi. *Epistemology, axiology and scientific knowledge.*

12.00–12.45. Hans-Peter Grosshans. *Judgment in hermeneutics.*

12.45–14.30. Lunch Break.

14.30–15.15. Reinhard Kahle. *The question "why?".*

15.15–16.00. Lorenzo Magnani (online). *Discoverability in scientific abductive cognition.*

16.00–16.45. Jean Petitot (online). *The notion of "alternative judgment" in Kant's phoronomy.*

16.45–17.00. Coffee Break.

17.00–19.00. General Assembly.

20.00. Gala dinner.

Friday, 15 October 2021.

9.00–9.45. Bo Chen (online). *On Quine's naturalism.*

9.45–10.30. Bernard Feltz. *Language, causality, neuroscience and free will.*

10.30–10.45. Coffee Break.

10.45–11.30. Pedrag Šustar. *The knowability of biological laws.*

11.30–12.15. Dennis Dieks. *Judgments and perspectives in natural science.*

Interest in the phenomenon of judgment within the philosophy of science has become increasingly prominent. Already in 2022, at the conference of the Academy in Pavia, organized by our colleague Lorenzo Magnani at the Department of Humanities, University of Pavia, the chosen theme was Justification, Creativity, and Discoverability in Science. More recently, at the annual AIPS conference in Rome, held within the framework of the World Congress of Philosophy (August

1–4, 2024), the theme was Scientific Understanding. In the days of Ernest Nagel, Carl Gustav Hempel, and Karl Popper, it would have been difficult to imagine that an academy for the philosophy of science would hold an annual conference on the topic of “scientific understanding,” because the intellectual activity of understanding was limited to the humanities, while philosophy of science primarily focused on discussion of explanation. Understanding, as an activity of the mind, was excluded from methodological argumentation by most representatives of the philosophy of science because it was thought to contain subjective statements and opinions lacking objective validity.

Terms such as *understanding* and *comprehensible* did not belong to the vocabulary of distinguished scholars of the philosophy of science half a century ago, since they refer to the psychological and subjective aspects of explanation.

The metaphor of the judge was a favorite theme of Kant’s philosophy of science, it is a vivid example of how the human capacity for criticism and judgment can be integrated into the scientific understanding and explanation of phenomena in the context of the laws of nature. This ability to judge should be practiced and constantly improved, both as an applicative activity of the existing laws to concrete cases and as a reflective power of judgment in which the appropriate law is investigated. Similarly, Pierre Duhem claims that in the choice of a scientific hypothesis, the spirit of refinement (*l’esprit de finesse*) and elegance plays a decisive role, not the spirit of logical and geometrical exactness, it is a question of prudent judgment (*bon sens*): “To judge correctly the agreement of some physical theories with the facts, it is not enough to be a good mathematician and a skilful experimenter, but it is necessary to be an impartial and just judge.” (Duhem, *La Théorie physique*, p. 357).

It is my hope that this volume, which examines the phenomenon of judgment along with its epistemic and ethical dimensions across different areas of the philosophy of science, will find a fruitful reception within the academic community of the philosophy of science.

Zadar

J.Z.

August 2025