

# Comptes Rendus de l'Academie Internationale de Philosophie des Sciences

Tome I

## Science's Voice of Reflection



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The 2018 conference of the Académie Internationale de Philosophie des Sciences was held at the Universiteit Amsterdam in September 2018 under the title

Science's voice of reflection. The philosopher of science as part of the scientific endeavour.

By virtue of its subject, its methods, and its disciplinary tradition, philosophy of science straddles the borderlines between C. P. Snow's *Two Cultures*, connected equally strongly to the learned realm of the humanities and the technological domain of the sciences and thereby linking these worlds.

Philosophers of science who engage with scientists or engineers often understand their role as that of the voice of reflection; the philosophical eagle perspective allows them to engage with those questions all too often ignored in the everyday routine of scientific practice: questions about the motivation, norms, values, methods, and limitations of the scientific enterprise.

Many modern scientific projects covering all of the disciplines in the natural, medical and engineering sciences urgently require this level of philosophical reflection: large-scale collaborative scientific projects with major impact on our world and society raise concerns about sustainability, safety, objectivity, inter-subjectivity, ethics, and the fundamental concepts underlying the scientific questions, all of which are firmly within the domain of competence of the philosopher of science.

Alas, philosophers of science are rarely if ever consulted or incorporated in the decision-making processes concerning these collaborative scientific projects. We emphatically believe that the focus on only one of C. P. Snow's two cultures is detremental to the larger goal of science as the endeavour of understanding and improving the world.

The 2018 symposium aimed to explore the possible and actual interactions of philosophy of science with the scientist's endeavour, including, e.g., historical studies, case studies of current collaborations between philosophers and scientists, the role of philosophy in the academic training of future scientists, and many more topics. In the following, we present the schedule of the conference with all presentations:

### Tuesday, 4 September 2018.

- 17:15–17:35. Opening (Gerhard Heinzmann & Benedikt Löwe).
- 17:35–18:35. Sonja Smets, Amsterdam, The Netherlands: Where logic meets the social sciences.

From 19:00. Dinner.

#### Wednesday, 5 September 2018.

- **9:50–10:30.** Gregor Schiemann, Wuppertal, Germany: *Epistemology* of the LHC.
- 10:30–11:10. Jean-Guy Meunier, Montréal QC, Canada: Modeling the mind: Bridging philosophy and cognitive sciences.
- 11:10–11:30. Coffee Break.
- 11:30–12:10. Valentin A. Bazhanov, Ulyanovsk, Russia: The detour heuristic influence of philosophy upon science: The cases of ideologized science and Kant's program in neuroscience.
- 12:10–12:50. Plenary discussion about the role of the philosopher of science in the natural and social sciences.
- 12:50–13:50. Lunch Break.
- **13:50–14:30.** Michel Ghins, Louvain, Belgium: Scientific realism and scientific practice.
- 14:30–15:10. Jesús Zamora-Bonilla, Madrid, Spain: Is philosophy's role to create concepts or to destroy them?
- 15:10–15:40 Coffee Break.
- **15:40–16:20.** Marco Buzzoni, Macerata, Italy: Methodological naturalism or transcendental distinction? On the relationship between philosophy, science, and philosophy of science.
- **16:20–17:00.** Inkeri Koskinen, Helsinki, Finland: Engaging through case studies: Can empirical philosophy of science influence the development of transdisciplinarity?
- 17:00–17:20. Coffee Break.
- **17:20–19:20.** General Assembly of the Académie Internationale de *Philosophie des Sciences*.

From 19:45. Conference Dinner.

#### Thursday, 6 September 2018.

- **9:50–10:30.** Michael Detlefsen, Notre Dame IN, United States of America: *Rigor as an epistemological ideal of mathematical proof.*
- **10:30–11:10.** Brigitte Falkenburg, Dortmund, Germany: Some remarks on the relations of philosophy to the sciences.
- 11:10–11:30. Coffee Break.
- **11:30–12:10.** Fabio Minazzi, Varese, Italy: *Historical epistemology* as a meta-reflection between science and philosophy.
- 12:10–12:50. Jure Zovko, Zadar, Croatia: Judgment as link between C. P. Snow's two cultures.
- 12:50–13:50. Lunch Break.
- 13:50–14:30. Martin Carrier, Bielefeld, Germany: Responsible Research & Innovation: Prospects & Obstacles.
- 14:30–15:10. Alberto Cordero, New York NY, United States of America: On the Complex Interactions between Science and Philosophy of Science.
- 15:10-15:40 Coffee Break.
- 15:40–16:20. Elliott Sober, Madison WI, United States of America: Philosophical Interventions in Science—a strategy and a Case Study (Parsimony)
- 16:20–17:00. Closing.

The conference took place in the historical VOC Zaal in the Bushuis of the Universiteit van Amsterdam. The Bushuis dates back to the mid 16th century and was originally the gun magazine of the city of Amsterdam. In the 17th century, the Dutch East India Company (Vereenigde Oost Indische Compagnie; VOC) made it its headquarters by adding the Oost-Indisch Huis to the building complex (1606). The VOC Zaal was used as the meeting chamber for the Heren XVII (the "Lords Seventeen"), the board of the VOC elected from the shareholders. The genius loci and its historical reminder of the Dutch colonial past with violence and oppression in the name of progress served as an impressive reminder of the importance of grounding scientific development in the understanding and contextualisation provided by the humanities. The organisers acknowledge additional financial support from the Institute for Logic, Language and Computation of the Universiteit van Amsterdam.

That this proceedings volume appears almost four years after the symposium is due to the fact that its production fell into the phase of the creation of the new book series Comptes Rendus de l'Académie Internationale de Philosophie des Sciences (C.R. AIPS): the original plan was to publish the proceedings volume as a special issue of a journal, but this plan was abandoned when the opportunity to make this volume the inaugural volume of the new book series presented itself. The delays caused by this change of publication plan meant that many of the papers presented at the conference had already found some other publication venue in the meantime; as a consequence, only five of the presented papers are published in this volume: Marco Buzzoni's paper Disunity in the philosophy of science: for and against. Alberto Cordero's paper Cooperation and conflict between philosophers of science and scientists, Brigitte Falkenburg's paper The two cultures-old and new debates on philosophy and the sciences, Inkeri Koskinen's paper, Engaging or not engaging with transdisciplinary research: on methodological choices in philosophical case studies, and Fabio Minazzi's paper Historical epistemology as a meta-reflection between science and philosophy.

The AIPS decided that the book series C.R. AIPS will provide proceedings of the events of the AIPS as they happened and reflect the diversity among members of the AIPS as well as their disagreements. Therefore, the papers published in this volume are not formally peer-reviewed beyond the feedback that took place in the lively discussions in Amsterdam: the papers reflect the opinions of the authors alone with no editorial influence. The five papers in this volume cover a wide range of thoughts and positions on the subject of the interaction between the philosopher of science and the scientist and we hope that the readers will find the papers thought-provoking and interesting.

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