

Values, Norms, and Facts We May Want to Take Responsibility for

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The History of Science Is Like a Foreign Country

The first Balzan Prize for the History of Science was awarded in 1986 to Otto Neugebauer, who impressed the Balzan General Prize Committee with his detailed illustration of the remarkable scientific achievements of ancient civilizations, namely Mesopotamia and Egypt. To quote the Balzan Prize *laudatio*, Neugebauer «revealed both the debt of later civilizations, notably Greek and Indian, to their Mesopotamian forerunners, and the remarkable mathematical abilities of the Babylonian astronomers». Besides his work on what Babylonian astronomers actually accomplished several millennia before modern times, his primary contribution to the history of science was his extensive work on the historical reconstruction of Egyptian astronomy which contributed to eradicating a number of modern myths about its nature and influence.¹

Twenty-three years later, Paolo Rossi Monti was awarded the 2009 Balzan Prize for the History of Science in light of his major contributions to the study of the intellectual foundations of science from the Renaissance to the Enlightenment, and especially for his successful efforts at combining the history of science, technology, and philosophy. Rossi Monti was hailed for expounding the interdependence of scientific thought and practice as well as technical developments with great lucidity, breaking new ground by «looking for the genesis of the Scientific Revolution in a union of knowledge and technical expertise».² Already in his first book on Francis Bacon and the origins of modern science in magic, Rossi Monti «illuminated the roots of

¹ Otto Neugebauer: 1986 Balzan Prize for History of Science.

² Paolo Rossi Monti: 2009 Balzan Prize for the History of Science.

Francis Bacon's thought, showing how his philosophy of science "developed out of the intellectual currents of his age".³

Paolo Rossi Monti himself listed what he regarded as «several convictions that have variously accompanied my lifetime's work». While these were conceived in Italy, where he was trained as a historian, they were «consolidated» during his time at the Warburg Institute in London and Wolfson College in Cambridge. In his essay *The Past is a Foreign Country*, delivered on the occasion of the 2009 Balzan Prizewinners Forum (held on 19 November of the same year in Bern, Switzerland), among his most important convictions he mentioned the following: first, we must never forget that the distinctions between the disciplines have not always been delineated in the same way as they are today; and second, the truths presented to us as self-evident in the manuals of the various sciences are always results.⁴ In other words, whether our focus be on the scientific activity in Ancient Mesopotamia, Early Modern England, or, for that matter, contemporary China, Russia, or – it may go without saying – in the United States of America or their more or less reliable allies located on the rest of the Globe, we should never forget the long, complicated processes leading up to those results. As Rossi Monti concluded, «struggles, contrasts, difficulties, attempts to identify crisis situations and then to get out of them underlie each of those results», including those results which are currently being obtained by social scientists, philosophers, and historians.

In other words, while historians of science critically revise the modern myth of «progress» over and over again, it becomes philosophically and ethically imperative to acknowledge our own role in human existence. As Martin Pickavé pointed out in his account of the life and work of Ian Hacking, 2014 Balzan Prize for Epistemology and Philosophy of Mind: «We as human beings are not just passively reacting to the world in which we live, but actively intervene in it and shape it. We create not just values, but also facts».⁵

³ First edition *Francesco Bacone. Dalla magia alla scienza*, (Bari: Laterza, 1957); first English translation *Francis Bacon: From Magic to Science*, (London: Routledge, 1968).

⁴ *The Past is a Foreign Country* - Bern, 19.11.2009 Forum - Fondazione Internazionale Premio Balzan.

⁵ *The Significance of Ian Hacking's Work* (by Martin Pickavé): Rome, 21.11.2014 - Forum (pdf) - Fondazione Internazionale Premio Balzan.

The Future of Science as a (Cosmopolitan) Social Construction

Lorraine Daston is an American historian of science. At Harvard University in 2002, she delivered two Tanner Lectures in which she traced theoretical conceptions of nature in several literary and philosophical works. A longtime leading voice of the Max Planck Institute for the History of Science, she was awarded the 2024 Balzan Prize for History of Modern and Contemporary Science. Her attentive focus on the mental representations and values underlying research activity was underscored by the Balzan General Prize Committee, as well as the new inroads into the history and epistemology of sciences her work opened. Furthermore, taking into consideration a distinguishing feature of the Balzan Prize, she was recognized for her support of innovative research projects while heading prestigious institutions.

Her focus on mental representation and values as well as her extensive scholarship in the history of science give rise to a «rigorous scrutiny of scientists' peremptory assertions of the objectivity of the theories they profess» culminating in «tangible evidence» of how said theories are «often based on generalizations uncorroborated by exhaustive observations and experimental results, on preconceived opinions about the constitution and ends of nature, on religious beliefs, and on conditioning due to the authors' affiliation with a community competing against others».⁶

These findings support and complement Daston's emphasis on the crucial role played by international cooperative networks in the history of science, including the very beginnings of modern science in the 1600s, and especially the period after the Second World War. Her attentive scrutiny of the difference «in moral codes, operating rules, and decision-making processes» between international scientific communities and all other cultural and educational institutions which may depend on their individual countries' agendas and political relationships, carries forward a commitment which the International Balzan Foundation's constitution and history has embodied, and a tenet which we must never forget, to use Paolo Rossi Monti's words once again.

⁶ Lorraine Daston - 2024 Balzan Prize for History of Modern/Contemporary Science.

Nationalistic and other vested interests more or less heavily interfering with the cosmopolitan project of science are often hidden behind imagery depicting scientific procedures by means of dangerously unexamined metaphors, Daston warned in her speech at the 2024 Balzan Forum. Traditional and modern tropes such as the «construction» or «building» (of knowledge), and of the «travel» or «train» (of progress), should be critically examined since consistency is not to be found between a static and a dynamic image of «science». Daston concluded her Q&A session of the 2024 Balzan Forum by forcefully stating that we are all responsible for devising and sustaining «a new way to talk about science».