Paolo Rossi Monti

2009 Balzan Prize for the History of Science

For his major contributions to the study of the intellectual foundations of science from the Renaissance to the Enlightenment.

Cosmology and Physics, Memory and Emotions: Research on the History of Science

Istituto Nazionale di Studi sul Rinascimento, Firenze

Adviser for the General Balzan Committee: M.E.H. Nicolette Mout

Paolo Rossi Monti has set aside half of the Balzan Prize for research that will involve seven young scholars who, after writing brilliant theses, have shown their ability to work well and with continuity thanks to fellowships awarded by Italian academic institutions. Paolo Rossi Monti, who will personally follow their research, has contacted each of the young people and their professors, convincing them that, by offering them the possibility of prolonging the period of their research, they will be able to make significant contributions to Italian and international culture.

Professor Paolo Rossi Monti will be supported by Professor Michele Ciliberto, corresponding member of the Accademia Nazionale dei Lincei and regular professor of modern philosophy at the Scuola Normale Superiore di Pisa, to follow the research on cosmology and physics, while Professor Bernardino Fantini, director of the Institut d'Histoire de la Médecine et de la Santé at the University of Geneva, will follow the research on the subject of memory and emotions. We estimate that the Balzan research project will conclude in 2011, with a conference to be held at the Accademia dei Lincei, which will also serve as the place to monitor the projects and let "external" scholars offer an opinion on work in progress. The administration of the fund will be entrusted to the Istituto Nazionale di Studi sul Rinascimento, with headquarters in Florence.

The subject cosmology and physics in the sixteenth and seventeenth centuries will be investigated in greater depth with the following pre-established themes: Olivia Catanorchi (Cosmology and Medicine in the High and Late Renaissance) will study the interrelations between astronomy, cosmology and medicine, and she will dedicate special attention to the work of Cornelio Gemma, who was known by Campanella and Kepler. The research of Francesca Dell'Omodarme (Aspects of Aristotelian Physics in the Paduan Lessons of Pietro Pomponazzi) intends to study Pomponazzi's comments and observations on the argumentation on physics and cosmology in Aristotle's works. Marco Matteoli (On the Mathematical Foundation of Giordano Bruno's Natural Atomism) intends to translate the *Articuli centum et sexaginta adversus mathematicos et philosophos* for the first time into Italian (including an extensive introduction and analytical commentary), starting with his in-depth study on Bruno's writings dedicated to mathematics and geometry. Chiara Petrolini (Science, Philosophy and Politics in the Venice of Paolo Sarpi) plans to study the intense intellectual exchange between Venice and England at the beginning of the seventeenth century, and in particular, the physiognomy of the so-called Sarpi circle. This theme of research will be related to the cultural background of De la Pirotechnia by Vannuccio Biringuccio. The research of Natacha Fabbri (The Moon in *Fabula, Istoria* and Utopia) intends to identify the main sources (pre-Galileo) defining the Moon as another Earth (Proclus, Macrobius, Simplicius, Plutarch) and to delineate the ways it was articulated by Bruno, Patrizi, Kepler and Wilkins.

On memory and emotions, the following research projects will be dealt with in greater depth, with pre-established themes: Matteo Borri (Arts of Memory in the Age of the Neurosciences) follows an investigation on the historical developments of experimental research and on the theoretical contributions to the theme of memory and neurobiology, as well as techniques for increasing mnemonic power, and maintaining mnemonic functions in the presence of pathologies, thus highlighting the connections between these techniques and the *artes reminiscendi* that enjoyed widespread popularity in Europe between the fifteenth and eighteenth centuries. Finally, Yamina Oudai Celso is investigating the backgrounds of Freud's theory of emotions (Psychiatry, Anthropology, and Scientific Psychology from Descartes to French Enlightenment: Textual Heritage and Theoretical Influx on Freud's Theory of Emotions).

Statement by the Prizewinner: All'inizio del secolo scorso i nomi di due italiani, il matematico Federigo Enriques e il filosofo Giovanni Vailati, erano noti a tutti coloro che, in Europa e in America, si occupavano di storia della scienza. Ma durante tutta la prima metà del Novecento la storia della scienza – in particolare dopo la diffusione in Italia delle filosofie di Benedetto Croce e di Giovanni Gentile (che si richiamavano ad Hegel e alla tradizione dell'idealismo) – ha avuto nel mio paese una vita stentata e difficile. Nel dopoguerra la situazione si è andata modificando. Oggi sono presenti molti studiosi che hanno scritto saggi e libri importanti e ben noti nel resto del mondo. Alla storia delle scienze si dedicano molti giovani ed esistono istituzioni, come l'Istituto e Museo di Storia della Scienza di Firenze, diretto da Paolo Galluzzi, che sono al centro di molte e importanti iniziative internazionali. Paolo Rossi Monti (Berne, 20.11.2009)