EXPERIMENTAL PRACTICES AND PHILOSOPHICAL TRADITIONS: ORGANIZING AND DISSEMINATING KNOWLEDGE IN EARLY MODERN EUROPE

INTRODUCTION

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In an era characterized by the recovery of ancient wisdom and by geographical discoveries, the body of knowledge as understood by the scholastics was too narrow to encompass this emerging new world. This big amount of information, gathered either from nature or from books, needs to be organized, classified, utilized for the advancement of knowledge and put into suitable forms to be transmitted further. As a consequence, the Aristotelian-Scholastic authority is discarded when new arising philosophical schools provide models of investigating the natural world. Even amongst those who consider nature to be the ultimate authority, there still exists a rivalry for interpreting the results of experimental practices, for finding the genuine method of demonstration and the appropriate technique for the investigation of nature and discovery of certainty.

Many of questions arise from the philosophical investigation of this historical period: 'What is relevant in nature as to be collected?', 'How should knowledge be organized and transmitted?', 'Which are the proper disciplines and methods of demonstration?', and, 'What does it mean to belong to a philosophical tradition or another?' This issue of *Society and Politics* does not aim at offering final answers to all these questions. Rather it offers insights on how different philosophers at the beginning of modernity dealt with these problems.

The chronological structure of this issue reflects the development of these major questions mentioned above. The fascination for curiosities, for collecting and gathering characteristic for the second half of the sixteenth century is reflected in Ruscelli's *Book of Secrets* and the description of Venice in his time. This Renaissance attraction to secrets is challenged by figures such as Bacon and Descartes, who were interested in discovering the theory behind both regular and curious natural phenomena. If Bacon chooses to keep the 'discipline' of natural history, but to change its content and function, Descartes rejects it as useless and includes the study of natural world within his mechanical philosophy. Not only is natural history rejected by Descartes, but traditional logic is also challenged in the search for the proper method of demonstration. Finally, Descartes' legacy and the intriguing issue of what it means to a philosophical tradition is analysed in the case of Pascal and Spinoza.

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The first article, "Ruscelli's Book of secrets in Context: A Sixteenth-Century Venetian 'Museum in Motion'," provides an interesting case-study for of the production and circulation of knowledge in the new era of print. Stefano Gulizia shows how Ruscelli's *Book of secrets* is a veritable 'theatre in print', specially created to present the curiosities of the natural world to the wide public. The aim of this paper is to analyse the activities involved in gathering and disseminating information: commerce and collecting, translations, and visual adaptations in print. All these epistemological changes are significant for defining the new long-distance networks specific for this age of geographical discoveries. However, these changes can only be understood when discussed in the context of medical practices and street crafts, Ruscelli's Venice representing the best example of a society involved in the production, organization and dissemination of knowledge.

As its title suggests, the second article, "Abolishing the Borders between Natural History and Natural Magic: Francis Bacon's *Sylva sylvarum* and the *Historia vitae et mortis*" addresses the problem of organizing and disseminating knowledge in Francis Bacon's natural philosophical writings. Doina-Cristina Rusu wants to prove that Bacon was not interested primarily in collecting facts, but in using these collections for the discovery of the causes behind visible phenomena. In these 'natural histories of matter', experience, experimental practices, and speculations are all intermingled, with the aim of arriving at the knowledge of forms. What is specific for Bacon's natural magic, as the author emphasizes, is that this science can be based on a provisional metaphysical knowledge, where the new experiments are designed to test and verify this provisional theory. In this way, Bacon's natural histories represent very complex instruments for the study of the natural world, in which experience and theory provide each other with means for the development of knowledge.

Within the same topic of natural histories, Fabrizio Baldassarri's article discusses the role of this type of writing in the works of René Descartes. His article "Between Natural History and Experimental Method. Descartes and Botany" brings to our attention a less-known writing of the French philosopher – *Excerpta anatonica*. This set of notes represents the proof that Descartes included botanical studies into his natural philosophy – plants are the perfect subject to be studied in relation to his laws of physics and mechanical physiology. His rejection of the collecting attitude specific to the natural historical endeavour is not a rejection of the study of living beings. On the contrary, as this article proves, Descartes aimed at including evidence and the order of reason in the study of biology, which in turn should be a relevant part of philosophy.

Ovidiu Babeş's article, "The Persuasive Value of Demonstration: Descartes' *Discourse,*" brings into discussion Descartes' methods of exposition and demonstration. Analyzing Descartes' early writings in the context of the rhetorical education he had received at La Flèche, the author shows why the classical disciplines, namely dialectic and mathematical demonstrations, were not suitable for presenting Descartes' philosophy. The aim of the article is to prove that geometrical analysis provides Descartes with the type of demonstration which, given its virtue of using suppositions, is able to attain intelligibility and certainty. By linking Descartes' early works and the mathematical developments from the *Geometry*, in other words linking

natural philosophy and mathematics, the author shows how the first gain persuasive properties using the method borrowed from the latter.

The last article, "Pascal, Spinoza and Defining Cartesianism," asks a very intriguing question: 'What does it mean to be a Cartesian?' Rather than looking at minor figures among Descartes' followers, Daniel Collette answers this question by analysing the works of two key figures in the history of philosophy: Blaise Pascal and Benedict de Spinoza. In defining the Cartesianism of these philosophers, Collette combines three aspects: the way in which each of them took and developed Descartes' philosophical ideas, their self-identification as Cartesians, and the fact that their contemporaries recognized them as Descartes' followers. Despite both their explicit criticism of Descartes' philosophy and the influences coming from different sources, Pascal and Spinoza share a common ground and this can be understood only in relation to their reading of Descartes. By proving that two philosophers with such different metaphysical commitments are still Cartesians, the article opens the field for a new approach concerning the boundaries and definition of 'being a Cartesian' in the seventeenth century.

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