
This collective volume, made of fifteen papers, some of which were presented at a 2009 workshop at the University of Sydney, questions the role of the body “as both an object of research and an instrument of experience” in the transformations of the life sciences from the late Renaissance to the early nineteenth century, in particular with the rise of empiricism. It is assumed in the introduction that such an investigation will contribute to the understanding of what this empiricism really was beyond the rhetoric developed by actors of this new science. One reason is that many of these actors were directly concerned with the study of the body, for example as physicians or naturalists (since medical professions were, at least quantitatively, well represented in such institutions as the Royal Society or the Parisian Académie des Sciences); another is that, from the late seventeenth century onwards, a reflection emerged among philosophers and scientists on the body as an instrument of science and how this body, from a physiological point of view, was able to do experiments and acquire knowledge by means of the senses.

The editors divide this book into three sections, the first of which, “The Body as Object,” deals with empirical studies on the human body. Harold J. Cook explores the triumph of empiricism on theory in medicine and argues that this change took place, above all, not because learned physicians recommended it, but because medical marketplaces promoted empiric therapies instead of traditional medical theory. Cynthia Klestinec emphasizes the rise of new experimental practices in anatomical training, and she shows the promotion of manual skill and expertise at the University of Padua in the late sixteenth century. Alan Salter establishes a connection between this new medical empiricism and the discourse of the senses in contemporaneous literary texts. According to him, such texts, published in England around 1600, had some influence on William Harvey’s conception and practice of observation and experience and contributed, in a sense, to his work on the circulation of the blood and the generation of animals. Victor D. Boantza studies another context, namely, the chymical research program undergone by Samuel Cottereau Duclos at the French Académie Royale des Sciences in the 1670’s; he shows that, in spite of the empiricist discourse of most Parisian Academicians at that time, theoretical and metaphysical debates, concerning for example the nature of matter, took place, underlying methodological disputes. Peter R. Anstey, in turn, examines the origins of Locke’s thought on medicine and science; his analysis of Locke’s medical notebooks leads him to deduce that one major influence on this philosopher was Helmontian chymical medicine; this link throws light on the development of Locke’s empiricism.

The five papers of the second section analyse the role of the body as the main instrument for practicing science and acquiring primary empirical knowledge, in connection with the physiological and philosophical conception on the senses. One
important mutation that occurred in the seventeenth century was the use of new instruments of observation, namely, the telescope and the microscope, which led to a reconsideration of the status of vision in science. For example, Ofer Gal and Raz Chen-Morris argue that, for Galileo and Kepler, the new instruments did not improve the faculties of human eyes, but replaced them, so that the eyes were themselves considered mere instruments, less powerful than artificial ones. As a consequence, the human senses became poorly reliable actors of the gathering of data, and they were looked at more suspiciously. Guido Giglioni’s paper is devoted to the program of investigation on the appetites of matter proposed by Francis Bacon in the *Sylva Sylvarum* (1627) and suggesting a kind of empiricism that was abandoned by Bacon’s followers. Another way to conceive the relationship between the body and knowledge was provided by the English physician and natural philosopher John Bulwer (1606-1656), who proposed to educate deaf people by means of a language of signs and gestures. Justin E.H. Smith analyses this work, based on Bacon’s notion of “transitory hieroglyphics,” as a major contribution to the debates on natural vs. artificial characters in the quest for a universal language in the mid-seventeenth century. The status of memory in the new science is investigated by Richard Yeo from the examples of Samuel Hartlib, John Beale and Robert Boyle. These authors had divergent conceptions on the role of memory, in connection with their empiricism: according to Hartlib and Beale, empirical data had to be systematically ordered in order to help memory, recollection and thinking, whereas Boyle refused such an arrangement as premature. This, too, illustrates the tensions around the position of human faculties in the new epistemological frame of the late seventeenth century, tensions that were by no means resolved by a consensual empiricism. The last paper of this section, by Snait Gissis, shows that the problem of acquiring scientific knowledge by the senses was always open one century and a half later, when Lamarck proposed his theory of *sentiments* and, in the new evolutionary framework emerging around 1800, reinvestigated the relationship between experience and feelings.

The volume’s final section considers “Embodied Minds,” i.e., the extension of empiricist conceptions on body function to mental processes. Firstly, John Sutton explains how English natural philosophers and physicians, from Locke to Hume, considered mental activity without mind, namely, carelessness and inattention, which consequence they deduced on the association of ideas, and how they tried to connect this with bodily phenomena such as movements of humors or nervous spirits. Lisa Shapiro analyses another aspect of the presence of the body in Locke’s empiricism since, according to her, pleasure and pain played a significant role in Locke’s account on perception and experience; she looks into this question in Berkeley and Condillac’s writings. Anik Waldow’s paper investigates the origins of empiricist thought from the medical Hellenistic tradition as discussed by Galen and the perception of this tradition by philosophers of the seventeenth to the eighteenth century, from Bacon to Kant. She demonstrates in particular that empiricism was closely connected to scepticism throughout this long history. Tobias Cheung is interested in Charles Bonnet’s attempts to make sense physiologically of sensations and to connect the mental process with the “organization of living ‘organized bodies’,” using especially the notion of organic