

was intensely contested and given variegated meaning. Despite these minor considerations, *Covenanting Citizens* is a substantial contribution to seventeenth-century scholarship.

Palmira Fontes da Costa, ed. *Medicine, Trade and Empire: Garcia de Orta's Colloquies on the Simples and Drugs of India (1563) in Context*. Farnham, Surrey, and Burlington, VT: Ashgate, 2015. xxiii + 279 pp. £78.99. Review by ALESSANDRO GIOSTRA, DEPUTAZIONE DI STORIA PATRIA—ANCONA.

During the Renaissance and early modern age, the hunt for new botanical species and investigation on their properties formed an integral part of medicine. New chairs in medical botany and botanical gardens were established in the most important universities. This new trend influenced the demand for more accurate naturalistic illustrations in botanical books and more complete descriptive publications as a consequence of the complexity of the argument. The growth of colonial empires helped increase Western medical knowledge, as Europe was not the only site of the botany-medicine interaction. This volume includes papers delivered at a conference, held in April 2013 at the Calouste Gulbenkian Foundation, to celebrate the 450th anniversary of the edition of Garcia de Orta's *Colloquies on the Simples and Drugs of India* (1563). Despite the fact that Garcia de Orta had received a traditional education, he can be considered an innovator. His move in 1534 to Goa, the capital of the Portuguese empire, as Chief Physician of the Spanish Captain of the Indian Seas, allowed him to collect a wide range of information about Indian medical treatments. The final outcome of de Orta's investigation consists in this dialogical structured work, in which the reader is fully involved in this specific subject. The choice of adopting a dialogical form reflects his relationship with many different people, whose learning enriched his knowledge. He was aware of the didactic relevance of the dialogical form for scientific communication; through the dialogical form he intended to create a room where different opinions could be expressed. In the dialogue, Western medical ideas are personified by Ruano, a fictitious colleague interested in the medical practice.

In that theatrical setting an important goal of the *Colloquies* lies in the correction of errors, which arose from the disparity between new and existing knowledge; these corrections were preventable with an objective knowledge of Eastern medicine. One of the problems frequently highlighted by Orta was the Western opposition to Muslim medicine. The critic against Vesalius in the forty-seventh colloquy is a clear instance of his approach to medical communication. So, the statement “I have no hate except for errors and no love except for the truth” (88) can be deemed to be the motto of his medical project.

The sixty colloquies forming part of Orta’s book present a medical view moving away from Galenism and Aristotelianism, and based upon modern botany and iatrochemistry. Furthermore, the economical context in which he lived exerted a deep influence on his conception. The case of the China Root, which was considered a valid remedy for syphilis, is emblematic, because Orta suggests a kind of preparation for sale. Broadly speaking, his appreciation of Chinese products reflects the importance of China for the Portuguese trading activity, and the medical marketplace represents a stimulus for innovation.

The *Colloquies* were printed in Goa, and, being influenced by the typical culture of investigation dominating in that area, they deal with a wide range of arguments about medicine in the Indian land, including drug prices and methods of healing. Those contents represent the new global context following the expansion of the Portuguese colonial empire in the beginning of the sixteenth century, an era in which the impact of new animals, plants and drugs was changing the common perception of nature. It was probably the first book concerning Indian medicine that had a relevant impact in the European medical science, although its circulation was limited by the posthumous condemnation of the author by the Inquisition. Notwithstanding that limitation, beginning in the seventeenth century the *Colloquies* was well regarded for the variety of contents. In order to have a complete idea of the importance of Orta’s work, it is necessary to take into account a “contextualized and innovative analysis [...] by reputed scholars in complementary areas of expertise” (5).

The reconstruction of Orta’s biography highlights some common features with other Iberian physicians, although there is a lack of knowledge about his personal identity. He was part of a network of

researchers able to support their own profession in a milieu in which the Inquisition was taking action against them, even if scientific curiosity was also part of his decision to move to Orient. The relevance of his action leads us to see his “self-appointed role as the centre of a network of cosmopolitan exchanges of European and Indian culture and especially medical knowledge” (267). Being a cosmopolitan researcher with a knowledge of different languages, he relied on many authorities. He exercised his profession in the Royal Military Hospital Garden, an institution whose staff was composed of indigenous Christians. As a matter of fact, notwithstanding the different cultural contexts, there were many common practices between Eastern and Western medicine, as European, Muslim, and Hindu doctors followed the same authorities. Portuguese settlement in Asia during the modern age brought about a great impact on European science. Just the attention he devoted to local medical practices is the reason why we can affirm that he was “less Cartesian, more Montaignian” (89), and more an eye-witness than a traditional professor. As a consequence, he wrote in an easy language and direct style, as his book was addressed also to ordinary readers. Moreover, his decision to write the *Colloquies* in Portuguese was probably due to his desire to make them available to the main port cities of the Indian Ocean. The *Colloquies* created a long-standing tradition, as more than two centuries later the medical remedies suggested by Orta were still studied and used all over the Portuguese empire in the same way he had described in his book.

In 1567 the Latin edition of the *Colloquies* by Clusius, made this work readable to a wider public in Europe; Italian, English and French versions were then based upon Clusius's edition. In any case, it must be specified that Clusius's version was a Latin translation of the original Portuguese text. Moreover, Clusius removed the dialogical form and added personal comments and woodcut illustrations. The work continued to arouse interest and five further editions by Clusius proved its commercial success. So, without Clusius's work “it is hard to imagine that Orta's work would have become famous in Europe” (193). Among the people who sustained his legacy, we can find some Jesuit missionaries who were interested in looking for medical solutions in their evangelical work. They incorporated the Goa medical gardens and continued to use the healing plants Orta had dealt with.

A document held in the Society of Jesus Archive in Rome witnesses the enduring influence of the *Colloquies*, as the Jesuit pharmacies in different areas of the world used the same medical substances highlighted by Orta. More in general, all “Portuguese colonial agents (missionaries, merchants, military officers, medical practitioners, colonial administrators) displayed widely varying motives for gathering and disseminating indigenous knowledge about healing” (236).

Unfortunately, medicine is not among the most commonly discussed subject-matters by historians of science, although it played an important role in shaping culture during the Scientific Revolution. The relevance of the *Colloquies* must be contextualized in an historical milieu in which anatomy and medical botany were emerging as leading disciplines within medicine. Furthermore, the attention devoted to empirical knowledge was part of the background for the radical turning point in scientific matters. The discovery of new drugs, plants, and remedies in Indian territories was part of the new *materia medica* and started reinforcing the bases of a medical practice that was showing interest in remedies arising from empirical evidence. In other words, Orta’s book just fits in the modern age characterized by revolutionary ideas that were bringing about a revision of the traditional remedies and new observations of the effects of plants. Moreover, the advancement of medical learning, due to the expansion of Western influence in Central-Southern America and Asia, represented the beginning of a “globalized” medicine that started taking into account the knowledge belonging to various traditions.

This collection of essays written by leading scholars in the field is very good reading for specialists as well as for readers with a basic background on biological sciences during the Scientific Revolution. Its merit lies in arranging the specific contents of the *Colloquies* in the broader context of the medical culture and formation of colonial empires in the sixteenth century: “De Orta and the *Colloquies*, much like science in general, belong to us all and, as such, throughout time and in different parts of the world, they have united people and renewed the universal values of humanity” (xxii).