

## JOSÉ RÁMON MARCAIDA LÓPEZ, Arte y ciencia en el Barroco español. Historia Natural, coleccionismo y cultura visual. FUNDACIÓN FOCUS-ABENGOA/MARCIAL PONS HISTORIA: MADRID, 2014. 337PP. ISBN 978-841596-336-3.

Teresa Nobre de Carvalho CIUHCT University of Lisbon, Faculty of Sciences

The History of Science has witnessed important developments in recent decades. By considering the role played by a wider range of actors, practices and institutions, the discipline covers today newer and broader grounds. Supported by these perspectives, the historical narrative on *Iberian Science*, be it the study of how Iberian Empires collected, managed and circulated new knowledge, became increasingly relevant. The impact of imperial science on the rise of a modern European science is echoed in recent studies of diverse scientific fields. Against this backdrop, Arte y Ciencia en el Barroco Español, sets itself as an innovative and bold challenge. By drawing on extensive archival research, careful argumentation and sustained reasoning, José Rámon Marcaida examines the tension between Baroque culture and modern science. The setting of his analysis is the Empire of Philip IV of Spain (c.1621-1655) and the main theme is the Spanish Baroque work Historia naturae (1635), by the Jesuit Juan Eusébio Nieremberg (1595–1658). The research is organized into three chapters, corresponding to the different Baroque pictorial genres: paintings of cabinets, still-lives and vanitas.

HoST - History of Science and Technology 10, pp. 137–139 DOI 10.1515/host-2016-0009

The first chapter, "Acumulación" (Accumulation) analyses the collections of rarities and their depiction. Here, Marcaida provides evidence of the gradual shift from the gathering of material culture in the collections of scholars and sages to pictorial representations of cabinets of curiosity. He describes the gradual dematerialization of objects and the increasing appreciation of their depiction in painting. Representations of New World wonders on canvas are a reflection of the ambitious projects of imperial expansion in the period. These were the result of a thorough prospection process, circulation and accumulation of knowledge and specimens associated with New World's natural resources, which became a symbol of the financial affluence and of the high social and intellectual status of those who owned and displayed them, while testifying to the establishment and domination of transoceanic trade relations. In addition, a growing curiosity for the natural world and a quest to reconcile experience with textual knowledge accompanied this process.

In the chapter entitled "Representación," (Representation) Marcaida focuses on the role of images in the construction and transmission of knowledge about New World's natural resources. He takes the illustrations of American wildlife made under the supervision of Francisco Hernández during his Mexican expedition (1570–1577) as a starting-point. The drawings gathered together in this impressive iconographic corpus caught the attention of its contemporaries, from clergymen and scholars to the curious. Despite relying heavily on the *Hernandino* material and including engravings based on figures sketched out by local artists, Nieremberg's work was devoted to the natural world of the West Indies displayed above all by existing illustrations. The lack of originality of the woodcuts included in the treatise, their small number, inferior quality and the difficult-to-understand logic used to determine their organization depreciated *Historia Naturae* in the eyes of some 1600s sages; but this verdict was far from consensual. In order to illustrate the diversity of forms favoured by Europeans to represent an invisible natural world (as the American one was), Marcaida centered his analysis on the testimonies regarding a "natural wonder" that intrigued travelers, sages, missionaries and artists alike: the passion fruit. By looking through sixteenth and seventeenth-century treatises and analyzing still-lives produced in the 1600s, he identified different descriptive criteria, showing a multiplicity of discursive strategies about the natural world and the coexistence, in the 1600s, of handwritten, printed and pictorial graphic narratives as disparate and complementary as those of Francisco Hernández, Juan Eusébio Nieremberg or Juan van der Hamen.

In "Preservación" (Preservation) the author shows the conformity of the

narratives of painters and naturalists by analyzing one of the central themes of Baroque culture: the symbolism of vanitas regarding the brevity of life and the transience of earthly goods. Given the natural decay of animal and vegetable life, the paintings afforded the specimens an illusory immortality. Marcaida takes as an example the descriptions of one of nature's marvels, the bird-of-paradise, to illustrate the multiple tensions existing between such depictions and naturalist knowledge. The reports of the 1500s related the apoda nature of this bird which, flying in the face of Aristotelian definitions, elevated it to the realm of "wonders." Although later travellers to the East described the bird's feet based on examples provided, some authors rejected this evidence and chose to reaffirm the mystical symbolism of the bird's eternal flight. Seemingly indifferent to the reports brought back by voyagers or described by painters, Nieremberg adopted a number of images then available in naturalist treatises. If his choice, at first glance, might seem surprising, it takes on greater relevance when considered alongside the Baroque concern with the theme of death and transient nature of human existence. In this sense, it is imperative to take a global view of his work, consisting as it does of treatises devoted to moral and scientific issues. As such, *Historia Naturae*, more than aiming to appropriate the knowledge of the real and observed natural world, emerged (as with vanitas) with the purpose of contemplating the work of the Creator and exalting the importance of eternal life. For the Catholic world, this was the greatest prize and ultimate aim of all human existence.

In Marcaida's portrait, the work of Juan Eusebio Nieremberg came about as the result of a complex era in which religious meaning, art and science mutually complemented and enriched one another. This integration of new naturalist knowledge in different pictorial genres, cultural practices, mystical literature, moral stories and the practices of acquisition and circulation of knowledge on an imperial level constituted the multiple facets of a wider phenomenon which characterized the modern character of Spanish Baroque science. With this book, José Rámon Marcaida responds to such a challenge with an innovative approach and an invaluable contribution. I do hope that in the future this topic will be further developed and enriched by the contributions of other researchers.