

the sixteenth century. In her words, ‘printing did not revolutionize visual techniques, but slowly consolidated inventions that had been made and tested elsewhere’ (p. 185). Egmond makes a similar – and even more important – argument when it comes to the microscope. Inspired in part by the rhetoric of astonishment mobilized to such great effect by its earliest proponents, historians for a long time argued that the development of the microscope in the early seventeenth century ushered in a new age of visual inquiry. Mobilizing her own discovery of Felix Platter’s images of insects, however, Egmond shows that many of the anatomizing visual strategies adopted by early users of the microscope had already been developed by the end of the sixteenth century. Indeed, she shows that pictorial formats expressing a desire to peer into and cut up the smallest of natural things appeared in drawings long before the rupture supposedly brought about by the microscope, in the botanical images made under the supervision of Federico Cesi, and in the charming paper mites depicted by Adriaen Coenen.

The book’s methodological claim, however, is less compelling. Egmond argues that her visual corpus should be analysed on its own terms, through a sharp-eyed attentiveness to visual detail. Nobody would deny, of course, that we should deploy visual methods in the study of visual evidence. The advantages of this approach, moreover, are already clear from the author’s important revisions to the history of scientific images. Sometimes, however, Egmond’s commitment to visual connoisseurship manifests itself as a resistance to meaning. At several places, admittedly, she acknowledges that we need to acknowledge that the meanings and uses of visual strategies change over time, pointing out that ‘historical images cannot be taken for granted just because they look familiar’ (p. 234). Yet it is equally true that, by largely excluding texts from her analysis, Egmond misses opportunities to tell us what the images she so adeptly analyses meant to the people who made and used them. This resistance to meaning, moreover, makes some of the author’s historiographical claims less effective than they otherwise might have been. In Chapter 3, for instance, Egmond criticizes William B. Ashworth Jr’s argument that Renaissance natural history was characterized by an ‘emblematic’ view of the relationships between nature and humanity, citing the fact that her corpus of original drawings manifests more of an interest in regular natural phenomena than in monsters and curiosities. Yet the emblematic view of nature was not a generalized fascination with the rare and the marvellous, but rather a system for assigning meaning to things. Indeed, naturalists of the sixteenth and seventeenth centuries applied the symbolic logic of the emblem to things common as well as rare, seeing moral value in the behaviour of foxes, and regarding the walnut as a microcosmic representation of the human cranium. Without attending to meaning, in other words, it is difficult to successfully challenge arguments about what people in the past thought and felt when they made and collected images of plants and animals.

Despite this criticism, *Eye for Detail* stands as a highly important contribution to the study of scientific images, substantially changing our understanding of the links between the visual worlds of the sixteenth and seventeenth centuries through its insightful and thorough analysis of hitherto overlooked original drawings. Featuring 128 colour images, many of them never previously published, this book will, moreover, be valuable to anybody with an interest in the visual culture of the early modern sciences.

ALEXANDER WRAGGE-MORLEY
University College London

DOMENICO BERTOLONI MELI, *Visualizing Disease: The Art and History of Pathological Illustrations*. Chicago and London: The University of Chicago Press, 2017. Pp. xvi + 294. ISBN 978-0-2261-1029-5. \$55.00 (cloth).

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In *Visualizing Disease* Domenico Bertoloni Meli presents himself as taking the reader down the proverbial road less travelled in the history of medical illustration by focusing on the formative

history of the ‘illustrated pathology treatise’ (p. xi). Bertoloni Meli contrasts the relative lack of attention that pathological illustration has received from historians with the wide concern with anatomical illustrations. As he puts it in the preface, it is ‘almost inconceivable to investigate the history of anatomy ignoring illustrations’, yet that is precisely what has happened for the history of pathology (p. xi). The focus in *Visualizing Disease* is thus on providing a framework for the understanding and further exploration of the long and uncertain development of the ‘new medical genre’ of illustrated pathology treatises, as well as the broader relationship between pathological images and the understanding of disease in the period covered by the study.

The work begins – somewhat surprisingly – in the early modern period and ends with the famous work of Jean Cruveilhier in the nineteenth century, proceeding in roughly chronological order throughout. As a comprehensive study would be impossible, the work covers what Bertoloni Meli has identified as the key developments in the early history of pathological illustration, focusing in each chapter on a number of individuals’ work deemed especially significant in exemplifying or initiating important developments. In each case, Bertoloni Meli provides a short biography; an explanation of the specific work in question, including discussion of other contributors such as artists and engravers; and an analysis of the work’s illustrations. This structure has the dual purpose of providing sufficient information on each of the medical practitioners and works discussed, some of whom and of which are obscure, and producing points of comparison that are revisited across chapters. Diachronic breadth, coupled with a biographical approach, is one of *Visualizing Disease*’s major strengths, as it enables Bertoloni Meli to bring out long-standing concerns and issues related to the making and conception of pathological images, whilst at the same time emphasizing the contingent and individual nature of the works and authors in question.

Bertoloni Meli is especially interested in practical, iconographic and cognitive themes that emerge from his analysis of the *longue durée* of the illustrated pathological treatise. For example, he is at pains throughout to list the artisanal practitioners (artists, engravers, lithographers) who made the images of concern in this study, providing useful, though limited, context in explaining the production of the specific illustrations in question. However, he also emphasizes that ‘not only expertise but also the ties between artists and anatomists were passed down across generations’ (p. 74), as in the case of the Leiden anatomists Govert Bidloo, Bernhard Siegfried Albinus and Eduard Sandifort collaborating with the Leiden artists Gerard de Laresse, Jan Wandelaar and Abraham Delfos respectively – each a student of his predecessor, all thereby acquiring a practical heritage that was crucial for their respective publications. Bertoloni Meli also convincingly argues that the gradual emergence of colour images from the early nineteenth century, crucial to the discipline of pathological anatomy, stemmed from the specific problems related to producing an iconography of cutaneous diseases, especially in the work of Robert Willan, Robert Bateman and Jean-Louis-Marc Alibert. The classification of skin lesions necessitated colour, which in turn promoted colour as a classificatory marker and one that became central to pathological iconography (pp. 125–126). Relatedly, Bertoloni Meli also outlines a cognitive inheritance in the work of nineteenth-century British pathologists like James Wardrop, John Richard Farre and Robert Hooper, that stemmed from Matthew Baillie’s earlier focus on the structure and texture of lesions (pp. 110, 158, 161).

Yet for all of Bertoloni Meli’s superb work in bringing together a chronologically, geographically and theoretically diverse group of works that have in common their illustration of disease – and merely on those grounds it is a vital survey work – it is unclear that what is described in his book is genuinely unitary. This point is emphasized by the loose usage of the term ‘genre’ throughout the work. In the early modern period the illustrated pathology treatise was a ‘new medical genre’ (p. xiii) and is described as the focus of study throughout the work. However, the first chapter focuses on another ‘new genre’ of the *Observationes* (p. 27) where disease was illustrated. As Bertoloni Meli himself concludes, ‘The material we have seen leads one to question whether it is

legitimate to talk of illustrated pathology as a genre to characterize early modern images of diseased body parts' (p. 51). In itself this could be placed aside, but later works are described as 'sub-genres with regard to contents and pathological iconography' (p. 108) and as belonging 'to quite a different genre' (p. 159) without sufficient clarification. Though books have long shelf lives, their authors' intentions and readerships' perceptions do not. Grouping works based on their having illustrations of diseased parts is also problematic due to the sheer heterogeneity of approaches to this that Bertoloni Meli himself has described – not only in terms of iconography, but in the basic organization and epistemic understanding of the respective projects.

Nevertheless, *Visualizing Disease* is a vital starting point for the study of illustrations of disease. Given the scant attention that this has received, Bertoloni Meli's focus on hewing a path which future study of pathological illustration – and the history of pathology – can follow is welcome, though the path requires pruning and extending.

RICHARD T. BELLIS
University of Leeds

ANITA GUERRINI, *The Courtiers' Anatomists: Animals and Humans in Louis XIV's Paris*. Chicago: The University of Chicago Press, 2015. Pp. xiv + 343. ISBN: 978-0-2262-4766-3. \$35.00 (hardback). doi:10.1017/S0007087418000638

In the introduction to *The Courtiers' Anatomists: Animals and Humans in Louis XIV's Paris* Anita Guerrini promises to 'add another level of complexity to the ongoing historical discussion of the era commonly known as the scientific revolution' (p. 1). The book that follows does just that, providing an account of the people, places and animals involved in the study of anatomy in and around Paris in the late seventeenth and early eighteenth centuries while providing insight into the role of dissection in the development of science. Beginning with the first chapter, where we learn of a battle over a stolen corpse between the faculty of medicine and the surgical school at Saint-Côme which included archers and took long enough that the much-decayed body was no longer of any use once recovered, and ending with the epilogue which recounts the afterlife of the Paris Academy of Science's *Histoire des animaux* publication project, *The Courtiers' Anatomists* combines fascinating details with an overall narrative of the development of anatomy.

After setting the stage for anatomy and dissection in Paris in Chapter 1 by providing background on the people, the places and the processes by which bodies (animal and human) were obtained, in Chapter 2 Guerrini describes the impact of the two great physiological discoveries of the early seventeenth century – Harvey's circulation and Aselli's lacteal vessels – and then sets forth her picture of how natural history, essentially descriptive in its focus, expanded into the more 'experimental' comparative anatomy as dissection and vivisection took their place alongside vacuum studies, transfusions and other investigative procedures employed by members of the Paris Academy of Sciences. Thanks in part to Harvey's methodology and the reactions that followed it, academy members saw these procedures of investigating the body as sources of *scientia*, or certain knowledge in the Aristotelian sense.

In Chapter 3 the projects of the academy are elaborated upon, especially the study of transfusion, adopted early on by the English but carried out much more meticulously and precisely in Paris. Even though Claude Perrault, who was in charge of the *physique* section of the academy, published his transfusion findings under his own name, the academy had adopted certain attitudes to its work that, while not always universally followed, affected its overall dissemination and even the historian's ability to recover their original form. These included principles like suppressing individual credit in favour of credit for the academy as a whole and a tendency towards confining the knowledge generated by the academy to its members.

Another facet of the experimental work of the academy was its access to animals in the royal menageries, which allowed members to dissect a variety of exotic species, including an elephant.