Cristiano Zanetti, Janello Torriani and the Spanish Empire: A Vitruvian Artisan at the Dawn of the Scientific Revolution. By Jim Bennett

Patrick Armstrong, Alfred Russel Wallace. By Michael A. Flannery

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Lisa M. Osbeck, Values in Psychological Science: Re-imagining Epistemic Priorities at a New Frontier. By Sydney Lane

Cristiano Zanetti, Janello Torriani and the Spanish Empire: A Vitruvian Artisan at the Dawn of the Scientific Revolution. Leiden, Boston, Paderborn and Singapore: Brill, 2018. Pp. xii + 450. ISBN 978-9-0043-2089-5. €95.00/$110.00 (hardcover).
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The first page offers an uncompromising assessment: we are promised an account of a sixteenth-century Italian practitioner who was ‘the greatest among Renaissance inventors and constructors of machines’. This is a crowded field of outstanding talents, so why is Torriani not better known? The author refers to him equally as Janello and as Torriani; we shall stick with the latter to avoid confusion in a short review. Zanetti reels off an impressive list of contemporaries who feted Torriani and his achievements, stretching as far north as Mercator, Kepler and Dee, before proposing an intriguing explanation for his subsequent obscurity. He served the Spanish Habsburg monarchs Charles I (Emperor Charles V) and Philip II as court clockmaker, engineer, mathematician and inventor. Politically motivated purveyors of ‘biased and deceptive narratives’ (p. 2) subsequently repressed any acknowledgement of progressive achievements in Catholic Spain, while Spanish nationalists could not acknowledge the contribution of a foreign immigrant. As if these were not enough, Alexandre Koyré’s antipathy to all things empirical and mechanical put paid to any recognition through the middle decades of the twentieth century.

The historiography of our own time is the occasion of Torriani’s restoration but our fascination with artisanal knowledge creates other challenges for the biographer. We now have many descriptors for a talent such as Torriani’s and they vie to be the best suited to the historian’s purpose. Was he an ‘artist-engineer’, a ‘superior craftsman’, a ‘court artisan’, a ‘practical mathematician’ or a ‘learned practitioner’? Finding none of these adequate, Zanetti opts for ‘Vitruvian artisan’, since the De Architectura brings ingredients he finds essential to his biographical task, such as education...
with humanistic content and standing, and a distributed identity that makes room for craftsman, patron and scholar. The reader may be reluctant to pass over the descriptor for Torriani offered by Charles V himself, ‘the prince among the architects of clocks’ (p. 8), but reads on with the promise that his career can be an exemplary case study for historical characterization in this area.

She is not disappointed: there is much to be learned from this single life, told here in impressive detail. Torriani pursued a successful career in the service of the Habsburg rulers, which took him to many urban centres in the empire and through a wide range of practical disciplines, from the intimacy of mathematical instrument-making to the vast scale of hydraulic engineering. Central to it all were ingenious clocks and planetary machines, prized at court and especially by Charles. The journey also took Torriani through levels of social hierarchy, again traced in this account. It is extraordinary that from all this activity there remains, we are told, a single signed creation – an armillary sphere made in Milan in 1540, now in the city’s Ambrosian Library. This statement, however, is contradicted by illustrations of later cardboard calendric volvelles, made in 1579 in the context of the reform of the calendar, but paper instruments are inclined to be overlooked.

Certainly Zanetti has recovered Torriani for us and added another figure to the ranks of the scholar-craftsman (or Vitruvian artisan). The account itself is rather loosely structured and meandering in places – this is not without its value, in that the author covers more material than he needs for a strict narrative, though it can also be frustrating, since some of the information is already known in the circles where this book will be read and the more focused reader will want to get to the novel information, which is certainly here. Unfortunately the book’s value as a secondary source is reduced by having an index confined only to names. It is a pity also that the text has not been carefully reviewed by an English native speaker and there are awkward constructions and even misunderstandings in the language. Addressing a craftsman as ‘mathematicus’ (p. 45) is said to be ‘shocking’, when it was surely surprising, and in a particularly unfortunate instance we learn that a civil ethic was based on ‘the discipline of the knightly courtesan’ (p. 65) – presumably ‘courtier’ was intended.

Final chapters move from Charles to Philip and from relatively small devices to an enormous hydraulic machine built in Toledo – not, we are told, an exceptional range of scale for an individual in the mechanical world of the period, moving from clockmaker to engineer.

There are many insights here into the courtly functions of practical mathematics and mechanics, while the opportunity for an in-depth study of patronage in sixteenth-century practical mathematics is grasped with dedication by the author. Almost as an afterthought, we are offered a further element in the explanation of Torriani’s later obscurity, despite the contemporary reputation of his machines: in the closed world of the imperial court, the technical content of his work was a valuable and safeguarded secret. Is that not another instance of the received historiography of Catholic Spain, but presumably not one that is ‘biased and deceptive’?

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PATRICK ARMSTRONG, Alfred Russel Wallace. London: Reaktion Books, 2019. Pp. 175, ISBN 978-1-7891-4085-9, £11.99 (paperback).

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Two names stand out in the history of modern evolutionary biology: Charles Darwin and his lesser known confrère, Alfred Russel Wallace. So much has been said of the former that it has become an acknowledged ‘industry’. Wallace’s historiography pales by comparison. Nevertheless, Wallace is playing catch-up with biographies like Peter Raby’s Alfred Russell Wallace: A Life (2001), Michael Shermer’s In Darwin’s Shadow: The Life and Science of Alfred Russel Wallace (2002), Martin Fichman’s An Elusive Victorian: The Evolution of Alfred Russel Wallace (2004), and Ross A. Slotten’s The Heretic in Darwin’s Court: The Life of Alfred Russel Wallace (2004), adding