



Cámara Muñoz, Alicia y Vázquez Manassero, Margarita Ana (eds.), “*Ser hechura de*”: *ingenieros, fidelidades y redes de poder en los siglos XVI y XVII*, Madrid, Fundación Juanelo Turriano, 2019, 286 págs. ISBN: 9788494892523.

Engineers and courtiers had a lot in common in Early Modern Europe. Kings, princes, and noblemen had to be knowledgeable in the arts of war and military engineering, and many of them were responsible for supervising fortification works. Engineers, for their part, had to possess not only technical knowledge and practical experience, but also the necessary social and diplomatic skills to navigate the intricate world of court politics, for in order to be successful an engineer had to gain the support of a protector at court, in which case he was said “to be the creation of” (*ser hechura de*) his noble patron. The careers of courtiers and engineers were thus closely connected and occasionally even coincided: some nobles conceived fortifications themselves; some engineers were ennobled for their services.

The volume under review – which is also available in an English translation entitled “*Ser hechura de*”: *Engineering, loyalties and power networks in the sixteenth and seventeenth centuries* – explores the manifold relationships between engineers and the high nobility from two perspectives: that of the nobleman in charge of waging war and therefore in need of competent and loyal military engineers; and that of the engineer in need of a high-placed patron requiring his services. It is a worthy addition to the valuable series of *Lectures on the History of Engineering* published by the Fundación Juanelo Turriano under the direction of Alicia Cámara and others, after previous similar volumes on, among others, engineers as draughtsmen (*El dibujante ingeniero*, 2016), treatise writers (*La palabra y la imagen*, 2017), and spies (*El ingeniero espía*, 2018). The present volume collects sixteen papers by Spanish, Italian and French historians from a conference held in Madrid in 2018, organized in three thematic parts.

Part I focuses on the nobles and their various interactions with engineers and engineering. Carlos José Hernando Sánchez studies three members of the Toledo family – Pedro de Toledo, viceroy of Naples, his son García de Toledo and his nephew the third duke of Alba – who in the middle decades of the sixteenth century were all involved in the planning of controversial fortifications, from Naples and Sicily to Antwerp. Almudena Pérez de Tudela Gabaldón sheds new light on the little-known career of nobleman Ferdinand de Lannoy in the 1560s, based on the correspondence of his protector and brother-in-law, cardinal Antoine Perrenot de Granvelle. Lannoy was not only an expert in artillery and fortification: he also authored a notorious map of Burgundy, which was engraved by Hieronymus Cock in Antwerp but then prohibited from being published for strategic reasons by the Spanish authorities, who locked away the copper plates. Oronzo Brunetti sketches an outline of Alexander Farnese’s interest in military architecture and his well-known relations with engineers such as Francesco Paciotto and Francesco De Marchi, from his early years in

Parma in the 1550s to his governorship of Flanders. Brunetti rightly questions Farnese's authorship of the *Commentarii* manuscript, an attribution already rejected long ago by the present reviewer. Margarita Ana Vázquez Manassero paints a fascinating portrait of Juan Fernández de Velasco, the sixth constable of Castile, who was not only a foremost diplomat – he is depicted in the famous 1604 *Sommerset House Conference* painting – but also occupied himself with military architecture, especially during his years as governor of Milan, where he ordered fortification works at the Sforza castle and collaborated with several engineers, in particular Gabrio Busca. Vázquez Manassero aptly portrays Velasco as a man of learning: he commissioned Busca to copy Francesco di Giorgio Martini's famed drawings of ancient machines and sent them to Justus Lipsius in Flanders for inclusion in his *Poliiorceticon* (1599). And his extensive library comprised, besides mathematical instruments, no fewer than 140 books on the art of war, including the sole surviving copy of Pedro Luis Escrivá's now famous manuscript treatise on military architecture of 1538. Annalisa Dameri concentrates on Turin in the period 1620-1640 and examines the collaboration of Christine of France, duchess and later regent of Savoy, with ducal architect and military engineer Carlo di Castellamonte. She discusses the remodelling of the Valentino castle into a lavishly decorated residence in the French style as well as the reorganisation of the duchy's defensive system against the backdrop of the thorny power struggles at the Savoy court.

Parts II and III focus on the engineers and their activities in relation to their courtly patrons. Three essays deal with engineers at the Spanish court. Marino Viganò presents an overview of the Paleari Fratino family of engineers, who originated from the Swiss village of Morcote, near Lugano, but became loyal servants of the Spanish Crown and worked extensively on fortifications in Spain, Portugal, and across the Mediterranean, from 1558 until 1698. Viganò concentrates on the family's four most notable members – Giovan Giacomo, his younger brothers Bernardino and Giorgio, and the latter's son Francesco (all nicknamed “El Fratín” in Spanish sources) – and quotes original letters demonstrating they were all held in unusual high esteem by the Spanish authorities, including Philip II himself, not just for their professionalism but also for their unwavering allegiance to the Crown. The downside of their success was their being deemed so indispensable that they were almost never granted leave to return home to their family. Alicia Cámara Muñoz analyses the position of engineers at the court of Philip III. In this period the *Pax Hispanica* alleviated the pressure on the frontiers, enabling powerful courtiers such as the duke of Lerma to have military engineers design their palaces and gardens. Cámara discusses several engineers – Tiburzio Spannocchi, Bautista Antonelli, Leonardo Turriano, Jerónimo de Soto, Juan de Medici and Alonso Turrillo – but also recounts two episodes showing that fully qualified fortification engineers were in fact scarce. When Spain's chief engineer Spannocchi died in 1606, very few engineers were thought qualified enough to replace him and, in the end, the prestigious appointment went to his assistant Soto. And when around the same time the court was looking for an “experienced person” to teach a course on military architecture, all three candidates – Juan Cedillo Díaz, João Baptista Lavanha and Andrés García de Céspedes – were experts not in fortification but in mathematics and cosmography, without engineering experience. In both episodes having an influential protector at court proved decisive. Dolores Romero Muñoz reviews the ardent debates that surrounded two projects of Carlos de Grunenbergh, an engineer of German origin who had emigrated from Flanders to

Spain in the 1650s: his proposal, developed with his brother Fernando in the 1660s, to make the river Manzanares navigable between Madrid and Toledo; and his plan for a citadel in Messina, Sicily, realized in the 1680s.

Three further papers concern the kingdoms of Sicily and Naples under Spanish rule. Maurizio Vesco presents new documentary evidence from the Sicilian court's state papers on the relations between its successive viceroys and the main engineers in their service, from the 1520s to the 1580s: Pietro Antonio Tomasello, Pedro Prado, Antonio Conte, Giovanni Antonio del Nobile and Giovanni Antonio Salamone. The latter's testament and *post-mortem* inventory of 1583 offer a rare glimpse into an engineer's private life. Lina Scalisi covers the same ground but with a more narrow focus on the 1570s: she examines the relationship between Sicily's viceroy Carlo d'Aragona Tagliavia, duke of Terranova, and engineer-entrepreneur Giovanni Antonio del Nobile, who managed to combine his work on the island's defences with a lucrative business in the production of gunpowder. Francesca Martorano surveys the fortifications from the 1540s onward in four towns in Calabria: Cariati, Isola di Capo Rizzuto, Carlopoli and Monasterace. The works in these feudal fiefdoms were not commissioned by the viceregal court in Naples but by local lords and as a consequence are poorly documented; the architects or engineers involved remain unknown, leading Martorano to propose that these projects were conceived by the feudal lords themselves, including two members of the Spinelli family.

Two essays concern centres in Northern Italy with close ties to the Spanish monarchy. Raffaele Tamalio focuses on Mantua, where in 1549 local architect Giovan Battista Bertani succeeded the famous Giulio Romano as "prefect of the ducal building works". Tamalio concentrates not on Bertani's work on the ducal palace, however, but on his relations with his consecutive patrons, cardinal Ercole Gonzaga and his nephew duke Guglielmo Gonzaga, in the context of the Mantuan court's conflict with the Pope, which led to Bertani's arrest by the Inquisition on heresy charges. Consuelo Gómez López discusses the works of the Florentine mathematician and military theorist Giovanni Francesco Fiammelli, who had served in Flanders under Alexander Farnese. Not much else is known about Fiammelli's career, but after retiring from practice he published in a short timespan (1602-1606) five books on politics and warfare and on a measuring instrument of his own invention.

Lastly there are also two contributions from outside the Spanish-Habsburg sphere, devoted to seventeenth-century France. Emilie d'Orgeix sheds new light on Louis Nicolas de Clerville (1610-1677), who despite being a military engineer of major importance as well as a prolific cartographer has been largely ignored by historians in favour of his younger colleague and successor, the illustrious Vauban. Besides outlining the engineer's main fortification projects and military feats, d'Orgeix elucidates Clerville's social position and his relations with his courtly protectors, including Mazarin and Colbert, and reveals that in imitation of these rich and cultured courtiers Clerville himself became a refined connoisseur with an envied art collection that included paintings by the likes of Annibale Carracci and Anthony van Dyck. Isabelle Warmoes charts the career of Jacques Tarade (1640-1722), a striking example of social advancement. Tarade, the son of a mason, became an architect thanks to his family's connections with leading Parisian entrepreneurs and was trained on the prestigious royal construction sites in Paris and Versailles. He also journeyed to Rome and even published, many years later, a set of drawings of St. Peter's. As of 1661 he worked as a royal engineer, became Vauban's trusted collaborator and even-

tually director of fortifications of Alsace, working mainly in Strasbourg, before being ennobled by Louis XIV.

Together these varied studies amply demonstrate the relevance and richness of the volume's central theme, as well as its capacity to illuminate broader issues, situated as it is at the intersection of architectural, cultural, political, technological, and military history. At the same time, however, the volume's exclusive focus on Southern Europe and its predominant concern with the Spanish-Habsburg realm result in an unbalanced overall picture and make one regret the absence of contributions on other parts of Europe. The editors merit praise for publishing this collection of papers so rapidly after the conference, for having the original Spanish, Italian and French texts translated also into English, and for making both volumes, as well as the video recordings of the conference presentations, freely available online. This procedure will help the volume reach the wide audience it deserves, but also comes at a price. The English translations, while serviceable, are replete with imprecisions and other infelicities; they are certainly useful for the general reader, but serious scholars are advised to consult the essays in their original language. Yet these are not without shortcomings either. Leaving aside the numerous editorial imperfections which are presumably attributable to the swift publication process and the volume's multilingualism, it is all too obvious from the published essays that they originated as conference presentations. Most are rather short and colloquial in tone. They also vary considerably in originality, depth, rigour and relevance: a few essays are deeply considered and carefully crafted, but many others make a fragmentary impression and meander about the central theme without a clear objective or line of argument, covering familiar ground and repeating earlier research, garnished perhaps with some new findings. The ensemble, then, is not a comprehensive and coherent treatment of the subject (nor does it claim to be), but a kaleidoscopic collage of, for the most part, preliminary explorations, arranged in an apparently thematic order that proves less logical than the one presented in this review. These criticisms notwithstanding, this is a wide-ranging, thought-provoking, and richly illustrated volume offering novel approaches of a captivating subject that will interest many historians of Early Modern Europe.

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