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Lino Camprubí, *Engineers and the Making of the Francoist Regime*. Cambridge, Mass: The MIT Press, 2014. 298 pp. 978-0-262-02717-5

Lino Camprubí's *Engineers and the Making of the Francoist Regime* clearly proves that, despite the ever growing number of publications devoted to the Spanish Civil War and Franco's regime, there are still plenty of areas which remain to be explored. Camprubí, who aims to analyse 'the role of science and technology in the building of the Francoist State' (p. 1), explores the ways in which technology transformed the country (both aesthetically and economically) and debunks the myth according to which the regime's ideology opposed industrialization and modernization. The author, who offers fascinating insights into the role of engineers in the construction (both material and spiritual) of the Nuevo Estado, argues that 'elite scientists and engineers in early Francoist Spain (and elsewhere) understood political engineering as an integral part of their professions' (p. 28). So far, studies devoted to the industrial policies of the dictatorship have tended to focus on macroeconomic data, but Camprubí takes a significantly different angle: drawing upon history, economics, aesthetics, architecture, urban planning and science and technology studies, he analyses in detail the design, functioning and outputs of a number of industrial projects. The author aims to demonstrate that, for Francoist engineers, technology was not only a means of furthering Spain's economy, but a way of expressing both their religious sentiments and their loyalty to the dictator's political project. As a result, Camprubí places as much emphasis on the aesthetic characteristics and symbolism of the projects analysed as on their functional aspects. The case study discussed in the second chapter, the construction of the engineering laboratory known as Costillares, is a case in point, since 'its combined economic and aesthetic values made it into an able mediator between scientists and engineers and the state' (p. 38). Camprubí analyses in great detail the functionality, the design and the techniques employed in the construction of the building. Admittedly, the subject might appear uninspiring at first sight, but the author's brisk prose and his sharp observations successfully manage to convey the importance of industrial design in the construction of the Nuevo Estado. He points out, for instance, that the architect in charge rejected the American tendency towards verticality and favoured horizontal planes in order to bring architectural structures back to human scale.

The first chapter, disappointingly short, discusses the methodological framework and provides the necessary background to the topic. While the kind of analysis undertaken demands an in-depth study of a selected number of case studies, some more context would have helped readers to gain a better understanding of the period. Having said this, the author's approach, truly interdisciplinary, is original and fruitful. The third chapter focuses on the ideology of the Spanish Catholic church regarding science and the attempts to transcend the divorce between religion and science by including churches in the designs of industrial projects. It provides fascinating insights into the alliance between the church, scientists and the political elite, which crystallised in the creation of the CSIC and, also, led to the construction of more modern, functional and austere temples which drew inspiration on industrial design. The new aesthetic was based on the idea that decorative excess 'was not only a waste of resources contrary to the new social interests of the church, but also the product of ignorance and a concession to superstition' (p. 65). Chapter 4, which examines the regime's attempt to improve rice production through technical means, provides a very detailed analysis of the functioning of the Sindicato Vertical and the ways in which this institution interacted with agronomists, scientists, producers and distributors. This is a particularly interesting chapter which makes it clear that the Sindicato Vertical should not be simply considered

an ineffectual and bureaucratic organization the exclusive aim of which was to control the working class. Chapter 5 addresses the construction of dams. Between 1940 and 1967, approximately 300 reservoirs were built in the country. Camprubí, while acknowledging that political propaganda was no doubt one of the reasons behind Franco's obsession with 'la pertinaz sequía', points out that dams transformed Spain's landscape and economy. Again, one of the major strengths of this chapter is the confidence with which the author examines the technical, social and economic aspects of the examples discussed. Chapter 6 analyses the role of the Laboratorio Central de Ensayo de Materiales de Construcción in the testing of construction materials and, also, the attempts of Spanish engineers to establish links with similar European agencies, since 'in the face of emerging international markets, they feared the consequences of falling behind' if they did not comply with European rules and regulations (p. 153).

The focus of *Engineers and the Making of the Francoist Regime* is on the 1940s and early 1950s, and therefore it is not entirely clear whether the ideas discussed still applied in the 1960s or can partly explain the rapid economic growth that followed the end of the autarky, issues which need to be further explored. It must be noted that the author makes it clear in the conclusion that 'acknowledging the significance of science and technology in the making of Francoism is not a vindication of the regime' (p. 161), since the examples examined 'often came at the expense of extremely impoverished conditions in the countryside and hunger and repression in the cities' (p. 162). This point could have been developed further by focusing a little bit more on the demographics and social conditions of the areas affected by the industrial projects examined in chapters 2 and 5. Overall, this is an original, nuanced and very well-researched study which sheds light on a number of issues that have merited little attention, such as the relationship between science, religion, aesthetics and technology during the autarky, the role of Spanish engineers in the creation of the Nuevo Estado, the role of the Sindicato Vertical in the 1940s and the regime's drive towards European technological integration. To conclude, the author convincingly proves that Spanish engineers 'sought to inscribe redemption and the restoration of an ideal past morality onto the new rationalized Spanish landscape' (p. 160).