

Johan Schot, Harry Lintsen, Arie Rip, eds. *Technology and The Making of the Netherlands: The Age of Contested Modernization, 1880-1970*. Zutphen/Cambridge MA: Walburg Press/The MIT Press, 2010. 635 pp. ISBN 978-90-5730-630-3; 978-0-262-01362-8.

*By Maria Paula Diogo**

This edited volume presents an excellent overview of how 20th century Netherlands was constructed. However, its interest clearly crosses national borders, as the way in which the Dutch case is addressed is an opportunity to apply and discuss new concepts and methodological approaches.

The book, which is the English translation of the final volume of a Dutch series on technology in the Netherlands in the 20th century, is divided into 10 chapters, ranging from infrastructures to colonialism, from engineers' organization to industrial agriculture, from scale increase in industry to consumption standards, from airports to kitchens. Behind this large array of topics lays a unifying view that brings to the forefront the importance of technology in the building of national identities and transnational relationships.

In the preface, the editors offer readers a brief recollection of the process behind the making of the book, including the discussions, and research projects that made it possible, and the international networks that enriched it. Presiding over the book and presented both in the Preface and in the first chapter, one main concept and one methodological claim stand out: "contested modernization" and "history through the lens of technology".

As to the first notion, the editors and authors use it to highlight the dynamics of modernization, presented as a vivid, sometimes even tumultuous, site- and time-specific process, which cannot be perceived as a closed, monolithic category. In this context, building and theorizing "modernity" is not necessarily the same as experiencing it, and therefore modernizing priorities are not the same for elites, including engineers, architects, artists, management consultants, or business men, and for the common consumer. Nevertheless, and taking into account unsolved tensions that persist even today, technological development has asserted itself as the main path

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to modernity – “Beginning around 1890, the ambition to modernize using the technological avenue was shared by a large majority of the Dutch population (...)” (p. 17).

In a broader perspective, editors and authors share a methodological approach that aims at analyzing technology as a building block of contemporary historical processes, not just as a more or less influential accessory. To “render visible the co-construction of technology and society” (p. 14) is undoubtedly an ambitious and tantalizing proposal, which though not completely new, gains a new scope and depth in this volume.

Based on these two central ideas, the book offers a specific periodization for the late 19th century and 20th century Dutch history: a first period, from 1890 to 1914, in which the creation of a modern period is discussed; a second period, from 1918 to 1939, which focuses on the notion of “controlled modernization”, and raises parallels to mass consumption and mass production; the final period, between 1945 and 1970, deals with the establishment of a culture of modernity based on the dominance of mass production and mass consumption. In between these periods, the two world wars were instrumental to the Dutch modernizing agenda: during World War I, the Netherlands’s neutrality was crucial to the country’s agricultural and industrial growth, and was behind the building of international informal networks, as well as the strengthening of nationalism; during and after World War II Dutch, economy was able to successfully manage difficulties and benefiting from the Marshall Plan aid, to build a long cycle of sustained and significant growth. According to the editors, this period of about 20 years (the decades of 1950 and 1960) was at the core of the process of democratization of prosperity, which meant necessarily to have access to technological commodities: automobile, telephone, refrigerator, washing-machine, and central heating.

Within this framework, the authors of the remaining 9 chapters focus on specific technologies, on how, why and by whom they are used, and to whom are they addressed: the building of national infrastructures (chapter 2); the planning of individual and collective spaces (chapter 3); the development of mass production (chapter 4); the definition of a research and development policy, based on technical education and research laboratories (chapter 5); the construction of colonial technologies (chapter 6); the rise of a technocratic agenda among Dutch engineers (chapter 7); the relation between economic growth, technological development and welfare (chapter 8); the modernization of the Dutch economy, both on the agrarian

and industrial sectors, and the rise of the consumers' society (chapter 9); finally, the rise of a new technological consumer culture, born from the criticisms to the mass consumption pattern and the awareness to a new technological environment embedded in today's culture (chapter 10). All chapters are illustrated with suggestive pictures.

This volume is most appealing to a general informed public, interested in contemporary European history. Although based on the Dutch case, any European reader is able to empathize with the analysis provided by the authors, either due to similarities or differences with his/her own national history. For historians of science and technology, both researchers and students, this book is a *must*, a reference to be taken into account in future studies within these fields, and hopefully an encouragement to future comparative studies.