

Lyvia Diser, **Wetenschap op de proef. Laboratoria in het Belgisch overheidsbeleid, 1870-1940** (Dissertation University of Leuven 2013; Leuven: Leuven University Press, 2016, 300 pp., ISBN 978 946 270 068 0).

By the middle of the nineteenth century, a handful of Belgian landowners had actively started to promote the ‘scientificization’ of agriculture. With its cohort of gentlemen-farmers, Britain had already set the tone some decades earlier; however, for Belgium it was feared that the liberal mindset would restrict the state from taking any action in this direction. The *Association pour la Fondation de Stations agricoles en Belgique* the landowners set up in 1871 became the driver to encourage the development of experimental agricultural stations. The man they successfully attracted to carry out the project was Arthur Petermann (1845-1902). A German graduate from Göttingen, Petermann arrived in 1872 at the State Agronomic Institute based in Gembloux. He fulfilled his mission beyond expectations, as various stations had been created throughout the country by the end of the century.

Petermann’s legacy marked the advent of an institutional setting based on the German model of *Agrikulturwissenschaft* (agricultural science). The process, though, was far from linear. In Belgium, as elsewhere, the diffusion of a more scientific approach to agricultural development coexisted with, and often complemented, rule-of-thumb practices. In addition, the master plan Petermann and others had in mind did not go unchallenged, as it met with the type of political and ideological conundrums the Belgian environment is quick to deliver. The strong antagonism between Liberals and Catholics also became apparent in these debates. It further fuelled the tensions between the centre and the periphery, the French-speaking bourgeoisie and the rising Flemish nationalism, and the advocates of state-based science and the supporters of a *laissez-faire* scientific regime.

The latter fault line is perhaps the most resourceful argument in Lyvia Diser’s book, which she has successfully converted from her PhD dissertation, defended at the University of Leuven in 2013. As the gap between the rhetoric of private and public science widened, Diser convincingly argues, the borders between the two practices became increasingly blurred. The emergence of chemical expertise for food control, for example, prompted the creation of various forms of laboratory-based tests in the name of science and for the sake of safety. This moment, which can be accurately dated to the turn of the twentieth century in the case of Belgium, is highly suggestive of the takeover of science by capitalism with the blessing of the state. Of course,

the commodification of knowledge lies beyond the scope of the book, but its historical roots are closely intertwined in the narrative, even if implicitly.

In a world infatuated with the dominant (and positive) views of industry-science relations, Lyvia Diser, who is currently active in the BESTOR project (Belgian Science and Technology Online Resources, <https://www.bestor.be/>), reminds us time and again of the complex historical interactions between scientific research and agriculture. She aptly inserts this topic into the framework of 'laboratory history' initiated by Robert Kohler (*Landscapes and Labscapes*, 2002) and others. But here, the laboratory is presented as an actor witnessing the disputed role of the state in organising science and orchestrating its usefulness. One could regret that the author rarely ventures into a broader 'beyond Belgium' perspective, or that she seldom engages with adjacent issues, especially on the economic side. For instance, contemporary debates on the professionalisation of expert knowledge in the United States are brilliantly examined in David Noble's *America by Design* (2013). More profoundly, however, I am puzzled by the unexplainable discrepancy between on the one hand, the chronological spectrum as it appears in the title, and on the other, the way in which it is treated in the book. The interwar years are examined hastily in the final chapter, and the years 1900 to 1914 and the First World War are not covered at all.

In spite of these flaws, the book stands out as an original, elegantly written and very well-researched contribution to the history of science, science policy and the role of the state in Belgium.

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