

Ronald Plantinga, *Wit goud, groene woestijn: Zuivelproductie en het Friese landschap na 1945* (Uitgeverij Noordboek, 2022, 272 pp., ISBN 9789056159504).

The challenges ahead in agri-food sustainability transitions are numerous and complex, crossing behaviour, governance, and power dimensions. It may be tempting, in this context, to think that ‘the times in which we live are exceptionally turbulent, coupled with an attribution of tranquility (...) in comparison [of the past] to the present’ (Spector, ‘Using History Ahistorically: Presentism and the Tranquility Fallacy’, 2014). For instance, the temptation is high to consider the agrifood evolutions of the last seventy years as a smooth course of events within a broader modernisation trend. As a corollary, the attempts to make agriculture and food consumption account for social and environmental impact may be dismissed as a breach in that seemingly ‘natural’ evolution. Ronald Plantinga’s book, in this regard, patiently yet systematically cuts this Gordian knot.

The book results from a PhD investigation conducted by Plantinga at the University of Groningen. It outlines, from 1945 onwards, how the transition towards agrifood production practices, as we know them today, unfolded. The author focuses, in particular, on the dairy sector of the province of Friesland in the northern part of the Netherlands. This sectoral focus is adequate to capture how changes in agricultural practices went hand in hand with changes in food processing practices. The provincial scale is of relevance to uncover the coordination and networking efforts supporting these changes. The author selected historical sources according to this aim of understanding the bundling of concrete efforts needed to shift practices and mindsets from the 1950s to the 1990s onwards. He privileged, to this end, extension and education manuals, sectoral press and periodicals, archives from public services, sectoral federations, and producers’ cooperatives, complemented by a limited set of oral sources.

In his book, the author explains and contextualises the pillars driving the modernisation of milk production and processing practices: technological improvement and scientificised management. The latter relied on F.W. Taylor’s principles of workflow segmentation and monitoring to optimise production, productivity, and economic return. The living, from the farmers to the landscape, from the cows to the milk, from the workers to the processing plants, had to change shape and rhythm, and follow standardised procedures. The changes ranged, in this regard, from land plot restructuring, draining and mineral fertilisation of land, to index-based cow selection practices, wide-range mechanisation and automation practices on farm and in dairy

processing plants. A detailed business accountability monitored human, animal and tools productivity. Technology and management practices hence evolved hand in hand to optimise the size and cost structures of farms and milk processing plants. These new practices unfolded through a thorough coordination of research, proofs, and outreach from the national to the local level, thanks also to the pioneering attitude of early-convinced farmers.

This modernisation, however, showed adverse effects. Plantinga describes remarkably how these modernised practices impacted the geo-chemical cycles of soil and water and subsequently induced pollution and biodiversity losses. The grassland ecosystems enriched in nutrients by effluents and fertilisation, cleared of their unproductive bushes and humid zones, saw the number of wild species shrink dramatically. Like the dynamic at play in the modernisation of practices, network and coordination efforts lead to the institutionalisation of environmental protection. The latter held specific challenges. There was an inherent contradiction between nature preservation and short-term economic efficiency. Additionally, different models of nature preservation co-existed, from singling out protected spaces to integrating nature preservation within agricultural practices. The author shows that the debate and the search for solutions were present early on within both models, with institutional fragmentation along this line. Different organisations, movements, and pioneering farmers supported each strategy.

The author succeeds in the *tour-de-force* to intertwine his results on the institutional complexity of the transition towards modern agriculture with the common thread of its adverse consequences and the necessity to consider a subsequent – still at play – transition. The book brings forward, in this regard, relevant lessons on agency dynamics in transitions. The book outlines, for instance, the importance of individual intermediaries and regional settings to stimulate and accompany changes of practices. In this regard, the book echoes similar conclusions of transition scholars working on present-day settings, such as Vermunt et al. ('Sustainability Transitions in the Agri-Food Sector: How Ecology Affects Transition Dynamics', 2020), Conti et al. ('Why Are Agri-Food Systems Resistant to New Directions of Change? A Systematic Review', 2021), and Groot-Kormelinck et al. ('Producer Organizations as Transition Intermediaries? Insights from Organic and Conventional Vegetable Systems in Uruguay', 2022). This convergence illustrates how much history can meaningfully contribute to the current debate on agrifood transition. The author, in this regard, successfully pursues the booming historiographical trail drawing analytical lessons from the societal embeddedness of past agrifood developments, illustrated e.g., by the recent special issue of *BMGN – Low Countries Historical Review* (no. 4, 2022). Framing our historical endeavours as to stress their significance for present-day challenges is, in my humble opinion, a rejoicing perspective for the field of historical investigations, and an invitation for further meaningful inquiry.

On a final note, I will add that this book is a call for collective modesty. Not only is a transition a complex phenomenon requiring a multiplicity of interventions. It is also sometimes with the best intentions that adverse outcomes occur. In the case of the modernisation of agriculture, these adverse effects induced the necessity to transition again, this time towards a consideration of other parameters than output optimisation on-farm and in food processing alone. Far from establishing that the modernisation of agriculture was an automatic process, the book demonstrates that the associated shift in mindset required an important coordination of efforts. This book is a dazzling demonstration that there is no easy transition: the investments in scientific inquiry, outreach, advocacy, networking, and coordination are a prerequisite to any shifts of practices, how natural they may then appear to retrospective onlookers.

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