

Lawn, Martin (ed.) *The Rise of Data in Education Systems: collection, visualisation and use.* Comparative Histories of Education series. Oxford: Symposium books, 2013. 160p. Reviewed by Eszter Neumann

This book collects a handful of articles in the field of the history of education that investigate how the rising relevance of statistics and standardized data collection gradually transformed our thinking about education systems. The common theoretical framings of the empirically oriented studies constructively bring together various traditions of social inquiry: (a) the strand of the sociology of knowledge that investigates the emergence of statistics as a fundamental technology of modern government: the new sociology of statistics elaborated by Desrosières (2002), Hacking (1990), Shapin (1994) and Porter (1996) among many others, as well as Foucault's work (1980) on systems of thought and governmentality and Latour's actor-network theory (2005); (b) the historical sociology of the emergence of modern mass schooling systems (e.g. Turmel, 2008); and (c) the strand of policy sociology that focuses on 'travelling policies' and the new technologies of governing 'at a distance' (e.g. Popkewitz 2005, Ozga et al. 2011). Each empirical study reconnects to the theoretical issues proposed by the above schools of thought. Altogether, the discussions of the institutional histories between the last decades of the 19th century and the first half of the 20th century integrate to a coherent narrative about the epistemology and genealogy of education statistics.

The volume is both edited and introduced by Martin Lawn who in the last decades has focussed his research on the Europeanisation of education and the 'fabrication' of a new European education policy space (Lawn & Nóvoa, 2002). Lawn explains that the common frame of the historical investigations presented in the book is the process how numerical data gained a power of explanation in the governance of education by offering "an esoteric and unknowable set of techniques for many in the field (...) [that] operates by excluding the values, ideas and politics" (p7). The case studies explore how the rise of numerical data had fundamentally redesigned education systems and formed a new governing paradigm that considerably affects the learning subjectivities and the aims of education practices.

"The Internalization of Education Data: exhibitions, tests, standards and associations" authored by Lawn focuses on how the great world expositions produced a new demand to display and compare the features of national education systems and thus fostered the growth of numerical data. The analysis argues that the second part of the 19th century was a transition period between paradigms of describing and assessing education systems: an elongated shift took place from the dominance of visual depictions to that of statistics which was advanced by the new demand on behalf of the state administration to quantify the economic needs and the social effects of the institutionalizing national mass education system. As a result, the first half of the 20th century witnessed an excessive growth of data production, the construction of new testing devices and the development of complex statistical apparatuses. The context of international statistical data production was the increasing interaction of the scientific and the policy fields between the two world wars. With the lead of the USA, the 1950s and 60s brought about the first large-scale international comparative projects which have significantly shaped how education systems are governed today when data production is not any more merely administrative, but linked to audit, production and performativity. It is concluded

that through the 20th century, data production was shaped by a dual driving force, education science and policy was aiming at standardizing measurement tools in order to produce reproducible data, while policy actors also hoped effective support from the very same data.

Some papers of the collection more strongly focus on the devices of calculations and the strategies of visualising education systems. In *“Educational data at late 19th and early 20th century international expositions: ‘accomplished results’ and ‘instruments and apparatuses’”*, following up the discussion of Lawn, Noah W. Sobe inquires how world fairs became powerful ‘centres of calculability’. The analysis centres on the logic behind data displays (such as the identification of ‘best practices’) and that in what ways visualisations attempted to bring together the distant and disparate into the same location. The author concludes that similar ‘rules’ are still palpable driving forces of the fabrication of international surveys such as the TIMSS or the PISA. In another article, Joyce Goodman investigates closely the visualisation strategies of one of the earliest European comparative reports on education, Amélie Arató’s *L’Enseignement secondaire des jeunes filles en Europe* published in 1934.

Another set of papers focus more sharply on the institutionalization and professionalization of data production in national or sub-national education systems. Marcel Caruso in his paper, *“Policing validity and reliability: expertise, data accumulation and data parallelization in Bavaria, 1873-1919”* analysed the constructions of validity and reliability in a transition period in terms of education governance when the clergy and the state administration developed parallel apparatuses of inspection to render their respective school systems accountable. The discussion contrasts the constructions of legitimacy based on different conceptions of validity enacted by the auditors of the clergy on the one hand and the ‘professional’ inspectors of the liberal government on the other.

Joakim Landahl and Christian Lundahl explore the paradigm shifts in data use in Swedish education reforms since the 1940s. The article explores how data collection methods have shifted from travel accounts, photographs, through the political debates over standardized testing to the recent effects of international testing and school inspection. A significant aspect of the paper is that it places into perspective how actors have negotiated the interpretations of the collected data, and discusses the contestations and resistance that effectively shaped the nature of assessments as part of the reform debates. The article also persuasively sheds light on how the political debates on social justice and tracking shaped the modes of testing as well.

Ian Grosvenor and Sian Roberts in *“Systems and Subjects: ordering, differentiating and institutionalising the modern urban child”* investigate the ways in which knowledge was constructed about the urban poor child in the era of massive industrialization and urbanization in turn of the century Birmingham. The article focuses on how the first welfare concerns and the invention of the public sector develop their ways of knowing about those in need, often overlapping the categories of social problems, delinquency and intellectual deficiencies. By analysing the records kept on the urban school child, the authors indeed produce the social history of the professionals responsible for collecting data and that of how a complex “medical-social-bureaucratic network of interconnected agencies” (p90) took form, produced and fixed the child subject of the welfare state.

Ines Dussel, analyzing the construction of a school census in the last decades of the 19th century in Argentina, opens up a perspective beyond Europe. The analysis shows the shift from a ‘picturesque’ rhetoric to descriptions based on observable facts and the gradual fixing of categories in the school

census. The author pays special attention to how this process of fixing prioritizes the idea of a white, European, literate nation and fails to recognize or in some cases even to take into account members of the indigenous population.

Finally, in a study focusing on the institutionalization of the discipline of sociology and the sociology of education in particular, Romuald Normand compares the UK and France in terms of how educational inequalities became a quantifiable scientific object of inquiry from the 1920s on. The article inquires the interaction of the structural position and socially situated knowledge of the actors who established the discipline with the focus of educational inquiry.

The empirical case studies, written with great scrutiny, submerge the reader in the institutional history and the epistemological production of educational data. The book stands on solid theoretical foundations and offers a rich resource for social scientists interested in the history and internationalization of education. The historical analysis persuasively shows that the internationalization of education knowledge and policy is as old as the modern state and that studying this history can provide us with illuminating insights about the logic behind the current processes of globalisation and the agenda promoted by the customers and creators of transnational knowledge. Moreover, the historical inquiry about how “data tended to displace politics and its arguments” (p23) also raises fundamental questions about how our categories of thinking and our imagination about the aims and processes of education became both universal and fixed.

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