BOOK REVIEWS 419

Ranald Lawrence, *The Victorian Art School: Architecture, History, Environment* (London: Routledge, 2021), 226 pp. incl. 137 b&w ills,

ISBN 9780367896423, £27.99 doi:10.1017/arh.2021.24

Reviewed by ROBYNE CALVERT

This book documents 'the history of the Victorian art school, from its genesis in the complex museum and studios at South Kensington to the construction of new schools in Manchester, Birmingham, and Glasgow'. The fundamental similarities of the three chosen cities as industrial powerhouses of the Victorian period suit them to a comparative study on how the South Kensington system was deployed beyond London. Government Schools of Design were developed in the Victorian era chiefly to support industrial production in major cities of the empire, beginning with the Metropolitan School of Design (now the Royal College of Art) in London in 1837, followed by others throughout Britain including Manchester in 1838, Birmingham and Sheffield in 1843, Glasgow in 1845 and Leeds in 1846.

While dedicated buildings were eventually designed in many British cities, the three selected here have survived as exemplary designs that were developed from the prescription for art-school buildings that came from the Department of Science and Art in South Kensington. The blond sandstone Manchester Municipal School of Art building was designed by G. T. Redmayne (1840–1912) and built in 1880–81, and the Cavendish Street location is still in use, the school now being part of Manchester Metropolitan University. Similarly, Birmingham City University has now incorporated that city's Government School of Design along with its famous Margaret Street building. Designed by J. H. Chamberlain (1831-83), the red-brick building in Ruskinian Gothic style was completed in 1884-85, after the architect's death. In Glasgow, Charles Rennie Mackintosh (1868-1928) designed and built their school in two phases, 1897-99 and 1907-09. The Glasgow School of Art remains the last independent art school in Scotland, and the Mackintosh building was in use until it was badly damaged by a fire in 2014. As a major conservation project neared completion in 2018, a second fire engulfed the building, leaving it a ruin. This tragic event adds to the poignancy of Ranald Lawrence's study, providing evidence of the importance of this building alongside the other two as archetypal art schools.

The text is very readable, with a narrative that unfolds through each of the studies in turn, using the schools to tell the stories of the cities they inhabit, their class divisions, civic challenges and triumphs. The title is possibly misleading in that it focuses on just these three examples. However, the introduction sets out clear parameters for the book, suggesting that, rather than offering multifaceted historical accounts, the text offers 'a unique and explicitly environmental reading of the Victorian city' through the lens of the art school. The author states that this book 'aims to contextualise [...] transformations in the use of glass, daylight, and artificial light within a building type unambiguously concerned with vision and illumination in the production and dissemination of art culture'. This goal is achieved to convincing effect not merely through technical analysis,

but also by considering the ways in which civic developments, and the shifting ambitions of each city, affected attitudes towards the ideal conditions in a cultural building. For example, the 'architecture (and environmental systems) of Mackintosh's school can be read as a metaphor for the wider transformation of Glasgow from a dark, polluted, industrial powerhouse into a culturally refined city'.

The studies undertaken in this book add to the body of knowledge by combining a review of Victorian art education theories with an investigation of the building designs they informed. In the second chapter, Lawrence traces the history of art schools in Britain from the establishment of Government Schools of Design in the late 1830s, offering a concise overview of the early ad hoc courses set up in varied places, from borrowed space in public halls to the purpose-built 'wooden huts' constructed in the grounds of Marlborough House. The work of Henry Cole and the Department of Science and Art is discussed in relation to the purpose of schools to provide skilled designers for the industrial and economic 'well-being of the nation'. Cole's 1853 twenty-threestage National Course of Instruction paved the way for guidelines for school buildings in 1859, exemplified in the South Kensington School and Museum building by Francis Fowke of 1863. Although Lawrence does not delve deeply into a comparison with the established academic system of art education, he does explore issues within the South Kensington movement, such as the ambiguities of training 'artisans'. He explores the tensions between the loftier goals of Arts & Crafts socialism — to give aesthetic education to skilled labourers — and more pragmatic issues such as mechanisation and the consequent need for a 'new kind of skilled workforce' with specialist capabilities.

A strength of this text is Lawrence's discussion of space, in particular the ways in which the buildings' arrangements reflect hierarchies of class and gender. This approach, alongside his clear formal analyses, reflects his professional experience: Lawrence is a trained architect with both practical and research specialisms in environmental design, and has previously led building performance evaluations. As a lecturer in architecture at the University of Liverpool, he continues investigations in this area at heritage sites such as Hardwick Hall, Derbyshire. His expertise offers a unique perspective that broadens the narrative of architectural history, as well as providing valuable pathways and methodologies for the maintenance of heritage assets.

Lawrence states that the political and cultural urge to reduce smoke emissions is a principal theme of his book, and the way he relates this to discussion of lighting schemes is compelling. The key case-study chapters examine the three art schools progressively in this regard. Lawrence first examines Manchester to discuss the ways in which local government engaged with the building of its art school to 'bridge the craft/industrial divide' that was not usefully addressed by the 'London-based Department' which was 'concerned principally with the improvement of design'. Funding was key here, as financial support for schools needed to be found at the local and regional level. Conditions in Manchester were a significant factor, and Lawrence discusses the impact and relevance of Friedrich Engels's analysis of the city as 'an intellectual and imaginative structure'. Art education, and the building of a fit-for-purpose school, was a means of improving the conditions Engels exposed, to create 'a cleaner, brighter, improved city'. Less is said about the actual structure of the building here, but the civic history is important in showing the conditions under which architectural ideas about lighting developed.

BOOK REVIEWS 421

Lawrence then turns to Birmingham, and the ways in which the building was designed to maximise daylight access. To express this, the author provides his own isometric views of the glazing for each of the schools that, by stripping away masonry, reveals the proportional increase of daylight in each scheme. Finally, in Glasgow, Lawrence shows how Mackintosh learned from the previous two buildings and, combined with his interest in new ventilation technology and his own ingenuity, created 'an entirely new kind of "tempered" environment unprecedented in its sophistication'. Mackintosh's use of the Boston-based Sturtevant Company 'Duplex Heating and Ventilating Apparatus' is discussed with expert detail here. A similar technical analysis of the glazing would also have been welcome, particularly as Mackintosh annotated drawings to specify the use of 'Pennycook's Patent Glazing' system.

The three schools are discussed from a historical perspective, with the author's own technical expertise underpinning the more scientific evaluations. Given that each of the buildings is still in use (at least until recently in the sad case of the Glasgow School of Art), it might have lent something to the discussion to include more recent accounts of how these spaces were occupied. Do they still work as intended? How have lighting conditions and expectations changed, particularly now that brighter environments are regarded as necessary for 'health and safety'? Perhaps that is an area for further study, inspired by this text.

Lynn Pearson, *England's Co-operative Movement: An Architectural History* (Swindon, Wiltshire: Historic England, 2020), 264 pp. incl. 300 colour and b&w ills, ISBN 97817892393, £40 doi:10.1017/arh.2021.25

Reviewed by JULIAN HOLDER

Those interested in either the architecture of the Co-operative movement — begun in Rochdale as a form of friendly, or mutual, society in 1844 — or the history of architectural practice (and particularly the history of official, or salaried, architects) have been looking forward to this book for some time. The wait has been well worth it. Apart from the scholarly exposition of these histories, the book also implicitly poses the question: was there such a thing as a recognisable Co-op architecture? With such a varied range of functions — from shops and bakeries to mills, factories and warehouses — as well as styles over nearly two centuries, it may seem a ludicrous question. Yet, in a parliamentary debate in 1927, the Labour MP James Gardner certainly thought he detected common characteristics when he referred to the Co-op as having 'ugly buildings'.

Even an in-house publication described the stores as 'dismal', and the Co-operative Wholesale Society Architects' Department, although founded as early as 1896, held no monopoly over the Co-operative movement's architecture. Commissioning decisions were made by the fiercely independently minded local Co-operative Retail Societies throughout the country, which were run for members' interests rather than profit, and appearance came second.