

Jaap Evert Abrahamse, *Metropolis in the Making: A Planning History of Amsterdam in the Dutch Golden Age* (Turnhout: Brepols, 2019), 535 pp. incl. 100 colour and 105 b&w ills, ISBN 9782503580302, €125  
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*Reviewed by* FREEK SCHMIDT

In this lavishly produced book, Jaap Evert Abrahamse provides a thorough study of Amsterdam's famous ring of canals, created during the 'Golden Age' of the Republic of the United Provinces of the Netherlands, claiming that it turned Amsterdam into 'the most meticulously planned city of Europe'. He shows, for the first time in detail, how this extraordinary project was realised, investigating the city's expansion between 1585 and 1668 to five times its previous size.

Although Abrahamse embraces the widely adopted view that sees 'Amsterdam as a three-dimensional grand design', a 'Baroque' composition of canals — arranged in a more or less geometric pattern around the medieval city — he avoids searching for a single author. By contrast, the extensive literature on the topic has included several attempts to identify its designer, often characterised as a 'genius', an idea that surfaced first in the nineteenth century among poets, artists and architects in the context of historicism and nationalism. Abrahamse presents a different story based on archival research, placing the city's administrators and civil servants or 'stadsmeesters' centre stage. Using resolutions, regulations, reports and requests, and rich visual documents, he reconstructs in detail how the city's governing merchant elite embraced the principles of early modern capitalism to solve pragmatically the many problems they encountered, such as soil condition, water management, traffic flow and infrastructure, housing, harbour facilities and industry. He reveals an almost constant preoccupation, on the part of the treasurers and burgomasters, with balancing functionality, beauty and profit — not expressed as empty phrases, but rather as explicit intentions, as part of decision-making and governance.

The first half of the book reconstructs in detail the planning and realisation of the main extensions: two smaller ones of 1585–86 and 1592–93, and the much larger, so-called third extension (1609/10–20) and the fourth (1656–68). The initial map drawn up in 1611 by the city carpenter Hendrick Jacobsz Staets showed little more than the outline of an extension all around the city. This plan, which started from the northern harbour front along the west side, was soon reduced in scale — now stopping at the current Leidsegracht canal less than halfway around the circuit — owing to lack of funds caused by large-scale expropriation of land outside the city. It was also affected by the need to preserve existing waterways and maintain the city's defensive capability. Three new concentric canals were planned — Herengracht, Keizersgracht and Prinsengracht — and the land between them was divided into oblong parcels and auctioned in 1614. Bridges were built across them, most in stone and brick, but across the outermost Prinsengracht canal in wood; the latter led to the new Jordaan, whose rather different pattern of roads was determined by the medieval agricultural peat landscape. Within these new canals, one square was destined as a marketplace with

a guard house, meat hall and the Wester church, while a second church and market square were decided on in 1620.

While the city kept on growing, large-scale illicit building at the periphery made fortification ineffective. To prevent further spontaneous urbanisation, a fourth extension became inevitable. New eastern harbour islands were reserved for a naval base with shipyards, wharves and warehouses, and a large shipyard for merchant shipbuilding, destined for the rapidly growing Dutch East India Company with its headquarters, wharves and storage facilities. The three canals were laid out with greater sophistication, in terms of organisation, planning, administration, design, water management, land division and sales, traffic planning and fortification. Regular blocks, streets and canals were to meet the river Amstel at right angles, following proposals of the city's architect Daniel Stalpaert. Approved in 1662, they demanded large quantities of material to raise the level of the land, especially sand, which had to be imported from the dune ridge along the North Sea and the sand quarry in the Gooi area near Hilversum. Building and zoning regulations were issued, stimulating a common basis for the design of house facades, securing open inner courtyards within the blocks, and preventing alleyways, elements that actively led to the creation of a luxury residential area. East of the river Amstel, land designated for charitable institutions was developed more slowly and ground sales dropped there dramatically in 1682, leading to the decision to create the so-called Plantation, an area to be leased as gardens and for timber storage, creating a green promenade planted with rows of trees.

The second part of the book focuses on how the city functioned with these new extensions, considering how the functions were distributed and how they affected architectural form, as well as the extent to which the government intervened in formulating a planning policy. Abrahamse has discovered that, at first, the canal district was not reserved as an exclusively residential area and that there were hardly any environmental restrictions, except for limits on heavy industry. Within a couple of years after the beginning of the third extension, however, new regulations were issued that banned industry, dangerous trades and noxious activities, but relocating existing industry remained exceptional and they found that the best way to exclude harmful industry was to stimulate expensive housing.

Next, Abrahamse focuses on public space and how it was organised in a city 'overrun with traffic', dependent for its daily necessities on an ever-growing hinterland. The use of quays, bridges and (paved) streets and waterways for transporting people, food, commodities and construction materials needed regulations to control the traffic system. In addition to shops, plain open spaces called 'plein' had to be easy to reach for both market vendors and consumers. Trees were planted everywhere at regular intervals as an integral part of the townscape. Street lighting was introduced and approximately 2600 lanterns were placed in the city, based on the design of the painter and inventor Jan van der Heijden, who also created the fire engine. Taken together, all the regulations and solutions contributed to the creation of a modern and comfortable city.

In a large city in which water was such a prominent element, all kinds of issues had to be solved to control its quality and uses. The written sources and beautiful prints, drawings and paintings of streetscapes fail to highlight the severity of the issues faced

by the early modern city, such as the problem of finding drinking water for the city's population, or the fact that the canals functioned as an open sewer that spread an almost continuous stench. Connection with the Amstel, set lower than the canal system, was also problematic, solved only two centuries later with a system of new sluices and pumping stations around the city.

Rather than lofty ambitions and a single unified town masterplan, it was the pragmatism of the ruling merchant elite that characterised the approach taken to expanding Amsterdam, and makes it stand out as an interesting case of early modern planning. The spatial development of its harbours, its stacked warehouses, the ordering of its urban structure, its residential environment of the canal district and the regulations to design, build and maintain it, were all governed by the city's commercial interests. Abrahamse's achievement is to show in detail how this seventeenth-century city was built.

Vaughan Hart, *Christopher Wren: In Search of Eastern Antiquity* (New Haven and London: Paul Mellon Centre for Studies in British Art and Yale University Press, 2020), 209 pp. incl. 180 colour and b&w ills, ISBN 9781913907079, £45  
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This book investigates the impact of Levantine antiquity on Christopher Wren's architectural and intellectual development, an aspect of his work and thought that has not been intensively studied. In doing so, the author, Vaughan Hart, sets the scene by using rich seams of seventeenth-century writings to chart how British interest in the Levant grew during the seventeenth century. He explores the prevalent culture of curiosity, tracing the exchange of ideas through the tying-down of encounters, facilitated by such institutions as the Royal Society, Gresham's College and the new-fangled coffee house. He considers trading links and voyages of discovery, which informed the shaky understanding of the sites of Ottoman lands. He explains, too, how chairs of Arabic had been founded at Cambridge and Oxford in the 1630s to encourage trade and learning as well as the conversion of 'them who now sitt in darkness'.

It was within this culture that Wren developed his own ideas about the buildings of the east, largely inspired by descriptions in books since he never knew them at first-hand. Like Fischer von Erlach a generation later, Wren was intrigued by the idea that six of the seven wonders of the ancient world stood in lands beyond Greece and Rome, which, according to Hart, led him to consider 'the East as nothing less than the cradle of classical civilisation'. Also important for Wren was the idea that the east was biblical territory, which intensified his interest in investigating the origins of Christian architecture. As with many other Anglicans, he was intrigued by what 'primitive' Christian architecture might have looked like, at a time before Roman Catholicism, and maintained that the buildings of the eastern church, later transformed into mosques, provided clues as to early forms of worship.