Summary
In the promised land: in the new city
Ideal and reality in Dutch city planning
1580-1680

The history of city planning in the Dutch Republic has received little serious attention to date. That is not to say that the handbooks on city planning simply pass Holland by. Quite the contrary: both Gutkind and Mumford devote long chapters to the seventeenth-century extension of Amsterdam, which they see as a triumph of Baroque city planning.

These authorities and others, such as Lavedan and Braunfels, base their interpretation of the historical material largely on Gerald Burke's survey of the development of the Dutch town, published in 1956, which in its turn relies heavily—and too often uncritically—on the pioneering study by Brugmans and Peters of 1910. The upshot is that our image of Dutch seventeenth-century city building is founded on turn-of-the-century historiography reflecting the contemporaneous ideas and ideals of such thinkers and architects as Sitte, Eberstadt, Howard, Stiiben and Berlage.

A prime example of a one-sided and tendentious historical judgment of the development of the Dutch town is the fascinating book on Haarlem by the Austrian historian Max Eisler (1914). In the spirit of Sitte, Eisler contrasts the better qualities of mediaeval Haarlem with the negative aspects of later developments. The worst offenders in Eisler's view were Jacob van Campen and Salomon de Bray, architects with an outspoken affinity for Italian Renaissance notions of building and planning. Eisler's judgments are all guided by his forthright rejection of classicistic city planning and all it meant for Holland.

The roots of classicistic city planning can be found in the theories of architecture, fortification and civil engineering that came out of Italy starting with Alberti in 1450 and reaching a larger and larger public through the publication of illustrated treatises in the centuries to follow. These books were related to particular kinds of philosophical and utopian tractates. They projected an architectonic and spatial whole ready-made for itself. Another manifestation of these architectural and arithmetical systems that were built. The circle was the ideal block, and other fixed ratios governed and building units. These too were deduced from Platonic and Pythagorean systems.

In the second half of the sixteenth century city planning reached the North. Simon Stevin, notably his *Vande omme van die willekuren der tijden* (of cities; c. 1600), contained evidence of Italian sources of two kinds: architectural and the science of fortification, with a city. The influence of Stevin's ideas is demonstrated in the workings of a programmatic, an engineering school a la Huygens. The idea of establishing a scientific engineering school was conceived jointly by Stevin and the latter's projected reorganization of philological and historical studies in Leiden. During the early decades of the Republic the new engineering school was an internal one; and a stream of literature on the subject.

It can be shown that Leiden abounds in fortification but also—despite the print until 1649 of the ideal city project—by the countless commissions executed by foreign—mainly Danish engineers for foreign—mainly Danish fortresses and walled towns in the Republic itself the concepts of city planning are much scarcer, if only here to build from scratch. Where in the various extensions of Dutch cities Around 1630, with the rise of Dutch we notice a striking rebirth of interest in planning among architects (Jacob de Bray and others) and in various stantence Huygens, Hendrick Morin the theories is the plan for the exten
utopian tractates. They projected an image of the ideal city as a rational architectonic and spatial whole reflecting the stratification of society itself. Another manifestation of the classicistic ideal is in the geometrical and arithmetical systems that underlay the forms of cities as they were built. The circle was the ideal contour, the square the optimal block, and other fixed ratios governed the relations of piazzas, streets and building units. These too were expressions of an ideal order, deduced from Platonic and Pythagorean visions of the cosmos.

In the second half of the sixteenth century these new conceptions of city planning reached the Northern Netherlands. The writings of Simon Stevin, notably his *Vande ordeningh der steden* (On the ordering of cities; c. 1600), contain evidence that his thinking was modelled on Italian sources of two kinds: architectural theory (Cataneo, Palladio) and the science of fortification, with its indirect reflections of the ideal city. The influence of Stevin’s theories on Dutch practice can be demonstrated in the workings of the so-called Nederduytsche Matematique, an engineering school attached to Leiden University (1600). The idea of establishing a scientific training school for military engineers was conceived jointly by Stevin and Prince Maurits as part of the latter’s projected reorganization of the military, an aim inspired by the philological and historical studies of the Leiden humanist Justus Lipsius. During the early decades of the seventeenth century the Leiden engineering school was an international center of military architecture, and a stream of literature on the subject came out of the Dutch presses.

It can be shown that Leiden absorbed Stevin’s theories not only of fortification but also–despite the fact that his book did not appear in print until 1649–of the ideal city as well. This conclusion is borne out by the countless commissions executed by Dutch engineers and surveyors for foreign–mainly Danish and Swedish–rulers; these wide-flung fortresses and walled towns could simply not have been built the way they were by engineers unfamiliar with Stevin’s *città ideale*.

In the Republic itself the concrete outgrowths of Stevin’s ideas on planning are much scarcer, if only because there was so little opportunity here to build from scratch. Where those ideas did come into play was in the various extensions of Dutch cities in the years 1580–1680. Around 1630, with the rise of Dutch classicism in art and architecture, we notice a striking rebirth of interest in Renaissance theories of city planning among architects (Jacob van Campen, Pieter Post, Salomon de Bray and others) and in various branches of the government (Constantine Huygens, Hendrick Moreelse). Unmistakably based on those theories is the plan for the extension of Haarlem worked out by Salo-
mon de Brar in 1643 and 1661/2 and published by him, with an extensive commentary, in 1661. De Brar's plan is seldom cited by historians of city planning in the Republic; their favored example is the 1613 plan for the Amsterdam canals, which is commonly considered the embodiment of everything Dutch in seventeenth-century city planning.

The long chapter on the seventeenth-century extension of Amsterdam in Lewis Mumford's influential book of 1961, The city in history, was largely responsible for the rise of the myth of the radial canal plan as a brilliant piece of urban design. This view has little foundation in historical fact. Insofar as a careful investigation of the documents has allowed me to reconstruct the actual decision-making process, which I have interpreted in terms of the demographic, economic and cultural changes then taking place in the city, the only possible conclusion is that there was no overall plan at all for the extension of Amsterdam in the seventeenth century. The link Mumford postulates between the meteoric economic growth of the city starting in the mid-sixteenth century and the development of a radically new and efficient planning method is historically untenable, deriving from an utterly subjective view of the nature and function of city planning.

The so-called canal plan of 1613 was never formulated and discussed as a unitary design. What lay behind the seventeenth-century extension was the need for adequate fortifications. It is nearly certain that the 'canal plan' that the town carpenter Staets is supposed to have submitted was nothing more than a finished proposal for a semi-circular fortification. The city authorities were actually opposed to the formulation of a full-fledged plan based on an overall conception of the city's future shape, dictating the use of ground and mapping out streets and canals. The framing of such a plan was advocated by former burgomaster Hooft, but he was a fierce critic of the way things were actually being done.

The system of canals that we know was conceived and designed by the merchant-city fathers themselves, who certainly did not see it as an integral part of a total plan for the new Amsterdam of the 1600s. The extension reflected and reinforced the isolation of the city fathers, who took advantage of the miserable housing situation outside the old walls in order to build a pleasant residential quarter for their own small group. The radial canals made up one part of an otherwise formless campaign of expansion; its only innovatory aspect was the mathematical relation between its canals, quays and building lots. In a departure from all former expansions of Amsterdam, that of 1613 was a system of waterways, streets and blocks conceived without reference to the previously existing situation. That utter lack of political say on the area, who were driven out to the modularity, the canals form a shadow of the old city. Seen in this light, Mumford, a mature view accurately described as a geometrically well-organized expansion.

In opening our eyes to the canal master plan, the Amsterdam's policies of other Dutch towns, very much the same. A close look at the various industrial towns as Leiden and town like Utrecht, reveals the same well-organized expansion.

Urban expansion in the Dutch towns was the spatial consequence of the necessity to safeguard the prosperity of the capital, and the patrician class of estate. The manufacturers pleased the housing shortage businesses would soon begin to combatting the housing shortage, and, by far the most t
viously existing situation. That this could be done at all is due to the utter lack of political say on the part of the former inhabitants of the area, who were driven out to the Jordaan. With their straight lines and modularity, the canals form a sharp contrast to the planological pattern of the old city. Seen in this light, the extension can hardly be considered, with Mumford, a mature variant of the Baroque town. It is more accurately described as a geometrically rationalized, politically streamlined version of the traditional Amsterdam style of expansion.

In opening our eyes to the causes and effects of working without a master plan, the Amsterdam situation allows us better to judge the policies of other Dutch towns, where the course of events was less clear-cut. A close look at the various stages in the extension of such typical industrial towns as Leiden and Haarlem, and a medium-sized market town like Utrecht, reveals the same picture of official resistance towards well-organized expansion.

Urban expansion in the Dutch Republic was not a matter of architectural airs or propagandistic display—it was a military and economic necessity to safeguard the prosperity of the city. The impulse to expand was the spatial consequence of the desire to keep the population as large as possible, in the interests of increased consumption and of maintaining a reservoir of cheap, instantly available labor. In the interest both of economic return and military security, it was unwise to enclose too much ground within the city walls. As the fortifications authority Marolos had written in 1615: ‘To enclose a large area without having good reason to suppose that it will eventually be inhabited is more like destroying than constructing.’

The growth of Leiden in three phases (1611, 1644, 1659) is a perfect demonstration of how projections of financial advantage operated to determine the precise moment, extent and character of city extensions. Most illustrative is the 1644 extension, which gave rise to a conflict of interests between cloth manufacturers, with their wealth in the form of capital, and the patrician class of regents, with their holdings in city real estate. The manufacturers pleaded for the extension as a means of combating the housing shortage and allaying the real danger that businesses would soon begin to flee the city on account of its wretched living and working conditions. The counter-arguments of the Leiden town government are virtually an echo of those sounded elsewhere in the country: a new quarter would attract undue numbers of riffraff; the one-sided favoring of textile workers would render the city overly vulnerable to shifts in the economic climate, so that it might empty out overnight; and, by far the most telling of all, the quick construction of a
large number of new houses would undermine the real-estate market and endanger the livelihoods of many inhabitants.

In Leiden as in Amsterdam there were those who were convinced of the advantages of a well-organized city plan. There were continual cries for a master plan that would enable the authorities to establish zoning regulations in and around the city. In practice, however, any such measure was doomed to be ineffective. The city was far too worried about scaring off potential buyers, and sold off new lots with virtually no binding conditions at all.

The debates in Leiden cast a penetrating light on the power struggle between various economic blocs, a struggle that left its mark on the quality of the successive extensions. In Utrecht things went quite differently. Burgomaster Moreelse's plan of 1664 for a lavish extension of the city can be traced in part to political and economic arguments like those that had been advanced in Amsterdam and Leiden. The large-scale plan was to provide Utrecht with a new fortification enclosing vast new tracts of land for suburbs, industrial parks and, as the main attraction, an extremely luxurious residential quarter. While the Amsterdam and Leiden projects were direct responses to spectacular economic and demographic developments, Moreelse's plan cannot be said to have met a demonstrable need. It reflects a humanistic vision of the city derived on the one hand from economic and political thinkers like Giovanni Botero (who also influenced Pieter de la Court in Leiden) and on the other from the literature on the città ideale: philosophical tractates, utopias, revisions of and commentaries on Vitruvius, writings on military architecture and handbooks on architectural theory.

The finished plan for Utrecht can be seen as a humanistic interpretation of the Amsterdam canal system. The Amsterdam plan, for all its inconsistency, must have served as the model for the parcelling up of the Utrecht extension, changed beyond recognition through elephantine enlargement and the admixture of humanistic ideals Moreelse's ideas can only be seen as abstractions—theoretical reflections lacking contact with the social and economic realities. This took its toll in the political defeat that his plans finally met.

Salomon de Bray's exceedingly detailed and encompassing plan for the extension of Haarlem was far better motivated. De Bray's solutions too derive in part from the Amsterdam parcelling scheme, but he succeeds where Moreelse fails—in transforming a humanistic theory of architecture into a vital organ of a città ideale.

Along with Jacob van Campen and Pieter Post, Salomon de Bray is one of the major representatives of an architectural stream known as Dutch classicism. This approach to antique architecture developed through Palladio and Scamozzi. Within important role through his theory of extension of Haarlem (1661). The extension of the city first broached by Burgomaster Moreelse's plan of 1664 for a lavish extension of the city can be traced in part to political and economic arguments like those that had been advanced in Amsterdam and Leiden. The large-scale plan was to provide Utrecht with a new fortification enclosing vast new tracts of land for suburbs, industrial parks and, as the main attraction, an extremely luxurious residential quarter. While the Amsterdam and Leiden projects were direct responses to spectacular economic and demographic developments, Moreelse's plan cannot be said to have met a demonstrable need. It reflects a humanistic vision of the city derived on the one hand from economic and political thinkers like Giovanni Botero (who also influenced Pieter de la Court in Leiden) and on the other from the literature on the città ideale: philosophical tractates, utopias, revisions of and commentaries on Vitruvius, writings on military architecture and handbooks on architectural theory.

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Dutch classicism. This approach was grounded in the interpretations of antique architecture developed by the Italian Renaissance architects Palladio and Scamozzi. Within this small group De Bray played an important role through his theoretical writings, including a book on the extension of Haarlem (1661). The book grew out of a plan for the extension of the city first broached in 1643.

In Haarlem alone among the cities of the Dutch Republic, a cautious municipal initiative was seized upon by architects and surveyors to express their classicistic-humanistic ambitions for the city. Salomon de Bray went furthest of them all. His plan is distinguished from the others by its central proposition: the form and circumvallation are determined not by internal or incidental factors; they are fragments of a regular sixteen-sided figure which he saw as the ideal groundplan for a Haarlem of the future. His book was a political instrument for attaining that goal. He goes into the pros and cons as they were discussed elsewhere as well, but he relates them to a consistent theory of his own, rooted in the humanistic conception of the ideal city.

Seen against the background of the Amsterdam, Leiden and Utrecht plans, Salomon de Bray’s project for the extension of Haarlem, expressed in a series of sketches and commentaries, emerges as one of the greatest single contributions in the history of Dutch city planning.