SUSTAINABLE CITIES

Assessing the Performance and Practice of Urban Environments

Edited by
PIERRE LACONTE and CHRIS GOSSOP

I.B. TAURIS
LONDON · NEW YORK

CONTENTS

CHAPTER 11

ASSESSING THE AMSTERDAM SINGEL CANAL AREA FOR THE UNESCO WORLD HERITAGE LISTING (2010): HERITAGE AND SUSTAINABILITY

Pierre Laconte

History and the initial Singel canal area design

The medieval township of Amsterdam developed southwards from the port, along an inland waterway leading to the sea (Plate 6a). In the seventeenth century it was confronted with the '80 years war' (1568–1648) and the Dutch accession to independence. A consequence of these events was the need to accommodate a major population expansion generated by the Protestants' exodus from the Southern Provinces. At the same time, Amsterdam became the centre of international trade, taking this role over from Antwerp. The growing city adopted a curvilinear development framework, surrounding the old town by a triple circle of canals ('grachten') and a grid pattern of streets linking them (Plate 6b and Figure 11.1).

This plan was implemented over some 400 years. The subdivision of space in narrow blocks aligned to form a cityscape is shown in a painting of the period (Figure 11.2). For the purposes of comparison the present cityscape is illustrated by a random canal view (Figure 11.3).

What were the pressures that led to the establishment of the three encircling canals around the medieval town? What factors led the early planners to conceive and build their compact plots and dense buildings in the way that they did? And, finally, how did the area develop even until today in such a resilient way?

Figure 11.1 View of Amsterdam Singel canal area. It indicates the three ring canals framework.
Source: Wikipedia.

The underpinning rationale of that plan was and remains the combination of: space saving (high density-low rise buildings); the provision of drainage systems for water protection and supply; the use of the canals as a way to access and service houses (and their upper floor mercantile space) and; finally, the concern for quality of life through private amenity provision such as small rear gardens. Public amenity was also important and this was achieved through systematic tree planting along the canals, making the canals themselves a civic amenity.

One might add into the mix the ethics of Dutch traders' society. Dutch egalitarian values and protestant ethics worked in favour of a limited number of variations in style within the three 'Singel canals' (Prinsengracht, Keizersgracht, and Herengracht). But there are variations in character between the three canals, their distinctive frameworks reflecting the economic and social hierarchy of the city, and the 'top' level being represented by the Keizersgracht. By contrast, the individual canals display conformity in their architecture.

This grand design developed over time through a process of trial and error, not by any 'imperial' decree. The first version, produced in 1612, was widely criticised but served as the precedent for the actual master plan of 1663, drawn up by the municipal planning authority. That planning provided in the first place for the digging of the canals to create platforms of land suitable

for construction and access of building materials. The architectural historian, Jaap Evert Abrahamse, cites occasional instances of speculation by developers who were illegally informed about the proposed plans and bought whole areas, for example in the area located around the present Jewish Museum. However, this did not affect the general subdivision plan.[1]

All in all, the seventeenth century circumferential planned lay out of residential canals and service streets, its land subdivision into small plots and its implementation over four centuries have proven both their robustness and their sustainability for the City of Amsterdam. For the most part, its integrity and authenticity has been preserved. The area has succeeded in accommodating changes in functions as well as changes in building styles and building techniques. This inherent flexibility, including the adaptive reuse of buildings, has, at the same time, been the subject of regulation over the centuries, for example in more recent times to avoid transformations into office space.

The late nineteenth-century inversion of sea access, through the creation of a direct sea link towards the west, while historically all ships had previously arrived from the east, and the building of the railway station (Figure 11.4) just north of the port and historic centre, have created an irreversible change in the city's urban functions. However, these changes have had scarcely any impact on the strong canal grid, as the port and railway areas never impinged on the residential grid.

The twentieth-century development of metropolitan rail transport right through the Singel canal area could have wiped out the entire fabric of the area, but fortunately this did not happen thanks to a thrifty use of space. This transport investment indeed raises the issue of the choices needed to ensure both the accessibility and the sustainability of the city as a whole, including the historic centre and the Singel canal area. Instances of demolition and other damage related to rail developments are to be seen in the broader perspective of keeping scarce urban space in the city primarily for the use of the people, instead of using land for the high space-consuming infrastructure needed for cars and related parking. There was a brief period when Amsterdam tried to embrace the automobile culture but eventually retreated from it. Pete Jordan's *In the City of Bikes* tells us about the efforts to make the city more car-centric from the 1930s to the 1960s, and the 'push-back' against these efforts.[2]

The intensive urban development on the water space extending north of the nineteenth-century Station required new north–south transport links running through the area. These developments also entailed a change in the land-use of areas adjacent to the historic centre, including high-rise buildings. However, as indicated earlier, these changes have hardly affected

Figure 11.2 View of early building phase. *The Bend in the Herengracht* by Gerrit Berckheyde (1671–72).
Source: Web Gallery of Art (public domain).

Figure 11.3 Random view of a canal today. This shows the multimodal use of the canals, adapting to changes in transport modes, while remaining an amenity in their own right.
Source: http://www.webklik.nl.

Figure 11.4   View of central station, Amsterdam. This photo, taken in 1900 shows the link with the old town and the canal area, while remaining outside of it. Source: Wikipedia.

the Singel canal area, as the station was separated from it by a water basin (Figure 11.4).

To sum up, the history and design of the Singel canal area, combining long-term economic sustainability, social coherence of the layout and environmental concern for water protection, land provision, energy-saving transport, and greening, do justify the qualification of best practice in sustainable development, and its place in the present book.

The interaction of human settlements with the maritime environment has been a national trademark of Dutch planning practice, both urban and rural, throughout history, combining private practice and collective interest as shown by the development of the Beemster Polder, gained from the sea four centuries ago, and inscribed on the World Heritage list in 1999. A special publication is available in English.[3]

The UNESCO World Heritage list: criteria and procedures

The UNESCO World Heritage programme was founded under the 'Convention Concerning the Protection of the World Cultural and Natural Heritage', which was adopted by the General Conference of UNESCO on November 16, 1972. The first inscriptions on the World Heritage List were made in 1978.

Ten selection criteria confer eligibility to be placed on the list, of which the first six apply to built heritage (Box 11.1).

UNESCO procedures require that countries ('state parties') must first take an inventory of their significant cultural and natural properties and enter them on the tentative list. Next, they can select a property from this list to place it in a nomination file. At this point, the built heritage nomination files are evaluated by experts appointed by the International Council on Monuments and Sites – ICOMOS.

Evaluation entails an experts' site visit report that can be complemented by a critical desk study review.

Once this procedure has been fulfilled the case's nomination is put on the agenda of the World Heritage Committee and considered for inscription on the World Heritage List. The beneficiaries have to declare that they accept their obligation to respect and maintain the character of the site.

Box 11.1   World Heritage List – UNESCO's criteria for selection.

To be included on the World Heritage List, sites have to be of outstanding universal value and meet at least one out of ten selection criteria. Thus, sites should:
 1. represent a masterpiece of human creative genius;
 2. exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
 3. bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
 4. be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
 5. be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
 6. be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The committee considers that this criterion should preferably be used in conjunction with other criteria);
 7. contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
 8. be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
 9. be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
 10. contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

The author's desk review

The site was duly selected by the state party (Dutch Ministry of Culture) as a candidate and a very detailed file was put together. The experts' visit was duly reported. Objections were raised as the candidacy was solely for the Singel canal area, while the historic medieval centre was not included. The state party disagreed and their view prevailed

The author's assignment was to carry out the ICOMOS expert desk review about the inclusion, or not, of the Singel canal area on the World Heritage List. This review argued strongly in favour of inclusion. It was part of the process leading to UNESCO's decision in 2010 to add the area to the World Heritage List.[4]

The Ministry's submission referred to three of UNESCO's qualifying criteria, these being Nos 1,2 and 4 which relate, principally, to evidence of human creative genius, the interchange of human values over time and outstanding achievement in terms of building, architecture and town planning (Box 11.1).

In the author's view, the justification, based on these criteria, includes planning, development controls, implementation issues and international influence.

The planning of the area reveals a great mastery of the land and water interface, the area's land subdivision (in small plots), bulk control, the creation of a consistent design and materials vocabulary, soft landscaping including tree planting and, finally, simplicity in urban block design. The blocks consist of residential row houses ('architectura minor'), punctuated by a limited number of iconic monuments ('architectura major');

Development controls were entrusted to the municipal planning authorities, with private associations acting in an advisory capacity, i.e. a sort of public/private partnership system, moderated by countervailing influences from the associations. A large number of city government resolutions ('Vroedschapsresoluties') are cited by Abrahamse in his book on urban development in seventeenth-century Amsterdam.[5]

Implementation has taken place over a very long period of time and has therefore confirmed the durability of the master plan. It has also confirmed the continuity of a 'Baukultur' combining technological and engineering strength with a concern for public and private amenities.

International influence has been acknowledged by urban historians at large and lately by the international symposium 'New Urbanism and the Grid: the Low Countries in an International Context – Exchanges in theory and practice', held in Antwerp on May 8, 2009 and by Abrahamse's book as referred to earlier.[6]

The comparison with canal-centred sites in other countries confirms the uniqueness of the Singel canal area. In particular it cannot be compared with Venice, which developed gradually along the Grand Canal and, so far as we know, not in accordance with any unified design or planned structure.

As to St Petersburg, Russia, while there is a clear influence emanating from the planning of Amsterdam, through the influence of Peter the Great, the two cities differ in terms of their overall planning (imperial vs merchant) and in the speed of their implementation (through 'imperial enforcement' this was particularly fast in St Petersburg). Important also is the difference in plot subdivision typology ('parcellation'). Thus the St Petersburg approach (subdivision into large palatial plots) is strikingly different from the typical small plots for merchant row-houses (Figures 11.1 and 11.2).

The superior mastery of water flows in Amsterdam (vs St Petersburg) must be underlined. This aspect cannot be emphasised enough, at a time when sustainable water management has become of international concern. In the wake of globally rising water levels, the Netherlands is continuing its long tradition of water management. It is probably the world pioneer in protecting itself against future floods, to the benefit of its historic areas as well as its newer settlements.

The main arguments for inscription on the World Heritage List can be summarised as follows:

1. The canal ring's layout (residential canals and service streets), its land subdivision in small plots and its implementation framework and development control have proved their robustness over four centuries.
2. The canal areas has been able to accommodate functional changes as well as changes in building styles and building techniques, but generally avoiding the amalgamation of individual plots to satisfy demands for larger scale building.
3. The boundary between public space and private space has been clearly preserved. The area has avoided the trend elsewhere in 'modern' planning whereby public/private boundaries are frequently blurred through the creation of anonymous 'green spaces' between slabs and towers instead of truly public spaces and gardens for neighbourhoods.
4. The issues confronted by the canal area at its edge have not overly affected its own robust framework and character, thanks to the (planned) physical separation.
5. Indeed the Singel canal area goes beyond the specifics of heritage conservation and places itself in the realm of the emerging wider UNESCO approach, i.e. towards 'historic urban landscapes' (HUL), and their global sustainability (economic, social and environmental).[8]

UNESCO's world heritage listing: an overall assessment

Between 1978 and 2014, 1,007 sites were put on the World Heritage List.

As UN bodies' decisions must be taken unanimously, there is clearly a case for a negotiation process involving national delegations before additional sites are put on the list by the World Heritage Committee.

The growing realisation that inscription on the list could result in an increased number of tourists has created a strong appeal to some countries to multiply their candidacies. Nomination files are getting more and more numerous and detailed and national selection more and more political.

China is a good example of how the selection process works. The national candidate projects, selected through a technical and political process, within China's branch of ICOMOS, are put on a multi-year calendar, enabling an optimal preparation and run up to the final international negotiation and decision. A case in point is China's Grand Canal. The nomination process started in 2007, the nomination files were submitted to the World Heritage Centre and the final decision by the World Heritage Committee was taken in 2014. The process was explained at length by heritage researcher Shuaishuai He.[9]

As an illustration from Belgium, there was an initial proposal to have some specific medieval belfries on the list. These were all located in one region i.e. Flanders. But the result of the national negotiation process was that all the belfries in Belgium, including recent ones with no architectural distinction, were nominated and inscribed on the list.

The international selection process has much to with the experts chosen to operate it. While the UNESCO criteria are reasonably well defined their interpretation leaves room for divergent recommendations. As an example of that divergence, the old town of Warsaw was put on the list because of its symbolic value although it was completely rebuilt and thus is not 'authentic'. By contrast, the old town of Gdansk, of equal symbolic value and also totally rebuilt, could not be put on the list, because it was not 'authentic'. But another reason may have been the feeling at the time that one inscription from Poland was enough.

The main problem with a list of more than a thousand sites is monitoring them in respect of the obligations placed on the authorities responsible for their management. Some countries, for example, the United Kingdom, consider that fixing the standards for respect of the inscription's obligations is part of their sovereignty and stress the mismatch between UNESCO requirements and their national planning system.

By contrast, other countries accept UNESCO's monitoring, even if it constitutes a constraint and may give unwanted publicity. A case in point is the

German city of Dresden, which lost its World Heritage Status because of a bridge which was considered to be incompatible with the listed perimeter. In some cases, the threat of the loss of that status is used by opponents to contest particular projects which are being favourably considered by the authorities, and fully supported by their own experts' reports ('my expert against yours').

In certain countries, the monitoring of inscription obligations is clearly giving way to political and commercial considerations. A case in point is the Xi'an site which has a shopping mall and high income housing next to it. In fact, inscription on the World Heritage List can sometimes accelerate inauthentic additions to a site (and 'Disneyfication').

Returning to the matter of 'authenticity' the interpretation of what this means remains a real problem. The 1972 Convention focuses on the 'materiality' of properties. Both restoration practices and investment pressures can lead to changes in use, allowing higher yields, and possibly the expulsion of established communities. This issue has been described at length by architect planner Dennis Rodwell.[10]

All in all, in the four decades since 1972, the listing process has proven to be an important tool towards increasing world wide awareness of the importance of cultural heritage conservation. However, the selection and monitoring processes have become part of the international political game and have therefore lost some of their credibility. Perhaps an independent evaluation of listed sites might be made available to authorities and visitors, to help avoid disappointments? But how would such an evaluation be put into place, financed and its own activity monitored? These are some key unanswered questions.

Acknowledgments

Notes

1. J. E. Abrahamse, *De grote uitleg van Amsterdam. Stadsontwikkeling in de zeventiende eeuw* (*The great expansion of Amsterdam: Urban development in the Seventeenth Century*) (Toth, 2010).

2. P. Jordan, *In the City of Bikes: The Story of the Amsterdam Cyclist* (New York, 2013).

3. W. Reh, C. Steenbergen and D. Aten, *Sea of Land – The Polder as an Experimental Atlas of Dutch Landscape and Architecture* (English version – published by the Hoogheemraadschap Hollands Noorderkwartier, Purmerend and Delft University of Technology, in cooperation with the Uitgeverij Noord-Holland, Wormer, the Netherlands, 2007).

4. P. Laconte, 'ICOMOS Desk Review about Potential Inclusion in UNESCO's World Heritage List (2010) (17th Century Canal Ring Area of Amsterdam inside the Singelgracht)' (2010, unpublished).

5. Abrahamse, *De grote uitleg van Amsterdam.*

6. P. Lombaerde and C. van de Heuvel, *Early Modern Urbanism and the Grid - Town Planning in the Low Countries in International Context: Exchanges in Theory and Practice*, *1550–1800* (Turnhout, 2011); Abrahamse, *De grote uitleg van Amsterdam.*

8. UNESCO Recommendation on the Historic Urban Landscapes adopted by UNESCO's General Conference on 10 November 2011.

9. S. He, 'Developing Relations between Heritage Conservation and Urban Revitalization: Lessons from China' (Oxford, 2014, PhD thesis).

10. D. Rodwell, *Conservation and Sustainability in Historic Cities* (Oxford, 2007); D. Rodwell, 'The Unesco World Heritage Convention, 1972–2012: Reflections and Directions', *The Historic Environment*, 3/1 (2012): 64–85.