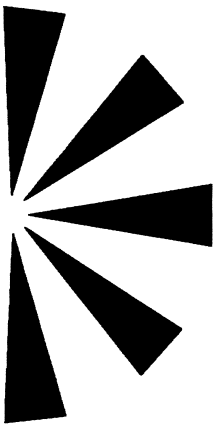

VIEWPOINTS

Discussion of topical issues
in urban morphology

Understanding place in the Netherlands

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Samuels (2010) critically reviews the guidance published by English Heritage on historic area assessments. He notes several problems relating to the advice offered. One is the lack of reference to recent relevant work in urban morphology. A second is the lack of demonstration of methods and techniques that can be used by heritage professionals. A third is the problem of work on historic area assessments being undertaken by people from different disciplinary backgrounds. In his conclusion, Samuels calls for an international exchange of information on the type of guidance given in different countries.

Consideration of the situation in the Netherlands reveals that similar problems exist there. The website of the *Rijksdienst voor het Cultureel Erfgoed* (State Service for Cultural Heritage) provides the type of fragmented guidance that is offered in the UK. Advice is provided by discipline, for example building history or historical geography. No effort appears to have been made to integrate the various disciplines and provide a holistic approach to the characterization of historical areas. The website offers nine brochures on legislation, 51 on building techniques and fifteen on 'cultural history' which, in fact, focus on various building typologies.

However, one brochure offers guidelines for historical building research (Hendriks and van der Hoeve, 2009) which includes work on defining 'cultural historical significance' that is applicable at a larger scale than just buildings. It specifically notes that any attempt to value cultural historical significance should include a range of scales, starting with 'area' and going down to the level of 'building component'. The types of values mentioned (historical values, ensemble values, architectural historical values, building historical values, historical use values) are somehow connected with these different scales.

This perspective may well remind urban morphologists of the work of, for example, Conzen (1975, 1988) and Kropf (1993). Conzen adopted a hierarchical approach to townscape analysis and his ideas on 'hierarchical nesting' and townscape regions (Conzen, 1988) suggest that this concept is central to his view of the character of historical townscapes. However, no specific reference to any urban morphologist is given in the Dutch guidance. Furthermore, the brochure is far too concise to provide any useful guidance on how to combine the characteristics of the different scales into a coherent analysis of historical character and/or value. It does not provide any advice on how to conduct the fieldwork required; nor does it give any suggestions about how to map the results.

The question arises as to the problems of applying in practice the type of guidance provided by the Dutch equivalent of English Heritage. In 2006 the local council of the city of Zaanstad created its own cultural historical significance map of the area (Kleij and van de Poll, 2006). There is little reference to the methodology used but from the document it appears that three maps are combined: a map providing historico-geographical values, a map of archaeological values, and a map

  ISSN 1027-4278

that shows all the listed buildings and other buildings of historical or architectural significance. A description is also provided of all these different elements within the townscape. Although this method undoubtedly provides some understanding of place, it does not provide a replicable approach to defining, delineating and valuing townscape character.

As has been pointed out long ago (see, for example, Whitehand, 1981, pp. 142-4), urban morphological research provides an excellent basis from which to develop an approach to understanding and managing places. Unfortunately in the Netherlands, as in the UK, a lack of practical guidance and scant reference to the work of urban morphologists leads to variable, frequently unsatisfactory, approaches to the subject. There is a need for much more rigorous methodology, including in fieldwork. The basic groundwork exists in the research literature, including at an international level. As in the UK, the main problems lie at the interfaces between the various disciplines and professions.

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What happened to the backyard? The minimization of private open space in the Australian suburb

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It is not often that a dramatic change in urban form occurring throughout a large modern country can be observed within a period of less than 10 years. Nevertheless, this is what happened in suburban Australia during the 1990s. It has now been the subject of research (Hall, 2010).

Up until the end of the 1980s, nearly all suburban houses in Australia had large backyards by world standards (Head and Muir, 2007; Timms, 2006). The older type of suburban form is still characterized by backyards of at least 150 m^2, and they are commonly several times this figure. They generally have a practicable shape and significant coverage of trees. Plot coverages by house footprints are generally 20-30 per cent with a maximum of 35-40 per cent.

However, in the early 1990s, a dramatic change in Australian suburban form began (Hall, 2007, 2008, 2010). During this period, the provision of large backyards in new construction ceased and the 35-40 per cent figure now represents the minimum, rather than the maximum, plot coverage. Although some properties may have backyards of 100 m^2 in area they are normally much smaller than this and are often less than 50 m^2. Moreover, the narrowness of the gap between the dwelling and the side

Figure 1. Part of the Brisbane suburb of Boondall. Note the older suburban form with large backyards on the left-hand side of the picture. In contrast, the housing scheme from the late 1990s on the right-hand side has minimal private space around the houses.

and rear boundaries of the plot frequently results in this area being in the form of a thin strip rather than a more useful square shape. This change has not been subtle or gradual in either space or time. Two distinct patterns of form are immediately apparent from even a cursory examination of aerial photographs (see, for example, Figure 1). The older areas are characterized by open yards and tree cover while, in the newer ones dwellings can be nearly roof-to-roof.

This change is not something that relates to the backyards alone. House and street design have also changed as part of the same process. There has been a trend towards deep, square house plans possessing large internal spaces with little natural light and ventilation. There is also a trend towards fewer and smaller windows. The narrow gap around single-storey houses is dominated by high opaque fences. The frontage is dominated by integral garages.

A common response to this trend is that it must be the result of smaller plot sizes. There is, indeed, a trend to smaller plot sizes in Australia but a closer examination of the data reveals that this is not the cause of the phenomenon. The evidence (Hall, 2010) suggests that it is the increase in the dwelling area, rather than the decrease in the plot area, that has been driving the shrinkage of the backyard. There is no evidence that it has been brought about directly by policies of urban consolidation. The phenomenon is to be found at all plot sizes. Most significantly, it is to be found in lower-density outer suburbs located a considerable distance from city centres. Local policies and planning regulations have not explicitly required small backyards. However, there has been nothing in them to prevent the reduction in the size of private open space that has occurred. Requirements for gaps to the sides and rear of properties are generally 1-2 m and, where they exist, minimum standards for private open space are tiny compared to the areas of the pre-1990 backyards.

Why should this be seen as a problem? The answer is that the shrinkage of the backyard has reduced the amenity of the property in terms of outlook from the dwelling and facilities for outdoor recreation around the house, especially for young children. Moreover, the disadvantages go way beyond the lifestyles of the occupants. The consequent reduction in vegetation, especially tree cover, around the dwelling has led to a loss of biodiversity and an increase in run-off of storm water. The microclimate becomes hotter and this, in turn, requires more air-conditioning and

increased energy use. Moreover, it represents a permanent change in built form that cannot be corrected later.

Why, then, are people choosing to live in such houses? Data on social trends within Australia suggest (Shepanski and Diamond, 2007) that the reduction in backyard size has coincided exactly with a trend to substantially longer working hours amongst middle- and higher-income office workers. At the same time, the growth in the use of air-conditioning has not only allowed, but also encouraged, an indoor lifestyle. For people buying a suburban house, the focus has become one of investment in buildings. A particular house form that maximizes floor area at minimum cost has evolved in response. Little priority is now given to planted space around the house, as it is not seen as an investment. The dwelling is therefore extended over as much of the plot as is permitted. These last points remain, for the moment, hypotheses but the questions they raise are ones that cannot be ignored and demand further study and debate.

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'Our common future' in urban morphology

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The presentation of 'Our common future' by the Brundtland Commission in 1987 introduced a new perspective in the debate on cities. Coming out from an essentially environmental discourse, discussions on sustainability pointed to the ways in which development was degrading the environment and compromising heritage for future generations. In just one decade, the sustainability concept was widely incorporated in theory, research and, to a lesser extent, practice on the city. The then new challenge was the conversion of sustainable development into principles or standards of development practice, translating the concept 'on the ground'. A multitude of approaches started to be conceived aiming at developing the sustainability framework. Nevertheless, the implementation of a notion that was so broadly defined proved to be quite difficult.

The analysis of the literature produced throughout the last 2 decades reveals, indeed, a strange paradox. Although this new perspective on cities highlights the key role of territory and urban structure in the process of urban development, and suggests the development of integrated approaches, it does not seem to include a sound morphological dimension. The reasons behind this paradox are many. On the one hand, disciplines that should be analysing and designing the city, notably urban planning, have been debating other issues. Batty (2010) states that within the world of planning cities are not viewed in terms of their physical or even their social layout or structure, but as ways of negotiating, resolving conflict, engendering development of various kinds through collaboration, and funding development . On the other hand, some critical points have been identified within urban morphology, notably in this journal: the practical difficulties in urban morphology of dealing with the physical scale and complexity of large cities and conurbations; the difficulties of comparing studies of urban form (Whitehand, 2009a) developed in different cultural settings (Conzen, 2009) or involving the use of different approaches (Kropf, 2009); the difficulties of both filling existing gaps in urban morphology and bridging boundaries between different fields of

knowledge (Whitehand, 2010); and finally, the difficulties of moving from morphological explanation and description to planning prescription (Whitehand, 2009b).

Against this background, it is argued that three fundamental issues should be placed on the agenda of urban morphology for the next decade. One major challenge for urban morphology is to be able to identify its most important and morphologically-specific contributions to contemporary cities and societies. In fact, it is urgent to strengthen the morphological dimension of the debate and practice on cities. In this sense, urban morphology should pay less attention to criticizing, modifying and transforming the wealth of its already sophisticated concepts, methods and techniques, and pay more attention to potentiate the conditions for the application of its contributions. This process will necessarily involve some simplification, but it does not have to mean a loss in the fundamental contents of the discipline. Two examples of such simplification are given, the former of a technical nature, the latter with a methodological dimension. Angular segment analysis is a method recently introduced in the space syntax community (see, for example, Hillier, 2009). It focuses on road-centre lines, a particular type of information that, unlike the axial lines that are central to the former space syntax mainstream method, axial analysis, is easily available in many countries for use with GIS. This step forward makes space syntax less consuming of resources and potentially more attractive, both to academics outside urban morphology, and to practitioners. The second example, more familiar to readers of this journal, is the framework proposed and applied by Kropf in the 1990s (see, for example, Kropf, 1996). Based on the work of Conzen and Caniggia – particularly the concepts of 'plan unit' and *tessuto urbano* – Kropf proposes a framework for identifying and describing, in hierarchical terms, the main elements of urban form. After a process of simplification of the existing theoretical and methodological background, in order to make it more operational, Kropf was able to bridge the gap between the geographical and architectural studies of urban form and the zoning system of planning.

The second issue for the agenda should be development of key cross-disciplinary links between urban morphology and the different bodies of knowledge studying the city, promoting effective integrated research. Despite the advantages of transferring morphological knowledge to these different disciplines, the fact is that its occurrence is quite limited. In urban morphology – and more generally in the social sciences and humanities – the ability to identify and build cross-disciplinary links, and the awareness of relevant work in other disciplines, are not very common (Whitehand, 2010). The fundamental, and realistic, challenge is to find a balance between two distinct poles: integration and specialization. The process of identification and construction of the specific links should involve the participation of academics, practitioners and citizens. Bearing in mind the goal of sustainability, disciplines such as urban ecology, urban sociology and spatial economics deserve our attention. The development of each particular linkage presupposes the capacity of researchers to gather and synthesize broad perspectives, knowledge and skills. Because most researchers, even in urban morphology, are trained in traditional disciplines, they must learn to appreciate differing perspectives and methodologies. A major breakthrough over the next few years would be the provision of a sound morphological dimension to other fields. This could, for many research projects, provide the desired added value and, ultimately, enable further advances in shared knowledge about cities.

Finally, the third issue for the agenda should be the development of key linkages between this integrated research and planning activity. Although it should be that urban morphology is one of the disciplines feeding planning, in practice urban morphology and planning exist in largely separate worlds. The mutual isolation is broken by occasional events, such as guest lectures, government planning officials joining the steering committees of research projects, and academic researchers becoming involved in development projects (Whitehand, 2007). In addition, it seems evident that the different models and approaches provided by planning theory in recent decades, despite their usefulness in relation to other professional issues, have not helped in coping with the morphological dimension of cities. The establishment of linkages between explanation and prescription should involve reflection on what is planning practice today: what is the 'demand' for morphological support, and what can urban morphology, in fact, offer to planning practice and development control – what is the 'supply'. Urban morphologists should engage in real planning practice instead of attempting to simulate it; learning to understand the interactions between the proposed tools – developed together with planning practitioners – and the different contexts.

The current debate and practice on the city does not have a sound morphological dimension. 'Our

common future' in urban morphology must involve a careful reflection on what should be our contribution, how it could be part of wider integrated research on cities, and how this could be applied in day-to-day planning practice.

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UK/Ireland Planning Research Conference 2011

The annual Planning Research Conference for 2011 will be held in Birmingham, co-organized by the University of Birmingham and Birmingham City University, between 12 and 14 September.

Its theme is 'planning resilient communities in challenging times'. These challenges include climate change and associated environmental issues; financial constraints, access to credit and economic uncertainty; political and security disorders; the effects of social polarization and migration on communities; and challenges to existing patterns of governance and leadership. Many of these topics have important implications for urban form. For urban morphologists, a seminar and visit to the M. R. G. Conzen Collection at the University of Birmingham are planned (numbers will be limited).

Planned thematic sessions include

- planning for climatic change
- planning theory
- sustainable development
- mobility and transport
- planning for risk
- urban and rural regeneration
- participation and governance
- urban design and physical forms
- planning and the economic recession
- learning and education

Keynote speakers include Lord Richard Rogers (chair of the UK Government's Urban Task Force); Simin Davoudi (Newcastle University); Kelvin MacDonald (Policy adviser, Royal Town Planning Institute) and Kieran Rose (Dublin City Council).

Further details of the conference can be found at www.curs.bham.ac.uk/planning-research-conference-2011

Meeting of the Council of ISUF

The next meeting of the Council of ISUF will take place during the Conference of ISUF to be held in Montréal, Canada, 26-29 August 2011. Any matters that members of ISUF wish to bring to the attention of the Secretary-General of ISUF, Dr Kai Gu, should be communicated to him at the School of Architecture and Planning, University of Auckland, Private Bag 92019, Auckland, New Zealand (e-mail: k.gu@auckland.ac.nz) by 1 August 2011.