Typomorphology and urban design practice

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The great strength of ISUF lies in its international embrace and, perhaps unique among learned societies, its interdisciplinary inclusiveness. There are few, if any, forums that bring together theoreticians and practitioners from the disciplines of geography, urban history, architecture and town planning. The views I set out here come from one corner of this spectrum, that of the architect and town planner who has different expectations than those of an academic urban geographer or a historian. Practitioners are concerned with the potential of the explanatory powers of urban morphology to be harnessed to the activities of planning and urban design: how its descriptive and cognitive concepts can be applied by practising professionals in those fields. Although typo-morphology is essentially about description and explanation, it can be used not just for managing change in our legacy of inherited urban form, but 'in the other direction it can inform innovations with a clear idea of the structure of what is introduced and how it fits into the wider structures and processes' (Kropf, 2006, p. 73).

This is a concern that has preoccupied many of us for some time, before ISUF was founded. That it is still a concern is confirmed by Camacho-Hübner's (2007) report of the conference of the Nordic Network of urban morphology in which he proposes three main topics as the basis for future debate. These are the practical use of urban morphological theories, the regionalization of urban morphological research and the communication of urban morphological knowledge.

More recently Whitehand (2007a) has discussed similar issues in an editorial in this journal. Although my observations here were drafted before the editorial, in some respects they are a response to Whitehand's concern when he points out how the practitioner representation in ISUF is dominated by architects 'from the Latin world'. This is especially true if one considers the composition of the Council of ISUF, but of course we must take into account the marginal importance of the planning profession in the Latin countries, in contrast to the anglophone world.

A quick count of the 'prescribers' (architects and/or planners) among the anglophone member-ship of ISUF is informative. In early 2007 there were 172 subscribing private members of ISUF (data supplied by S. M. Whitehand). Eighty-seven of these were based in anglophone countries, of whom around 50 are known to have or appear to have (it is not always clear from the listings) a design profession affiliation. This is a much higher proportion than one might expect. However, of the 149 institutional members worldwide, only twelve seem to be professional offices or government planning agencies. A further five individual members give professional offices as their addresses. This membership analysis is only approximate, and takes no account of the recent large increase in the number of members in South America, but it does show that, while ISUF has a substantial academic presence, there would seem to be a potential for it to gain membership among professional offices.

The extent of typomorphological concepts in practice

At the risk of perpetuating what Jeremy Whitehand (2005) has called anglophone squint, the focus in this paper has to be on the anglophone situation, because it would be presumptuous to consider other contexts from a limited personal experience. In discussing here the extent to which concepts of typomorphology have been used in urban design projects I have been very modest in my aspirations. I have looked for the presence of a lowest common denominator of urban morphology – the systematic application of the essential elements of streets, blocks, plots and buildings and the demonstration of how they interrelate and are affected by the socio-economic context.

Two separate strands of planning and urban design activity can be identified, that of conservation, or managing the inherited townscape, and that of implementing new settlements and major redevelopment schemes in urban areas. In the first strand, currently in Britain we have some work of prominent ISUF members infiltrating in a modest way the world of conservation. These include Peter Larkham *et al.* (2005) at Stratford-

upon-Avon and Jeremy and Susan Whitehand at Barnt Green (Whitehand, 2007b). But in the current development climate conservation takes second place to new building, especially new housing.

The planning climate in the UK has changed remarkably over the last three decades in a way that one would expect to be enormously favourable to the introduction of urban morphological concepts in practice. Recent evolving public policy towards new urban development has been marked by a series of official publications such as *By design: urban design in the planning system* (Department of the Environment, Transport and the Regions, and Commission for Architecture and the Built Environment, 2000) and the *Urban design compendium* (Llewellyn-Davies, 2000). The big shift in these works was to a reborn interest in the virtues of traditional urban form. It received central government sanction as witnessed by the Deputy Prime Minister's Foreword to the recent *Design coding: testing its use in England*. To quote his words, 'centuries ago we knew how to achieve the best in urban design, from Roman Chester to Georgian Bath, but today it's almost as if we are having to learn how to build communities again' (Commission for Architecture and the Built Environment, no date, p. 5).

However, this recognition of the virtues of the inherited urban form of streets, blocks, plots and buildings is hardly matched in practice by an equivalent degree of attention being given to these urban elements, so central to both the Conzenian and Caniggian approaches (see, for example, Caniggia and Maffei, 2001; Conzen, 1975). There is little awareness of the importance of establishing the underlying deep structures that will endure for centuries as opposed to a concern with the relatively ephemeral nature of the architectural superstructure. This is especially disappointing in official publications since it is public agencies that have the responsibility for these deep structures, i.e. the public space system. In this era of privatization this guardianship of the public realm becomes more crucial than ever.

Of course the extent to which typo-morphological methods can be adopted has much to do with the structure of the planning system in different contexts. Tony Hall, in both his academic work (Hall, 2000) and in his role as chair of a local authority planning committee (Hall, 2007), has pointed out that the British planning system, with its focus on two-dimensional land use was not likely to be a fruitful field for the introduction of these methods. It was also unlikely to deliver the design quality that was being sought after in the documents referred to previously.

Pilot coding projects in Britain

The enthusiastic promotion of urban design codes by central government in the UK would seem to offer an opportunity for the introduction of typomorphological concepts into planning. In England, over the last 5 years, these codes have been enthusiastically grasped as a way of ensuring a high quality for the massive housing programme proposed in 2003 by the 'sustainable communities plan' (Office of the Deputy Prime Minister, 2003). A programme of seven pilot coding projects was started for sites, predominantly for new housing, ranging in size from 7 ha to over 300 ha. Together with six other locations where codes had already been used they form a body of work which was evaluated in a series of publications and workshops run by the Commission for Architecture and the Built Environment and other bodies (Department for Communities and Local Government, 2006).

The codes vary enormously in the extent to which they employ typomorphological concepts or methods. The most systematic is that by Roger Evans Associates (2005) for Rotherham, which rigorously applies a scheme of levels of resolution. Most have some sort of regulating plan that defines street types: in this they follow US form-based codes. They vary in the extent to which they specify the detailed architectural language they require. Some simply have photographs of acceptable exemplars but they do not spell out the minimum qualities an acceptable building must have. Others are much more restrictive and, under the cover of achieving local character, insist on a lot of local vernacular detail (John Simpson and Partners, 2005) – this very much follows the US pattern book approach.

A major criticism of the evaluation of the pilot studies is that their ease of use was never considered – it may have been too early, for some had not yet been legally adopted at the time of the evaluation. Indeed a tracing of the impact of codes on built form as implemented would seem to be an essential investigation, but no government agency is likely to pursue this type of study, which would need to be extended beyond the life of any elected body. A related criticism of the evaluation process is that it did not include those very protagonists who will be its principal users – developers and the local government officers concerned with administering the code.

The English codes are mainly concerned with housing. One of the challenges of coding is making rules that will achieve a diversity of form. It is relatively easy to create a varied streetscape given the range of widths of housing plots. However, the extent to which volume house builders will follow the codes, which require slight and perhaps arbitrary variations in height, is doubtful, as suggested by their use in Hastings (Urban Initiatives, 2005). It is much more difficult to achieve variety with big-box commercial development. For instance, the same code specifies entrances to commercial buildings every 15 m and this is simply wishful thinking. The danger of proposing forms that do not acknowledge the realities of the market is demonstrated in Camborne, which has one of the few codes that is in an advanced stage of implementation. Here the masterplan proposed a traditional street of shops at the heart of the community. The reality as implemented is a free-standing big-box supermarket sited in the centre of a surface car park.

Form-based codes in the United States

The renewed willingness to learn from older urban forms owes a lot to the New Urbanist movement in the United States. This is the latest transatlantic idea to be imported to Britain and is another example of anglophone squint since typo-morphological codes or their equivalent have been the basis of much planning in Italy and France for some decades (see, for example, Cataldi, 1984; Steinebach *et al.*, 1992). One of the of the tenets of the New Urbanism has been the introduction of form-based codes to replace those based on quantitative and land-use controls by 'addressing the relationship between building façades and the public realm, the form and mass of the buildings in relation to one another and the scale and types of streets and blocks' (Form Based Codes Institute, 2006).

These codes often use the 'transect', a system of classification that groups, in a progressive scale, from rural to urban core, the various elements of urban form. While drastically reductive of urban form, it does offer a very easy to understand approach. Indeed it is this user friendliness that is the most positive attribute of the US codes. Unlike their complex European counterparts, they are designed for application by a local government office rather than being intended primarily for an audience of academic peers.

However, some US codes are much less concerned with the deeper levels of structure and much more with architectural style. Certainly the authors of Seaside (Bressi, 2002) would argue that their code allows a wide range of styles and that there are few modern-style buildings because the owners do not want them. This freedom may be possible in developments where the houses are bespoke but less relevant where houses are being built speculatively for sale.

This focusing on the superstructure as opposed to the deeper levels of urban form leads to an easy perversion of New Urbanist ideas. While the Charter for the New Urbanism advocates walkability, mixed use and other estimable qualities, it is too easy for a house builder to simply put a porch on a house, put the car parking round the back, and claim it is New Urbanist development. And a New Urbanism tag helps sell houses.

Conclusion

This review has been sketchy because we need more systematic evaluation of how typo-morphological methods have been applied in design, how easy have they been to use and what were the outcomes. Such an evaluation should focus more on the products and less on the process. This research will need to be done independently of government agencies, which always have an agenda to fulfil – it is important that research results are not edited to meet political ends.

Research also needs to take place in different contexts and investigate the extent to which positive experiences can be transferred from one context to another. In this respect the broad spread of ISUF membership is well suited. But we need more accounts in our journal of how urban morphological concepts have been used in design. Until now the emphasis in *Urban Morphology* has been on the descriptive and explanatory use of urban morphology. Those excellent papers that for 10 years have discussed the use of typomorphology in different national contexts only barely touch on issues of application to design. From Darin (1998) writing about France to Heineberg (2007) on Germany, this facet has been neglected. For example, Darin notes that Panerai and Huet went on to practise after doing their important academic work on morphology. It would be interesting to know how that practice reflected their earlier work and what the outcomes were.

If *Urban Morphology* can turn some attention to

these issues, then perhaps we can broaden our membership in the direction of the design professions. As Evans (2005) has observed, 'urban morphology is not a user friendly term' and often where it has been used its terms have been modified. Thus plan units become character areas (Larkham *et al.*, 2005) and levels of resolution become scale levels (Stratford-on-Avon District Council, 2001).

However, the use of such terms as areas of 'homogeneous directness' and 'global legibility analysis' have not seemed to be an obstacle to the diffusion or usefulness of that 'microsoft' of urban morphology, space syntax (Space Syntax, 2006). Any consideration of urban morphology in design in Britain cannot ignore space syntax. Although it has an approach to urban form different to the Conzenian or Caniggian tradition (Larkham, 2006), it is perhaps the most successful of any branch of urban morphology in the way that it has been taken up.

Perhaps the use of special language has the power of a magic spell; an abracadabra which people believe will get results. It may be that our urban morphology language has not yet demonstrated its efficacy or perhaps it is too close to everyday speech and really needs to be made more specialized.

Given the strength of the planning profession in anglophone countries it is perhaps in this direction that we should be giving our attention, for it will be much more difficult to make an impact on the architectural profession. The whole of the culture of architecture is focused on innovation and image. In Habraken's succinct formulation, 'the demands of the everyday environment are vastly different from what is required to create the extraordinary. Nevertheless the profession's self-image, publications and ways of working still cling to its roots in monumental architecture' (Habraken, 2005, p. ix).

To conclude, why should we be concerned to introduce urban morphology into design practice? There are two reasons. First, if we are to believe the politicians, the UK is at the start of a housebuilding boom with 3 million new homes to be built by 2020 (Department for Communities and Local Government, 2007). The last time the UK had an amount of new building comparable to that now envisaged was 40 years ago and we know what a mess was made of that. The proper application of typomorphological concepts to the design process can help avoid repeating these mistakes.

Secondly, we seem to be entering an era of single-issue design. There is great pressure to design and build projects that save energy. While the importance of low-energy design cannot be denied, design solutions are emerging that, in their obsession to confront one issue, ignore all the rest – a sort of environmental fundamentalism. It is only by emphasizing the broader implications of urban form at all its levels of resolution and the complexity and longevity of urban tissues that this danger can be avoided. As the first President of ISUF wrote, 'ISUF's interdisciplinary focus stresses the importance of interrelating scholarly endeavour and professional intervention, playing one against the other to provide a body of knowledge which is at once relevant to contemporary social issues and useful for professional practice' (Moudon, 1999).

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Ninth International Conference on Urban History

The Ninth International Conference on Urban History, with the theme 'Comparative history of European cities', will take place in Lyon, France, from 27 to 30 August 2008.

It will be a large, multi-disciplinary meeting, with 56 sessions being planned. Many of these have the potential to interest urban morphologists.

Further details can be found on the conference website (http://eauh.ish-lyon.cnrs.fr/) and the organizers can be contacted by e-mail at eauh@ish-lyon.cnrs.fr