VIEWPOINTS

Discussion of topical issues
in urban morphology

Informing and forming practice: the imperative of urban morphology

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Concern has increased over recent years about the weak relationship between urban morphological research and practice, particularly in planning and design (McGlynn and Samuels, 2000; Oliveira and Sousa, 2012; Samuels, 2008; Whitehand, 2007, 2012). This results in no small way from what Whitehand identifies as the lack of a common theoretical framework and language which, in turn, reflects the absence of 'a widely acknowledged set of terms and principles pertaining to the composition of urban form' (Whitehand, 2012, p. 60). The need for an acceptable, common, comprehensible and usable language has also been raised by others (Barke, 2012; Kropf, 2011; Marat-Mendes, 2011). Whilst there are noteworthy examples of the implementation of urban morphology in practice – for example in Porto (Oliveira, 2006), Stratford-on-Avon District Council (2001) and Chelmsford (Hall, 2008) – without a common language and methodological framework for application it is likely that urban morphology will be ignored by the majority of practitioners, who currently fail to see it as imperative for better urbanism.

Imperative? Yes, for although urban morphology is fundamentally concerned with the what, how and why of the constitution of the urban fabric, there is little or no knowledge of this essential reality among practitioners of urbanism, due primarily to poor professional training – notably in the UK (Larkham, 2005). Yes again, for empirically the evidence from across the globe of extensive incoherence in the form of the urban fabric is unequivocal. It is most apparent in urban development since the advent of the automobile (see, for example, Krier, 1998; Rogers and Gumuchdjian, 1997; Scheer, 2005), and it is planners and architects along with infrastructure engineers and policy makers who are primarily responsible (Hall and Doe, 2000; Kropf, 2005). Yes yet again, because those who might see themselves as part of a new breed of enlightened urbanists equipped to provide 'solutions' to such problems, ironically can unwittingly engender an intellectual and methodological hazard to the morphological integrity of the urban fabric.

Paucity of understanding amongst the professions: a UK example

Consider, for instance, the misapprehension by David Rudlin and Nicholas Falk (2009) of the figure-ground map illustrating part of the UK town of Barnsley presented in their revised edition of *Sustainable urban neighbourhoods*. In a single-minded concern for urban densification in and around the core, they advocate the infilling of a clearly legible urban fringe belt which they dismiss as an 'ill-defined space that separates [the core] from surrounding residential areas' (p. 22). Moreover, in order to bolster their misplaced dissatisfaction with this urban structure, they cite internationally renowned architects and urban designers, Llewelyn-Davies (no reference given), describing this historically important urban phenomenon as a 'shatter zone' where considerable capacity exists for new development.

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Particularly disturbing is the fact that all of the experts involved in this instance are experienced urbanists with considerable influence on strategic thinking in the UK, not least Llewelyn-Davies who is responsible for two sets of urban design guidelines (2000 and 2008) produced for English Partnerships. There is little or no evidence here of either comprehension of what constitutes urban form or a sense of enquiry into the historical development or cultural meaning concerned – in this case regarding the integrity of a fringe belt as an urban tissue or morphological region or series of regions within the urban whole, not to mention a host of other diverse values (Hopkins, 2012; Moreira, 2012). Rather, there seems to be little other than a superficial graphic reading of a figure-ground town plan.

Such manifest ignorance of urban form among practitioners highlights the need for an education strategy. Whilst this can be effected through formal college education, pragmatically perhaps it can most immediately be achieved amongst practising professionals by providing a language and working examples relating to a methodological framework and guidance. The selected examples must be meaningful, relevant and usable in urban planning and design, and attractively presented. Moreover, rather than attempting to convey a comprehensive urban morphology, it might be wiser to adopt a step-by-step approach. For the sake of simplicity in initiation as well as intellectual and methodological accessibility, arguably it is the physical constitution of the urban fabric, with its tangibility, visibility and persistence, which should be the initial basis for a practical morphological method (compared to, say, land use and process – see Conzen, 2004; Kropf, 2009; McGlynn and Samuels, 2000). The physical aspects are most readily communicated by using the immediacy of expressive graphics that can be powerfully appealing and comprehensible to those professionals who can most benefit, particularly designers, while also being fundamental in the presentation of ideas to the public. This is not to deny the complexity of urbanism in terms of politics, economics and culture or, indeed, of a broadly scoped urban morphology to which the practitioner can be led in due course.

Methodological framework and exemplary case studies

Policies and objectives in planning and design need to be underpinned by the fundamental principles of urban form, understood as a physical hierarchical system of interrelated and interdependent levels, but also involve the application of a morphological framework. One possibility of attracting and convincing practising professionals would be through a selection of worked case studies and plans that would both demonstrate the utility and adaptability of urban morphology and contribute to the development of a methodological framework. The latter could comprise, for instance, a set of key morphological factors that influence the initiation and development of urban settlement but are also drawn from certain established urban theories (McCormack, 2010a, 2010b, 2010c). Accordingly, it would be solidly grounded on conventional plan-based analysis of urban form, including physiognomic identity and plans with the 'stamp of their own period of origin' (Conzen, 2004, p. 9) as well as topography and transportation infrastructure. It would also embrace such pragmatic concepts of urban form as the rural-to-urban transect. Moreover, a morphological framework of this kind should open up the three-dimensional reading of urban form, comprising the structured approach of Lynch (1960) or Cullen's (1961) three-dimensional and sequential townscape and urban character, which in turn might reflect other ways of determining urban structure through movement, such as space syntax (Hillier and Hanson, 1984) or broader cognitive environmental perception theories (for example, Appleton, 1975; Kaplan and Kaplan, 1982). This can be packaged as a tool kit used to structure the processes of analysis, description, planning and design. In support, a meaningful language must be produced that conceptually corresponds to and articulates the tool kit.

To convince the planning and design professions of the value of urban morphology in practice, it will be necessary to establish its relevance to the whole urban landscape. This would include urban areas which would be deemed ordinary and of limited cultural concern, such as contemporary 'placeless' mixed-use suburban development – not least the coarse-textured plot series or messy 'strip' (Scheer 2005) of big box pavilion buildings clustered or strung out amidst fine-textured residential areas along roads connecting urban settlements to their rural hinterland. Ironically, this all-too-typical urban phenomenon can afford a valuable opportunity to demonstrate the power of urban morphology to produce coherent form regarding both greenfield development and retrofitting of the urban fabric. Take, for example, the Versailles Pavilion type investigated and illustrated by Castex *et al.* (1980) (see also Moudon, 1994), comprising a series of grand detached houses rhythmically forming a landscaped boulevard plot series. Such historical precedent can be used to challenge and stimulate planners and designers to seek imaginative new solutions, or at least variations of such morphological characteristics as plot series configurations, building-to-plot arrangement, building heights, setbacks, frontages, on-site car parking and street design. Similarly, contemporary urban exemplars would be useful not only in themselves, but could strategically allay fears amongst design professionals of urban morphology being relevant only to urban conservation or its being unnecessarily adopted by over-conservative planners to demand traditional form types. Thus, the use of precedents may involve typomorphology, as guidance to solving typical problems, not unlike the patterns of Alexander *et al.* (1977), by interpreting these exemplars through urban morphology in the parlance of contemporary urbanism.

Conclusion

Would one permit a 'mechanic' without a sound grasp of the physical and systematic constitution of automobiles to work on one's car? No, so why the tolerance of similarly ignorant practitioners regarding urbanism? Unless planning policies and objectives are explicitly underpinned by an urban morphology judiciously honed for ease of understanding, use and application, and until urban designers, architects and landscape architects begin to see the creative opportunities presented by a proper understanding of urban form, it is likely that we shall continue to suffer not only the loss of cultural meaning in older areas, but also a perpetuation of incoherence of form in urban settlement generally. Aspects on which knowledge and skills in urban morphology are required include urban conservation, urban expansion and urban retrofitting, especially in relation to the ubiquitous amorphous suburbs. But whilst prescriptive codes and traditionalist guidelines may appeal to planners for controlling change in the urban fabric, urban morphology must, rather, be seen to be the powerful driver of meaningful and coherent urban form-making that it is for all parts of the urban fabric, whether drawing from historical or contemporary models.

To this end, there is an urgent need to develop a language and conceptual frameworks that incorporate the fundamentals of urban morphology, providing a tool kit for practical application, as well as guidelines for inspiration through examples drawn from the past and present. This must be attractively packaged and involve integrated graphic analysis and expression. As is evident in this issue of *Urban Morphology*, ISUF has wisely established a Task Force dedicated to investigating the problem of urban morphology in practice, with a key objective being the identification of ways of broadening the understanding and application of the discipline amongst practising professionals and indicating how these processes might be facilitated. If urban morphologists really want their work and concepts to make a difference to the practical world, it is necessary to ensure research generally and conceptual frameworks in particular demonstrate how that difference can in fact be made. Without this, much of their work might be seen to be incestuously closeted and unusable in practice, and there will probably be little or no conversion of the relevant professionals.

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The master plan is dead: long live urban morphology

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The master plan is dead. Or so declared participants in ISUF’s recent conference in Delft. Perhaps it is premature to declare it so, but it is clear that large-scale master plans have fallen out of favour in places where resources have become ever tighter and uncertainty rules. Maybe it will be barely-surviving theme parks like City Center project in Las Vegas ($8.5 billion) that will eventually signal the death knell of gigantic, destructive, and finance-intensive urban projects. Big transformative plans never really made much sense anyway, requiring devotion to a single vision carried out at great expense in a short time (Gregor, 2012). Only in China, where large cities can rise from scratch because of the existence of resources, absolute control and desperate demand, is the big master development plan relevant any more, and even there it may be a bad idea.

And if it is the end of master planning – brought on by limited resources, dispersed and democratic control, the need for sustainability, and the emergence of a post-know-it-all world – then what takes its place in practice is utterly dependent on urban morphology.