
Urban morphological regions, plan units and terminological exactitude

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Oliveira and Yaygin's (2020) recent exploration of the development of, and prospects for, the use of urban morphological regions in the analysis of the physical form of towns provides a wide-ranging review of research in this area over the past half century. One of their four key 'aspects' for progress in this type of research is terminological exactitude. Unfortunately, they fall immediately into a trap of their own making by fusing two different Conzenian terms into one, suggesting that 'morphological region' and 'plan unit' are the same thing, as are the use of terms such as 'townscape unit' or 'urban character areas' by other researchers. I would contend that Conzen understood two somewhat different divisions of the physical entity of a town in using morphological region and plan unit but failed to provide sufficient definitions to explain that difference, which is essentially one of scale. I would concur with Oliveira and Yaygin that research over the past thirty years has led to confusion rather than clarity.

My own contention is that both 'morphological region' and 'plan unit' are useful terms in advancing our understanding of urban form and that they should not be confused or conflated. The devising of the smaller module, the plan unit, is the building block for the larger morphological region. Thus, in Alnwick, Conzen discerns six morphological regions: the 'old town' core; the inner fringe belt; nineteenth-century housing integuments; the middle fringe belt; twentieth-century housing integuments; and an incipient outer fringe belt (Conzen, 1969, Figure 21 'first order' boundaries), which he then divides into 134 plan units. This basic analytical framework would be valid for most smaller towns in the UK and, with some minor variations, for similar small towns across Europe. Similar analysis of the larger morphological regions could provide a basis for wide-ranging comparative studies which could be done descriptively or mathematically, since the large size of the regions enables rapid measurement to be undertaken. However, this is too simplistic a framework for more detailed research in town-plan analysis

where plan units provide a finer grain, as some of Conzen's later published work demonstrates (Conzen 1962).

For research which aims to delve deeper into the historico-geographical development of towns and cities it therefore becomes necessary to divide these broad morphological regions into their constituent plan-units. Conzen provided a concise definition of a plan unit (Conzen, 1969, p. 128) but, as Oliveira and Yaygin correctly point out, a rather less concise methodology for creating them. It was this that prompted Baker and Slater (1992) to provide a detailed methodology for creating plan-units in medieval towns using the example of Worcester. Unfortunately, we added to the terminological confusion by titling the chapter 'Morphological regions in English medieval towns', though it was concerned almost exclusively with plan-units. In limiting this study to the medieval period, we left room for similar methodologies to be developed for later periods of urban history and different socio-cultural backgrounds, through to the present, but this has not yet been developed.

Thus far we have only covered the town plan, which most researchers concur to be the basic building block of more complex analyses which take into account the third dimension of buildings and the uses to which those buildings are put. It is the combination of the three that provides a measure of the townscape character – and that gives us 'character areas'. These, too, can be constructed to varying scales and varying levels of complexity; research leading to a conservation planning document for a local authority, for example, would need to be on a much simpler level of sophistication than an academic analysis of a distinctive part of a town. The example of a conservation planning report also provides the reason for the use of a different terminology since 'character area' is an accepted term in local authority conservation plans, at least in the UK.

Morphological regions are the physical expression of 'morphological periods', and here Conzen provides both a definition (Conzen, 1969, p. 127)

and a worked set of examples in his paper on ‘The morphology of towns in Britain during the industrial era’ (Conzen 1981, originally published in German in 1978) where he pays particular attention to working-class housing forms and plans. Thus, for example, most British industrial cities are ringed with a distinctive belt of ‘bye-law housing’ constructed over the period 1875–1914. The built form is almost identical everywhere because national public health and housing legislation in 1875–80 set new minimum standards for house builders, whilst the outbreak of the First World War brought an end to house building for a decade. In British cities, therefore, this is a distinctive morphological period resulting in distinctive morphological regions of terraced, two-storey houses with back projections, built along grids of streets of uniform width, usually with narrow back alleys giving access to the back yards/gardens of the houses. These morphological regions are mostly still extant in the majority of cities and can therefore easily be compared through cartographic analysis, field evidence and the like.

A case study where more complex transformations have taken place over time would be to

examine the previous morphological period in British working-class housing, which in most places would encompass the period from 1770–1875. In this period house forms and housing plans were distinctively different in each major city; places such as Birmingham, Hull, Liverpool, Leeds, and Newcastle-upon-Tyne were characterised by, respectively: the back-to-back courtyard, the open-front courtyard, the court-and-cellar, the back-to-back terrace, and the ‘Tyneside flat’ (Muthesius, 1982). In most cities the housing in these morphological regions was swept away in the period 1950–70 through local authority slum clearance policies. Nonetheless, the morphological region often survived with almost exactly the same boundaries but with different built forms consisting of Scandinavian-style terraces and quadrangles, tower blocks of flats and extensive landscaped settings, all in local authority ownership. This is certainly so in Birmingham, where the five inner-city slum-clearance areas of the 1950s are immediately apparent in today’s townscape (Cherry, 1994, pp. 168–91) and some are in process of undergoing a second transformation as tower blocks are demolished and local authority-owned property



Figure 1. Part of the morphological region of Back Bay, Boston, designed by Arthur Gilman and developed in the second half of the nineteenth century. Five east-west streets are parallel to the Charles River, the linear parkway of Commonwealth Avenue at their centre. Eight north-south streets at regular intervals form the grid. It was designed as, and to some extent remains, a high-status residential district of four/five-storey ‘brownstone’ mansions (source: T. R. Slater).

is transferred to private owners. These sorts of city-wide transformative processes can be easily mapped, as Michael Conzen shows in his study of Omaha (1990), and can act as the initial framework for burrowing down to the detailed level of plan units to examine those processes in more detail at the local level of platting evolution and plot development through time. Michael Conzen's study is a comparative one, putting Omaha as a contrast to Boston but here, too, an initial view demonstrates clear historic-geographical morphological regions – distinctive areas of the town plan developed at a particular time – perhaps most clearly exemplified by the Back Bay area (Figure 1).

Oliveira and Yaygin have performed a useful service by drawing together much of the literature on the regionalisation of urban form. However, there is a need to make clear the difference between broad-based studies based on 'morphological regions' and their connection to 'morphological periods', and more fine-grained studies of small towns or parts of larger towns and cities where discerning 'plan-units' form a more satisfactory methodology.

References

- Baker, N. J. and Slater, T. R. (1992) 'Morphological regions in English medieval towns', in Whitehand, J. W. R. and Larkham, P. J. (eds) *Urban landscapes: international perspectives* (Routledge, London) 43–68.
- Cherry, G. E. (1994) *Birmingham. A study in geography, history and planning* (Wiley, Chichester).
- Conzen, M. P. (1990) 'Town-plan analysis in an American setting: cadastral processes in Boston and Omaha, 1630–1930', in Slater, T. R. (ed.) *The built form of Western cities. Essays for M. R. G. Conzen on the occasion of his eightieth birthday* (Leicester University Press, Leicester) 110–42.
- Conzen, M.R.G. (1962) 'The plan analysis of an English city centre', in Norborg, K. (ed.) *Proceedings of the IGU symposium in urban geography, Lund 1960* (University of Lund, Lund) 383–414.
- Conzen, M. R. G. (1969) *Alnwick, Northumberland: a study in town-plan analysis* 2nd edition Institute of British Geographers Publication 27 (Institute of British Geographers, London).
- Conzen, M. R. G. (1981) 'The morphology of towns in Britain during the industrial era', in Whitehand, J. W. R. (ed.) *The urban landscape: historical development and management. Papers by M. R. G. Conzen* Institute of British Geographers Special Publication 13 (Academic Press, London) 87–126.
- Muthesius, S. (1982) *The English terraced house* (Yale University Press, New Haven).
- Oliveira, V. and Yaygin, M. A. (2020) 'The concept of the morphological region: developments and prospects', *Urban Morphology* 24, 35–52.