

design. A key point is that urban conservation strategies do not necessarily need to be based on the preservation of architectural units and built-up fabric. The underlying structure/pattern of the urban fabric provides a relevant reference for the regeneration of historical urban sites. As the authors state in their introduction, 'with such knowledge, we will be able to understand our cities better and guide their development accordingly'.

References

- Marshall, S. (2009) *Cities, design and evolution* (Routledge, London).
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The genealogy of cities by Charles P. Graves, Jr. Kent State University Press, Kent, Ohio, USA, 2008, 367 pp., with CD containing 1000 downloadable city plans. ISBN 978-0-87338-939-6.

The genealogy of cities is an urban designer's A–Z reference atlas of 226 city ground plans from various parts of the world, shown at often random points in their growth history to illustrate different visual patterns of street systems and built-up areas. The plans are severely simplified in order to be represented by four different styles of figure-ground drawings, and are shown at many different scales so the plans can fill the page. A compact disk accompanying the book contains digital files of these and others to offer 1000 urban plans overall in downloadable format.

The book's title is misleading, because it would seem to promise a genetically-based classification of urban ground plans. In fact, the classification is of a historical parade of plan features and partial characteristics from different periods that can be found embedded in the ground plans of many cities. It is certainly not a classification of individual urban ground plans in all their composite historical complexity. Thus, particular cities are included

because they contain – and have been chosen to illustrate – one, and only one, plan feature across the entire classification scheme. (For example, the ground plan of Como, Italy, is classified as typical of a plan type Charles Graves terms 'Medieval on early fabric', but it could equally well demonstrate two others he has defined: the 'Roman colonial' or the 'Grid expansion' type.) So, 'genealogy' here is simply a loose metaphor for a range of plan features that have appeared in the historical development of urban planning practice.

The key purpose of the work, however, is to provide inspirational examples of different plan configurations – past and present, real and contemplated – for graphic training and urban design projects. To the extent that figure-ground cartography fulfills such a goal, the book's appeal would seem to be great. The mapping technique, while it has lost ground in architectural work to three-dimensional computer visualizations, remains useful in urban design courses as a graphic discipline. Graves seeks to enhance its utility by investing it with interpretive value, and this possibility, given the sheer abundance of city plans collected here and their great historical and geographical sweep, prompts the question whether the work might also serve as a plan source for comparative work in urban morphology.

The heart of the book is a large collection of city ground plans, one per page, arranged alphabetically, and assigned a significance related to one of 28 plan features considered important in the history of urban design worldwide. These features are discussed briefly in a preceding expository chapter ('Historical typologies') that represents a forced march through more than 2 millennia of selected urban planning highlights. Examples of the typological categories are 'Early cities', 'Greek colonial', 'Islamic', 'Medieval new town', 'Renaissance ideal', 'Grid expansion graphed onto earlier fabric', 'Formal expansion', 'Company towns', 'Garden city', 'Early modern and Fascist new towns', 'New urbanism', and 'New modernism'. Given the space allotted to this (only 21 pages, with copious graphics) the choice of highlights, and therefore plan features identified, is understandably lean. For urban morphologists, however, many of the 'types' will appear problematical. For example, 'Medieval on early fabric', 'Medieval linear, spinal, or multiarms', 'Medieval circular or free growth', and 'Medieval new town' by no means exhaust, typify, or even accurately specify the various forms recognized in the morphogenetic analysis of medieval urban plans.

As to the towns and cities selected, European

and American cases are overwhelmingly favoured, and although early Asian and the Middle Eastern ones receive passing coverage – including examples of cities founded well before they were influenced by Western planning ideas – pre-Hispanic cities of Central and South America are completely absent. Cuzco (Peru), for example, the oldest continuously occupied city in the New World, with Inca fabric to this day shaping the plan of the central area, could well have justified a page in this book, even if it had to be at the expense of, say, Fairfield (Alabama).

In each section of the expository chapter, stylized icons serve to introduce each plan feature or type. In design they are overly elaborate and some too close in visual texture to be quickly distinguished. The icons then appear all together along the bottom margin of every plan page, with the relevant classification highlighted. The plan pages also contain thumbnail sketches, printed in red, showing the mere outline of the larger plan on the page, and it is only these little sketches that are drawn to a standard scale throughout the A–Z section. There are also minute directional indicators showing how far the plan has been rotated from the convention of ‘north up’ to fit the page. The large plans are rendered in one of four figure-ground drawing styles: (1) city block as aggregate mass; (2) blocks with plots outlined; (3) collective building footprints with some plot lines within open space; and (4) collective building footprints with public-civic buildings shown by interior layout (so-called Nolli plans, after Giambattista Nolli’s 1748 plan of Rome). The reason behind these four styles is not explained, although the choice is presumably dictated by the limitations of the original cartography.

This brings us to map sources. Graves found maps mostly reproduced in well-known secondary sources and travel guides, including, for example, the simple tourist cartography of Karl Baedeker. He seems to have made no use of the splendidly detailed and highly accurate urban plans in the pan-European *Historic Towns Atlas* (1969–present) series.¹ His sources are summarized only in a general list, making it impossible to check the provenance of a particular city plan. The plans range widely in date, mostly from the sixteenth to the twentieth centuries, covering urban plans dating from the third century BCE to the near-present. The failure to provide individual source citations severely reduces the book’s scholarly value. For example, it strains credulity that the detailed plan of Venzone (Italy) dates from a document either produced in AD 1255 or showing the town at that

date, as stated (pp. 311, 363), since, among other things, the cathedral presented in modern outline in the plan was only begun in AD 1338.

Graves felt the plans had to be accurate, but there is no explanation how this was determined. He created from all such images new renderings, standardized to his four drawing styles for a welcome if limited degree of comparability. Since the main objective was to seek out and present a good variety of built environments across time and space, including places large and small, simple and complex, a uniform scale for these large plan sketches was not attempted. But since the work is ‘meant to help urban designers comprehend scale relationships at a city level’ (p. xi) this is a definite drawback, especially from the perspective of morphological analysis, since the tiny, same-scale, silhouette thumbnails are no compensation. Consequently, the plans appear in haphazard sequence, prisoners of the alphabet, with scale, degree and type of plan detail, date of pattern, and typological classification ricocheting back and forth from one page to the next like pin-balls. Considering the book’s claim to offer a ‘genealogy’ of cities, a genealogical progression would seem to have been the obvious basis for a sequence.

There is a short additional section (‘Typological icons representing city makeup’, pp. 324–39) which represents an idiosyncratic and irrelevant detour. It offers a new set of 33 completely different, unrelated (and fussy) graphic icons designed to express the author’s sense of recurrent patterns. These are purely morphographic, and not in any way historical. Examples include ‘circle’, ‘amoebic’, ‘object’, ‘morph’, ‘fingers’, ‘peninsula’, ‘processional circulation’, ‘scrambled’, and ‘designed urban seedbeds’(!). This so-called typology is then illustrated with city plans, one per icon/category, except for the ‘domino’ type, which for some reason is missing. Ironically, the 32 plans in this section – adding little if any value to the book conceptually – are printed at a standard scale! If that were possible here, why not throughout the main A–Z section?² A final component of the book is the Appendix, which lists the 1000 cities in the book and the CD and their historical-typological classifications (but not those of the ‘city makeup’ scheme).

Below the surface, the organization of the main historical typology is a complete mess. While there are ‘twenty-eight typological icons representing various periods in the history of urban design and planning. . . [that] allow the user to identify the plan’s historical period. . .’ (p. 1), only 27 distinct icons appear in the expository chapter. The chapter

presents 14 major rubrics (headings in red ink); 27 types and sub-types with icons attached; 2 types without icons; 4 types that share icons with other types (India & China; Fascist & modern city planning); and a 28th type implied by icon #15 ('Early New World urbanism or Late Renaissance') that is missing from the chapter but present in the icon strip printed on every A-Z plan page as well as in the Appendix. Furthermore, the identifying labels in the Appendix do not match those used in the section headings of the 'Historical typologies' chapter – some even carrying significantly different meanings (for example, icons for types 14: 'Colonial grid' and 16: 'Grid expansion' in the Appendix appear in the chapter discussion attached to 'New settlements') – creating further confusion. In addition, the typology's sequence (types 1-28), shown in that order in the icon strips and Appendix, does not match that in the expository chapter after the eleventh type (the sequence being 1-11, 13, 12, 17, 18, 21, 19, 20, 14, 16, 23, 22, 25, 24, 26, 27, 28, with 15 missing), for no apparent reason, complicating attempts to cross-reference cases.

Considering the very small amount of text in relation to graphic material, the frequency of editorial and typographical errors is unnerving. Examples include five typographical errors before reading beyond page 3, including misspellings of two authors' names; reversed captions for the plans of Como and Arezzo (p. 4), and for New York and Herrnhut (p. 15); erroneous dates for the 1858 plan of Como (given as 1950 on p. 4, and 1958 on pp. 128 and 347); an inaccurate name for the Society for the Diffusion of Useful Knowledge (twice on p. xiv); and, throughout the Appendix (pp. 342-65), on every page for type 24, the label 'Colonial expansion', which ought to be 'City Beautiful Movement'. Graphic errors can also be found throughout the work: the plan of Pietrasanta (Italy) is shown 'north up', whereas in reality the street grid runs at a 45° angle; the rowhouses of Pullman (Illinois) are shown as discontinuous clusters, whereas they are continuous within the city blocks. The book evidently took 9 years to mature; it is a

shame its final form betrays marks of hasty completion.

For students in urban design courses this book is no doubt of considerable value. It introduces something of a historical dimension into urban ground plan depiction all too often favouring abstract pattern over formative process. For urban morphologists, the partial standardization of numerous urban plans offers some access to cross-cultural comparative cartography on a quantitative basis hardly available before. Yet the lack of a common map scale is hugely frustrating, as is also the frequent inconsistencies between plans that show, for example, plot boundaries and those that do not. It is not clear the author made every effort to obtain the best plans available for certain cities, or chose cities wisely with maximum comparability in mind. Nevertheless, the historical typology offered, no matter how lean and debatable it may be in some critical details, offers a starting point for comparative study on an international scale. This book, with all its flaws, should spur others to improve upon it, especially with the more systematic needs of morphogenetic analysis in mind.

Notes

1. *Historic Towns Atlas* (1969-present) series. Complete listing of town plan publications at <http://www.wien.gv.at/kultur/archiv/kooperationen/lbi/staedteatlas/bibliographie/index.html>
2. A recent book that provides just such a collection is Eric J. Jenkins (2008) *To scale: one hundred urban plans* (Routledge, New York), reviewed in vol. 13 (2) of this journal.

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The study of urban form in Poland
