Urban Morphology the Kropf Way (Review)

The Handbook of Morphology, by Karl Kropf, 2017, John Wiley & Son

õThe built environment is a design resource ó a library of mind toolsö (p220).

Urban morphology in its most general sense ó as the study of urban form ó has a broad constituency from scholarly historical cartography to GIS, and cropping up in urban design site analyses and compact city policies. Karl Kropføs *Handbook of Morphology* brings this constituency together in a single authoritative volume. This is a welcome work of cumulative wisdom: much more than a -handbookøin a narrow sense, it weaves together many of Kropføs painstakingly assembled theoretical ideas, with demonstrations of methods and applications to practice. The result is a visual as well as intellectual feast, packed with maps, diagrams, figure grounds and cadastral plans, copiously illustrated in colour, articulating all manner of morphological, morphographic and morphogenetic food for thought.

The book has a three part structure: principles, methods and applications. The first part introduces various different approaches to morphology, weaving in some of Kropføs multi-level diagrams that have appeared elsewhere, but now brought together in a single narrative. The second and largest part ó half the book ó comprises a set of analytic techniques; while the final part demonstrates applications, drawing from a range of sources in addition to those advanced in the preceding part of the book.

The book perhaps fully finds its métier in Chapter 4, where Kropf launches into an interpretation of morphological elements from first principles. This chapter features a useful succession of graphics which pack in a wealth of embodied morphological knowledge. This articulates the multi-scale generic structure of the urban fabric, extending from streets through plots and buildings down to rooms, the solids and voids expressed diagrammatically and cross-referenced to maps and cross-sections. This ten page chapter on its own is a distinctive and compelling contribution, of value for any morphologist.

While the *Handbook* provides a useful overview of techniques, it is not always clear if the text is primarily a description of procedures that morphologists already typically do, or is intended as an actual step by step guide to be followed by the reader. That said, while the book will not always be read from end to an end, it is a tribute to its readability that many will be happy to do so even if they have no intention of doing all the analyses. Another curious ó albeit minor ó effect is that the text generally avoids naming proprietary analytic software, which tends to make the text seem a bit generic, perhaps in places diluting the narrative¢ otherwise real-world ring. This is understandable, but it also draws attention to the possibility that the choice of morphological tools and methods could in practice be driven by the software available ó choices perhaps already pre-empted within menus and toolbars ó which might diminish the incentive for these to be spelled out on the printed page. Indeed, the seemingly irresistible connection with software also raises questions for all academic morphologists, in terms of the limitations of theories if divorced from the software actually used by practitioners.

Overall, the *Handbook* is a masterful blend of Kropføs original insights, practical advice and demonstrations of existing morphological studies. While Chapter 4 is perhaps quintessentially Kropfian, in its combination of intellectual abstraction, definitive articulation and practical demonstration, by the time the *Handbook* gets to desktop analysis, it reads a bit more like a generic textbook. In a sense, in the interests of being comprehensive or eclectic, the book by its end becomes more a collage of demonstrations than a conclusively Kropfian enterprise. This is of course the authorøs prerogative ó and serves to provide a more representative snapshot of the field than would otherwise be the case ó but one cannot help imagining what a more exclusively Kropfian approach might look like, worked through the entire morphological compass of the book.

As it is, the *Handbook of Morphology* is surely set to be a classic work for every morphological bookshelf. As a general treatment of urban morphology, each part of the book is useful in its own way, providing a very welcome introduction ó and enticement ó to the field. For the academic morphologist already familiar with the gist of Parts 2 and 3, Part 1¢ assemblage of an extended sequence of Kropf¢ ideas could well be the main draw. For the practitioner wishing to actually do morphological analysis, the book should provide an enduring source of ideas, techniques and exemplars ó a -library of mind tools¢ indeed.

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