



VIEWPOINTS

Discussion of topical issues
in urban morphology

From Alnwick to China: M. R. G. Conzen's classic study in Chinese

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A half-century after its publication, M. R. G. Conzen's classic study *Alnwick Northumberland: a study in town-plan analysis* (1960) has been translated into Chinese (Song *et al.*, 2011). This follows a number of studies in recent years exploring the applicability of Conzenian methods in China (Chen, 2008; Whitehand and Gu, 2007; Whitehand *et al.*, 2011a, 2011b). It is testimony to the significance of these methods far beyond the European towns and cities to which they were originally applied (Conzen, 2004).

The study of Alnwick is in some ways an embodiment of two aspects of Conzen's early experience: his training as a cultural geographer in Germany in the late 1920s and early 1930s and his service as a practising planner in England in the late 1930s. Focusing on the physical structure of urban space, Conzen applied his historico-geographical perspective to deciphering the accumulations of forms produced by many generations of builders, planners and ordinary people. But his approach lacked resonance in China until recently. As early as the 1960s copies of *Alnwick* were available in China, and in the 1980s several related publications (Conzen, 1981; Whitehand, 1987) became available to Chinese researchers. However, before the formal introduction of Conzenian urban morphology in Chinese publications (Gu, 2001), the Conzenian school received little attention in China judging by citations in journals and searches in CNKI (Chinese

National Knowledge Infrastructure, www.cnki.net), the authoritative database of academic journals in China.

Until the 1980s there was little systematic research in historical urban geography in China (Whitehand and Gu, 2006). Key-word searches (for example, for 'urban landscape' and 'townscape') in CNKI from 1911 to the present, yield only one paper in geographical journals before 2000 and eight after. There are more papers in journals of architecture and urban planning. The gap between the research-based geographical discipline and practice-oriented architecture and urban planning is greater in China than in the West.

The growth of interest in the Conzenian school has been particularly evident since 2001, mostly within architecture and urban planning. This may well reflect concern among architects and planners about the loss of the identity of Chinese cities. This concern was awakened by the widespread destruction of historical features during the Cultural Revolution, and led to the enactment of various planning laws and the publication of a List of Precious Chinese Historical Cities since the 1980s (Whitehand and Gu, 2006). However, historical areas in many cities are undergoing redevelopment or so called 'regeneration' even if they appear on the List of Precious Historical Cities: a situation much more serious than that to which Conzen (1981) drew attention in Britain.

Against this background, Conzen's stress on the

educational and intellectual value of the urban landscape as an 'objectivation of the spirit' of the succession of societies that inhabits it (Whitehand and Gu, 2007) is fundamental. Unfortunately in China this perspective has hitherto been slow to take hold in the face of economic priorities – in the case of historical cities, particularly priorities related to tourism. A historico-geographical perspective is needed which emphasizes sequences and periodicities in historical development (Whitehand, 1994), based on a sound framework of philosophy and methodology (Larkham and Morton, 2011; Whitehand *et al.*, 2011b). Thus the historico-geographical methods elaborated by Conzen in the Chinese translation of *Alnwick* are especially welcome.

Chinese readers will be attracted by the book's integrated cartographic expression. They will also be impressed by the remarkable range of research resources available in the small town of Alnwick. Associated with political and cosmological beliefs, Chinese ancient city maps are artistic and symbolic. They contain very limited planimetric information (Whitehand and Gu, 2006). For most cities there were no accurate maps until the twentieth century. Also there are few historical tax and court records, and little cadastral and rental information, mainly due to political upheavals. The availability of *Alnwick* in Chinese may spur local scholars to make progress in two respects: first, the exploration of approaches to tracing earlier townscapes using limited historical data, such as focusing on extant features in the ground plan; secondly, creating a climate in which the authorities show greater willingness to make available to researchers those sources of information that do exist.

The conceptualization of the townscape and theory building are exceptional features of *Alnwick*. Conzen achieved this by articulating Alnwick's historical trajectory. The concepts he developed should be congenial to Chinese researchers working in various disciplines. They provide the basis for comparative research across different culture areas. Some, such as fixation lines, morphological frames, and fringe belts, have a clear resonance in China. Hundreds of Chinese cities have, or have had, walls and moats. As demonstrated by Whitehand (1994, 2009), fringe belts have been shaped not only by fixation lines such as city walls and natural barriers, but also by the uneven nature of urban growth, particularly related to economic cycles. Many political-economic periods in China have similarly left their footprints. Fringe-belt theory also connects urban amenity to development cycles (Conzen, 2009). Fringe belts provide both

ecological and heritage benefits that need to receive attention in China.

In *Alnwick*, Conzen explored the relationship between urban form and the agents of change operating in various periods, and this was subsequently developed further by himself and the Conzenian school (Whitehand, 1988). During recent Chinese history there have emerged various agents and forces characteristic of particular periods. In the 1950s, a traditional tenure system was replaced by state or collective ownership, and over several decades *danweis* (work units) became characteristic. The morphological aspects of these changes are still to be fully investigated in China in a way that builds on Conzen's investigations in England.

Painstaking descriptive and analytical work is a striking aspect of Conzen's study of Alnwick and such an approach is essential if the morphological characteristics of different periods are to be understood and if urban design is to mature in China (Moudon, 1992). Furthermore, both indigenous and imported planning theories have left footprints in Chinese city form that can be explicated using Conzen's methods.

To sum up, the translation of *Alnwick* will provide Chinese scholars with a platform from which to comprehend and communicate with the Conzenian school. In the era of the Internet, Historical GIS and WebGIS, Koster (2006) has indicated technical developments that can build on the sort of data that Conzen has provided for Alnwick. These developments can both further extend the life of his classic study, and bring to light new knowledge (Hillier, 2010). Conzen has set in train a range of developments that he could scarcely have imagined when he was working half a century ago.

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Urban morphology in higher education

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Urban morphology is an interdisciplinary field. This key characteristic has both advantages and disadvantages. One of the disadvantages is the difficulty of providing a sound urban morphological education. There is a lack of degree courses in urban morphology. Furthermore, where urban morphology appears within degree courses in other disciplines its role tends to be minor. While many reviews of urban morphological research have been produced over the years, systematic reviews of urban morphological education have been few (for some notable exceptions see Moudon, 1995, and Larkham, 2001, 2003). It may therefore be of interest to describe recent developments in Portugal.

Higher education institutions in Portugal are structured according to four different groups: public institutions (including universities and polytechnics), private institutions (including universities and polytechnics), concordat/religious institutions, and

military/police institutions. In total, the four groups include 135 institutions. A recent review involved an analysis of all these institutions mainly based on their curricula.

The first stage was the identification of the curricula that effectively incorporate the study of urban form. It was found that the study of urban form is being promoted in ten Portuguese institutions. These include public and private universities, but not polytechnics. Urban morphology seems to be more integrated within public universities' curricula. As expected, this integration is confined to faculties and departments of architecture, geography, planning and engineering (in this order of importance).

Eight of the fifteen public universities in the country have courses that include the study of urban form. Three factors underlie these findings. The first is the geographical location of universities. Universities along the Portuguese coastline

(Minho, Porto, Aveiro, Coimbra, and the four universities in the capital city, Lisbon) tend to better integrate morphological aspects in their curricula than universities located in the interior of the country (Trás-os-Montes e Alto Douro, Beira Interior and Évora) and on the islands of the Azores and Madeira. The only exception is the University of Algarve, which is also located on the coastline. The second factor is the size of the university expressed by the number of students (these universities have between 3000 and 30 000 students). Larger universities seem to incorporate morphological aspects in their curricula more readily than smaller ones, the exception being Lisbon University Institute. The last factor is the diversity of a university's subject coverage as expressed in its different faculties and schools. Universities with more faculties tend to integrate morphological aspects more satisfactorily in their curricula, though again there are exceptions: the University of Aveiro and Lisbon University Institute.

In broad terms, eight institutions do incorporate urban morphological theories, concepts and methods at some stage. Nevertheless, a fundamental weakness in all these institutions is that urban morphology is introduced at some time in the course but it does not follow a sound, continuous line through the whole curriculum. The specific content of the urban morphological component varies according to institution, though common aspects can be identified. One of these is the persistence of some 'urban morphological classics'. While in architectural curricula the main references seem to be Lynch (1960), Cullen (1961) and Rossi (1966), in geographical curricula urban morphology is represented in the urban geography textbooks of Carter (1972) and Pacione (2001).

One of the most interesting examples is the University of Porto, the largest university in the country. It includes 13 faculties, one institute and one business school; it offers almost 300 degree courses and it has more than 30 000 students. Urban morphology is taught in three different faculties of this university: architecture (FAUP); arts, in the department of geography (FLUP); and engineering, in the department of civil engineering, where it is part of planning (FEUP).

The Master's Degree in Architecture in FAUP is structured in 5 years. The whole curriculum, in English, can be accessed at http://sigarra.up.pt/faup_uk/PLANOS_ESTUDOS_GERAL.FORMVIEW?p_Pe=5. The city is introduced to students in the first year in a practical class, 'Architectural Design I'. Despite the continuity of this class

throughout the degree, it lacks a focus on the city, as a whole, until the last year. Instead, in the second, third, and fourth years, students approach the city in three theoretical classes – 'Geography II' (in the second year), 'Urban Planning I' (in the third year), and 'Urban Planning II' (in the fourth year). Only in the fifth year of the degree does the city become a really major concern. This is notably expressed in two disciplines, 'Architectural Design V' and 'Territory and Urban Form'. As in most architectural schools, FAUP has a clear focus on buildings. Even when the city is considered, lecturers and students tend to place most emphasis on the analysis, and particularly the design, of buildings, and not on streets and plots.

FLUP's Department of Geography offers a Bachelor's Degree in Geography, structured in three years. The whole curriculum, in English, can be accessed at http://sigarra.up.pt/flup_uk/PLANOS_ESTUDOS_GERAL.FORMVIEW?p_Pe=725. The city, in its morphological dimension, is introduced to students in the first year, in the discipline of 'Cartography'. In contrast to FAUP, in FLUP, the second year – particularly the discipline of 'Urban Geography' – provides the richest experience in morphological terms. From an urban morphological point of view the course ends, as it begins, with the discipline of cartography providing the most valuable insights on urban form. As in FAUP, FLUP's mainstream perspective on the city is framed by the specific contents of geography.

Urban morphological theories, concepts and methods can be found in some degrees offered by faculties and departments of Portuguese institutions of higher education. Nevertheless, even in the most interesting cases, such as the University of Porto, these morphological theories, concepts and methods have a 'marginal' role in the approaches promoted by each particular faculty and department.

Efforts should be made not only to integrate urban morphology in the curricula of Portuguese institutions where it does not exist, but also to promote more interdisciplinary perspectives and less disciplinary ones (architectural, geographical and planning) in those curricula where urban morphology already exists.

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ISUF 2014: Our common future in urban morphology



The historic core of Porto and the D. Luis I bridge over the Douro River (photograph by Vítor Oliveira).

The Twenty-First International Seminar on Urban Form (ISUF2014) hosted by the Faculty of Engineering of the University of Porto, will take place in Porto, Portugal, from 3 to 6 July 2014. The theme of the conference is 'Our common future in urban morphology' and topics to be covered include:

- Urban morphological theory
- Urban morphological methods and techniques
- The evolution of urban form
- Agents of change
- Revisiting urban morphological classics
- Multidisciplinarity in urban morphology
- Comparative studies of urban form
- Integrated approaches
- Teaching urban form
- The relations between research and practice (planning, regeneration, conservation)

The organizers and the Council of ISUF invite participation in the Conference by interested academics and professionals. Abstracts of

proposed papers should be submitted by 31 January 2014. Authors will be notified whether their paper has been accepted by 28 February 2014. The deadline for registration and fee payment is 31 May 2014. A conference website providing more detailed information will be launched shortly.

Post-conference excursions will take place in Lisbon (including the Monastery of the Hieronymites and the Tower of Belém), the historic centre of Guimarães, and the Alto Douro wine region. All these places are represented in the World Heritage List.

The Conference Organizing Committee comprises Vítor Oliveira (University of Porto), Paulo Pinho (University of Porto), Fernando Brandão Alves (University of Porto), Michael Conzen (University of Chicago), Jorge Correia (University of Minho), Mário Fernandes (University of Porto), Kai Gu (University of Auckland), Teresa Marat-Mendes (Lisbon University Institute), Nuno Pinto (University of Coimbra) and Jeremy Whitehand (University of Birmingham).