

Mobility and the Transformation of Built Form

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The social sciences deal with a variety of material or immaterial, fixed or moving, enduring or ephemeral phenomena.¹ Among these phenomena, buildings and urban form are intuitively and generally considered as material, fixed and enduring entities. They are also often seen as having been produced by local forces, materials and resources. The regional, the traditional and indigenous – the ‘location’ within these forms – have long been favoured compared to the seemingly anonymous processes of internationalisation and globalisation (Canizaro 2006).

This book proposes to look at buildings and urban form from a different perspective by investigating how they are, both today and in the past, constituted and shaped by different manifestations of mobility: the mobility of ideas and models regarding urban society and space, of building types and architects themselves, of migrants, images and materials. The different chapters examine the different ways these mobilities are locally accommodated and integrated into existing forms and spaces: how, for instance, national or regional building codes affect the adoption or rejection of certain building types, how specific versions of hospitals or asylums were designed for specific social and cultural contexts and not for others, or how certain urban models are simply cut and pasted from one place to another. In other words, this book deals with how the *here* in the built environment is always also an *elsewhere*.

In this introductory chapter, we first analyse the processes which the book addresses. We will therefore describe the circulating entities that are constitutive of buildings and urban form: people, models, ideas, types, journals and images. We then discuss the determinants of recent changes in the production of the built environment and identify some theoretical resources useful for the study of the circulatory dimensions of cities. We argue that these changes are determined by five main factors, each linked to one or more of the circulating entities: market liberalisation (capital), international migrations (people), cultural globalisation (ideas), urban entrepreneurialism (images), and changes within architecture and planning (the rise of global offices, ‘starchitecture’, intensified exchanges within the profession and new design technologies, journals, models, types). We then

move on to the third and last part of the introduction where we describe the organisation of the book and the different contributions. As these are written by authors from anthropology, architecture, geography, history, linguistics and sociology, this is an essentially transdisciplinary collection. While the theme is common, the different approaches to the question of how mobility shapes built form are therefore quite diverse. This diversity of approaches, as well as of space and time frames, has also been a central editorial goal.

A WORLD OF CIRCULATING ENTITIES

Different circulating entities shape buildings in different ways. The main forms of mobilities involved are the circulation of people, practices and ideas, the circulation of building types, the circulation of different kinds of media, such as images, words and texts, architectural models, the circulation of parts and materials, and finally the circulation of whole buildings.² In this section we discuss them and detail in what ways they are related to the transformation of built form.

Circulating People

The most likely starting point for the circulation of concepts and ideas about buildings is the circulation of people. The latter is a vector of the circulation of artefacts for two reasons. First, people travel, and travelling exposes them to new ideas which they might bring back home. Travelling may occur with or without the specific purpose to learn about and import new conceptions of built form. In Anthony King's study of the bungalow, for instance, the introduction and reinvention of that building type did not result from a plan to research the idea in India and bring it back to England (King 1984). Rather, the notion of the bungalow, conveyed by the circulation of the term, textual descriptions and images between the two countries became sufficiently familiar in England for it to be reinvented there as a new type of building by people who, as far as is known, had no previous experience of India. But travelling may also have the specific purpose to study and learn about objects and building types.³ As reported in Topp's contribution to this volume, in the early twentieth century, architects of psychiatric institutions undertook study trips to learn about psychiatric institutions in other countries.

Moreover, people migrate, and through migration they bring specific cultural practices to other places. The travelling of these practices leads to the creation or reconfiguration of places in other locations. It is well known that migration flows are at the origin of transformations of urban landscapes at different scales: from shops and restaurants displaying signs and offering cuisines from other parts of the world to whole neighbourhoods, such as Chinatowns created through a complex interplay between migrant and local communities (Anderson 1991; Leeman and Modan, Chapter 9, this volume).

This process also includes the redefinition of actions and interactions in places, from the culturally variable management of distance in face-to-face

relations to spatially more extended social practices. For example, as discussed in the chapters by Kuppinger and Guggenheim, Muslims give new functions to spaces in West European cities by converting different kinds of rooms and buildings into places of prayer, without (or with minimal) architectural intervention.

Circulating Types

If we move away from people as vectors of the circulation of built form, we encounter the most abstract and probably most complex way to transport conceptions of buildings: that is, the adaptation of existing building types. The latter refer to terms, such as 'bank', 'villa', 'church' or 'prison', that classify buildings according to their uses. A type is related to a historical process: it emerges when a form crystallises to accommodate specific social practices such as, to put it into its simplest terms, 'managing savings and lending money', 'dwelling as a nuclear family', 'praying as Christians' or 'detaining people as a form of punishment'. The link between practice and form is a rather loose one however, and architectural theory struggles to define it. Already in its first codifications in architectural theory, the relation between types and actual buildings was considered flexible.⁴

For this very reason, ideas about building types are predestined as transport vehicles, since they are loose enough to convey only some essential features and be adapted to the specificities of new places. As Kenneth Frampton points out in his discussion of the distinction between typology and topography, the notion of a building type already presupposes transportability whereas the idea of topography highlights a 'place-form' adapted to local ecological, climatic or symbolic circumstances (Frampton 2006). Following this argument, a type is a classification that does not link buildings to their site or place of origin, but to other, usually social and functional classifications, devoid of local references. The notion of building type is thus opposed to the idea of 'regionalism'. It does not follow that types cannot or are not adjusted to local circumstances: rather the opposite. Exactly because types are classifications that do not refer to specific local qualities, buildings of a given type are adapted to local circumstances, while still belonging to the same typological classification. But such an adaptation automatically redefines the building type, since the type in question now encompasses new and different exemplars.

Schneekloth and Franck have coined the term 'type operations' to describe the ongoing to and fro between interactions, names, images and actual buildings that create types (Schneekloth and Franck 1994: 23). The mere existence of buildings that are used in a certain way does not constitute a building type. Types only *exist* through type operations. Such operations work in two directions: first through abstraction and then through exemplification (and back to abstraction, ad infinitum). They are abstractions both of built form and of human activities.

A building type is, first of all, formed by detaching given features from existing, locally rooted buildings and condensing them into a non-local type. By this process, formal features are identified and related to specific functions. The history of building types can then be written as a history of very specific local

circumstances that give rise to new building types that are abstracted and reduced to a description of essential features, to make them reproducible.⁵ Today, in the age of high-tempo globalisation, social practices are transferred across space and with them building types, such as the office tower, to house them in new places.

Types are also abstractions in another sense: because they frame, schematise and reduce the potential complexity of social practices. Thus, for example, in Chang's contribution to this volume, we can see how the development of the pavilion hospital includes the standardisation of health- and hygiene-related behaviour through built form. As Chang shows, the transfer of these standards can become quite a difficult task.

The second operation, the exemplification of types, occurs when a building is built according to a particular type concept. Types have to be adapted to a new location because construction workers and architects use other building techniques and construction practices, because different sites provide different materials, and because of the existence of different cultural norms and legal frameworks. The circulation of types encounters, in certain circumstances, local differences that lead to a radical redefinition of the type. In the case of mosques, for instance, seemingly defining elements such as minarets cease to be attached (in all senses of the word) to mosques when they are created in European contexts where there is pressure for their invisibilisation (as is discussed here in the chapters by Kuppinger and Guggenheim). These cases are interesting 'border situations' where one can argue, depending on the exemplifications, that the type is adapted for example, losing one of its distinctive features) or that social activities are performed without being hosted in their corresponding building type.

Circulating Media

Types, as we have seen, are abstract vehicles providing for the mobility of building forms. Other, more concrete media intervene in this process. First, symbolic ones, such as words and images, which encode buildings (and building types), each according to their distinct logic. Second, the means of transportation of these symbols: people of course, as mentioned previously, but also drawings, maps, photographs, journals, videos, CAD renderings and websites. All these different media are crucial in the circulation of built form at different scales: from details of interior design and street furniture to entire city layouts.

In visual disciplines such as architecture and urban planning, images are, of course, much more efficient than words. Visual media have historically been constitutive elements of these disciplines. When, in early fifteenth-century Florence, Filippo Brunelleschi uses drawings as spaces of simulation for architectural conception, he establishes architecture as a *cosa mentale*, an intellectual activity, and moves architecture up from the mechanical arts to the liberal arts (Santillana 1959). When, a few years later, Leon Battista Alberti precisely maps the city of Rome in his *Descriptio Urbis Romae*, he creates one of the conditions of possibility

of modern urban planning by providing a totalising image of the city and thus a space for its (re)conception (Söderström 2000).

Drawings and plans are efficient intellectual technologies not only because they allow simulation and conceptual thinking, but because they preserve a representation of a realised or potential building across space. They are what Bruno Latour calls 'immutable mobiles' (Latour 1987: 226–227). These different advantages of visual media have been magnified by innovations in information technologies in the past decades. Globalisation is not only planetary interconnectedness but, as Castells insists (Castells 1996), *real-time* planetary interconnectedness. As a consequence, architectural and urban forms can be immediately shared across the globe, between practitioners belonging or not belonging to the same firm. Borrowings, inspirations, 'cut-and-paste' operations (see Söderström, Chapter 10, this volume) have become easy to perform and are therefore very widespread.

A yet unwritten history of the media of architecture would show the ever-increasing speed and ever-increasing numbers and diversity of images used to 'circulate buildings'.⁶ The invention of the printing press made the widespread availability of architectural tracts possible. The invention and dissemination of architectural journals made the global exchange of styles, forms and plans much faster. The internet and all its derived technologies have in recent years added another layer of speed and global accessibility. Stock photography and internet-based picture databases are other related and powerful visual media, as Grubbauer (Chapter 4, this volume) shows, participating in the same process and leading, notably, to the visual standardisation of building types.

Linguistic signs, used to give places names and sometimes to exoticise them, can be circulating entities, as shown by Leeman and Modan in their analysis of Washington's Chinatown (Chapter 9, this volume). Accompanying the presence of the Chinese community and later the ethnic-packaging of the area (when most people of Chinese origin were gone), these signs go hand in hand with the import of 'Chinese' built form or have an autonomous function in the production of the area's different meanings through time.

Circulating Building Parts and Whole Buildings

The above-mentioned circulating entities all hint at the fact that ease of transportation is inverse to size and weight of an object. For this reason, buildings are themselves only rarely moved, and very rarely over long distances. Examples to the contrary show how extraordinary such a movement is. It mainly occurs at both ends of the value spectrum of the building stock. At the cheap end are temporary houses, such as tents, caravans or mobile homes, all left out by architectural history, precisely because they are in between movable objects and immovable buildings.⁷ At the other extreme we have buildings that are moved because they are very valuable. They are moved to save the buildings from destruction or to become part of a museum and are then turned into works of art. Typical examples are buildings transferred to open-air museums, such as that

at Skansen in Sweden (Crang 1999), where they are displayed as representatives of regional styles and constitutive parts of national identities. Hancock (Chapter 6, this volume) discusses similar processes, but where the open-air museum itself is also seen as a travelling type, in a non-European context, namely southern India. The 'Cloisters', the medieval gallery of the Metropolitan Museum in New York, built in its entirety from medieval building parts that were shipped to the US from their original sites in Europe, is another example of rare travels of buildings or building parts as such (Barnet *et al.* 2005).

These examples show that buildings are usually not moved at all. Buildings are however dependent on the flow of materials towards the building site. Thus the materials in the vicinity of a building site often influence or determine the appearance of a building, as the distance the materials have to travel directly influences the cost of a building. Tim Edensor shows (Chapter 11, this volume) that locally available sorts of stone heavily influenced the appearance and form of Manchester for a long time. In recent years, the networks of supply have diversified, also covering longer distances. As a result, Manchester's 'stony fabric', like that of many other cities, has become more cosmopolitan and less rooted in its local and regional geology.

These are the main constitutive elements of the mobility of built form. They combine in multiple ways – people convey types through images, for instance – to produce changes in urban landscapes. Where, when and how they combine is only understandable by considering the structural processes through which built form is shaped.

DETERMINANTS OF CHANGE

Trying to get a heuristic gain by looking at the interplay between different forms of mobility, as we propose in this book, is the central tenet of the so-called 'mobilities' paradigm (Sheller and Urry 2006). The natural bias of such an attempt is to consider that 'everything and anything flows', when we know that some things don't. In other words, focusing on circulatory features, one might end up overlooking phenomena of fixity on the one hand and producing a blurry, indiscriminate picture of social change and organisation on the other. It is therefore important to consider in general that mobility and fixity are dialectically related (Urry 2007) and, as we will show below in the more particular case of this volume, that there are structural determinants of urban change.

The same may be said about another way of framing the processes analysed in this book: the cosmopolitical approach to social phenomena.⁸ In its most programmatic version (Beck 2006) this approach is an encouragement to move away from theories, concepts and data sources forged within strictly national contexts. It says little however about the forces at work creating a cosmopolitan world.⁹

We will therefore try to identify hereafter not a single determinant of change, but a series of general processes which frame the different local or

regional phenomena described and analysed in the chapters of the book. The following is thus a preliminary and cautious attempt to delineate some historical processes that are at play.

There are, in our view, as a precondition to the mobility of built form, three structural processes: first, economic processes and more specifically the global reach of building firms; second, the reach of global cultural flows, and third, the migration of the highly skilled. We will then briefly address, on a lower level of generality, two shifts related to these processes: the rise of urban entrepreneurialism and the emergence of the global architectural and planning firms.

The contributions to this volume cover quite a long time-span and, of course, a large geographical space: from mid-nineteenth century Singapore to present-day Stuttgart. It would be beyond the possibilities of this introduction to try to account for such wide-ranging processes in all these different temporal and spatial contexts. The following section will therefore restrict itself to give some indications concerning a longer *durée*, but will then focus on recent decades.

Economic Networks and Mobile Built Forms

According to Peter Taylor, industrial modernity was organised by a 'centripetal metageography'¹⁰ where a global periphery supplied the needs of an industrial core (Taylor 2004: 183). Basic raw materials were brought to Northwestern Europe from distant regions, which often were, or became, colonies. Colonial economic networks in the nineteenth and early twentieth centuries were important channels for the worldwide dissemination of built form (King, 1990). The main orientation of the flows was that of the export of building types and styles from the centre to the colony, but flows went also, to a certain extent, the other way, as an analysis of the landscape of imperial London clearly shows (Driver and Gilbert 1999). Specific solutions were also derived from the local adaptation of building types in the periphery first elaborated in the core (see Topp (Chapter 8) and Chang (Chapter 7), this volume).

Cities like Cairo have, for instance, gone through different periods during which the direction and importance of foreign influences have clearly changed: a period of French influence during the domination of the Ottomans in the 1860s and 1870s, followed by a period of British influence (1882–1922) and a period of re-Arabisation and re-nationalisation under Nasser. More recently, Cairo has entered a period of Americanisation of its built forms which is related to a deregulation of the national economy and to the fact that Egypt has become a pivotal ally of the US in the Near East (Abaza 2001; Volait 2003).

In comparison to the preceding and successive periods, the early postcolonial era, during the 1960s and 1970s, with the rise of nationalist economic strategies in the global South, was less favourable for the forms of circulation this book is interested in. The Keynesian compromise of that period – combining redistributive politics, controls over the free mobility of capital and capital accumulation (Harvey 2006) – may be seen in retrospect as a period of relatively

closed borders.¹¹ The most notable development was probably the global success and adaptation of the international style and of the building technologies that made it possible, especially the widespread use of concrete as the main building material. Typical examples are the new mega-plannings of capitals, such as Brasilia, Chandigarh and Ankara (Epstein 1973; Prakash 2002; Sagar 2002). This in turn has also led to a rediscovery and often import and then re-export from the periphery to the centre of those building technologies and types that were displaced by the rise of concrete.¹²

The worldwide development of neo-liberal politics since the early 1980s has altered the role of the states: creating a good 'business climate' has become more important than improving the well-being of all citizens (Harvey 2006: 25). Free mobility of capital as a means to favour capital accumulation has, in this context, become a major target of governments in most countries (with the help of international institutions such as the IMF and the World Bank). The implementation of policies aiming at such a target has implied the removal of a series of barriers to the free flow of investments and access to labour markets at national and local scale. As a consequence, access to formerly protected national markets in the building and planning sector has been opened to foreign firms and practitioners and planning, and building regulations in cities have been made more flexible.¹³ These structural developments are preconditions for the increase in the circulation of architects, planners and built forms we have witnessed in recent years. They have facilitated the rise of global architecture firms (McNeill 2009) and its correlates such as the development of a global market of symbolic architectural capital.

The shift in the technological organisation of the economic sector accompanying and sustaining market liberalisation in the same period is a second structural precondition of this process. Described as an informational economy by Manuel Castells, this form of organisation is based on the intensity and speed of information flows connecting economic actors: 'it is the historical linkage between the knowledge information base of the economy, its global reach, and the Information Technology Revolution that gives birth to a new, distinctive economic system' (Castells 1996: 66). The basic unit of this economy is the 'network enterprise' (Castells 1996: 171). Interconnectedness is a means to identify new business opportunities on a wide geographic scale and to be able to react rapidly to changes in the market. Information technologies are here, of course, crucial tools, bringing ever-increasing speed and capacities (in terms of quantity and quality) to the exchange of information.

Firms in planning and architecture have thus become network enterprises: part of their success depends on their capacity to successfully link with partner firms and subcontractors locally and globally (interfirm linkages) and in some cases to create an internationally organised system of offices belonging to the same firm (intrafirm linkages). The rise of networked architectural and planning firms in the past two decades has thus provided an important material support for the mobility of built form, as we will see below.

Transnational Cultural Flows

The idea that cultures are localised and that we have witnessed a recent shift from a situation where the world was characterised by a mosaic of neatly distributed 'cultures' to a situation where it is criss-crossed by a dense web of cultural exchanges is historically inconsistent. Such a theory is oriented by a Herderian nationalist conception of culture (Wimmer 1996) more than by anything else. As Gupta and Ferguson put it, 'spaces have always been interconnected, instead of naturally disconnected' (Gupta and Ferguson 1992: 8). Colonialism, they argue, should therefore be seen as the 'displacement of one form of interconnection by another' (*ibid.*), instead of the opening up of what were previously closed and autonomous societies.

This being said, the colonial context, in which some of the contributions of this book are set, corresponds to an intensification of transnational cultural connections linked to routes of economic exchange.¹⁴ But the story of economic and cultural connections, if closely related, is not completely parallel. While the period between 1945 and 1980 is an era of economic statism and relative closure, it corresponds to a huge development in cultural flows related to the development of mass media and telecommunications. This development radically changed societies' relations to information and especially its geographical distribution (Meyrowitz 1986). It changed in particular the access to visual information concerning built form in regions that were not easy to reach through travel. The circulation of images through the development of television and the facilitated access to geographically distant places through the use of jet airplanes during this period enormously enhanced what we could call the visual exposure of the world to itself.

The globalisation of culture related to the rise of real-time technologies added another feature to what Appadurai calls 'imagescape', which is the possibility to access and retrieve images from an ever-growing worldwide visual data bank (see Grubbauer, Chapter 4, this volume). What is meant by cultural globalisation should be unpacked however, since it is a multifaceted process which is approached differently in the literature. To put it briefly, one can say that four related (but different) processes constitute it.¹⁵

The first is the growing awareness that the world as a totality is an arena of exchange, cooperation and conflict. This view has been elaborated and discussed in particular in the work of Roland Robertson (Robertson 1992). The second refers to the symbolic struggles related to the dynamics of global capitalism, characterised by tensions between increasingly hegemonic cultural practices (in the realm of consumption for instance) and resistant ones. These mechanisms have been highlighted notably by world-systems theory (Wallerstein 1974). The third consists of the standardised international norms and regulations at a global scale in the domain of public policies. Education policies (including the curricula of architectural schools), as studied by Schofer and Meyer (Schofer and Meyer 2005), are good examples of such globalised political cultures. The fourth process is the increasingly dense and interconnected flow of ideas, values, images and

lifestyles across the globe. The effects of these connections in terms of identity positionings, cultural creolisation, transnationalism or cosmopolitanism have been described by authors such as Appadurai (Appadurai 1996), Hannerz (Hannerz 1996) and many others in cultural theory and the social sciences in recent years.

The transformation of built form is part and parcel of these different phenomena. The defence, by certain sectors of society, of a 'national architectural style' in the context of the Westernisation of the urban landscape of Beijing (Ferrari 2006), as well as debates around mosques in European cities (Kuppinger (Chapter 5) and Guggenheim (Chapter 3), this volume) or the debate about (critical) regionalism (Canizaro 2006; Lefaivre and Tzonis 2003) are related to the fact that the world has become a relevant arena for identity politics. The literature on gentrification (Lees *et al.* 2008), in particular work dealing with the role of transnational elites (Rofe 2003), stresses the tensions between globally diffused urban ways of life and local urban cultures. As Massey and Escobar argue however, these debates tend to stage too easily the local as the resistant victim and the global as an omnivorous footloose force (Escobar 2001; Massey 2005, 2007).

Unfortunately there is barely any research on the third of these processes: the standardisation of norms regulating the exercise of professions in the building sector. Rules concerning public markets in the European Union during the 1990s, for instance, as well as the generalisation of open international architectural competitions, have widely opened the access to public contracts for foreign professionals. Finally, the mobility of built form has been largely intensified by the spectacular increase in global cultural flows through mass media and different other types of images and texts.¹⁶ These flows result in the creolisation of built forms described by different contributors in this volume. In brief, cultural globalisation, as a set of connected processes partly autonomous from economic globalisation, is another structural dimension of the process that this volume addresses.

The International Mobility of the Highly Skilled: The Architect as a Travelling Professional

The mobility of built form also rests, as we have seen, on bodily movement. Architecture, as a professional activity, has never been purely local. The architect may be seen as the archetypical cosmopolitan, bringing his or her expertise to places where they can find work and adapting their skills to local circumstances. What change over time are the geographical reach and the reasons behind their mobility. Initially, the reasons for the travels of architects seem to be colonial in the sense that architects travelled as representatives of the central power to the periphery. French professionals, like their British counterparts (see Chang, Chapter 7, this volume), actively participated in the building of colonial cities, notably in Morocco during the first decades of the twentieth century, where figures like the planner and architect Henri Prost was the brilliant executor of Maréchal Lyautey's governing programme and experimented with new solutions that were later imported back to the centre (Rabinow 1995). The other reasons

for the travels of architects were economic or political hardship in their original place of residence.

The emigration of many of modernism's key representatives from Europe to countries such as the US, the USSR and Israel, is, for instance, at the heart of its internationalisation. Neither White Tel Aviv nor the rise of modern architecture in the US would have come into existence without the forced migration of many of Germany's and Austria's best architects. The belief in architecture as a universal language has been another motivation for architects and planners to travel. It is true to a certain extent of the Italian Renaissance *trattatisti* (Choay 1980). It is clearly the case with the modern and functionalist movement in architecture from the late 1920s onward, where internationalism was related to the project of bringing rational and context-independent solutions to the art of building.

In more recent years, such mobilities, formerly related to individual career paths or professional networks like the CIAM (Mumford 2000), are also to be inscribed in the general context of the transformation of international migrations. The structure of migratory patterns after World War II indeed changes after the 1973 oil crisis (Castles and Miller 1998: 67). As a consequence of the recession and economic restructuring of the 1970s (deindustrialisation, new international division of labour, development of the service sector) the needs of the labour markets of developed countries mutate. The search for highly qualified personnel is one of the consequences of this economic restructuring and, hence, the increase of their mobility. Many OECD countries during that period changed their migration policies to favour the immigration of skilled and highly skilled workers.

These changes in the needs of the labour market and in migration policies have acted as powerful 'pull factors' in the mobility of professionals in planning and architecture. These factors are reinforced by a widespread discourse on the virtues and necessities of geographic mobility in different milieux: in the media and in higher education (with the strong development of mobility programmes in the past decade) in particular. The result is a cosmopolitisation of architectural and planning firms and a renewal of architectural and planning styles or trends in national contexts. The recent shift in Italian architecture has, for instance, been attributed to the so-called 'Erasmus generation': in other words, to the first generation of students having benefited from the European mobility programmes at university level (Prestinenza Puglisi 2007). As Söderström shows for the city of Palermo (Chapter 10, this volume), these effects are also observable at a local level, when recent changes in urban forms are related to their authors: young architects with experience as students in cities like Berlin and Barcelona.

These three macro-level transformations are connected to a series of meso-level processes that frame the contemporary mobility of built form. Two of them are of particular importance: the first, regarding forms of urban governance, is the development of urban entrepreneurialism, the second, regarding the organisation of architectural and planning firms, is the rise of the global architecture and planning offices.

Urban entrepreneurialism is related to a dramatic increase in interurban

competition within and across national borders (Brenner 2004; Hall and Hubbard 1998; Harvey 1989). Such a competition involves, among other things, the creation of an exciting urban landscape with a series of landmark buildings produced by 'starchitects', with the hope that a 'Bilbao effect' can be reproduced (Cronin and Hetherington 2008). But it also means producing an image where more banal urban forms (certain styles of condominium, street furniture) and generic types of interventions (waterfront, brownfield rehabilitation) are 'imported' to create what is conceived as an up-do-date attractive environment.

Since the 1990s there has been an important increase in the average size and geographical reach of architectural firms. A new layer of firms – providing services in architecture, planning, engineering or landscape architecture – has emerged for which the playground is, if not global, at least very international. These practices function as network enterprises, taking advantage of international outsourcing for tasks that can be performed by skilled and (most importantly) inexpensive personnel in another country (interfirm network). They are also constituted as a web of offices in different (usually global) cities on different continents (Knox and Taylor 2005: 24).

What the rare publications on these issues show is that there are privileged routes for the activity of these global practices (Knox and Taylor 2005; Knox 2007). The mobility of built form through these firms, which is but one of its vehicles, is therefore geographically uneven, or better there is a set of circuits in which firms of different sizes and with different reaches operate to import and export built form. The different chapters of this book, to which we now move, tell different stories about built form. Each of them stages some of the above described 'circulating entities' and discusses some of the structural determinants of urban change.

THE ORGANISATION OF THE BOOK

The book is organised in four parts. Part I is devoted to theoretical considerations regarding the theme of the book. This introduction has tried to identify the elements and mechanisms involved in the mobility of built form. In Chapter 2, Anthony King spells out some preliminary ideas for a historical sociology of building types in the light of global mobility and thereby responds to a neglect of the significance of built form in globalisation theory. He focuses on the importance of imperialism, colonialism and postcolonialism to insist on the role of power in the worldwide circulation of built form. These two chapters prepare the ground for a series of theoretically informed case studies that examine various forms of circulation in different contexts. The chapters cover diverse historical settings and a wide geographical spectrum (including India, Italy, the UK, Germany, China, the USA and Singapore). The reader may take the lack of studies that predate the nineteenth century or that look at African or Latin American examples or that integrate other media, such as films, or other building types, such as parliaments,

courts or shopping centres as encouragement to expand our first venture into other times and spaces.

Part II focuses on the media of circulation. Instead of looking primarily at buildings, it examines some of the factors that help (or prevent) buildings circulate. In Chapter 3, Michael Guggenheim focuses on the law as a powerful but often neglected mediator to regulate the circulation of building types at a national scale, in this case, Switzerland. His analysis of caravans, mosques and homes for assisted suicide shows that the law is a powerful mediator that shapes the import of building types by enforcing adaptations and controlling changes to building form. The legal realm serves as an arena where conflicts about the circulation of building types become explicit.

Chapter 4 looks at media in the more common sense of the term. Monika Grubbauer shows how the practice of stock photography firms serves to globally standardise the type of the office building. She maintains that it is not so much the office tower itself which is standardised. It is rather the global diffusion and endless reproduction of a limited number of pictures representing *the* office tower that standardises our image of it. These images in turn act as vectors in the production of actual office towers.

Part III focuses on the circulation of specific building types. Each chapter addresses a building type circulating in a part of the world other than that of its origin. Chapter 5 by Petra Kuppinger analyses the history of mosques and their use in the city of Stuttgart, Germany. She shows how these mosques, located in converted buildings and in marginalised parts of the city, and also often unrecognisable as such from the outside, express the uneasy 'place' of Islam in Germany.

The following three chapters share a common interest in travelling architects as the central actors in the circulation of building types. Mary Hancock's ethnography in Chapter 6 shows how the open-air museum, DakshinaChitra, located close to Chennai in India, borrows from European and US precursors to represent a memory of the pre-modern vernacular space and architecture just at the time when this space is vanishing. She shows how such places are both nostalgic reactions to and functional elements of contemporary global mobility. In Chapter 7, Jiat-Hwee Chang tracks the circulation of the pavilion hospital from the colonial metropolis of London to its colony, Singapore, in the early twentieth century. He shows how this specific built form is part and parcel of colonial governmentality through the use of both environmental technologies, such as the adaptation to its 'tropical' setting and the control of ventilation, and social technologies, most notably racial segregation. Leslie Topp's chapter (Chapter 8) on psychiatric institutions is in many ways complementary to Chang's. She also deals with the travels of notions about hospitals at around the same point in time but in the Habsburg Empire. Here, it is not colonialists who export a building type, but government officials, architects and psychiatrists who undertake study trips in order to determine the most 'clinically effective' building type to import from Germany. Topp shows how these study trips resulted in the adoption of different building models to match the different requirements of the Italian and Austrian context, respectively.

Part IV deals more specifically with the buildings themselves, their exterior facades and the materials they are made of. The chapters in this part therefore focus much more on the actual appearance of buildings and on the constraints in actually changing them. First, using tools stemming from sociolinguistics, urban geography and anthropology, Jennifer Leeman and Gabriella Modan (Chapter 9) analyse the linguistic landscape of Washington's Chinatown. They show how the signs that partially comprise this landscape were first related to the initial installation of the Chinese community in the area and were used for orientation. Later, with the gentrification of Chinatown, the signs became touristic indicators of the supposedly Chinese character of the area, which was reinforced by building codes. In Chapter 10 on Palermo's city centre, Ola Söderström opens up a broader discussion of how cities are transformed by different types of flows. He first analyses the central mediating role of local government in the relation between global flows and local forms and then considers five urban types, such as the reuse of waterfronts, as indicators of a recent reconnection of Palermo to global flows of people, capital and ideas. These imported and adapted forms not only reconfigure the landscape of the city but also, he shows, generate new urban practices such as 'waterfront jogging'.

In Chapter 11, Tim Edensor looks at the circulation of building materials, specifically different types of stone, and how they shape the building of cities. Taking three buildings in Manchester as case studies he shows how the supply of stone not only shapes the appearance and forms of the city but also the places from where it is taken. The quarries are connected to the city according to a complex cultural history of extraction and building techniques. With Edensor's piece on stones we reach the point where the seemingly most durable and stable part of a city, stone, becomes part of the network of endlessly circulating things. In conclusion, Lynda Schneekloth (Chapter 12) does much more than give her comments on the previous contributions. She offers, first, a reflection on the typological mechanisms enabling the circulation of ideas and material forms of buildings. She concludes her chapter and the volume by looking at how the production of built form at a global scale is as much about the making than about the unmaking of environments, reminding us that those transformed environments are the habitat of more-than-human (and often vulnerable) entities, such as animals and plants.

NOTES

- 1 The authors would like to thank Monika Grubbauer, Lynda Schneekloth, Anthony D. King and Thomas Markus for their insightful comments on this Introduction.
- 2 The distinctions drawn here are for analytic reasons. It goes without saying that in most processes dealt with in this book, several of these modes of mobility occur together.
- 3 For examples related to the history of planning, see Ward (1999: 55).
- 4 Quatremère de Quincy, in his classic definition, distinguished type 'more or less vague' from the 'precise and given' model (Quincy 1788–1828: 544).

- 5 In the aftermath of the French Revolution, a plethora of new building types thus emerged (see Markus 1993).
- 6 For a history of architectural journals see, for example, Leniaud (2001) or Crysler (2003). For a history of architectural models see, for example, Smith (2004) and Moon (2005), and for a history of architectural drawings see, for example, Johnston (2008).
- 7 Although see Kronenburg (2002) and Schwartz-Clauss (2002). See also Guggenheim (Chapter 3 this volume) for an account of how caravans produce legal conflicts.
- 8 In the burgeoning literature on cosmopolitics and cosmopolitanism, let us quote only one publication, which is, in our view, the most useful for an orientation in the field: Vertovec and Cohen (2002).
- 9 As well as those creating anti-cosmopolitan reactions (Graham 2006).
- 10 A metageography is here the 'geographical structures through which people order their knowledge of the world' (Taylor 2004: 180).
- 11 'Relatively closed borders', because the impact of USSR and US architecture and modes of planning during the Cold War in their respective spheres of influence should not be underrated.
- 12 See, for example, Christopher Alexander's attempt at a universal language for architecture that incorporates the knowledge of local traditions (Alexander 1979). Or see more specifically Hassan Fathy's attempt to reintroduce natural mud plaster-coated mud brick buildings into the US (Steele 1996).
- 13 This is a tendency and not a completed process: many national restrictions remain and are likely to persist because of (or thanks to) the non-finalisation of the WTO treaty concerning the liberalisation of professional services (GATS).
- 14 For interesting contributions on the reception side of the process regarding planning models during and after the colonial period see Nasr and Volait (2003).
- 15 The following list of approaches is inspired by a typology suggested by Lechner and Boli (2005).
- 16 For a (certainly incomplete) list see the section above on media of circulation.

REFERENCES

- Abaza, M. (2001) Shopping Malls, Consumer Culture and the Reshaping of Public Space in Egypt, *Theory, Culture and Society*, 18, 97–122.
- Alexander, C. (1979) *The Timeless Way of Building*, New York: Oxford University Press.
- Anderson, K. (1991) *Vancouver's Chinatown: Racial Discourse in Canada, 1875–1980*, Montréal: McGill-Queen's University Press.
- Appadurai, A. (1996) *Modernity at Large: Cultural Dimensions of Globalization*, Minneapolis: University of Minnesota Press.
- Barnet, P., Wu, N. Y. and Cloisters (Museum) (2005) *The Cloisters: Medieval Art and Architecture*, New York; New Haven, CT: Metropolitan Museum of Art; Yale University Press.
- Beck, U. (2006) *The Cosmopolitan Vision*, Cambridge: Polity Press.
- Brenner, N. (2004) *New State Spaces. Urban Governance and the Rescaling of Statehood*, Oxford: Oxford University Press.
- Canizaro, V. B. (ed.) (2006) *Architectural Regionalism. Collected Writings on Place, Identity, Modernity, and Tradition*, New York: Princeton Architectural Press.

- Castells, M. (1996) *The Rise of the Network Society*, Cambridge, MA: Blackwell Publishers.
- Castles, S. and Miller, M. (1998) *The Age of Migration. International Movements on the Modern World*, New York: Guilford Press, 2nd edn.
- Choay, F. (1980) *La règle et le modèle: sur la théorie de l'architecture et de l'urbanisme*, Paris: Seuil.
- Crang, M. (1999) Nation, Region and Homeland. History and Tradition in Dalarna Sweden, *Ecumene*, 6, 447–470.
- Cronin, A. and Hetherington, K. (eds) (2008) *Consuming the Entrepreneurial City: Image, Memory, Spectacle*, London: Routledge.
- Crysler, C. G. (2003) *Writing Spaces. Discourses of Architecture, Urbanism and the Built Environment, 1960–2000*, London: Routledge.
- Driver, F. and Gilbert, D. (eds) (1999) *Imperial Cities*, Manchester: Manchester University Press.
- Epstein, D. G. (1973) *Brasília Plan and Reality. A Study of Planned and Spontaneous Urban Development*, Berkeley: University of California Press.
- Escobar, A. (2001) Culture Sits in Places: Reflections on Globalism and Subaltern Strategies of Localization, *Political Geography*, 20, 139–174.
- Ferrari, B. (2006) *A Home for the World's Elite. La construction des espaces transnationaux à Beijing*, Neuchâtel, Institut de Géographie: MA thesis.
- Frampton, K. (2006) Ten Points on an Architecture of Regionalism. A Provisional Polemic, in V. B. Canizaro (ed.) *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition*, New York: Princeton Architectural Press.
- Graham, S. (2006) Cities and the 'War on Terror', *International Journal of Urban and Regional Research*, 30, 255–276.
- Gupta, A. and Ferguson, J. (1992) Beyond 'Culture': Space, Identity, and the Politics of Difference, *Cultural Anthropology*, 7, 6–23.
- Hall, T. and Hubbard, P. (1998) *The Entrepreneurial City: Geographies of Politics, Regime and Representation*, Chichester: John Wiley.
- Hannerz, U. (1996) *Transnational Connections: Culture, People, Places*, London: Routledge.
- Harvey, D. (1980) From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism, *Geografiska Annaler B*, 71, 3–17.
- Harvey, D. (2006) *Spaces of Global Capitalism*, London and New York: Verso.
- Johnston, G. B. (ed.) (2008) *Drafting Culture: A Social History of Architectural Graphic Standards*, Cambridge, MA: MIT Press.
- King, A. D. (1984) *The Bungalow: The Production of a Global Culture*, London and New York: Routledge & Kegan Paul.
- King, A. D. (1990) *Urbanism, Colonialism and the World-Economy: Cultural and Spatial Foundations of the World Urban System*, London and New York: Routledge.
- Knox, P. (2007) World Cities and the Internationalization of Design Services, in P. Taylor, B. Derudder, P. Saey and F. Witlox (eds) *Cities in Globalization*, London: Routledge.
- Knox, P. and Taylor, P. (2005) Toward a Geography of the Globalization of Architecture Office Networks, *Journal of Architectural Education*, 58, 23–32.
- Kronenburg, R. (2002) *Houses in Motion, The Genesis, History and Development of the Portable Building*, Chichester: Wiley-Academy.
- Latour, B. (1987) *Science in Action. How to Follow Scientists and Engineers through Society*, Cambridge, MA: Harvard University Press.
- Lechner, F. J. and Boli, J. (2005) *World Culture, Origins and Consequences*, Oxford: Blackwell.
- Lees, L., Slater, T. and Wyly, E. K. (2008) *Gentrification*, New York: Routledge/Taylor & Francis Group.
- Lefavre, L. and Tzonis, A. (2003) *Critical Regionalism. Architecture and Identity in a Globalised World*, Munich: Prestel.
- Leniaud, J-M. & Ministère de la Culture et de la Communication (France) Sous-direction des

- Études de la Documentation et de l'Inventaire (2001) *Les périodiques d'architecture XVIIIe–XXe siècle recherche d'une méthode critique d'analyse*, Paris: Ecole des Chartes.
- Markus, T. A. (1993) *Buildings and Power. Freedom and Control in the Origin of Modern Building Types*, London: Routledge.
- Massey, D. (2005) *For Space*, London: Sage.
- Massey, D. (2007) *World City*, Cambridge: Polity Press.
- McNeill, D. (2009) *The Global Architect. Firms, Fame and Urban Form*, London: Routledge.
- Meyrowitz, J. (1986) *No Sense of Place: The Impact of Electronic Media on Social Behavior*, New York: Oxford University Press.
- Moon, K. (2005) *Modeling Messages: The Architect and the Model*, New York: Monacelli.
- Mumford, E. (2000) *The CIAM Discourse on Urbanism, 1928–1960*, Cambridge, MA: MIT Press.
- Nasr, J. and Volait, M. (eds) (2003) *Urbanism: Imported or Exported?*, Chichester, England; Hoboken, NJ: Wiley-Academy.
- Prakash, V. (2002) *Chandigarh's Le Corbusier. The Struggle for Modernity in Postcolonial India*, Seattle: University of Washington Press.
- Prestinzenza Puglisi, L. (2007) Italiens nya arkitekturlandkap, *Arkitektur*, 48–55.
- Quincy, Q. d. (1788–1828) Type, in Q. d. Quincy (ed.) *Encyclopédie méthodique*, Paris: Panckoucke.
- Rabinow, P. (1995) *French Modern: Norms and Forms of the Social Environment*, Chicago, IL: University of Chicago Press.
- Robertson, R. (1992) *Globalization: Social Theory and Global Culture*, London: Sage.
- Rofe, M. (2003) 'I Want to be Global': Theorising the Gentrifying Class as an Emergent Elite Global Community, *Urban Studies*, 40, 2511–2526.
- Sagar, J. (2002) Revisiting Chandigarh, in H-J. Henket and H. Heynen (eds.) *Back from Utopia. The Challenge of the Modern Movement*, Rotterdam: 010 Publishers.
- Santillana, G. d. (1959) The Role of Art in the Scientific Renaissance, in M. Clagett (ed.) *Critical Problems in the History of Science*, Madison: University of Wisconsin Press.
- Schneekloth, L. and Franck, K. A. (1994) Type: Prison or Promise?, in K. A. Franck and L. H. Schneekloth (eds) *Ordering Space. Types in Architecture and Design*, New York: Van Nostrand Reinhold.
- Schofer, E. and Meyer, J. (2005) The Worldwide Expansion of Higher Education in the Twentieth Century, *American Sociological Review*, 898–920.
- Schwartz-Clauss, M. and Design Museum Vitra (Weil am Rhein) (eds) (2002) *Living in Motion. Design und Architektur für flexibles Wohnen*, Weil am Rhein: Vitra Design Stiftung.
- Sheller, M. and Urry, J. (2006) The New Mobilities Paradigm, *Environment and Planning A*, 38, 207–226.
- Smith, A. C. (2004) *Architectural Model as Machine: A New View of Models from Antiquity to the Present Day*, Oxford: Architectural Press c/o Elsevier.
- Söderström, O. (2000) *Des images pour agir: le visuel en urbanisme*, Lausanne: Payot.
- Steele, J. (1996) Dar Al-Islam, Abiquiu, New Mexico, in I. Serageldin (ed.) *The Architecture of the Contemporary Mosque*. London: A.D. Academy Editions.
- Taylor, P. J. (2004) *World City Network: a Global Urban Analysis*, London: Routledge.
- Urry, J. (2007) *Mobilities*, Cambridge: Polity Press.
- Vertovec, S. and Cohen, R. (eds) (2002) *Conceiving Cosmopolitanism: Theory, Context, and Practice*, Oxford: Oxford University Press.
- Volait, M. (2003) Making Cairo Modern (1870–1950): Multiple Models for a 'European Style' Urbanism, in J. Nasr and M. Volait (eds) *Urbanism. Imported or Exported*, Chichester: Wiley.
- Wallerstein, I. (1974) *The Modern World-System*, New York: Academic Press.
- Ward, S. (1999) The International Diffusion of Planning: A Review and a Canadian Case Study, *International Planning Studies*, 4, 53–77.
- Wimmer, A. (1996) L'héritage de Herder, *Tsantsa*, 1, 4–18.