

A journey through space: Cultural diversity in urban planning

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Ethno-centrism in space

This chapter explores the ways in which people from different cultural and political backgrounds have evolved rational and ingenious solutions to meet their shelter needs and the lessons this may offer for professionals working in the field. It is also a personal journey through these issues which reflects on a range of international research projects and practical experiences over a period of more than thirty years.

The concepts with which we perceive and use space are like a language; we use them intuitively and almost without thinking of the structures involved. Yet there are hundreds of mutually unintelligible languages, all with their own distinct dialects, so why should there not be diverse ways of perceiving and using space? At a time when Western attitudes and practices are extending their reach through globalisation, it may be that non-Western ways of perceiving and using space provide people with an important sense of their own identity. They may even offer lessons for application or adaptation in other contexts and should form an integral component of development programmes for upgrading existing informal settlements or planning new developments funded, or supported by, international donor agencies. To achieve this, a more holistic and multi-disciplinary approach to settlement planning will be essential for success.

Much of the literature on this subject in English has tended to assume or imply that European and American concepts of space are universally relevant. In his seminal book on urban form, Morris (1972, 1979 and 1994) reviewed the origins of urban settlements but focussed on European and American examples, adding a chapter for the third edition (1994) on the Islamic city, together with appendices on China, Japan, Indian mandalas and Indonesia. Whilst reflecting a welcome awareness of different traditions, the inclusion of these alternatives did not provide an analysis of why these societies had evolved such distinct urban traditions. Similarly, Lynch (1981) identifies characteristics of good urban form (vitality, sense, fit, access, control, efficiency and justice), which, whilst internationally relevant, are illustrated primarily through western examples. The launch of the journal *Urban Design International* in 1997 reflected an increasing interest among western urban designers in other traditions by which non-western societies have organised the built environment. However a rich vein of material exists which exerted a substantial influence on earlier generations and has not perhaps received the recognition it deserves.

Space and place

My personal initiation into these alternative ways of perceiving and organising space was initially through the work of Rudofsky (1964). A more analytical approach was adopted by Gunter Nitschke (1964, 1966) in a series of seminal articles published in *Architectural Design* (Nitschke 1964a, 1964b and 1966). These demonstrated that early Japanese urban planning was based on Chinese concepts, which were in turn derived from religious considerations intended to reflect a cosmic order at the urban scale. In this sense, they were similar to the mandalas of India, which provided a map of the cosmos and determined the spatial ordering of key symbolic features. Within this system, residential areas were organised on three scales into the 'bo', 'ho' and 'cho' in which a block of about 120m ('cho') formed a quarter of a 'ho' and that in turn was a sixteenth of a 'bo'. This was the basis for the organisation of the early capitals of Nara and Kyoto. However, this somewhat rigid geometry did not suit Japanese conditions, in which large areas of level ground were rarely available. As a result, the plans as built reflected a different ethos based on the Japanese concept of 'Ma' or 'place' which Nitschke defined as the "simultaneous awareness of the intellectual concepts form+non-form, object+space, coupled with subjective experience" (1966:117) (see Fig 9.1)¹. He identified three different ordering



Fig 1: Plan of Imai, Japan, a sixteenth century city. Nitschke AD March 1966 p124

¹ According to Nitschke (1966:152) the Japanese word for design, *ma-dori* literally means, 'grasp of the Ma'.

namely: 'apparent disorder', 'geometric order' and 'sophisticated order' and likened the first category to 'fortuitous order, in which "man's efforts to impose his own order on nature are unsophisticated (see Figure 9.2). Nature is the basis of all systems of order, man accepts it as the controlling element – contours, natural falls, river beds and ravines determine boundaries and divisions, roads, the form of villages and buildings. Man acts intuitively, unconsciously as it were, as an extension of nature".



Fig 2: Plan of Igaia, Japan from Nitschke, AD 1966 page128

Nitschke defined geometric order as a form in which "man seeks to impose an intellectual concept or order on nature. Number and geometry are used as the means of control in this conscious stage". Using early Shinto shrine precincts as examples, (see Figure 9.3) he demonstrated how the effect of geometry "leads to 'perfection of type', one aspect of beauty in Japanese terms and how this is

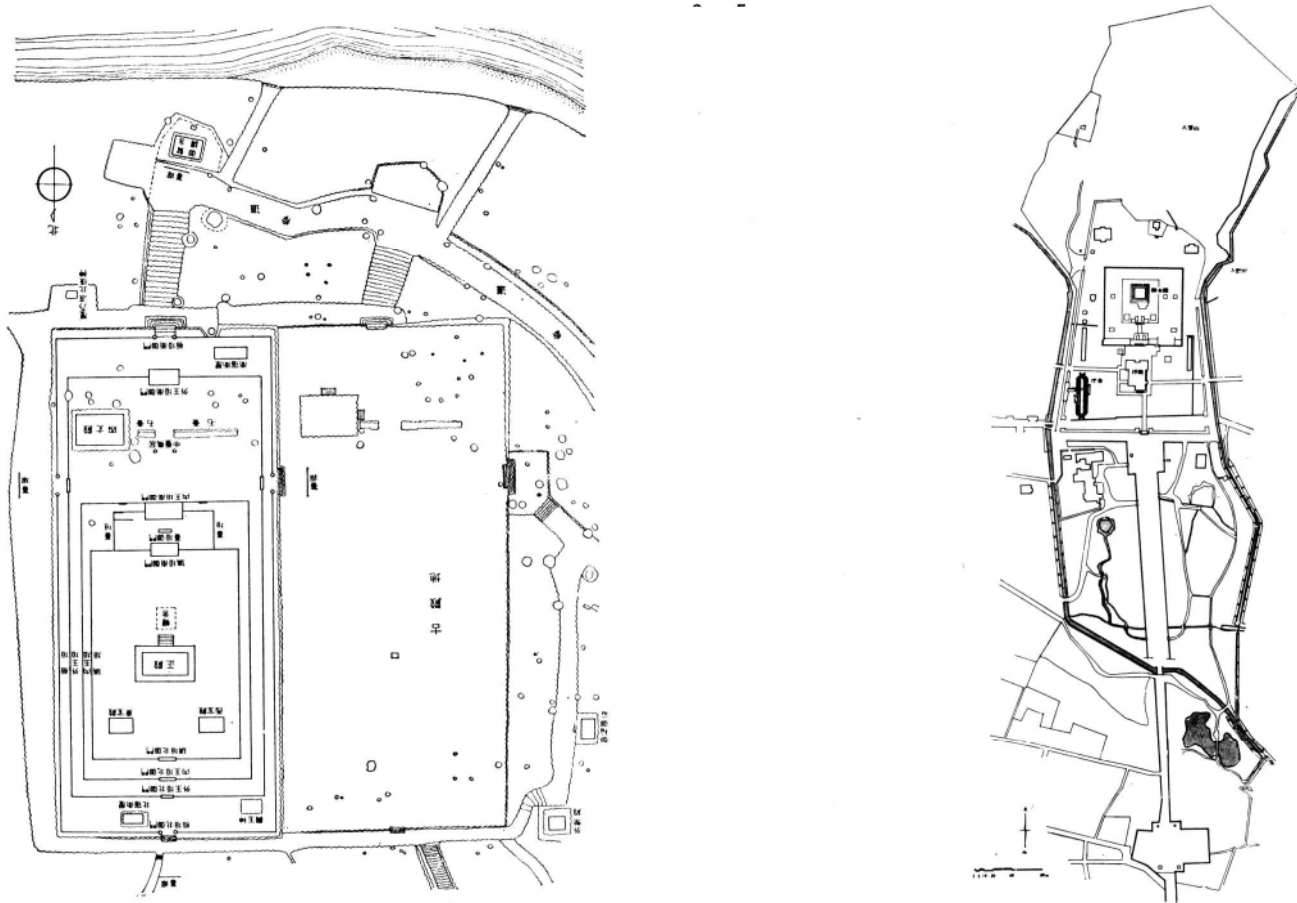


Fig 9.3: Inner sanctuary of the Ise Shinto shrine in Japan showing an adjacent alternative site. On the right, the Grand Shrine at Izumo. From Nitschke AD 1966 page 119/9]

restricted by geometry and doomed to lead to rigidity, to a dead order” (Nitschke 1966:120). However, even in these cases, the designers modified the purity of the designs by moving the entrance gates to the shrines off-centre, as an acknowledgement that perfection was the preserve of the gods. According to Nitschke, sophisticated order:

“emerges only when man has fully absorbed and worked through the principles of geometric order – which pertain to a static, immutable world – and discovers the order of an organic, constantly changing universe. This stage is not altogether unlike the first, but the intuitive grasp of nature has been replaced by perception and a conscious application of her principles. This stage is super-conscious”.
(Nitschke 1996:118).

He explained the transition from one stage to the next as appearing to be ‘simply a progression from unconscious asymmetry through symmetry to complex asymmetry’, but considers it ‘in fact far more complex. In each phase there is a different consciousness of space or rather *place*, which is the determinant in the shaping and placing of all forms (Nitschke 1966:118). As examples of ‘sophisticated order’

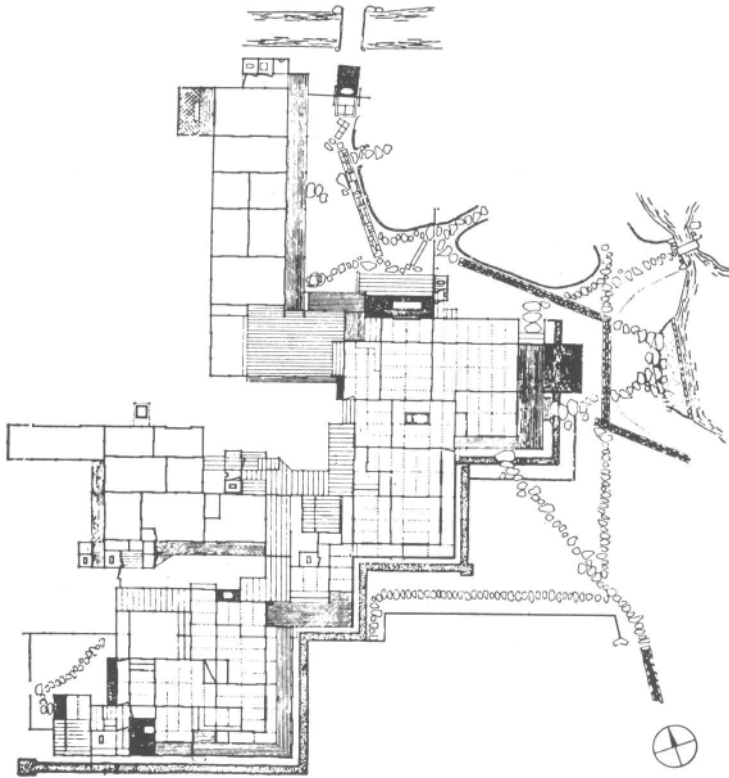


Fig 4: Plan of Katsura Palace, Japan from Nitschke, AD 1966 page 121

Nitschke cites Katsura Palace (see Figure 9.4) and Nijo Castle, in Kyoto, both of which “permit new elements, of the same, or different quality and size, to be added or taken away as required; in other words, it permits ‘change’ in its three aspects of growth, fulfilment and decay, to take place. One is reminded of the Chinese/Japanese character for ‘change’ *eki*, which also stands for ‘ease’”. (ibid:133). He continues:

“Each phase of growth is complete and beautiful in itself; nothing seems to be missing. The eternal architectural paradox, that of giving an impression of completeness within incompleteness, is solved. Life itself silently solves this paradox all the time, a human, an animal and tree does not at any stage suggest visual incompleteness. The structure visible in the plans is not only adaptable to change, but is even secretly stimulating growth and life. Though so formally perfect, it turns out to be the opposite of formal perfection which would mean death”. (Nitschke 1966:133).

Nitschke also demonstrated that form had its counterpoint in space or the void (*ku*) which made the context of a form an integral component of its development. For a student of architecture in middle England, Nitschke therefore offered another cultural perspective on concepts of space, or rather place and therefore place-making, and demonstrated that these concepts evolve with our relationship to the world around us and each other. In other articles, Nitschke (1964a, 1964b) reviewed the work of the ‘Metabolists’ an emerging Japanese group of architects similar in some ways to the

Archigram group in UK. Many of their ideas revolved around the need to incorporate change, growth and decay in the built environment. They shared a common desire to create forms which were both complete at any one point in time, yet capable of change, as found in nature and embodied in the concept of 'Ma'.

The impact of these articles determined me to visit Japan and in 1967 I was able to raise funding to visit for three months. Despite being unable to meet Nitschke, his approach established the foundation for a lifelong curiosity about how different cultures and social groups perceive and organise space. Among other significant examples was the fact that many Japanese classical gardens, such as the Katsura Palace garden, were often extremely small, yet created a sense of infinity by ensuring that it was not possible to see the whole garden from any single vantage point. Similarly, the layout of temples was designed to create a changed state of mind by literally leading you from the everyday, profane environment across a (spiritually cleansing) bridge and along a stream, at strategic points of which would be located places for rest and reflection, before climbing steps to the temple itself. The spatial organisation of the temple also reflected the social order, since only the Emperor and the High Priest were permitted to enter the inner court and the second prayer gate, defined with a curtain of pure white silk, was the furthest a normal worshipper was ever allowed. The Japanese concept of place also distinguished between physical objects and their social meaning. For example, key elements of many famous temples, including Ise, were rebuilt on adjacent sites every twenty years, but the new buildings were still regarded as ancient because they still housed the gods.

The visit to Japan exerted a powerful influence over my subsequent approaches to design and planning². The search for rules which permit flexibility and growth led to an interest in games, and particularly chess, since these provided a restricted set of pieces and movements, yet could be played at different conceptual levels to produce an almost limitless range of outcomes. The issue of structures which stimulate options for local variations suggesting an organic process of growth and change, was addressed nearly a hundred years ago by Patrick Geddes who also used the analogy of chess as a basis of finding ways of improving urban environments. In a series of highly innovative studies in India, he advocated the need for diagnostic surveys and pioneered the concept of 'conservative surgery' in which the role of the professional was to work with the grain of local traditions rather than remove all the pieces and start again. This interest in space as perceived and used, not just seen, was reflected in my final year student project³. This explored options for creating a flexible planning structure within which a declining coal-mining community near Nottingham could meet its changing needs within a social and economic environment which was also changing rapidly (Payne 1969).

Planners versus people

I applied for a Commonwealth Universities Research Scholarship and after travelling through Iran and Afghanistan, I finally reached Delhi and registered at the School of

² A number of my papers on planning and design in Japan were published in a special issue of *Arena*, the Architectural Association journal in Vol 83 No 921, March, 1968.

³ Undertaken with a friend, Peter Cookson Smith

Planning and Architecture in 1970. -In the late 1960s, Delhi was already growing at a rapid rate as migrants from rural areas arrived in search of a better life. The demands on housing agencies exceeded the ability to provide social housing for the poorer households and led to the emergence of numerous squatter settlements scattered throughout the capital. The professionals involved in housing and urban development, together with politicians, administrators and many middle class voters regarded these as a scar on the city's grand colonial environment and supported measures to remove them. This culminated years later in a crisis which forcibly removed up to half a million slum dwellers and contributed to the collapse of Indira Gandhi's government.

Sadly, few people at that time were concerned at the plight of these newcomers to the city or willing to find ways of absorbing them into its economy. In the event, however, the poor did not wait for the authorities to help them and created their own settlements on land which nobody else had claimed or developed and set about finding work in the service sector. Located just behind the capital's commercial centre of Connaught Place, one of these unauthorised settlements accommodated 2,000 people in huts on less than one hectare of land (see Figure 9.5).

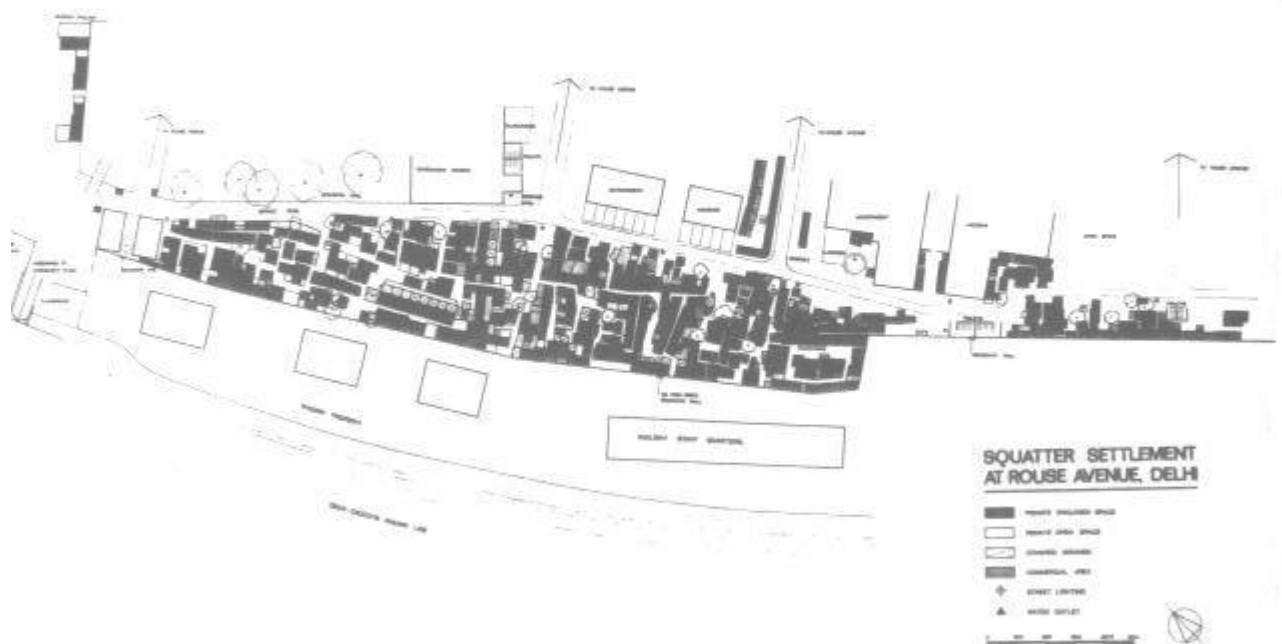


Fig 9.5: The Rouse Avenue squatter settlement in central New Delhi before its demolition in 1976 (by the author).

How did they organise such limited space in ways which enabled them to survive? This question combined the concern for spatial organisation aroused in Japan with the social concern aroused in the Nottingham thesis study and led to an intensive period of physical and social surveys plus observation of spatial use patterns at different times of the day and different seasons. What became evident⁴ was that the residents had evolved a symbiotic relationship between private and public space which enabled the latter to be used for different purposes at different times. Small 'chowks' or open spaces under trees became communal meeting, working and commercial spaces due to the shade they offered, whilst the main thoroughfare was used for cooking in the evenings and grazing animals, as well as circulation. Other huts were grouped around small communal courts and all huts were close to either the main thoroughfare, a chowk or a court. It was this symbiotic arrangement which enabled people to live at such high densities without apparent tensions and created an environment which, whilst lacking even basic amenities, was convivial in the sense that Geddes had recognised so many years earlier (see Tyrwhitt 1947).

To architects and planners indoctrinated by the professional views that only environments which they had created were ordered, such solutions were understandably anarchic. Yet the environments created by such professionals imposed a superficial order based on concepts of planning inherited from the British during the colonial period or influenced by foreign architects such as Corbusier. These schemes lacked conviviality and segregated housing from work and recreation, unlike the more dynamic and multi-functional informal settlements. They created sterile environments which often depended on substantial subsidies and therefore (fortunately) could not be built in sufficient numbers to meet ever increasing needs. Corbusier's proposals for Chandigarh, for example, reversed the traditional arrangement of mixed land use and medium to high density with narrow streets which suited the climate and replaced them with segregated land uses, low densities and wide roads. Housing accommodating the low-income groups was on the cheapest land furthest from the main employment centres, thereby imposing heavy travel costs within a grid layout suited for European levels of car ownership, not the public transport system needed by the majority of local people. The plan for Chandigarh was largely a solution to Europe's urban planning problems rather than those of India. However, the real cost was far greater than the inconvenience it imposed on its residents, since it encouraged local professionals and succeeding generations, to deny the rich indigenous traditions for organising space which had evolved over many centuries and replaced them with a half digested set of alien and largely inappropriate values. This permeated into popular consciousness and encouraged many people to regard traditional environments and building designs as backward and therefore to be discouraged by the expanding middle classes of many developing countries. In this way, local aspirations for progress became synonymous with denying local achievements and adopting foreign values and mores. This evoked uncomfortable memories of visiting Hiroshima to find a city rebuilt largely in the image of the West which had destroyed it decades earlier.

The extent to which ethno-centric Western professionals and their local counterparts intentionally or unintentionally undermined local confidence in non-Western ways of perceiving and using space went largely unchallenged in academic courses in either

⁴For more details of the settlements studied see Payne (1977)

the West or developing countries themselves. Even urban design, which originated out of a recognition that architectural preoccupations with their individual buildings, and planners with their two dimensional plans, had left a conceptual void in the three dimensional urban environment which we actually experience and use, did little for many years to recognise the rich variety of spatial traditions still remaining but under threat. This prompted an awareness that housing was not the preserve of any one conceptual framework or profession and could only be tackled successfully by multi-sectoral, culturally diverse teams working together and willing to listen to the people they sought to help. If my training had been based in UK, it was therefore in India that I received my real education.

Cultural concerns go mainstream

This interest could easily have been a temporary personal experience had it not been for meeting Paul Oliver on my return from India. Following an invitation to give a lecture at the AA School of Architecture on my Indian studies, Paul offered me a post teaching in the Graduate School. This exposed me to his own writings (Oliver 1969, 1971) and those of John Turner, Amos Rapoport, Bill Hillier, William Mangin, Anthony King and others engaged in the field of housing, spatial organisation and the role of communities. John Turner had already published seminal papers on informal settlements in Peru and created models explaining the logic behind their development (eg Turner 1965, 1966), which was later articulated into an influential book (Turner 1976). Meanwhile, Rapoport had followed up his book on House, Form and Culture (1969) with publications identifying the concept of a 'cultural core' which involved communities retaining certain modes of acting and spatial organisation considered central to their sense of identity in order to more easily accommodate change in areas considered less critical (Rapoport 1979). Meanwhile, King was extending his work on colonial urban ways of perceiving and using space as a means of social control (King 1976) into the domestic environment by demonstrating that the design of the bungalow was itself based on traditional Bengali designs, adapted to impose separation of the local servants from the colonial masters of the house (King 1984). For one academic year, I was able to combine a full time teaching post at the AA with being a full time masters student up the road at UCL, where Bill Hillier was pioneering an environmental studies course, the basis of what was to become space syntax theory (see Hillier 1984).

Teaching at the AA included the opportunity to undertake international study visits and in 1974 we visited Ankara, Turkey, where almost half of the city's population were living in unauthorised settlements. Ankara was different in several ways to Delhi and other cities in urbanising countries. First and perhaps most importantly, the government had sought to superimpose liberal, secular structures onto Turkish society and to use these to emulate the process of economic development achieved in the west. High priority was given to modernisation, industrialisation and urbanisation, an approach fundamentally different from the anti-urban bias found in many other countries.

While the new capital was planned according to international standards current at the time, and incorporated provision for low-income housing areas, these were rapidly swamped when migration accelerated and the city regularly doubled in

population every decade. Under the Ottoman Land Act of 1858, villagers in the under-populated Anatolian plateau were permitted to occupy unused state land, providing they developed or cultivated it. Naturally, rural-urban migrants were quick to exploit traditionally legal ways of occupying and developing public land in the city, even though different laws applied there. The outcome was a rapid expansion of informal *gecekondu* settlements, mostly on public land. Initial settlements were planned in order to discourage strangers, especially officials or the police, from entering and to disorientate those who persisted⁵. By exploiting legal loopholes which prevented completed dwellings from being demolished without a court order, settlers became more confident and planning layouts gradually changed to a more open, regular pattern (see Figure 9.6).



Fig 9.6: Plan of the Bahçelerüstü squatter settlement, Ankara, Turkey. Note the irregular inward-looking layout in the older area to the west, developed when the threat of official demolition was strong and the more regular, outward-looking layout in the later area to the east after the threat had receded.

This became even more regular in later re-blocking as *gecekondu* settlers sold their informal rights to developers skilled in obtaining official permissions for apartment

⁵ *Gecekondu* literally means to 'land by night', as in the case of mushrooms.

buildings or *apartment-kondu*. Such legal plurality or ambiguity, together with resource constraints and limited local powers, led to a form of decentralised, 'ad hoc' planning in which community leaders fulfilled similar roles as they had done in isolated rural communities. The result was that many communities generated their own development proposals for transport links, services provision, layout regularisation, etc and had a major influence over the implementation of such developments (see [Figure 9.7a and 9.7b](#)). Although the process was strongly influenced by political considerations, communities nonetheless had a major role in determining the form and nature of local development and suggested that, in this respect at least, Turkey had much to offer other countries, including Britain.

From theory to practice

In the late 1970s, an opportunity arose to put some of the research findings and recommendations into practice as part of a consultancy team developing urban land and housing projects in Ismailia, Egypt. Following two wars with Israel, the Suez Canal region had been evacuated for seven years between 1967-74, but when the Israeli army withdrew from Sinai, the Egyptian government was determined to reclaim the region and redevelop the three main cities of Port Said, Ismailia and Suez City. As in Turkey, here was another case of a government actively encouraging urban growth and seeking to manage it effectively, rather than inhibiting it. The UK consultants prepared master plans and were then invited back to prepare 'demonstration projects' to show how the objectives of the plans could be implemented.

The team commissioned to prepare proposals for settlement upgrading and new developments in Ismailia had an advantage over the other teams in that the city was surrounded by an unlimited expanse of flat, government-owned desert land. Another key advantage was that the Governor was amenable to new ideas⁶. A series of diagnostic surveys of the housing market were carried out and revealed that a majority of all households, and most poor families, lived in informal settlements, of which the largest was named El Hekr after the land tax or ground rent paid to register a claim to unused state land. In fact, this practice was based on the same Ottoman Land Act that applied in Turkey, whereby people were entitled to occupy and develop unclaimed state land on payment of a modest ground rent⁷. The official acceptance of this process resulted in layouts which were an extension of the formal grid layout used by the city's French planners who developed the city initially as the headquarters for administering the Suez Canal which they were constructing⁸. However, whilst the main north-south roads followed the formal plan, east-west links

⁶ Clifford Culpin and Partners, later reformed as Culpin Planning

⁷ In the 19th century, Egypt was still part of the Ottoman Empire.

⁸ Ismailia was largely developed by the French as the administrative headquarters for the Suez Canal which they were constructing. The plan followed the traditional colonial grid pattern criss-crossed with diagonal roads and public squares.

took on a much more informal character, providing a range of semi-public, semi-private spaces for communal use (see Figure 9.8). These evoked similarities with traditional urban layouts throughout the Middle East which consist of compact layouts with mixed land use, medium rise and medium density – the qualities that most good urban environments seem to embody.



Fig 9.8: The El Hekr informal settlement in Ismailia, Egypt, in 1977 before upgrading and expansion.

In preparing proposals to upgrade the existing settlement and expand it in ways which were both efficient, affordable and appropriate to the needs of local people, the consultancy team undertook detailed physical, social and economic surveys of the existing settlements and communities. A shortage of office space encouraged the various professional disciplines involved on the project – architects, planners, engineers, economists, sociologists and management experts – to interact continuously, so that each sectoral specialisation was focused on the central issues. This contrasted sharply with the ways in which housing projects were formulated and implemented routinely in Egypt and other countries, by which planners would identify potential project sites, pass the plans to the architects to prepare detailed plans, which would then be passed to engineers to ensure conformity with standards and regulations and then passed to the accounts department which would invariably lack adequate funding, necessitating either delay or a repeat of the complete process. Multi-disciplinary teams were able to avoid such wasted efforts and provided a more stimulating professional environment to work in, since each team member was able to see issues from a different perspective than their own and broaden their understanding and effectiveness as a result.

Years later, when directing a masters degree course on Building and Urban Design in Development (BUDD) at University College London, this approach was adopted with considerable success, despite difficulties from some colleagues who felt that recruiting anthropologists and economists to a design course was inappropriate. Vindication, for me at least, was achieved when on a study visit to Morocco to study and make proposals for improving a small town near Marrakesh. All the architecture and planning students studying the existing informal settlements presented graphically sophisticated analyses which focused on the spatial attributes of proportion, texture, scale and appearance. The anthropology student presented a plan of the existing layout onto which were marked a series of red dots. His explanation was that these indicated spaces which were an extension of the domestic environment where he had seen traditional, and usually poor, women working, socialising and supervising children. His conclusion and recommendation was that if planners sought to liberate such people, they should make such spaces an integral component of all new residential areas. None of the architects had been trained to interpret space in this way. Similarly, the economics student, working with an architect student, impressed her colleague with the need to consider costs and affordability to a level which would otherwise never have occurred. It is a sad commentary on the way in which professional institutes validate academic courses dealing with housing and urban development that they reinforce professional boundaries rather than seek to loosen them. This results in many universities throughout the world training students to adopt narrow perspectives on what is essentially a multi-faceted subject.

The Ismailia projects made a great effort to create proposals which were broadly self-financing and provided a range of options for plot size, levels of initial infrastructure provision and construction based on observing how local people developed land and housing and financed such development themselves. As such, we were students learning from those whose expertise was managing to build their lives - and their houses – with the minimum of resources. A critical feature of this process was the need to minimise initial expenditure and maximise future options. Accordingly, the team's proposals sought to permit plot sizes, levels of initial infrastructure and building construction to lower standards than officially permitted, but at least as high as those found within the existing informal settlement. Furthermore, detailed plans included a range of informal communal spaces for the new development and allowed residents in the areas to be upgraded to have control over such spaces (see Figure 9.9). The emphasis was on initiating and reinforcing a process of incremental development which was locally sustainable without dependence on external subsidies.

In the event, the projects were implemented in a very different way than was envisaged. The government refused to accept what was considered substandard development using mud brick and insisted that loans be repaid within seven years rather than the 15-25 years proposed. This raised both the initial costs and monthly repayments to levels which poor households had no chance of being able to meet and thereby excluded them from the project. In addition, the United States Agency for International Development (USAID) offered to meet the costs of providing full

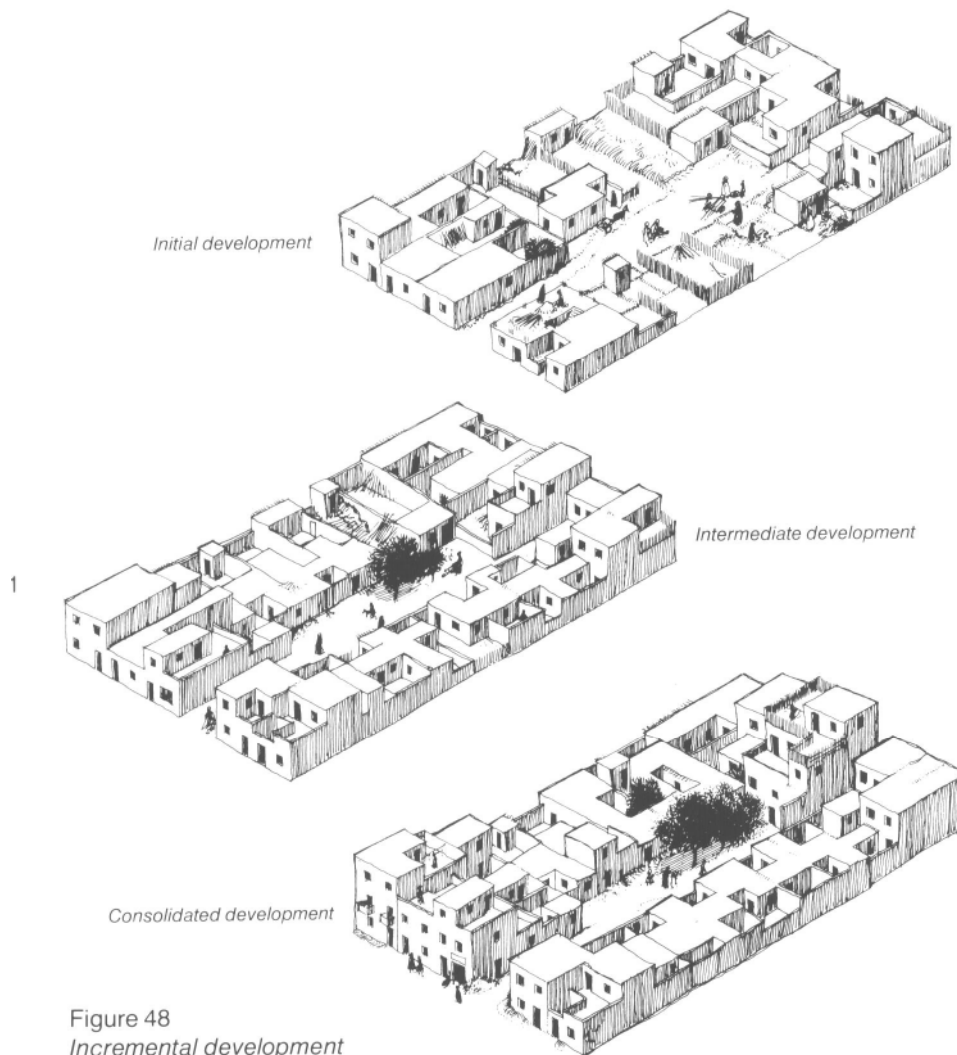


Fig 9.9: Proposals to adapt the existing layout principles in new development areas in order to incorporate communal spaces and incremental plot development.

infrastructure, which made the area potentially the best serviced part of the redeveloping city. Finally, the limited number of clerical staff appointed to process applications was inadequate to undertake checks on eligibility and resulted in many higher income households obtaining plots and building apartment blocks on a speculative basis. In this sense, the project was less successful than had been intended, though there was an ironic twist to the story in that President Sadat, who had a holiday home in Ismailia, was so impressed by what he was advised was largely self-financing housing for the urban poor, that the agency implementing the project was expanded to become the Ismailia Land and Housing Development Agency with a brief to apply the principles throughout Ismailia. Whilst we had therefore failed to implement the projects as envisaged, we had inadvertently succeeded beyond any reasonable expectation in demonstrating the benefits of the approach.

Lessons learned

The Ismailia projects demonstrated clearly the intimate interactions between social, cultural, economic, technical and political aspects of settlement planning. Nowhere were these aspects more closely interwoven than in Jordan, where many thousands of Palestinian refugees have been living in informal settlements for decades. Since the attitudes of both the government and the refugees themselves was often ambiguous in terms of wanting full citizen rights in Jordan, in case these prejudiced their eventual return home, whole communities were living in a form of limbo. In one case known as East Wehdat, the residents lived on a steeply sloping site in tin huts. However, they were not necessarily poor. Their inadequate housing was due to the owner of the land permitting them to occupy it on the condition that they did not construct permanent houses, leaving him the prospect of developing it to its full commercial value at some future point. As part of a World Bank loan, he and other landowners agreed to receive payment for the land and enable the community to develop it in ways which would stop sewage running in open tracks down the main pathway and enable them to realign their plots and rebuild their houses when they were ready and able.

Preparing plans to upgrade the settlement were not made easier by the difficult topography and the informal way the settlement had evolved. These were compounded by an inaccurate survey and local suspicions as to the intentions of foreign planners and surveyors visiting the site. On a personal level, travel within Amman involved time-consuming journeys into the city centre and out on another radial road, limiting productive time on site. To overcome these constraints, it was decided to develop the proposals locally and a friendly resident with a smooth concrete floor to her hut agreed to allow us to spread the map of the area out and use her house as our office. Needless to say, neighbours were soon coming to the door to see what was going on and how they would be affected by the project. However, they were mostly unable to make sense of the map and its complex contour lines, plot and building lines, etc., which inhibited their ability to offer suggestions and was in danger of reinforcing suspicions. The solution to this problem proved simple. Pieces of expanded polystyrene, bits of wood, or matchboxes were found and placed on the map to indicate buildings and people were immediately able to identify their own house, suggesting that three dimensions are more easily understood by lay people than two. With increasing interest from local residents, it proved possible to complete a provisional plan in less than ten days thanks to local participation. Many residents suggested ways of routing paths that would not require them to rebuild, whilst others offered ideas based on intimate familiarity with the site which no amount of outside analysis would have yielded. After years of exposure to the literature advocating participatory, bottom-up approaches to local development, here was tangible evidence that it was soundly based. The result was a project which, after considerable refinement by the project team resulted in a highly attractive modern version of a traditional Arabic urban environment, with narrow pedestrian lanes to provide shade, but also access for cars (see Figures 9.10a and 9.10b).⁹

⁹ Traditionally, streets in Arab towns were based on the need for a fully laden camel to pass unhindered, with wider streets (dual carriageways wide enough for two laden camels to pass in opposite directions.



Fig 10a: The East Wahdat informal settlement, Amman, Jordan in 1981.



Fig 10b: Proposed layout after upgrading, retaining the traditional winding, narrow pedestrian dominated circulation pattern.

The Middle East was urbanized long before Europe and has a long tradition of sophisticated urban forms which reflect cultural, climatic, economic and other factors. Unfortunately, contemporary planners, reflecting perhaps the desire to demonstrate modernity in Western terms, have done little to retain, adapt or reinterpret such traditions and have tended to either replace them completely or provide a pastiche of traditional elements which ignore the principles upon which they were based. Organisations such as the Aga Khan Foundation, Princes Trust and the Building and Social Housing Foundation have helped instil a more self-confident respect for past achievements and encourage local professionals to build on what remains¹⁰. Consultants and writers such as the late Jim Antoniou have also made a major contribution in this respect.

Of all the examples in which local professionals have developed a more egalitarian and productive relationship with local communities, two stand out as exceptional. In Karachi, Pakistan, the Orangi Pilot Project (see Khan 1996; Hasan 1999) pioneered a supportive role in which young professionals offered technical advice on disposing of sewage from individual houses to the end of lanes and eventually to main outlets for connection to the city sewerage network. Although the authorities were slow to respond and install the connection, the community of almost a million people were able to demonstrate that they could act as urban managers and planners as well as house builders. All the professionals did was to complement local initiative. In another example, the Kampung Improvement Programme in Surabaya, (see Silas 1984) Indonesia harnessed community initiative to install narrow paths, services and community facilities to high density settlements, adopting standards and regulations acceptable to the residents rather than imposing conventional ones which would have required massive relocation. As a result, the community improved their houses and managed a ten point community development programme which included literacy, health, livelihood generation, security and environmental development. The environment created as a result reflected ways of living with which most local people felt comfortable (See Figure 9.11).

Customary concepts

Different, but equally intense, attachments to land exist in all parts of the world. In Papua New Guinea, for example, 97 percent of all land is held in customary tenure by local ethnic groups. Local chiefs enjoy considerable power in terms of allocating land to *wantocks* or tribal kith and kin who in turn receive the right to occupy, use and sometimes transfer their assets. However, the concept of ownership is completely alien and the tribe considers itself the custodian of its land which is held in trust for future generations. Border disputes may result in bloody conflicts between neighbouring tribes and head hunting has been common until very recently.

Although this system of managing land has worked effectively for many generations, the introduction through colonial rule of Western concepts of property ownership, land titles and individual rights has undermined not only the traditional land management system, but other aspects of tribal identity and social relationships. When a small plot on the edge of an expanding town is suddenly capable of generating a substantial rental income or capital value, this stretches bonds of family

¹⁰ BSHF is based in Coalville, Leicestershire, UK



Fig 9.11: View of upgraded *kampong* settlement in Surabaya, Indonesia (sketch by the author).

loyalty and offers of free accommodation for *wantoks* may not be so readily forthcoming. This erodes traditional mutual support systems and throws families onto the formal market in ways which they are not necessarily well equipped to cope with.

One visible expression of this fragmentation of Papuan society has been an alarming increase in alcohol abuse and violence, which is in turn restricting progress in economic and social development. This is not to suggest that the introduction of individual property rights (or individual rights in other aspects of life) is wrong per se. However, it has proved impossible for the new statutory systems to develop appropriate responses at the scale required to meet the needs of a predominantly poor and increasing urban population. This has revealed the extent of the disparity between systems of land management which enjoy social legitimacy and those that seek to replace it. This came sharply into focus in the island of Bougainville, where one of the world's largest copper mines was discovered. After the local tribes agreed compensation and mining commenced, it was discovered that there were extensive gold deposits in the area and the tribes sought to renegotiate the levels of compensation. When this was refused, conflict erupted which caused the mines to be closed for some time, during which some tribal members claimed that they had not agreed to the loss of their land in the first place, rendering the agreement null and void in their eyes. Other tribal members then claimed that it was against tribal custom to sell land, since they did not regard themselves owners, but only custodians, and were therefore not entitled to deprive subsequent generations of their birthright. Repeated strikes and clashes between tribal groups and the

government have done nothing to improve either the productivity of the mine – potentially the main source of government revenue – or therefore of the national economy. The result of this and the unresolved relationship between customary and statutory systems of governance is that the gap between those able to succeed within the new system and those forced to the edge is increasing. Papua New Guinea is perhaps simply an extreme example of a pattern common throughout the developing and, to some extent even within ‘developed’ countries, where formal governance systems are failing to meet the needs of the poor.

Customary land management systems are not, of course, unique to Papua New Guinea. They are widespread through the Pacific and sub-Saharan Africa, where they are coming under threat from Western systems based on individual rights and market forces. In Lesotho, for example, all land is held by the King in trust for the Basotho nation and has traditionally been managed on the King’s behalf by local chiefs. This system has worked well, despite occasional cases of mismanagement, and has enabled people to obtain easy access to land for housing and sources of livelihood. However, the government’s decision to render the role of chiefs in land allocation illegal within urban areas has exposed failures of the new statutory system. Conventional methods of public sector land acquisition have attracted numerous charges of inadequate or delayed compensation, which has encouraged customary groups to continue allocating land for housing unofficially. At the same time, the failure of public sector land development and housing projects to meet even a modest proportion of housing needs in expanding urban areas has forced those seeking homes to seek help from the chiefs or those allocated land by them. Even middle income households no longer follow official procedures which require the Commissioner of Lands in the Ministry of Local Government to personally sign every lease in the country and include other requirements which collectively take up to seven years on average to complete. The result is that virtually everybody follows a procedure which is illegal, yet enjoys widespread social acceptance. This is hardly conducive to good governance.

Land use patterns in the Lesotho capital Maseru reflect these processes in the form of low-density settlements spreading many kilometres from the city centre. The traditionally close attachment to the land felt by local communities means that land is not regarded primarily as a commodity to be traded and this has restricted land prices to a minute proportion of total housing costs. Accordingly, people regard the official minimum plot size of 600 square metres as inadequate and plots of more than 900 square metres are common within the urban boundary. For many low-income households, this is justified in that it enables them to keep animals and grow some of their own food. However, it also makes densities so low that the provision of basic services, such as piped water supply, sewerage and surfaced access roads become uneconomic, stretching distances to the main employment areas and making travel an expensive and time consuming process. With Maseru growing at an estimated 7 percent a year, it is likely that its existing population of 250,000 will double within a decade, so unless densities increase, at least in some areas, the health and accessibility problems may become unmanageable. In this instance, market forces may be welcome as a means of encouraging more efficient use of available land on the urban periphery.

In most other parts of the world, market forces are already well entrenched. In Peru, for example, collective efforts have been a means to realising individual benefits for decades. The squatter invasions reviewed so fully by Turner (1965, 1966) and Mangin (1967) in the 1960s have become established parts of the urban land and housing market, with many households eventually obtaining property titles from the authorities. The organisers of such invasions took care to plan their settlements on state owned desert land using a simple grid pattern, often with the help of sympathetic local students. This made the allocation of titles and the provision of services relatively easy and provided everyone with similar size plots. The first thing that most families did was to build a brick wall across the whole frontage of their plot, both to protect it and also to ensure privacy for whatever form of development they undertook within the plot. In these areas, there is no intermediary space between the fully private and the fully public space as found in Arabic settlements, simply the articulation of the two categories. Unless empirical research can demonstrate the opposite, this suggests that the spatial language used by these settlers does not have a rich vocabulary.

Conclusions

The global trend for market forces to penetrate all sectors of economic activity has undoubtedly threatened the ability of many indigenous systems of governance to meet increasing and changing needs. However, governments have so far rarely risen to the challenge of replacing traditional forms of governance or land management in forms, or at the scale, required. The result is that a large proportion of the urban populations of the developing world finds itself in a legal limbo. In a sense, we should not be surprised at this problem. After all, it took Europe nearly two centuries to transform itself from a predominantly feudal, rural society to a modern, urban one. European countries had the added benefit of small populations, powerful economies and influence throughout the world which enabled them to export their problems. For example, troublesome religious minorities could be encouraged to leave and establish their own communities in North America, criminals could be deported to Australia and the second sons of the aristocracy could be sent abroad to govern the colonies. Countries undergoing this transformation today have larger populations, do not control even their own economies let alone the world's and cannot export their problems. In fact, they are finding it difficult to cope with those left by the previous colonial powers. Furthermore, they have only had five decades to develop a legal, institutional and technical framework appropriate to their diverse situations. Whilst globalisation is tending towards conformity to a predominantly Western world view, there is an urgent need for countries to examine objectively those elements of indigenous systems of governance and land management that have worked in the past and ways in which they can be adapted to meet contemporary and future needs.

The examples reviewed in this chapter demonstrate that there are many ways in which people perceive and use space and that simplistic attempts to change these can be counterproductive. Under such conditions, people may resist other changes which would be to their advantage. It is therefore advisable for change to be introduced at a rate which society can accept and which is seen to build confidence, rather than erode it. The best way this can be achieved is by encouraging the active participation of local communities in the development process at all levels and in all

sectors. Planning regulations, standards and administrative procedures which require applicants for land or housing to spend months or even years visiting different departments, paying bribes and having to meet costs which they cannot afford are clearly counterproductive. However, few countries have so far undertaken or acted on regulatory audits which can indicate where change is most needed. Yet the evidence is there for all to see, if only we care to look. The literature generated by Nitschke, Turner, Oliver, Rapoport and others amply demonstrates not only the rich diversity of spatial languages and forms which people have developed, but their potential contribution in organising the upgrading of existing settlements and planning new ones. The key is therefore to find ways of harnessing this creative energy and assimilating it into official development programmes. It is these which need to change, not the populations of our urbanising societies.

On a more practical level, it is important to break the blinkered hold which many professional institutions exert on academic institutions educating future generations of planners, architects and other disciplines. Until we encourage a more holistic approach to addressing issues of urban development and housing, we cannot complain if the next generation of professionals repeats the failures of the past.

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