

Urban Design in Developing Countries

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Abstract:

The discipline and profession of urban design developed out of the experience of post-industrial societies, particularly in northern Europe, north America and Australia. The issues facing these societies are almost the mirror image of those facing the rapidly growing cities of developing countries, where populations are commonly doubling every ten years, or increasing by up to 1,000 people a day. It is therefore important to question whether the theories and methods of urban design evolved to address urban issues in the 'north' are relevant to those facing urbanising countries, what skills future urban designers in the 'south' need and how educational institutions can adequately prepare them for the issues which they will face in practice.

1 Issues of theory and practice

Urban design is increasingly recognised as a vitally important discipline for the future of our towns and cities. It is at the forefront of the relationship between the individual and society and between architecture and its urban context. It is concerned with the politics of space and the spatial form of power relations. In this respect, its remit is wide and its application universal.

Teaching the subject therefore requires a wide view of the factors which influence built form and spatial structure. These include the obvious subjects of economics, planning, design, management and sociology, but also the political factors which influence the options and constraints within which land is acquired, transferred, developed and managed.

To what extent does urban design theory and practice provide an appropriate framework for teaching the subject to students from developing countries?¹

Clearly, some assumptions have to be made and few British academics have the opportunity to visit every country from which students arriving in Britain originate, let alone to be familiar with the issues facing individual cities. Such assumptions, however, run the risk of becoming embodied into theories and methods which students then take home and apply in urban areas where the economic, political, cultural, climatic and environmental conditions are very different to those relevant in London or Oxford.

There are many obvious differences between 'developed' and 'developing' economies. The former are characterised by relatively stable, ageing and affluent populations; the latter by expanding, young populations with a high proportion of low-income households. The former have evolved relatively strong institutional and legal frameworks to manage land transfers and development, whilst the latter frequently have to cope with weak governmental institutions and

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For practical purposes, the term developing countries has generally been used in this paper, since it is the term in most common usage. It is recognised, however, that the term has no specific meaning and does not apply specifically to any country in particular.

conflicting legal systems of land management. The former are characterised by a high proportion of urban populations which is increasingly moving from central urban areas to the suburbs and beyond, whilst the latter have only begun to urbanise in the last fifty years, yet are now doing so at a rate unprecedented in human history and with ever increasing densities in central areas. Cairo, for example, is increasing by about 8,000 people a week and even Lusaka by about 500. Whilst land prices in some British cities are currently stable, or even declining, those in developing countries are increasing rapidly and recent reports indicate that Bombay, for example, now commands the highest rents for commercial properties in the world, having recently overtaken New York, Hong Kong and Tokyo. Finally, virtually all urban development in western countries is carried out in accordance with official standards, regulations and procedures, compared to only 30-50 percent in many developing countries.

Despite these differences there are, of course, many similarities. During the 1950's and 60's, expansion of the British economy led to increasing competition for well located urban sites and large scale corporate investments in urban redevelopments. Many cities in developing countries have experienced equally, or even higher, levels of competition for prime urban sites, as seen in Bombay. The emphasis on private sector investment found throughout advanced market economies has recently been followed by many developing countries, as structural adjustment programmes begin to take effect. Even such similarities can, however, be deceptive, since the high land prices found in developing countries reflect a lack of attractive alternative investment opportunities in more productive sectors of the economy and the attractiveness of land as a means of transferring funds from the black into the white economy.

Against this background, it is hardly surprising that questions should be raised concerning the application in developing countries of town planning theories and methods evolved in Europe. Garden cities, or low density grid layouts, such as Milton Keynes, may be appropriate to countries like Britain, with their high levels of car ownership, but are highly questionable in places like Chandigarh, where an insignificant minority own cars and travelling on foot or cycle in high temperatures is extremely uncomfortable. Similarly, the suitability of capital intensive, high technology buildings, which require skilled manpower and expensive maintenance systems, is even being questioned in Britain, so that their construction in countries where neither capital, nor skilled labour exist in abundance is even more doubtful.

If British planning and architectural theories have therefore been questioned in terms of their relevance to developing countries, it is therefore only reasonable to question whether urban design theories and methods are also prone to such limitations, especially since they have, by and large, been based on the urban experience of advanced economies.

The literature certainly provides numerous examples to suggest that the issue is open to debate. Studies of urban morphology, for example, have drawn heavily upon historical examples from within the European tradition, such as Rome, Siena, Florence, Paris and Berlin, not to mention Britain. Even American examples, such as Boston, owed much to this tradition. It is only in the third (1994) edition of Morris's book on the history of urban form that chapters have been added on the Middle East, China, India and other countries outside the western experience, even though, as he acknowledges, these were the first areas in the world to become urbanised and evolve complex administrative, technical and spatial solutions to urban living. Cullen, Krier, Ching and Alexander have based their work largely on the experience of western societies and few urban design theorists have so far emerged from within developing countries, though the study by del Rio (199?) indicates that this may be

about to change.

In this respect, European studies tend to apply a somewhat functional, secular approach towards space. Krier, (1979), for example, makes great play with geometric configurations to explore options for successful spaces based on classical precedent, whilst Lynch emphasises the importance of nodes, paths, edges and landmarks in ordering the environment and finding one's way around it. Tibbalds (1992), also adopts a practical focus and considers that traditional environments usually produce an attractive, organic whole with a variety of useful pedestrian areas on a comfortable human scale. This, he sees as the scale of people walking, the creation of intricate places and the complexity of use and activities. The need is to create urban areas with their own identities, rooted in a regional and/or historic context. To be successful, new developments should therefore make a positive relationship with existing morphologies. He also claims that an essential quality of great cities is that they include a variety of uses and activities in any one area, though this hardly constitutes an urban design theory.

One of the most respected American observers has also adopted a relatively functional approach to urban theory. In his study on good urban form, Lynch (1981) listed five qualities inimical to successful cities: *vitality* (the extent to which the form supports the vital functions of an area); *sense* (the degree to which it can be clearly perceived and mentally differentiated in time and space by its residents); *fit* (between the actions of people and the capacity of spaces); *access* (the ability to reach other persons, activities, resources, services and information); and *control* (the degree to which the use and access to spaces and activities, and their creation, repair, modification and management are controlled by those who use, work, or reside in them).

Among the British approaches to urban design theory and practice, the Responsive Environments group has had a seminal influence and their book on the subject (1985) has been widely adopted. The qualities which they define as determining the degree of environmental responsiveness are well known, but bear repeating for the uninitiated: *permeability, variety, legibility, robustness, visual appropriateness, richness and personalisation*. They rightly consider that the ways in which these qualities can be applied is a political matter, yet they do not claim the status of a theory for their approach and address it primarily to designers, even though they are not the only professionals exerting a direct impact on the way in which cities are developed at the local level. What they are essentially offering is an approach or method to the analysis and design of local environments, with the assumption that the qualities they admire will help to ensure a responsive and therefore socially desirable urban environment.

These essentially formal and functional approaches have been complemented by a range of studies focusing on the way in which people perceive space and on the cognitive and behavioural processes by which we map our environment and give it order. (See inter alia, Canter 1977, Lynch 1960 and Appleyard, D 1980). Even these, however, make scant reference to the urban issues facing the cities of developing countries.

Since the modern discipline of urban design is still in its infancy, its ability to develop a universally valid body of scientific theory is not surprising. However, as Lynch (1981) has noted, there are few general theories concerning cities with a strong explanatory power and much of the best literature is based on the assumption that each city is unique, an approach which he labels 'antitheoretical'. Yet this limitation on theory has not prevented general

methods being applied to a wide range of contexts. So we return to the question with which we started; To what extent is urban design theory, method and practice relevant to the issues facing cities in developing countries?

Among the influences on urban form in developing countries, those which have received inadequate attention would have to include cultural, climatic, political, religious and, of course, economic factors.

2 Issues of context

However, it is not just within western countries that these factors have been overlooked. In the 1960's, for example, some remarkable work was undertaken by Gunter Nitschke (1966) to explore the ways in which space is perceived and used in Japan. A distinctive feature of these studies is that Nitschke attempts to understand the 'invisible' as well as the visible characteristics of space. He notes that this raises the problem of explaining the facts of one culture or consciousness in the language of another. For example, in Buddhist terminology, form sometimes stands for object and non-form for space. The Japanese sense of space is expressed in the term 'Ma', which is best described as a sense of place and embodies both the physical and spatial characteristics of form and non-form and subjective responses to them. It is therefore not something that is created by compositional elements, but something which takes place in the imagination of the person who experiences these elements.

The principal of place-making in traditional Japan coincides with a gradual appreciation of the order of nature as revealed through man's attempts to create order. Nitschke identifies three stages in the development from disorder to order;

- 1) apparent disorder,
- 2) geometric order and
- 3) sophisticated order.

In the first, man accepts the dominance of nature and builds, un-self-consciously, as an extension of it. In the second, man seeks to impose an intellectual concept of order upon nature, using numbers and geometry in a conscious way. In the third, and most advanced, stage, man has fully absorbed and worked through the principles of geometric order to discover the order of an organic, constantly changing, universe.

Another way of explaining the approach is that it involves a progression from unconscious asymmetry, through symmetry to conscious asymmetry, though each stage involves a different consciousness of space.

Examples of the first type of place-making are found in the 'falling leaves' layout patterns of traditional villages. Examples of geometric order abound, but are exemplified in the Ise temple, where the courtyards are increasingly sacred and ordinary worshippers are only permitted as far as the second gate (figs). Even then, man is considered unfit to approach the first gate on the main axis, and this is positioned slightly off centre, an act which has nothing to do with aesthetics.

Examples of sophisticated order can be found in the Katsura palace and the Kiyomizu Temple, both in Kyoto. The palace follows the principle of being complete and beautiful in each stage, yet equally capable of accommodating change and additions. In fact the Japanese term for 'change' also stands for 'ease'. The distinction between inside and outside at this level of order becomes almost indistinct.

In Asia, the ordering of space was based on cosmic, rather than merely functional, principles, such as the mandala. Communal facilities were not concentrated centrally, or around a core, but at intervals along the streets. Thus, the main streets were vital places of social activity and oriental ceremonies were processional, not static or focused on a central space. The smaller streets were places for normal communal life and resulted in an equal distribution of density. It is rare, if not impossible, to find in Japan the European sense of enclosure created in town squares.

Figs also reflect another aspect of urban design which has received insufficient analysis from secular western analysts, that of religion. The layout of the Ise shrine is an excellent example of the way in which space is organised around a concept which is intended to reflect and induce a state of mind, in this case a journey, physical and spiritual, from the profane town to the sacred shrine. Thus, one starts the journey by crossing a bridge, symbolically leaving behind the everyday world and purifying oneself. One then passes various landmarks which serve as points for reflection, pauses alongside a stream and climbs various flights of steps, each representing a physical and spiritual challenge, before arriving at the entrance to the shrine itself. This is an ordering principle far more complex than the mere manipulating of formal elements to create spaces which are aesthetically satisfying.

Returning to the issue of cultural appropriateness, many other examples can be cited of concepts which would reward further analysis. Both Chinese and Indian concepts of urban form are based largely on cosmological concepts, though similar influences are found in most ancient South American civilisations. These held that any permanent settlement should be a magical model of the universe and the gods. Cities, therefore, were seen as a means of linking human beings to those vast forces and a way of stabilising the order and harmony of the cosmos. Nitschke (1966) illustrates how the ancient Chinese cities were repeatedly subdivided into smaller and smaller units from the cardinal points of the compass, into administrative units of the *ho*, *bo* and *cho*, each of which reflected different levels of social and administrative organisation.

Indian theorists produced a series of texts on city planning called the '*Silpasastras*', which indicated how the earth could be parcelled out and the evil forces of chaos enclosed and controlled (Lynch 1981:73-7). The typical form was a mandala, a set of enclosing rings divided into squares, in which the most powerful point is the centre. Enclosure and protection reinforces holiness, and the key movements are from the outside in, or circling the sacred enclosure in a clockwise direction.

These concepts indicate the degree of sophistication developed many years ago in non-western cultures with respect to the ordering of space and built form. More mundane examples can also be found in the ways in which different cultures perceive the notion of privacy, individuality, or community. Thus permeability is actively discouraged in the residential areas of many traditional Islamic settlements, since outsiders are not welcome. Similar tendencies can be found in many squatter, or informal, settlements in developing countries, where residents wish to discourage access by the prying eyes of officials and the police.

In Ankara, Baghdad and several other cities, the old citadel areas contain a mass of narrow paths and culs-de-sac, deliberately intended to ward off visitors and with street widths based on the ability of two loaded camels to pass each other! Early squatter settlements in Ankara tended to follow the same approach, with traditional courtyard houses and narrow lanes being used to confuse visitors (see **figs...**).

Another example of the cultural aspects of spatial ordering was noted in a field study visit to Morocco undertaken by students on the Building and Urban Design in Development course at University College London in 1994. An anthropology student (Thomson 1994) noted that women were rarely seen in the public streets and open spaces, but were frequently found in the semi-public areas outside the houses. These 'link' spaces were found to perform a vital social function in allowing women, who would otherwise be prohibited from leaving their homes, to meet other women and carry out domestic and economic activities. Any proposals to remove such areas would obviously have a detrimental effect on the social position of women in these areas. Accordingly, he recommended a series of infill developments specifically designed to maximise such link spaces, an approach which few architects would have adopted.

Another example of cultural influences on urban form is provided by Ghaidan (1975), whose study of the old Swahili coastal town of Lamu, led him to conclude that "the patterning of space is culturally determined, ie. spaces and the manner in which they are used interdepend in the sense that systems of behaviour require specific shells, and the shells in turn give permanence to those systems".

The structure of Lamu is based on a hierarchy of roads and markets, with roads becoming less formal as they penetrate residential areas. The town is divided into 36 '*mitaa*', or neighbourhoods for families of related clans, following an East African tradition (p78). This has a parallel in other Muslim settlements in which different neighbourhoods specialised in different trades or guilds. These commonly developed by a single house being built on a large plot and subdivided continuously as demand increased, until all land was developed. A high degree of co-operation existed between neighbours and this enabled some houses to span across streets, ('*wikios*'). Street life is animated and a transition space considered essential between the public and private domains of the houses themselves. Personal space is minimal and high levels of participation in public life exclude any expression of grandeur. Even mosques may not be distinguishable from houses. (The same tendency was noted in residential parts of towns in Morocco).

The need for privacy has led to designs in which no external windows are tolerated (again, a tendency in urban Morocco). Ventilation is provided through the internal courtyard. In this way, the street itself serves as a public lounge, whilst personalisation is concentrated in the intricate design of carved house doors.

Climate is another major factor influencing the urban environment in many developing countries. Since most advanced economies are in temperate climate zones, climate has not featured as a major design factor. Whilst many studies have been undertaken of ways in which building design and construction systems have succeeded in achieving comfort levels, relatively little has been undertaken to show how settlement designs can facilitate comfort and improve economic performance under extreme conditions, especially where private transport is restricted.

Political factors represent both a direct and indirect influence on built form in developing countries. In Ankara, for example, various master plans have been prepared for the city since it was made the national capital in 1922, yet political realities ensured that whoever was able to deliver the most votes determined what development took place, even if this involved illegal settlement. Whilst this process challenging the rule of law, it was at least a democratic response to the inability of formal supply measures to meet the demand for low-cost plots in accessible locations. It also led to many very attractive and efficient layouts, in which resident groups exerted considerable influence on both initial settlement and later upgrading (see **figs.....**).

An equally impressive example of the way in which political factors can influence spatial organisation and built form can be seen in the Kampung Improvement Programme in Surabaya, Indonesia. Here, municipal government is subdivided into small units, related to the size of *kampungs*, or traditional settlements (kampungs are not squatter settlements). These organise themselves, together with NGO's and local government funding, to achieve a remarkable level of environmental improvement by concentrating on the public domain of streets, services and facilities. Individual households then improve their own dwellings when and as they can afford to (see **figs.....**).

Just as Hausmann's Paris was only possible through the application of centralised power, so political patronage influences the regulatory framework of planning and design standards in developing countries. When the World Bank made its first loan to Kenya in 1973, it stipulated that the Government accept a review of existing official planning and design regulations. This was duly completed but, despite being introduced to Parliament repeatedly ever since, has still to be implemented. As a result, access to officially approved settlements is restricted to a small proportion of the urban population, despite the high level of demand. Political reluctance to be seen to 'lower' standards, even if this makes housing and services more accessible, has been resisted by numerous countries.

Finally, the most pressing factor facing those involved in the design of urban settlements in developing countries is that of economics. Whilst this is important in any country, the margins between success and failure are far more critical and sensitive in the context of countries where average monthly household incomes are less than \$50 and land costs are comparable with, or even greater, than in Europe.

3 The need for urban design in developing countries.

This is where urban designers can make a significant contribution to improving the environmental conditions of millions of poorer households in the cities of developing countries. It is almost impossible for architects to work with or for the poor, since low-income households are unable to afford their services. However, urban design offers the possibility of working with community groups, making it possibly the first point of contact with professional services for the majority of people. By preparing site development and urban design briefs, urban designers can also be at the forefront in establishing a new working relationship between public, private and voluntary sectors, as has happened so successfully in Indonesia.

Whilst no manual can, in itself, guarantee that these objectives will be achieved, it is abundantly clear that the most pressing issue is to reduce entry costs to a development to the absolute minimum, if lower income households are to be able to participate. This is not simply

a question, however, of planning layouts with the narrowest streets and the smallest plots, but of designing the public realm to reflect both the economic realities and the way local people perceive and use space. As Rapoport has frequently (eg 19.....) demonstrated, economic efficiency involves more than technical considerations, since any plan which requires people to use space in ways which are alien to them is likely to fail and, therefore, to be uneconomic.

Nonetheless, it is essential to put every square metre to good use, (however defined), if a proposal is to be both affordable and replicable. One example of this can be seen in the Rohini project in New Delhi, where extremely high densities have been achieved without creating a sense of oppression. Although the individual plots are only 25 square yards, almost all plots have direct access onto a small communal open space, and walking along the streets provides alternating buildings and open spaces every few yards. The skill of the designer is put to the ultimate test under such conditions.

There can be little doubt that the discipline of urban design is central to any attempt to achieve efficient and equitable urban development in the rapidly urbanising countries of Latin America, Africa and Asia. The rate of urban growth is unprecedented in human history, though much of this is due to natural increase, rather than rural-urban migration, so cannot be stopped or even reduced in the short term. Whilst the *rate* of urban growth, even in large metropolitan centres, shows encouraging signs of reduction, the *level* of growth remains colossal in numerical terms. Lahore is estimated to be growing at about 6,000 people a week, whilst Mexico City is increasing at over 10,000 a week and even Lusaka, with a population estimated at 150,000, is increasing by 450 each week.

It does not require technical expertise to see that the problems of acquiring land, providing services, constructing housing and generating employment at this sustained scale is enormous, especially since the level of resources available to either governments or people are limited. The fact that between half and three quarters of all urban development takes place outside the formally planned, legal framework, is an indication of the problems facing anyone operating within the urban development field. Yet before anyone suggests that cities have already grossly exceeded any definition of optimum size, they need to recognise that very little can be done to stop the process and, more critically, major cities contribute a disproportionate share of total government revenues per head of population. Anyone concerned about funding for rural development programmes cannot therefore afford to kill the goose that lays an egg this size.

These practical problems also have to be seen in the context of an increasing consensus among professionals, governments and international agencies that governments cannot resolve these issues directly, but must encourage the direct intervention of the private sector and local community groups in the development and management of urban development schemes.

This has become known as the support, enabling or facilitating approach. It recognises that the poor have already made a substantial contribution to the economic and physical development of urban areas, and that government action to facilitate this can best take the form of indirect action. However, its ability to improve the lot of the urban majority will depend on several key factors; 1) a willingness by governments to change the regulatory framework within which urban development takes place; 2) the willingness and ability of the private sector to address the needs of the vast numbers of low-income people, which until now, it has steadfastly excluded from its operations, because of the low profits and high risks and 3) the

ability of local communities, which rarely have the resources to conform to official standards, norms and procedures for planned development. The policy consensus should not be expected, therefore, to resolve these issues overnight. Nonetheless, it does mean that almost every country currently following economic liberalisation programmes as part of structural adjustment programmes, will not be able to meet the needs of the urban poor through direct provision, especially if this requires subsidies.

This policy environment will exert a major impact upon the ways in which urban land is developed and managed. It implies government departments developing new relationships with land-owners, developers and communities and evolving innovative programmes which are socially acceptable, economically viable and ecologically sustainable. To date, there are understandably few examples of good practice which can be cited as embodying this new approach and even fewer which have been applied at a large scale. The landscape is therefore lacking navigational fixes upon which new travellers can take their bearings when starting out themselves.

The situation in which we find ourselves therefore suggests that the days of intense theoretical debate about the role of the state in urban development are over, at least for the present. What we need now is an agenda for action which can translate the objectives of the new policy approach into action. In practical terms, this means asking what options can be generated for particular sites within existing cities, or on open land on their periphery. This is where urban design becomes central to the implementation of urban development strategies. It is the ground upon which the success or failure of current policies will be tested.

Such a central role raises the stakes of urban design from a technical question of designing attractive environments and public spaces, important though this undoubtedly is, to a level where it is central to policy implementation.

4 Teaching urban design skills to students in developing countries

A primary consideration is that to date very few central or local governments in developing countries have recognised the important contribution that urban design can play in creating appropriate, attractive and economically viable urban environments. One therefore has to start by demonstrating possible applications within evolving economic, political, legal, professional, environmental, social and cultural contexts - no easy task!

Secondly, student exposure to urban design concepts may vary enormously on arrival in Britain and cultural attitudes also vary considerably. Teaching them about concepts without direct reference to the issues which they will face at home can only serve to exacerbate such disorientation and lead to the uncritical adoption or rejection of ideas, neither of which is desirable. The ability to absorb new concepts will also vary with aptitude and previous training.

The predominance of architects on urban design courses is understandable for several reasons, not least the need to diversify career options in a profession noted for being vulnerable to fluctuations in the economic cycle and with ample opportunities for working on large scale commercial schemes. However, this creates the risk of urban design simply being 'architecture writ large' and of urban areas being treated as primarily formal design issues, when in fact municipal engineers, economists, sociologists and planners have vital skills to contribute to the development process. Yet it is equally clear that it is impossible to create designers, however, defined within the confines of a one year master's programme. So should

we be widening our definition of urban design to include aspects of all those skills which other professions have acquired, but focused on the scale of the local environment, or restrict access to courses to those who can already demonstrate design skills?

As if this is not enough, how can one provide a conceptual framework which uses British and other approaches from advanced economies as a starting point for an exploration of urban design issues and the development of an approach sensitive to other cultures and levels of economic development?

The Building and Urban Design in Development course at the Development Planning Unit, University College London, has addressed these issues by encouraging the recruitment of students from a wide range of related backgrounds, such as planning, economics, anthropology and engineering, as well as architecture. Exercises, workshops and projects have been set which encourage group work and the cross fertilisation of ideas and skills, so that no single vocation is encouraged to consider that it has a monopoly of wisdom on the subject in hand. Rather, it is implied that any attempt to create environments in which the whole is greater than the sum of the parts, can only be generated by a mixture of skills and ideas from multi-disciplinary groups working together. This avoids, or at least reduces, the need to turn economists into designers overnight, but helps each student to see where his or her contribution can best be made in creating environments which are socially responsive, economically viable and ecologically sustainable.

With regard to the issue of cultural relevance, one methodology which addresses this issue has been developed by Amos Rapoport (199....). Following on from his seminal studies in the 1960's, Rapoport has sought to operationalise a concept of culture. He assumes that the purpose of culture is to provide a sense of identity, a "design for living", so that things only have meaning in the context of other things. Using this approach, he takes the abstract notion of culture to define a world view held by a group and the values it embodies, which leads to studies of the lifestyle and activity systems of a group, all of which combine to determine the way the environment is perceived and used.

Rapoport accepts the dynamic nature of social change and proposes the notion of a 'cultural core', to enable observers to assess those elements which a social group are willing to discard easily (peripheral) and those to which they cling, even when logic suggests they are inappropriate (core). By assessing the type and rate at which certain elements of the built environment change over, say, 15 years, it is therefore possible to assess the nature of the cultural core of a specific group. Unfortunately, insufficient diachronic studies have been undertaken to enable this approach to yield results to date, though it clearly has considerable potential.

For most overseas students, merely being in Britain will expose them to cultural factors and challenge many assumptions which they had held for many years. This can provide an opportunity to introduce concepts and methods to be tested within an alien environment, rather than as universally valid approaches. Having thus filtered such concepts and methods, it would be desirable to apply them further in a developing country context, so that their relevance can be further tested. After this, students can be encouraged to relate such approaches to their own countries. This three stage process of introduction, assimilation and adaptation can serve to enable students from widely differing regional and vocational backgrounds to acquire both concepts and methods which will serve them well in their careers and provide the basis for new theories and practices.

In the Development Planning Unit, various urban design concepts and methods are introduced early in the course and students are required to carry out exercises in a local area. These involve applying each approach to the area and using it to prepare initial proposals. As each approach is tested, so students become aware of the strengths and limitations of each and their own attitudes towards the subject. In the second semester, the group visit another country, such as India, Morocco, Pakistan and Egypt, to carry out further studies and prepare more detailed project proposals and individual dissertations related mostly to their own countries.

Among other issues which urban design needs to address in developing countries, gender perspectives on spatial form (especially in Islamic cultures - eg Morocco) are likely to prove important. The increasing awareness of the need to create gender sensitive environments is particularly relevant in many countries where the social and even legal rights of women may impede both social and economic developmental goals.

Helping students to appreciate the merits of traditional urban forms in their own societies can do much to enhance their respect for local achievements and encourage them to generate approaches based on locally appropriate concepts, rather than imported ones.

Such an approach will require time to translate into practical solutions significantly more relevant than those currently available. There are many vested professional interests which regard such multi-disciplinary and cross-cultural approaches with antipathy. However, it is only when students are educated to more holistic approaches that the gap between existing professions will be reduced and more humane, enriching and dynamic urban environments can be developed. Education is the place to start.

Bibliography

Appleyard, Donald 'Meaning and behaviour in the built environment' 1980

Bentley, Murrain, Smith and Alcock 'Responsive Environments: A tool for designers' Architectural Press 1985

Canter, 'The psychology of place' 1977

Ghaidan, Usam 'Lamu: A study of the Swahili town' East African Literature Review, Nairobi, 1975

Krier, Rob 'Urban space' Academy editions London 1979

Lynch, Kevin 'The image of the city' MIT Press Cambridge, USA 1960

Lynch, Kevin 'Good city form' MIT Press, Cambridge, USA 1981

Morris, A E J 'History of urban form before the Industrial Revolutions' Longman, London 1994

Nitschke, Gunter 'Ma' - The Japanese sense of 'Place' Architectural Design, London March

1966

Rapoport, Amos (19..)

Rapoport, Amos (19...)

Tibbalds, Francis 'Making people friendly towns' Longman, London 1992