THE SIGNIFICANCE OF GLOBAL DESIGN IN CREATION OF SOCIAL LIFE IN URBAN NEIGHBOURHOODS

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ABSTRACT

Today, in many urban residential layouts there is a failure of public use, hence, lack of social interaction. These effects could be explained with the locally oriented design system, which considers only the identity of the neighbourhood and neglects the global structure.

Therefore, design should start with thinking of the larger scale for the new development to integrate into and take advantage of the surrounding patterns. Such a design system is called 'global design'. Most essential qualities in implementation of global design are the 'choice of access' to and the 'choice of experience' through the spaces.

KEY WORDS: *Neighbourhood, quality of social life, global design, choice of access, choice of experience.*

INTRODUCTION

The empirical research shows that the concept of neighbourhood is difficult to define due to its multi-dimensional nature (1, 2). However, 'neighbourhood' is generally understood as specific cumulative settings where a group of residents confront. The success of a neighbourhood is subject to the existential meaning it acquires for its residents (3, 4).

The idea of neighbourhood has been usually and traditionally related to the idea of 'place'. A neighbourhood, regardless of its varying conception, has been considered as a distinguishable system from the other parts of the city by the fact of territorial separation.

Place, in fact, is an essential need in organising our environment. The character of a place helps us first, to 'visualise' our understanding of the environment. Secondly, it can 'symbolise' meaning. Thirdly, the character of place 'gathers' experiences of meaning which help the individual to create an image about the place perceived. Norberg-Schulz (5) here stressed the importance of these factors in developing a sense of belonging and identity with places.

A neighbourhood, from this perspective, has usually been considered as a distinguishable system from the other parts of the city by the fact of territorial separation. In this way, spatial proximity (location) appears as the most necessary condition for the social quality of the neighbourhood.

Safety issues also affect decisions about the organisation of neighbourhoods. As the major influence on the evaluation of neighbourhood quality generally has been 'keeping out strangers', the main use of exterior space in housing areas seems to form a barrier for this purpose, which is mistaken. Jacobs' investigation (6) into the urban scene and analysis of the use and the meaning of city neighbourhoods showed that successful neighbourhoods could be achieved by people's concentration into the neighbourhood area.

Such, schemes implemented with this idea of separation and homogeneity come out as isolated enclaves, and do not receive support from their surroundings for the maintenance of their social communities.

DESIGNING NEIGHBOURHOODS FOR CHOICE
In line with the situation described above, what we should recall is that the city basically consists of 'places' and ' links', and places cannot have meanings without connections to other places. The use of urban spaces, hence social integration, are very much dependent on linkage.

Alexander's publication *The City is not a Tree* (7) has made an invaluable contribution to the understanding and importance of linkage in restructuring the city. Alexander argued that the organising principle of the city is a semi-lattice, and not a 'tree'. If the city is organised as a tree-structure, important needs of overlap are dismissed and vital links between activities in the city are never allowed to develop. The inherent result of the tree system is a sameness where links are predetermined and choices greatly reduced.

From this point of view, it follows that urban environments should be connected to other parts of the city with choices of 'access'. This is because public spaces that offer a single or restricted number of choices of moving among spaces within the urban environment inhibit people's interaction with that environment as well as with one another.

The quality by which an environment allows people a choice of access through it, from place to place, has been called 'permeability' by Bentley (8). This is the most essential quality of urban neighbourhoods in creating well-used spaces that promote encounter and social interaction.

Once an urban area has been designed for the choice of access there comes the necessary step to provide it with the experiential choice which enables people to orientate themselves when moving through the spaces and makes interpretation of spaces more meaningful.

The importance of variety has been recognised by social scientists, and many of the research reports focus on the problems of an environment without variety, stressing the negative effects of monotony - the quality of environments lacking visual variety and leading disorientation (9, 10).

Variety of experience is generally related to varied forms, uses and meanings. Amongst these, variety of use is the most dominating level of variety. A variety and diversity of uses operating 24 hourly, and fronting onto public spaces could stimulate people's interaction with the built environment. Therefore, variety of use has been considered as the second key quality for the successful urban environment (11).

THE NEIGHBOURHOOD AS A COMMUNICATION SYSTEM

In the past decade there have been several attempts at describing the city as an aggregate of places of passage (paths) that, by virtue of their variety of use and their proximity, can be considered effective devices for sustaining maximum degree and choice of communication. In this social context, a society or culture is considered as 'people in communication', and one fundamental characteristic of the city is the capability it serves for regional communications in general and, internally, to provide an accessible web of contacts and exchanges physically (12, 13).

In the scale of the urban neighbourhood, the capability of the neighbourhood as a mode for social interaction has a greater meaning. A vast number of researches shows that the most potent public places for social contact in streets are 'streets'. They can provide physically a wide range of communications vital to the life of urban society (14, 15, 16, and 17).

Streets represent a very large proportion of urban space - particularly if their confines are expanded beyond the movement system or property boundaries. They are not only movement channels mechanically, but also places where many sources of human need can be satisfied. Those needs include almost every activity that is essential to make our urban life meaningful.

Gutman (18), in consequence of his analysis into the street generation, indicated that in its social context a street has two functions. One of these is 'instrumental'. The purpose of the street is to provide a link between buildings over which necessary activities occur - such as agricultural, manufacturing, administrative, and military activities. The other social function is 'expressive'. The street as a link between people facilitates communication and interaction, thus serving to bind together the social order of the 'polis', or what may be called the 'local urban community'. It is this expressive function of the street that includes street use for social activities and by the level of this, shows the social quality of the neighbourhood.

What we mean by social activities here is such activities that depend on the presence of others in public spaces, and occur spontaneously. In an urban neighbourhood, social activities include greetings and conversations, various communal activities, but mostly passive contacts - seeing and hearing a great number of unknown people (19).

Streets are organisational sub-systems of the city and are particularly important in 'aggregating' loosely related fields into a whole and in linking separate entities. It is through the streets that we can order an urban area and have the essential freedom of movement on which city life depends (20, 21). From this point of view, streets should be taken as the most important elements in global design.

If we conceive of a street both as a focus of social interaction, and a path linking destinations, then the street does not appear to exist at the simplest levels of human society. Examinations of the appearance and role of the street throughout history shows that there is a clear decline in the meaning of streets. The primary reason of this change in the meaning is the increasing complexity of society which could be easily understood by the fact that many of the socially cohesive activities such as entertainment, marketing, information and personal services, no longer exist where once available in the street.

Sub-urbanisation is the most influencing factor in the loss of street definition. In suburban areas the physical sidewalk is often narrowed to a footpath; and in some developments there is no

sidewalk. In central urban areas the situation is similar in high-rise schemes, firm boundaries between buildings and street serve to maintain separation. Only in the slums and in some ethnic enclaves the streets seem to function as a focus for public life (22). Consequently, streets, in the present time facilitate only traffic.

However, we still have the opportunity to be able to change the mechanical character of streets to 'places' of gathering, by learning from the past. In the past, streets used to be spaces of intense activities as territories of collective appropriation and thus as complex multi-functional spaces. Therefore, at any time they may be centres of social contact and excitement. Hence, through such streets we can have socially active neighbourhood spaces.

GLOBAL DESIGN: A WAY TO ACHIEVE SOCIAL QUALITY IN RESIDENTIAL ENVIRONMENTS

It has become evident that internal structure of an urban development can take advantage of its larger environment only by designing it from global to local (23). Indeed, it is the global pattern that seems most to influence the patterns of use and movement that is essential for urban life.

By outlining a new method of spatial analysis, Hillier (23, 24) aimed first to show that it is through the deformation of the grid that urban spatial patterns can be created which make local places identifiably different from each other and create the global pattern of the whole; and second, that once this is understood then it becomes clear how these global patterns are a natural product of the way in which towns generate and control patterns of encounter.

As this paper aims at understanding the significance of global design in creation of social activities in neighbourhoods, the task is describing the ways we can activate our ideas within a global framework. Since the key qualities for our aim were identified as those of 'the choice of access' (permeability) and 'the choice of experience' (variety) towards promotion of the use and movement, we are now confronted with the matter of finding ways to achieve these qualities in urban neighbourhoods.

Designing for choice of access

The quality of the choice of access, or permeability, of a neighbourhood system as previously indicated, depends on the number of alternative routes it offers. Hillier's 'syntactic analysis' is very much of use to represent, analyse and interpret the spaces of the settlement to be able to reveal this quality.
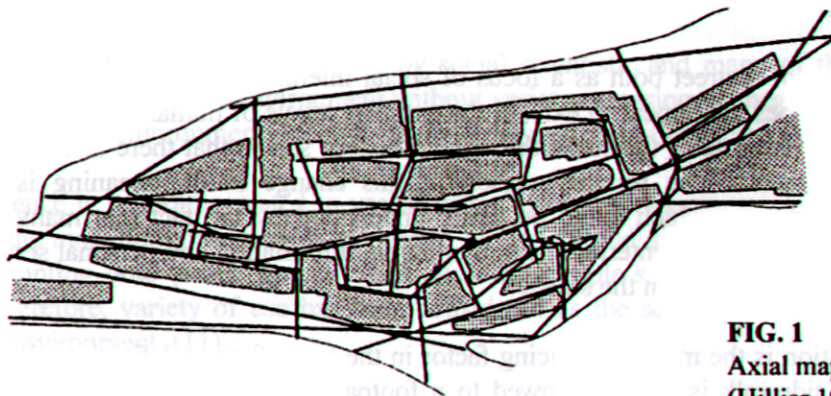

FIG. 1
Axial map of a town
(Hillier 1984)

Within the method of 'syntactic analysis', axial map is particularly useful as axiality is associated with patterns of movement and mostly to do with the presence of strangers, as a way of seeing and experiencing. An axial map offers the most 'globalizing' perspective since an axial line will extend as long as at least one point is visible and directly accessible from it. Figure 1 shows an axial map of a town, which includes the fewest, and longest straight lines that the entire surface of the town, taking account of how far one can see and how far one can walk.

The permeability of any system depends on the system of the network of the 'spaces'. The way this network divides an environment into 'blocks' thus makes its permeability different from another settlement's (Fig.2),

Block sizes, if they are arranged consciously, could add the permeability of the neighbourhood. As Jacobs (25) suggested, layouts with small blocks offer more choice of route than ones with large blocks. In the example below (Fig.3) the small-block layout has nine alternatives whilst the large-block only three.

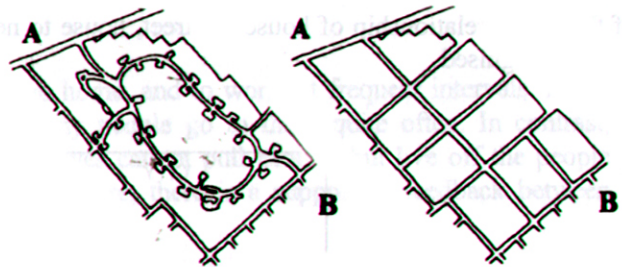

FIG. 2
Network of the
spaces and blocks
(Bentley 1985)

FIG.3
Layout with small
And large blocks

There are two main issues affecting permeability of neighbourhoods in negative terms. First, the use of tree-like hierarchical layouts, by generating culs-de-sac, dead ends and little choice of routes, causes a clear decline on the degree of permeability. Second, total separation of vehicular and pedestrian traffic which has been the general norm of twentieth century neighbourhood planning is effectively harmful to the accessibility, hence, livability of the neighbourhoods. In this way, vehicle users and pedestrians have entirely different system of routes, and none of them can give the area an efficient level of permeability. The main reason for such organisations is traffic security. However, it is the integration of the traffic that people could be gathered into the spaces and activities take place. Therefore, in an urban neighbourhood, the street system responsive to the existence of a useful pedestrian context would not be a tree-like structure (Fig.4) of a hierarchical relationship (7), but at the contextual level would be a net or plaid hierarchical relationship (Fig.5).

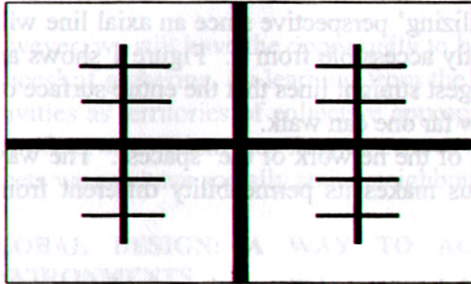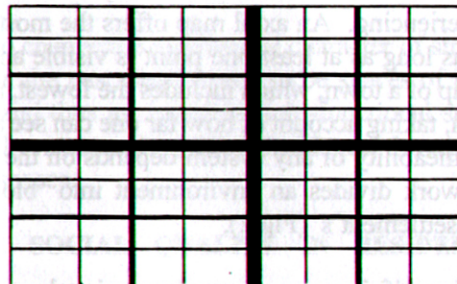**FIG. 4** Tree-like street hierarchy   **FIG. 5** Net-like street hierarchy

Such a hierarchy of a street relationships should find a corollary in a hierarchy of places based on an awareness of the environment expanding from house to street, to neighbourhood, to district, to city. Schumacher (26) represented this hierarchy by a spiral diagram (Fig.6) which permits each of the direct relationship of house to street, house to neighbourhood and house to district, to be easily recognised.
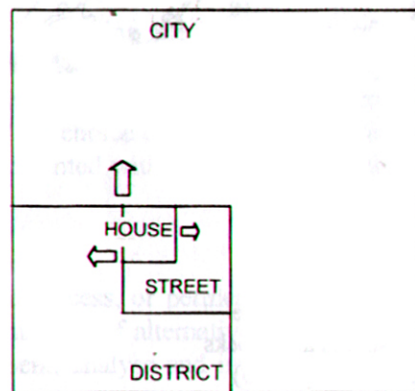

FIG. 6. Conceptual hierarchy of places acknowledging the street as a component of the environment.

Designing for choice of experience

The zoning of neighbourhoods by excluding service activities and commercial uses often reduces the possibility of use of, and consequently interaction in, the public domain. In many housing schemes, the relegation of these goal-directed activities to the outside world creates a gap in continuity from the private domain to the public domain. The resultant open space therefore occurs as unused, at least partially, because there is no place of importance to go (Fig. 7).

As Jacobs (27) strongly stated, a district or a neighbourhood must serve a mixture of functions. However, the variety of functions is not achieved without pre-evaluation. To work well, the uses should give each other mutual support. In that sense, Bentley *et al.* (28) suggests to construct a logical interaction between 'primary' and 'secondary' uses. He considered primary uses as 'magnets' attracting people to the site. For example, concentrations of residences or work places

FIG. 7 A housing plan relegating
goal activities to the outside world.
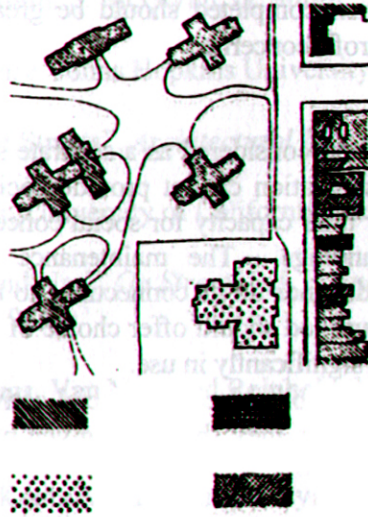
are primary uses - nearly every one has to go home, and to work, at frequent intervals. Large stores or markets have a similar affect - many people go to them quite often. In contrast, 'secondary uses' are enterprises which themselves cannot pull people, but live off the people drawn to the place by its primary uses. Therefore, there is a supportive feedback between primary uses and secondary uses (Fig.8).

FIG. 8 Feedback between primary uses and secondary uses
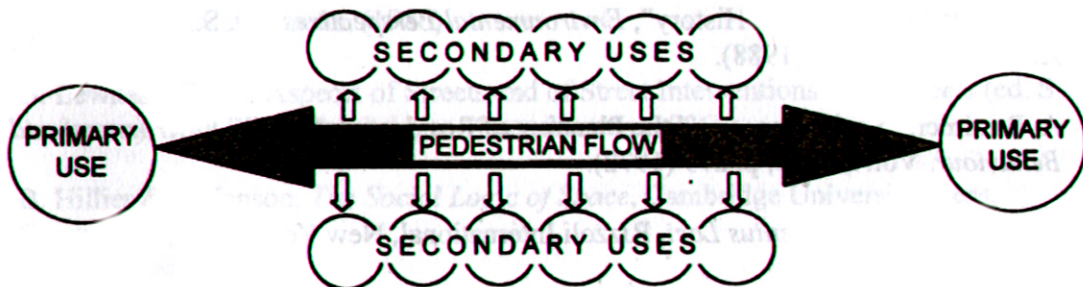
The time factor is also important to this system of mutual support. Variety of use must ensure the presence of people who go outdoors on different schedules and are in the place for different schedules and are in the place for different purposes, but who are able to use many facilities in common. This can be actualised only by a mixture of primary uses as secondary uses are not always capable enough to be able to draw people into the area over a long period.

Establishment of uses in an area is a matter of functional, political and economic performance. Therefore, the new development first should include compatible functions that can take

advantage of each other. Second, the pattern of uses should respond to the local demand to be proved by the political authorities of local planning. Third, the scheme should be economically viable; its economic value when completed should be greater than or equal to the cost of production - plus developers' profit concerned.

CONCLUSION

It is obvious that a neighbourhood considered as a separate system from the other parts of the city by the fact of territorial separation cannot provide socially active environments. As its constituent parts are valued for their capacity for social concentration, a neighbourhood should be integrated into its surroundings. The maintenance of the social community of a neighbourhood therefore, first depends on its connections to the rest of the city with choices of access. Secondly, the neighbourhood should offer choice of experience provided by variety in form, use and meanings - more significantly in use.

Since streets are the most potent public places for social activities to occur, and most effective elements in linking separate entities, they should be given prominence through the process of design.

These ideas all apply to reading and thinking neighbourhoods in a global and overall structure, early in design. Therefore, 'global to local design' is of great importance to achieve social life in urban neighbourhoods.

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