3 Development alternatives of the human ecosystem:
## An integrative and comprehensive approach

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Introduction

The human ecology is concerned with the interrelationship among people and their spatial setting. The pertinent literature does attempt to detail the various aspects of human ecosystem in terms of its basic elements, viz., population, social organisation, environment, technology and social-psychological factors (Gist and Fava, 1974, p.151). However, most of these endeavours are descriptive rather than prescriptive or therapeutic in nature and therefore, have limited applied utility for socio-physical development. These conceptualisations highlight the dynamics of the ecosystem generically, and fall short of incorporating the interactive planning and development mechanism into a single framework.

In order to increase the applied utility of the interactive development framework, three imperatives manifest themselves. First, due to the complex nature of the ecosystem development, the framework should be developed hierarchically; second, the apex of the hierarchy should be composed of the seminal determinants dealing with both the potential and procedural aspects of socio-physical development; and third, the framework should provide for the mutual and iterative interaction of the seminal determinants.

The ensuing portion of this chapter has been divided into four parts. Part one attempts to modify the salient elements of the human ecosystem into the seminal determinants of socio-physical development, and form them into an integrative framework. Part two attempts to identify various parameters of each determinant of socio-physical development and their inherent variations. Part three attempts to generate a number of explorative alternatives for the development of the human ecosystem, and also deals with their feasible and normative dimensions. Finally, part four highlights the salient conclusions of the study.
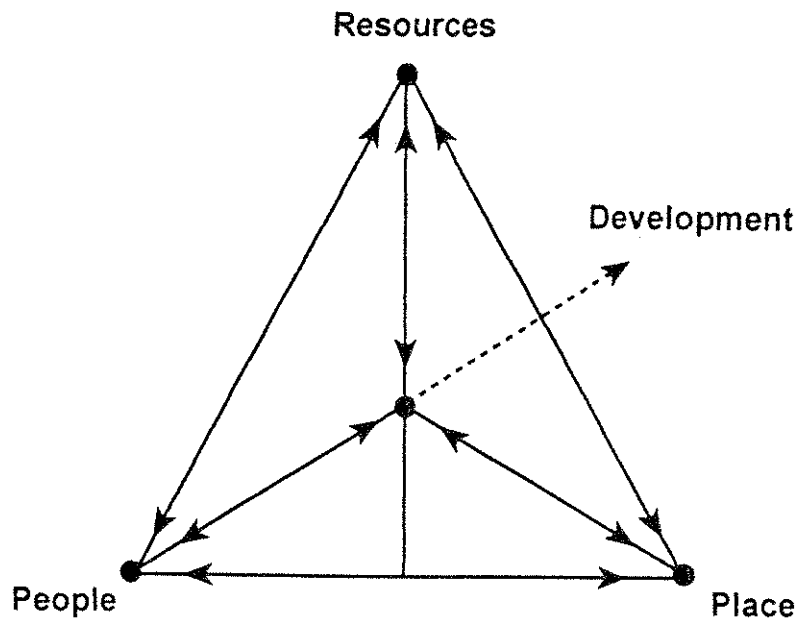
Figure 3.1 Prismatic framework providing for the interaction of seminal determinants of socio-physical development.
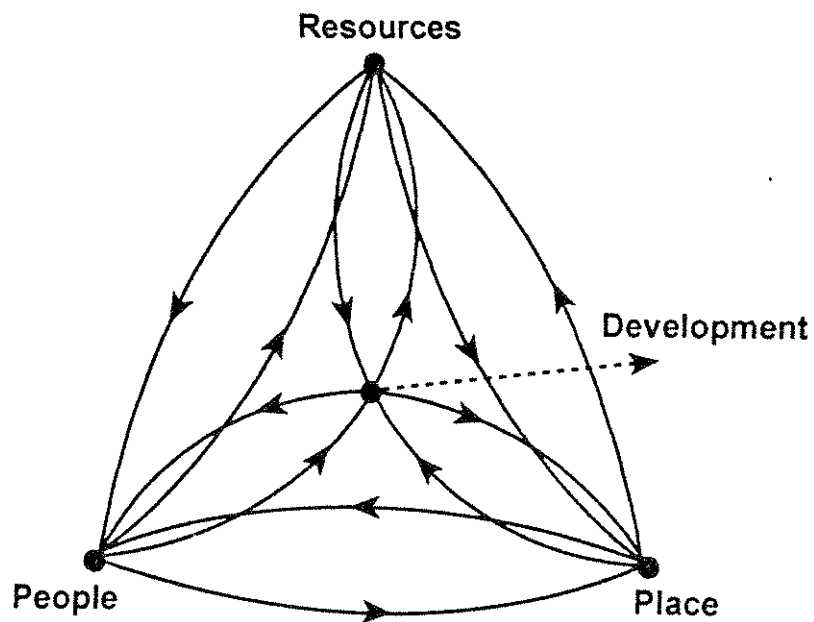
Figure 3.2 Cyclical interaction between the seminal determinants of the socio-physical development process.

# An integrative framework for socio-physical development

The generally accepted five basic elements of the human ecosystem, mentioned in the preceding section, though important in their own right, do not provide for the processes of planning and development per se. These elements need to be modified and rearranged into an integrative hierarchy providing for the mutual and iterative interaction of the seminal determinants of socio-physical development.

The determinants of socio-physical development have been identified as 'People', 'Place', 'Resources' and 'Development'. Figure 3.1 shows that a prismatic framework is best suited for the integrative interaction of the four determinants because each of these determinants is directly linked with the remaining three determinants. It may, however, be pointed out that Figure 3.1 presents an oversimplified version of the mutual interaction between these determinants. In the real world, each of the determinant is interlinked with the other through a cause and effect relationship. Each of them influences and is influenced by each other, either implicitly or explicitly; for instance, the functions of the inhabitants (people) and the form of the habitat (place) iteratively assume cause and effect roles. On some occasions it appears that form is following the functions, and on others functions appear to be following the form; and sometimes, they appear to be interlinked by the phenomenon of circular causation! The same is true of the interaction between other determinants. Figure 3.2 presents the cyclical interaction between the four seminal determinants of socio-physical development.

Parameters and typologies of developmental determinants

The nature, magnitude and speed of socio-physical development is a function of a function. Although it appears to be the direct outcome of the four interacting determinants, yet each of these determinants is dependent on their respective sets of parameters. For illustrative purposes Figure 3.3 indicates three salient parameters of each of the four determinants of socio-physical development. For instance 'People' can best be understood in terms of their salient parameters such as social organisation, social-psychological factors and population density/size. All these parameters are interactive: social organisation is a function of social-psychology which in turn is influenced by population density/size in a given cultural setting; and population density/size also interacts manipulatively with the social organisation.

Likewise, 'Place' which is the receptacle of all human activity systems may require a variety of physical media including land, water and space. Similarly 'Resources' are of no less importance and may be better visualised in terms of human, financial and technological potentials of a social system.
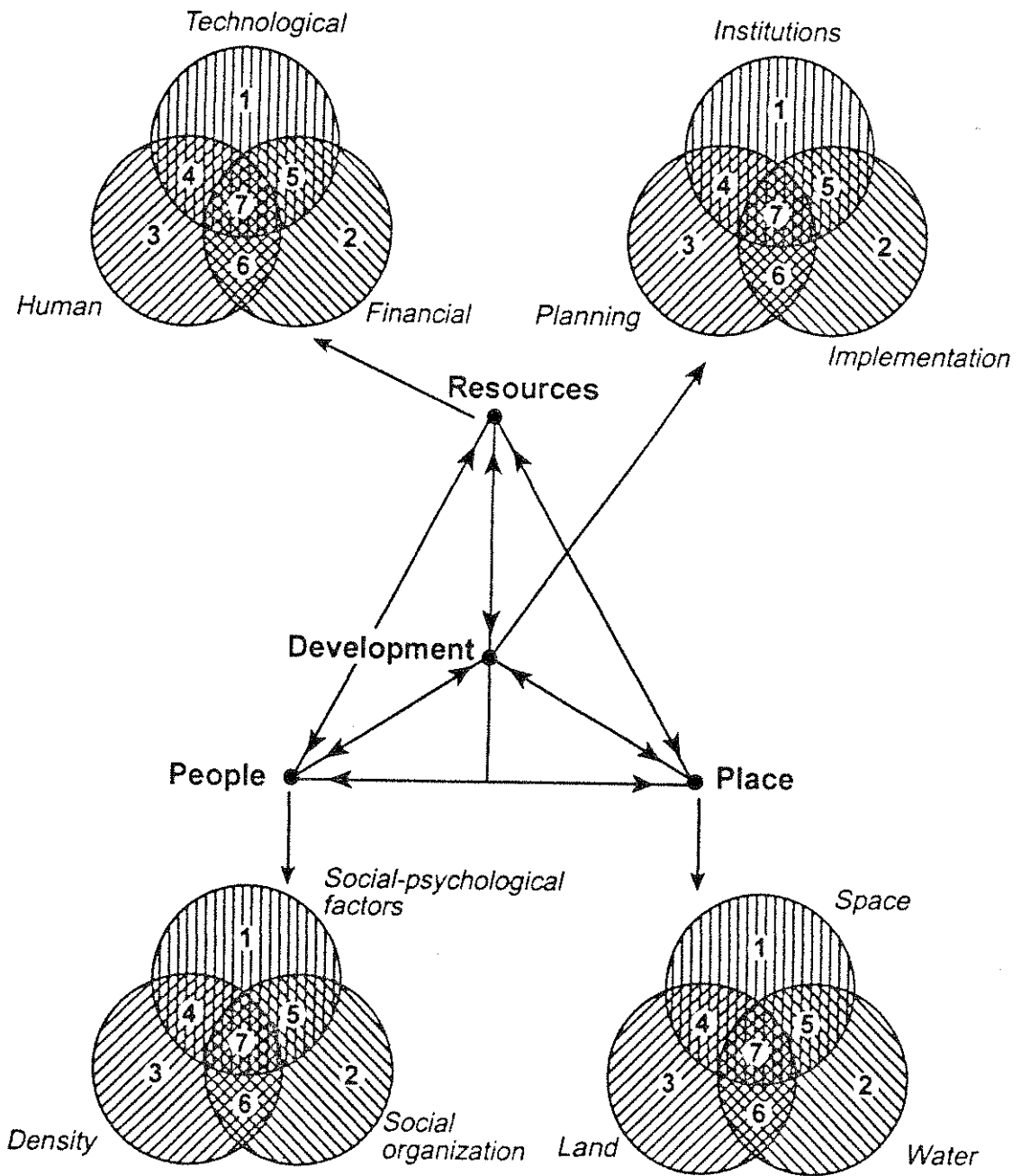
Figure 3.3 Salient parameters of determinants of socio-physical development.
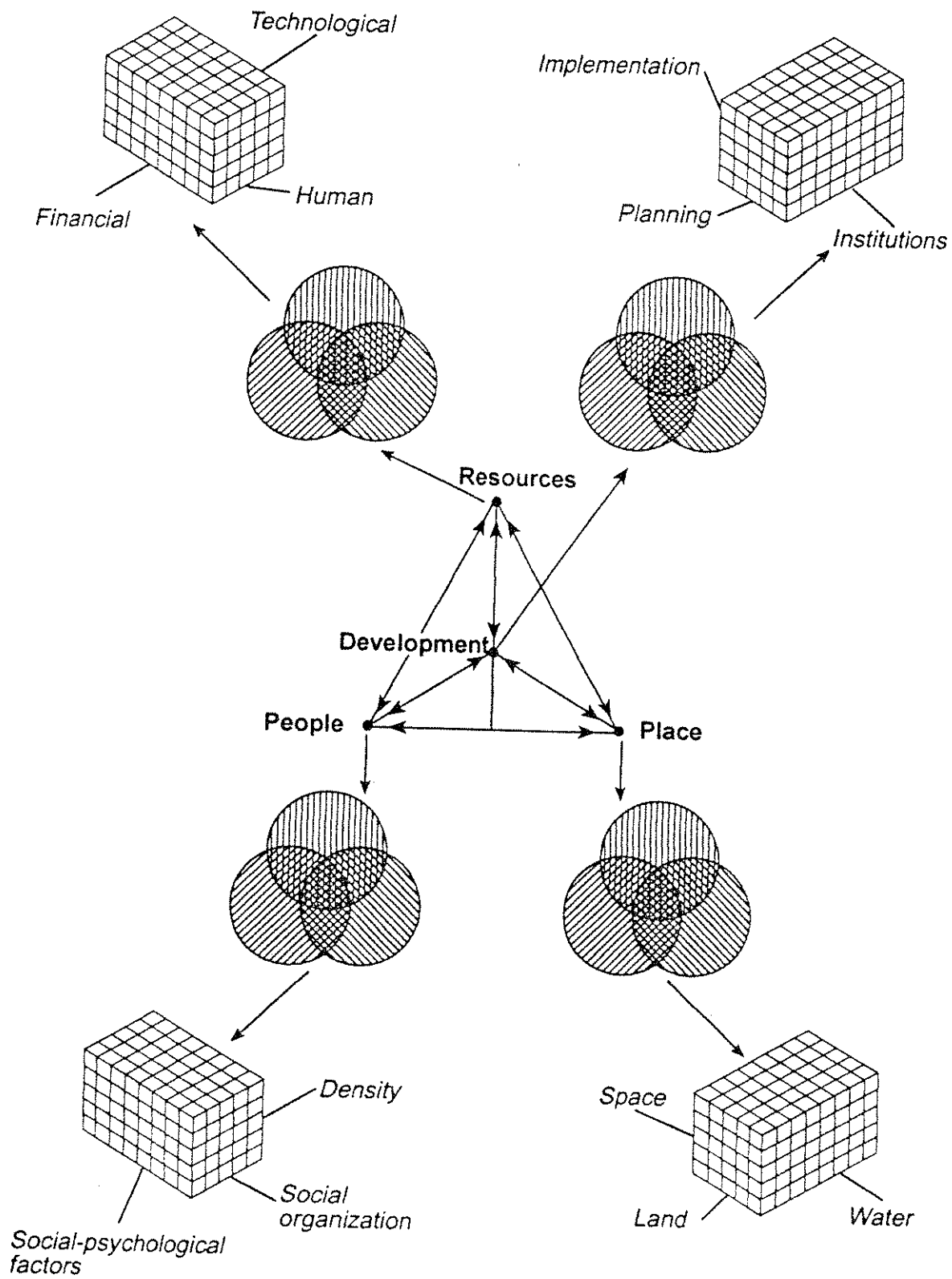
Figure 3.4 Parametric variation due to cultural, technological, climatic and topographic changes.

Lastly, 'Development' could be conceptualised as the actualisation of the planning process through the institutional set-up, and reflects the political ambitions of a community or its power elites. The salient parameters of 'Development' have therefore, been identified as: Planning, Implementation, and Institutional Set-up. The various sets of interacting parameters influence the determinants either severally or in a combination of two or even jointly. These parameters variously dominate each other and differentially affect the socio-physical development of a human ecosystem. Depending on their nature and extent of their availability or otherwise they may prove to be either a potential or a constraint. As illustrated in Figure 3.3 each set of three parameters results in seven typologies, leading to a total of twenty eight parametric typologies pertaining to the four determinants of socio-physical development.

The situation is further complicated by the fact that each parameter undergoes variations due to cultural, technological, climatic and topographical changes. An idea of the number of parametric variations may be formed by considering a hypothetical case. An assumption that each parameter undergoes five variations would be subjected to 125 variations in each of the four parametric sets as indicated by the cubes in Figure 3.4. Each of the smaller 125 cubes represents a set of parameters which would further lead to seven typologies due to their several, combinational and joint interactions. One hundred and twenty five variations coupled with seven typologies in each parametric set would amount to 875 inputs for each of the four determinants of socio-physical development.

This was, however, an oversimplified hypothetical example which dealt with only three salient parameters and only assumed five variations in each of them. In a real world situation, with numerous cultural settings, climatic zones and technological levels, the number of parametric typologies and their inherent variations would generate manifold increase.

Development alternatives of the human ecosystem

Having conceptualised an integrative framework for socio-physical development, and highlighted the dynamics of its parameters in the last two sections, this section will attempt to generate development alternatives of the human ecosystem. The technique of morphological analysis[1] will be used for the generation of various alternatives. This technique provides for 'identifying, indexing, counting and parametrizing of a wide range of variations' (Ayres, 1969, p.72). In this technique different options are generated by combining various attributes of a number of mutually exclusive sets of parameters.

The advantage of generating explorative alternatives is that they afford access to a large number of options which would have otherwise been ignored and that the 'process of synthesising alternative solutions in morphological analysis is

systematic, the biases and prejudices held by the person using the tool are avoided while generating ideas'(Delp, 1977, p.10).

The list of various determinants and parameters developed in the previous section has been further enlarged and scrutinised for its mutual exclusiveness. Variations for each of the parameters have also been further refined. Table 3.1 shows the revised list of mutually exclusive parameters of socio-physical development along with their variations. Parameters 1-5 represent one or the other functional aspects of 'People'; 6-8 deal with 'Place'; 9 deals with 'Resources'; and 10-12 deal with 'Development'. Twelve parameters and their respective variations, shown in the table lead to 1,959,552 explorative alternatives. However, many of these combinations may be physically, if not theoretically, impossible or meaningless. However, sometimes 'even illogical combinations may trigger feasible solutions'(Delp, 1977, p.11).

Although it is not possible to describe such a large number of alternatives, much less to evaluate them for their feasibility or otherwise for a specific real world situation, yet it may be worthwhile to pick-up at least one alternative and highlight its attributes. The dotted line in the table indicates the parametric attributes of the selected alternative. It represents an ecosystem which will be intensive as well as extensive in its physical character with a mix of high, mid and low-rise structures, built on the ground as well as underground, and extending into the sea semi-submerged, with detachable floating suburbs, and orbiting industrial satellites in space, augmented by outstations on Mars.

The social organisation of the selected ecosystem will be based on the principle of universalism rather than communalism or pluralism. Functionally, it may be characterised as socially integrated rather than socially segregated; and therefore, the controversial concepts of 'exclusionary' or 'inclusionary' zoning will become meaningless. As the entire ecosystem will work as one community, economic activities would locate on the basis of absolute rather than comparative advantage,[2] and as a consequence, the economic base of the various nuclei of the ecosystem will be specialised rather than diversified. Although the ecosystem will be interplanetary in nature, yet due to a revolutionary breakthrough in communication technology, the friction of distances will be reduced to a minimum. Due to the erosion of the friction of distances, the locational contiguity of human activity systems will lose its significance, and therefore the physical development may follow a pattern which may be described as 'decentralised concentration'.

The various units of the ecosystem will be integrated by means of a very efficient electronic mail network. People will not have to move every time they change a job - it will simply require a change of computer terminal (Toffler, 1982, p.204). The various districts of the ecosystem will be endowed with a surplus of energy due to uninterrupted solar radiation in the space colonies and atomic fusion on various planets. The problem of solid waste disposal would also be obviated as most of it would be recycled. Peak hour traffic will no longer pose a

problem as the places of residence and work are going to be combined in the electronic cottage (Toffler, 1982, p.195); and even the universities may start imparting education electronically.

Obviously the scenario of the selected human ecosystem appears highly utopian. But the same impression was created by most of the innovative development concepts propounded in the fifties and sixties. However, due to the accelerative pace of technological advancements, some of these concepts have either already been surpassed or are being outlived. For instance, Frank Lloyd Wright's proposal for a mile high city put forth in the fifties for Chicago's Lake Front (Blake, 1956, p.129) has already been dwarfed by the 'Volcano City' project proposed to be built by the Japanese on an artificial island approximately four miles in diameter. The volcano-shaped city, inspired by Japan's Mount Fuji, would allow its inhabitants in the upper levels to look down on the clouds below them. Exceeding the height of 2.5 miles, the one building city would accommodate up to 700,000 people. Facilities housed above the one-mile mark would include a nature and space observatory, an energy plant and a resort. The lower levels would hold marine resorts, as well as marine-based farms to make the facility more self-sufficient. The building comprises three circular frames: the outer frame would be used for residential facilities, the middle for business and commercial needs, and the inner to serve as a headquarters for administrative personnel (Conway, 1993, p.30).

Likewise, Doxiades' transnational and non-racial 'Ecumenopolis', which envisaged that the world's population will live in one universal city by the end of twenty-first century (Doxiades, 1986, pp.377, 430), will perhaps start spilling over into the sea and into space much before the end of twenty-first century. Some of the incipient concepts, mainly tabled by the Japanese are already on the horizon. For instance, the Japanese are suggesting floating islands which could serve as an alternative to creating new coastal space by landfills. One such proposed project, called Floating Station 'Jonathan' could be moored in deep water and accommodate scientific and recreational facilities, including a 1,000-room luxury hotel. Another artificial island proposed by Japan's Taisei Corporation could be used in relatively shallow waters. The man made island, nicknamed 'Never-Never Land' would rest on the sea floor and be accessible by either boat, helicopter, or an underwater tunnel connected to the mainland (Conway, 1993, p.32). Commenting on the supercities, Conway has opined: 'Whether the super macro engineering projects of the future tower past the clouds or brave the ocean depths, neither the sky nor the deep may limit the potential of tomorrow's supercities'(Conway, 1993, p.33)!

Viewed against the backdrop of the aforementioned innovative projects currently in the pipeline, and the accelerative technological advances, the development alternative of the human ecosystem, described in this section does not appear as theoretical as it did at the outset. It may indeed be one of the feasible alternatives

for the Universal City of the twenty-first century, and perhaps an up-dated version of Doxiades' Ecumenopolis!

Conclusions

This chapter takes a holistic view of the development of the human ecosystem by visualising it as a composite of four determinants: People, Place, Resources and Development and employs the technique of morphological analysis for generating the explorative development alternatives of the human ecosystem. Table 3.1 shows the parameters of socio-physical development and their respective attributes and indicates that combinations of the various attributes lead to 1,959,552 explorative development alternatives of the human ecosystem. The chapter does not go into the specifics, such as the feasibility and normative analyses of highly theoretical development alternatives of the human ecosystem. However, that was neither the purpose nor it is possible to carry out any pragmatic analysis without detailed information about the culture, social organisation, physical environment, resources, institutional set-up and political aspirations of a given social system.

The main thrust of this chapter is conceptual rather than empirical. It provides an approach rather than a solution. Solutions, indeed, should be the last thing which planners should look for. Although the fact of the matter is that the planners, in their desire to achieve the goal, become impatient and resort to the deductive approach which is based on convergent thinking. The deductive approach is indeed scientific, mathematical and logical. Nevertheless in the process, unconsciously or subconsciously, planners end-up projecting the future incrementally rather than creating it and advocate solutions which are rather subjective. At worst they act like politicians and decision makers and at best, they act like Churchill's scientific advisor who, due to his subjectivity, failed to recognise the potential of the V-2 rocket which was identified by the morphological analysis and had already been secretly developed by the Germans.[3] The pursuit of the inductive approach, which involves divergent thinking, is also not right because it leads to artistic, less orderly and theoretical solutions which may be remote from reality. Planning being a scientific art, needs to combine both the approaches. As rightly pointed out by Faludi, 'when combined, convergent and divergent thinking enable truly creative responses to an ever changing environment in a way which neither of the two would be capable of providing on its own' (Faludi, 1976, p.118). Figure 3.5 provides the desired combination of both inductive and deductive approaches in order to identify innovative solutions which will not only be feasible and normative but also acceptable to the decision makers.

Table 3. 1 Morphological analysis for the generation of development alternatives of human ecosystem.

Variations (attributes)

Determinants/Parameters									
1	Social organisation	Communalism	Pluralism	Universalism					
2	Social-psychological aspects	Socially integrated	Socially segregated						
3	Density of population	Low	Medium	High					
4	Size (hierarchical level)	Village	Town	City	Metropolis	Megalopolis	Gigalopolis	Ecumenopolis	
5	Economic base	Diversified	Specialized						
6	Place	Land based	Underground	Floating on water	Underwater	Space	Planets	Land & water	Land, water & space	Land, water, space & planets
7	Density of development	Low-rise	Mid-rise	High-rise	A mix of L, M & H-rise				
8	Pattern of development	Concentration	Decentralis-ation	Decentralised concentration					
9	Technological/human & financial resources	Low	Medium	High					
10	Planning	Normative	Functional						
11	Implementation	Turnkey project	Phased development	Phased programme					
12	Institutional Set-up	Public	Private	Autonomous	Semi-autonomous				

Number of alternatives = 3 x 2 x 3 x 7 x 2 x 9 x 4 x 3 x 3 x 2 x 3 x 4 = 1,959,552
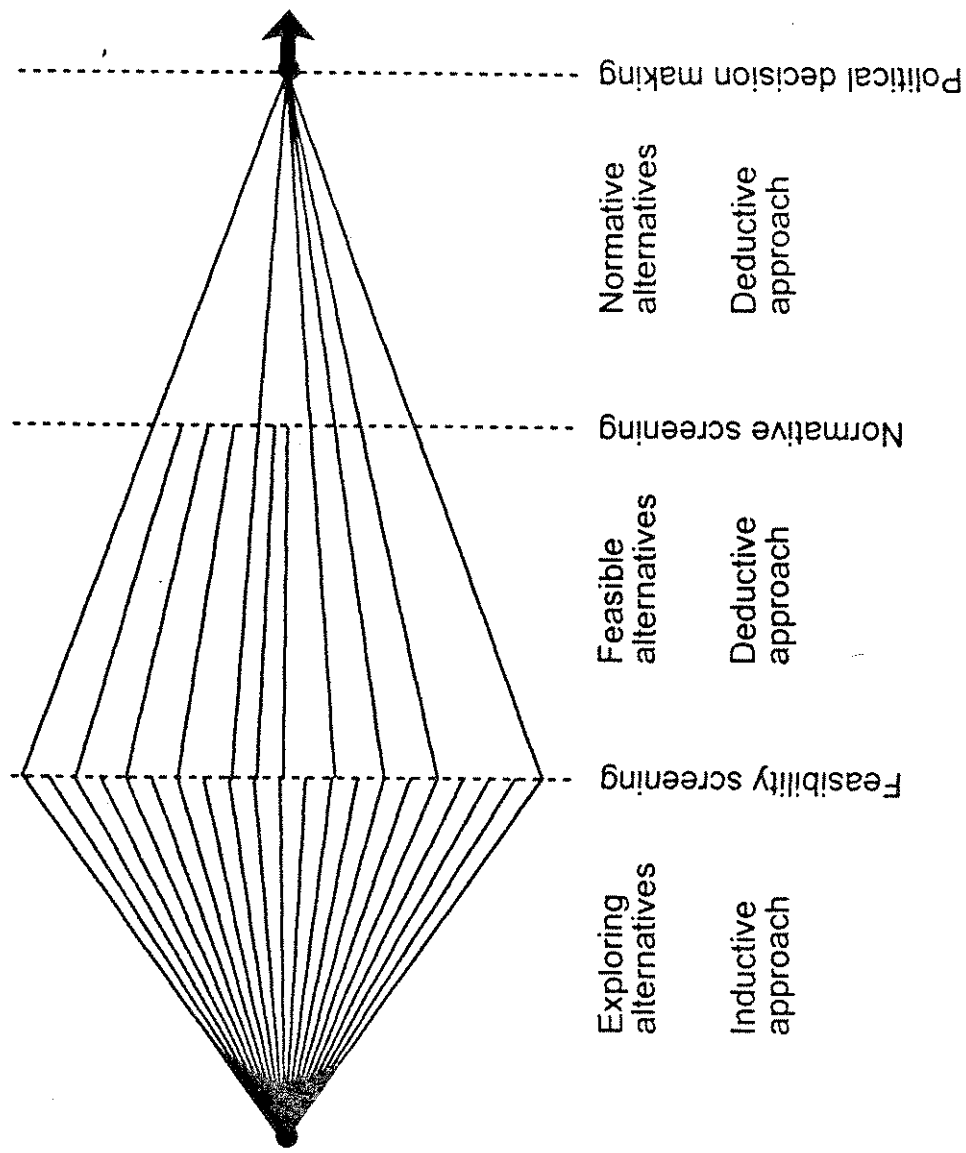
Figure 3.5 A conceptualization showing the desirability of using an inductive approach for the generation of explorative, and a deductive approach for the selection of feasible and normative alternatives.

Notes

1   The *morphological method* was developed by Zwicky, a well known Swiss astronomer working at the Mount Wilson and Mount Palomer Observatories in California, as long ago as 1942 (Jantsch, 1967, p.175).

2   Countries compete in the international markets on the basis of comparative advantage, whereas regions within a country compete on the basis of absolute advantage (Hirschman, 1975, p.152).

3   The simplest and perhaps purest example of morphological analysis comes from Zwicky; he focused attention in great detail on the totality of all jet engines containing simple elements only and being activated by chemical energy. As a result of morphological analysis Zwicky identified 36,864 distinguishable combinations. However, due to some internal restrictions the number of possible jet engines appeared to be 25,344. An evaluation in 1943, on the basis of fewer parameters, indicated 576 possibilities which correctly included the then secret German pulse-jet powered aerial bomb V-1 and V-2 rocket. The fatal failure of Churchill's Scientific Adviser to recognise the potential of the V-2 even when he was shown photographs has been explained by Jantsch as 'his preoccupation with solid propellants, leading to a stubborn rejection of the idea of liquid propellants' (Jantsch, 1967, pp.177 & 178).

THE ROLE OF ISLAMIC SHARIAH IN OPTIMIZING THE DEVELOPMENT OF A BETTER URBAN ENVIRONMENT*

Anis-ur-Rahmaan and Bushra Anis**

The paper pursues three complimentary objectives. First, it highlights the functional and environmental imperatives of Islamic Shariah; second, explores analytically the extent of adoption and non-adoption of these imperatives in urban development, and the reasons thereof, in selected Islamic cities; and finally, propounds strategies and measures which need to be adopted to enrich the functional and environmental aspects of the human ecosystem in the Islamic countries.

Substantively, the paper is composed of five parts. Part one presents a framework for human ecosystem. Part two attempts to portray a scenario of human ecosystem in the context of relevant salient provisions in the Islamic Shariah. Part three attempts to trace empirical evidence of Islamic sociophysical elements in some of the selected settlements developed in the Islamic eras. Part four deals with the transformations of physical development in Islamic cities. Finally, part five, based on the synthesis of the ideological concepts and empirical evidence, puts forth conclusions and recommendations for the planning and development of an ecosystem best suited to an Islamic way of life.

Keywords

I. INTRODUCTION

Human ecology is concerned with the interrelationships among people and their environment. The pertinent literature does attempt to detail the various aspects of human

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ecosystem in term of its basic elements, viz. (i) population, (ii) social organization, (iii) environment, (iv) technology and (v) socio-psychological factors.[1] However, most of these endeavors are descriptive rather than prescriptive or therapeutic in nature; and therefore, have limited applied utility.[2] These conceptualizations highlight the dynamics of the ecosystem symptomatically and segmentally, and fall short of identifying their parameters and the interactive planning and development mechanism into a single framework.

The human ecosystem, if conceived in the context of sociophysical development, would perhaps lead to the identification of four seminal determinants, viz., (i) people, (ii) environment, (iii) resources, and (iv) development. Figure 1 shows that a prismatic framework is best suited for the integrative interaction of the four determinants because each of these determinants is directly linked with the remaining three determinants. Although the nature, magnitude and speed of sociophysical development appears to be the outcome of the four interacting determinants, yet each of these determinants is also dependent on its respective sets of parameters (fig.1). For instance, "People* can best be understood in terms of their salient parameters such as social organization, socio-psychological factors, and spatial distribution of people. Likewise, environment is composed of the interacting physical media (land, water & atmosphere), flora and fauna. similarly "Resources" could be viewed in terms of financial, technological and human potentials of a social system. Lastly, "Development" could be conceptualized in terms of the planning process, the institutional controls, and the social acceptance of people through their power elites (see fig1. and fig.2).

II. HUMAN ECOLOGY IN THE CONTEXT OF ISLAMIC SHARIAH

Islam subscribes to the view that the entire life of a Muslim and Islamic community is subservient to the Will of Allah (SWT). Their "political order, social organization, culture, economic policy and legal system must be in tune with the code of guidance revealed by Allah (SWT) in the Qur'an and the sunnah of the Prophet (SAW)".[3] This code of conduct is known as *Shariah*. which sets standards for the orderly behaviour of man, both individually and collectively. The most important aspect of Islamic culture is that its values and norms are neither man made nor derived from the traditions and customs of the past, but God Himself has bestowed them upon Muslims. The Shariah thus prescribes the

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1   Gist. N.P., and Fava. S.F. *Urban Society*. New York: Harper & Row, Publishers, 1974 p.151.
2   Anis-ur-Rahman, *Development Alternatives of Human Ecosystem: An integrative and Comprehensive Approach*, a paper presented in International Symposium on People, Place & Development, held in Newcastle upon Tyne in December 1994; in Ademrele Awotona (ed.) Proceedings of the Symposium, Newcastle upon Tyne: Center for Architectural Research and Development Overseas (CARDO), 1994, p.540.
3   Maududi. Abul Ala. *Islamic Way of Life*, Lahore: International Islamic Federation of Students' Organization, 1975. p.1.
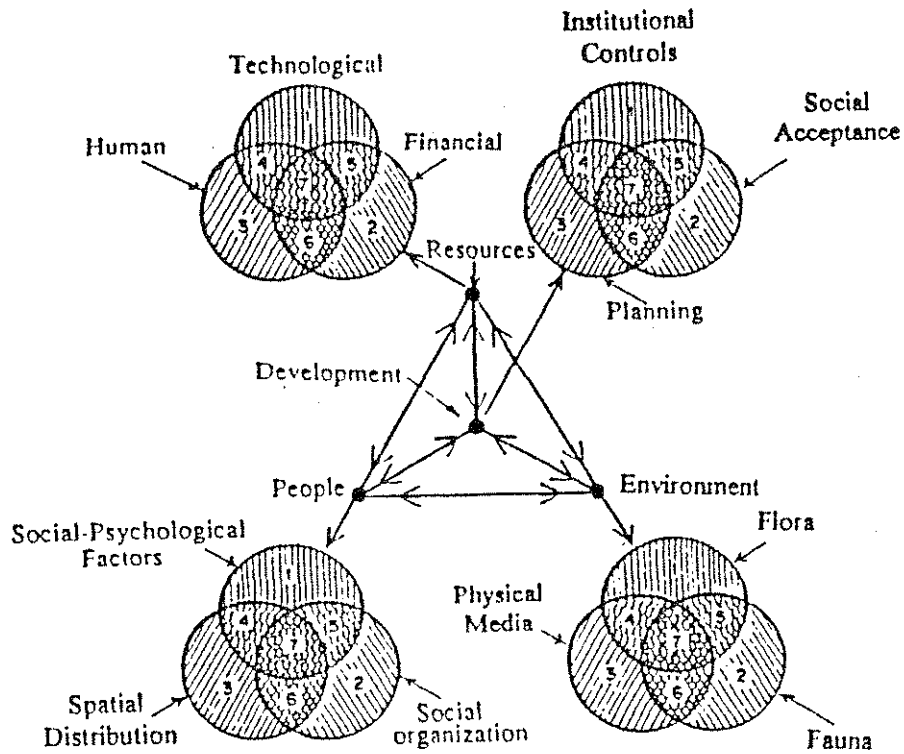
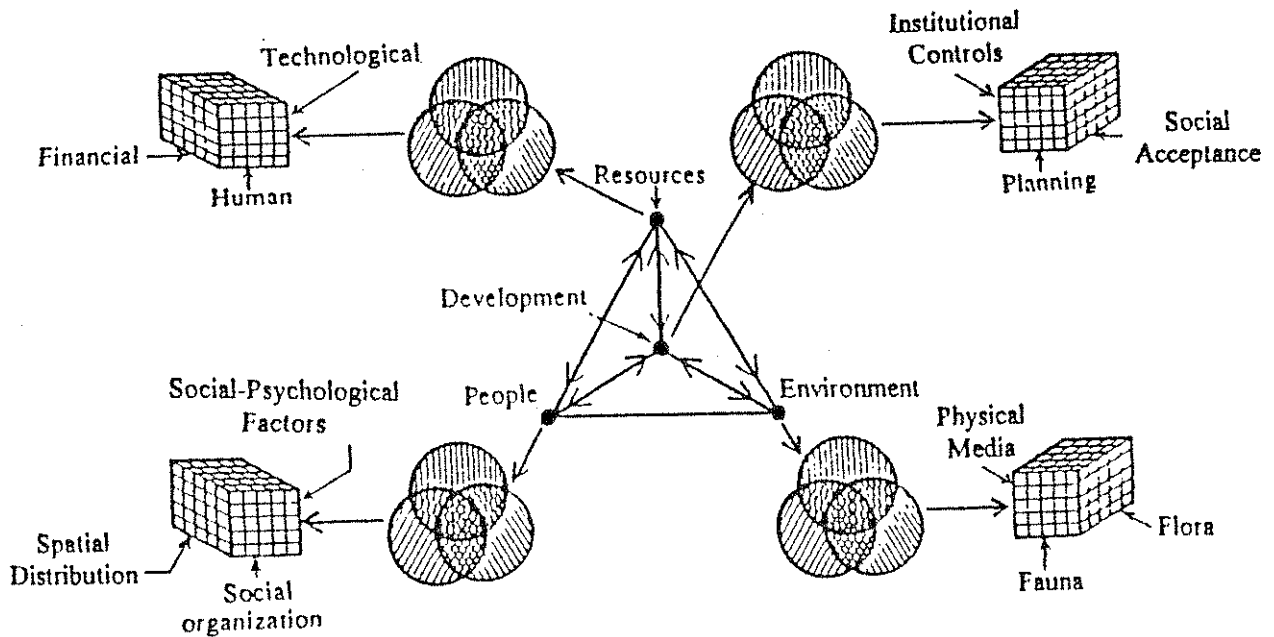Figure 1: Salient Parameters of the Determinants of Sociophysical Development

Figure 2: Parametric variation due to cultural, technologic, climatic and Topographic changes in space and time.

directives for the regulations of the Islamic society in such a manner that virtues may flourish and vices may not pollute the social life. The salient determinants of the human ecosystem and their parameters, in the context of Islamic Shariah, are as follows:

People

The salient Islamic parameters pertaining to the "People" are highlighted as follows:

Social Organization: One of the unique characteristics of Islam is that it is essentially a religion of congregation and assigns a very high priority to social organization in the society. Islam builds up the community hierarchically by laying emphasis and defining the roles of various units of the social structure viz., (i) the individual, (ii) the family, (iii) the neighbours, and (iv) the Ummah. In Islam every individual is considered like a building block and as such, has a role to play in the Islamic society. The concept of brotherhood in Islam makes it imperative for every muslim to take care of other muslims. It encourages, to the extent of making it obligatory, the participation of every individual in community life. For instance, according to the Islamic Shariah, every muslim is not only obliged to act righteously but also has to ensure that righteousness prevails in the society.[1]

The family is the most fundamental social institution in Islam, since it not only plays a very important role in the development of culture,but also strengthens the whole civilization. That is why Islam devotes much attention to defining the roles and rights of each family-member and takes a very serious view of is problems. The Qur'an and Ahadith are full of statements emphasizing the importance of the family, and every care is taken to nourish this institution in a healthy physical and social environment. The privacy of family life is secured through moral, social and physical restrictions, placed on the Muslim community. The Qur'an even makes it obligatory for a Muslim not to enter a house without taking the permission of its residents[2], to ensure the privacy of family life and even forbids visitation during inconvenient and rest hours.[3]

Islam attaches utmost importance to the social relations between neighbours inorders to maintain a healthy and peaceful neighbourhood.[4] In fact, love and consideration between the neighbours form the backbone of the Islamic community. The Prophet Mohammad (SAW) is reported as saying that nobody can be a true believer unless neighbours feel secure and safe at his side; also, nobody can be a true believer if his

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1   Qur'an, 103: 1,2, & 3.
2   Qur'an, 24:27 & 28.
3   Qur'an, 24:58.
4   Qur'an, 4:36; also 17:23.

neighbours pass the night hungry while his own belly is full. On one occasion, the Prophet (SAW) said that the rights of neighbours were so much emphasized by the angel Gabriel that he thought that neighbours would perhaps be entitled to have a share in one's inheritance also.[1]

Interaction between the people is facilitated by encouraging congregational prayers five times a day in the local mosque, once a week in the Friday Mosque; twice a year in Eid Mosque; and finally at least one in a life time in "Maidan-e-Arafat" for Haji. The human interaction is further augmented at the community level. Offering prayers in congregation is considered to be twenty seven times more rewarding than offering them individually; so, much so, that a Muslim is considered to be constantly in the state of prayers even when he is waiting for prayers to be observed in congregation.[2]

Socio Psychological Factor: The socio-psychological factor is a very important and motivating force to determine the actions of people. It relates to the value-system, attitude and beliefs of the people living in a community, which directly or indirectly control their actions and influence the ecological pattern of a settlement. Spatial segregation due to income, race and religion is a by-product of cultural values and prejudices of people living in that society, which is today creating a lot of problems and becomes a threat to the integrity of an urban area. They also affect the land-use pattern and zoning regulations of an urban area, since the central problem in urban zoning is the resolution of the conflicts among the competing values and beliefs about land use.[3]

Islamic Shariah is the basis Code of Ethics determining the behaviour of Muslims. It not only holds the life of an individual according to its moral values, but also transforms the social order in such a manner that the people may live in peace and contentment.[4] Islam emphatically believes in human equality and does not discriminate between people on economic and racial basis. It encourages a balanced ecological pattern which is devoid of extremes. According to a *hadith,* when a person is evaluating himself materially, he should compare himself with people below him so that he may be able to realize how well off he is, and when it comes to matters in the spiritual and educational realm, one should compare himself with people above him in order to realize how much he needs to improve.

Spatial Distribution: In order to promote human interaction in a boundless, classless and socially integrated society, Islamic Shariah introduced a system of functional

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1   Maududi. op.cit., p.58 & 63.
2   *Sahih Muslim,* Chapters CCXXIV and CCXL, Lahore: Mohammad Ashraf.
3   Gist, op.cit., p.158.
4   Anis-ur-Rahman. Bushra Anis & M. Fekry Amin, "Preservation of Islamic Cultural and Architectural Heritage of Al-Madina Al-Munawara", Preservation of Islamic Cultural Heritage. Urban Development Institute. Riyadh. 1408 AH. p.230.

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hierarchies, both in space and time, at the individual as well as community level. The human interaction is further facilitated in the form of spatial distribution of people by subdividing mankind into tribes and nations as outlined in the Qur'an "O, mankind, verily we have created you from a single (pair) of a male and female and have made you into nations and tribes that you may know each other. Verily, the most honoured of you in the sight of God is the most righteous.[1] The intercommunication within the "Ummah' is further enhanced by creating a hierarchy of settlements in space, as borne out by the following Qur'anic description of the blessed people and their system of settlements:

> Between them and the cities on which We have poured Our bless-
> ings, We had placed cities in prominent positions, And between
> them We had appointed stages of journey in due proportions:
> "Travel therein secure, by night and by day".[2]

The above ayah refers to the old "Frankincense highway" between Yemen and Syria, which connected the great and flourishing Kingdoms of Euphrates and Tigris valleys, Egypt and the Great Roman empire around the Mediterranean at one end, and at the other end, through the Yemen coast, the highway was connected, by sea transport, with India, Malaya and China. As pointed out by Yusuf Ali: "the route was studded in the days of its prosperity with many stations (settlements) close to each other , on which merchants could travel with ease and safety, "by night and by day. The close proximity of stations prevented the inroads of highwaymen".[3] Viewed in the context of settlement-pattern of the "blessed people" described in Qur'an, the spatial distribution of people in space would perhaps be best accomplished by a hierarchic settlement-pattern arranged in a semi-lattice fashion, wherein the nodes represent the system of cities and the connecting links represent the system of smaller human settlements.

Environment

Environment is the second most important element of the human ecosystem. It should be conceived holistically in a dynamic framework, rather than viewing it as a mere physical entity. Environment should not be deemed to be limited to physical media (land, water and atmosphere) only because flora and fauna are also its implicit constituents whose symbiotic disposition in space is, all the time, forming and modifying the environment.

According to Islamic Shariah, environment is a basic resource, which God has created for His vicegerent on earth, to be used in a sustainable and responsible manner. The following paragraphs of this section briefly highlight the salient parameters of the environment in the context of Islamic Shariah.

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1   Qur'an, 49:13.
2   Qur'an, 34:18.
3   Abdullah Yusuf Ali, op.cit., p.1139, n.3816.

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Physical Media: Islam aims at improving the quality of the physical media by rewarding the people with utilization rights if they revive dead land[1], setting desirable standards of aesthetics, and cleanliness[2], providing a safe and clean environment for the neighbour[3], talking in a soft tone[4] to attain a peaceful and tranquil atmosphere, and requiring judicious utilization (rather then wasteful consumption) of resources.[5] The Prophet (SAW) admonished a man, who was washing for prayers, not to waste water even at a flowing river; he made it clear that wastage of resources is forbidden, whether in case of scarcity or abundance.[6]

Flora: The Holy Qur'an has also set the standards for a normative human ecosystem by providing a scenario of "Heaven" where the main physical characteristics, described in the Qur'an at many places, are the abundance of green areas and beautiful gardens full of fruit trees with flowing water streams.[7] That is why greenery and flowing water has always been an aspired physical characteristic of Islamic human ecosystems. The old Muslim cities in Asia and Africa (Fez, Baghdad, Damascus and Istanbul, etc) are examples of this aspiration. In addition to the Qur'anic description of a desirable physical environment, there are many ahadith which encourage planting of trees[8] and prohibit the devastation of crops and orchards, even during wars.[1]

Fauna: Allah Subhanahu-wa-T'aala has made it amply clear in the Qur'an that He has created the fauna for the service of mankind[2], and that their habitat should not be polluted or disturbed.[3] The rights of both domestic and wild animals to humane treatment

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1 el-Hafez Ibn-Sallam, *Kittab el-Amou'al* (The Book of Finance), edited by Mohammad Harrass, Cairo, Dar el Fiker, 1975, p.367.

2 al-Qardawi, Youssef, *al-Halal wa al-Haram* fi al-Islam (Allowance and Prohibition in Islam), al-Maktab al-Islami, Cairo, 5th revised edition, p.79.

3 Karim, Fazlul, Al-Hadis: an English translation and commentary of "Mishkat-ul-Masabih", Vols. I & II, Calcutta, p.249.

4 Qur'an, 31:19.

5 Qur'an, 5:90.

6 Mishkat al-Masabih, Lahore: Sh. Muhammad Ashraf, Vol.I, p.133, no.427.

7 Qur'an, 2:25, 3:15 & 136, 9:72, 16:31.

8 *Mishkat Al-Masabih*. op.cit., Vol.I, p.597, no.1900; and p.600, no.1916.

1 Muhammad Hamid Ullah, The Muslim Conduct of State, Lahore (Pakistan); Sh. Muhammed Ashraf, 1973, pp.204-208 and 312-316.

2 Qur'an, 16:5-8.

3 Mishkat, op.cit., Vol.I, p.115, no.345; and Vol.II, p.125, no.2970; See also Llewellyne, O.A., "Islamic Jurisprudence and Environmental Planning" in the *Journal of Research in Islamic Economics*, Jeddah: King Abdulaziz University, International Center for Research in Islamic Economics, Vol.1, No.2, 1984 p.34; Muhammad al-Khidr Husayn, "al-Rfq bi'l-Hayawan" in *Nur al-Islam*, Al-Azhar, Cairo: Matb'ah al-Ma'ahid al-Diniyah, 1351H/1933AD, pp.86-87' Sabiq, Al-Sayyed, *Fiqh-al-Sunnah*, Beirut: Dar al-Kitab al-Arabi, Vol.3, pp.564-565.; Mishkat al-Masabih, op.cit., Vol.1, p.597, no.1903; Mishkat al-Masabih, ibid. Vol.2, p.424, nos.4075 and 4076; and Mishkat al-Masabih, ibid. Vol.1, p.729, no.3377.

are explained in detail in *ahadith*.[1] Human beings are under legal obligations to provide proper maintenance for any animals under their care[2], and are morally obliged to provide for any other needy animal they encounter, for"there is a reward on every living thing".[3] Moreover, people are warned of punishment in hell fire for causing an animal to starve to death.[4] As regards the wild animals, the Islamic laws of hunting permit the taking of life for food or other necessities. The Prophet (SAW) prohibited the taking the life of any living thing for sport, and cursed him who does so.[5] He forbade causing of any creature's death without sufficient cause. for example, he ordered a man who had taken unfledged birds from a nest to return them to their mother which was trying to protect them .[6]

A practical demonstration of animal sanctuaries is best found in the Islamic system of *"hema"* (Reserve Area). It is one of the oldest known forms of range and resource-conservation in the world.[7] The oldest known *hema* was declared by the Prophet (SAW) himself in Medina.[8] It is estimated to be six square miles in areas and was used for the horses of the Muslim army as a grazing ground; hunting was forbidden within four miles and the destruction of woody vegetation within twelve.[1] The *hema* system could be used effectively in range lands, woodlands and wild-life management, taking into consideration that the most important criterion in establishing a *Hema* is site selection. The site should be strategically selected to accommodate diverse ecosystems that are able to support variety of fauna and flora.[2]

Resources

The third element of human ecosystem is composed of secondary and tertiary resources. Resources may be broadly classified into human, technological and financial categories. The following paragraphs attempt to view these determinants in the light of Islamic Shariah.

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1   Llewellne, O.A., "Islamic Jurisprudence and Environmental Planning" in the *Journal of Research in Islamic Economics*, Jeddah: King Abdul Aziz University, International Center for Research in Islamic Economics, Vol.1, No.2, 1984, p.34.

2   Muhammad al-Khidr Husayn, "al-Rfq bi'l-Hayawan" in *Nur al-Islam*, Al-Azhar, Cairo: Matb'ah al-Ma'ahid a Diniyah, 1351 H/1933 AD, pp.86-87.

3   Sadiq, Al-Sayyed, "*Fiqh-al-Sunnah*, Beirut: Dar-al-Kitab al-Arabi, Vol.3, pp.564-565.

4   Mishkat al Masabih, op.cit., Vol.1, p.597, no.1903.

5   Mishkat al Masabih, ibid. Vol.2, p.424, no.4075 and 4076.

6   Mishkat al Masabih, ibid. Vol.1, p.729, no.3377.

7   Eighmy, J. and Ghanem, Y., *The Hema System: Prospects for Traditional Subsistence* University, Jeddah, Saudi Arabia, 1980, p.1.

8   al-Mawardi, Ali, *Al-Akham as-Sultaniyyah* (*The Sultanic Rules*), 1983, p.160.

1   Ibid.

2   Joma. H.A.A.S., "*The Earth as a Mosque: Integration of the Traditional Islamic Environmental Planning Ethic with Agricultrual and Water Development Policies in Saudi Arabia*, Unpublished Ph.D. dissertation, University of Pennsylvania, 1991, p.89.

Human Resources: Islam lays heavy emphasis on education and advancement of knowledge. According to the Qur'an: "Allah will exalt, in degrees, those of you who believe and who have been granted knowledge. And Allah is aware of what you do" .[1] Also the advice of God in the Qur'an to pray: "My Lord increase me in knowledge"[2], has made education a sacred activity for Muslims. In many *ahadith*, the Prophet (SAW) had reiterated that it is obligatory for every muslim to seek knowledge.[3] That is why in the old Islamic settlements, schools were attached to the hierarchy of mosques. In the city of Cordoba, there were six hundred mosque-schools.[4] This Islamic tradition of mosque-schools appears to have been adopted later on in the Christian countries in the form of parochial schools, which are attached to the church. Encyclopaedia Britannica, acknowledging the contribution of Muslims towards the advancement of education and research, has pointed out that:

> "The crown and glory of medieval Muslim education were their famous research centers. Important among them were the Universities of Nizamia and Mustansiriyah in Baghdad, which developed during the Abbasid caliphate, and those that developed in the Spanish cities of Cordoba, Sevilla, Toledo, Grenada, Mercia, Almeria, Valencia and Cadiz in Western Islam under the Umayyads.[5]"

Qarawiyyin Mosque-University in Fez, towards the end of fifteenth century, is another example of a teaching center which excelled in the law of inheritance, mathematics, chronometry, geometry, metaphysics and logic, etc.[6]; and it drew students and scholars from far and near. Al-Azhar University, where we are holding this conference, is another living example of the Mosque and the University.

Financial Resources: Islamic Shariah subscribes to the efficient and equitable utilization of financial resources. As such, it advocates moderation and is distinctly different from socialism and capitalism, which call for extreme measures.[7] In Islam the profit motive has been upheld, being consistent with human nature, but has been subjected to certain moral constraints so that it serves the individual interest within the social context and does not lead to economic and social ills or violate the Islamic goals of social justice and equitable distribution of income and wealth.[8]

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1   Qur'an, 58:11.
2   Qur'an, 20:114.
3   Ibn-i-Majah, Vol.1, p.81, no.224.
4   Siddiqi, Amir Hasan, *Cultural Centres of Islam*, Karachi: Jamiyat-ul-Falah Publications, 1970, p.77.
5   Encyclopaedia Britannica, 15th edition, Vol.6, p.333.
6   Burckhardt, Titus, *Fez City of Islam*, Cabridge, UK.: The Islamic Texts Society, 1992, pp.107-112.
7   Chapra, M.U., *The Islamic Welfare State and its role in the Economy*, Leicester, UK.: The Islamic Foundation, 1979, p.27.
8   Ibid, p.26.

Technological Resources: Islam is a very forward looking religion and encourages the development and adoption of action-oriented innovative technological measures. Many of the concepts introduced during the zenith of the Muslim empire were highly innovative and revolutionary.

Development

The process of "development" is of paramount importance as an umbrella function, which is regulated by the planning strategies in vogue during the epoch under consideration and the nature and effectiveness of institutional controls and the social acceptance of the nature and the pace of development. The extent of "unions" and "intersections" of the various interacting parameters get manifested in the resultant urban pattern. The following paragraphs will highlight the parameters of development in the context of Islamic Shariah.

Planning: Islamic Shariah is proscriptive rather than prescriptive; it provides a preventive framework, avoiding extremes rather than limiting the solution to one only. It encourages innovations and addresses root-causes rather than treating the symptoms. It maintains that prevention is better than cure. It emphasizes analytical thinking[1], and resolves the planning and development issues through mutual consultations.[2] In the temporal context, Islam subscribes to long-range planning by fixing the ultimate goals and defining ways and means to achieve it. It is reflected in the belief in heaven as a goal in the life hereafter.[3] This goal serves as a guide for a balanced personal and communal life in this world, thereby regulating the day to day actions of the individuals and societies.

Institutional Controls: One of the basic developmental axioms of institutional controls in Islamic Shariah, which have been widely accepted by the people and strictly enforced by the Shariah courts and the *mohtasib*[1], is *"la zarer, la zaraar"*[4], viz., do no harm to others or yourself, and others should not harm you and themselves. Any violation of this principle was strongly dealt with, unless the damage caused was redressed by the law-enforcing institutions in accordance with the policy "to hold the weakest as the strongest until his rights were fully established, and to hold the strongest as weakest until he complied fully with the law".[5]

Social Acceptance: Social acceptance is a pre-requisite for urban development. It is a process through which Planning Strategies and Institutional Controls are matched

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1   Qur'an, 2:219; 7:179; 34:46.
2   Qur'an, 42:38.
3   Qur'an, 40:39,40.
4   al-Qardawi, op.cit., p.77.
5   Abul Latif, *Bases of Islamic Culture*, Hyderabad, India: Institute of Indo-Middle East Cultural Studies, 1959, p.192.

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[1]*An official ensuring that the percepts of the Islamic Shariah are observed.*

with people's needs and aspirations, resulting in a consensus of opinion for the implementation of urban development plans. Although political and bureaucratic set-up plays a very important role in bringing about any physical, economic or social change on a short-range basis, yet it is through the social acceptance that it can have a lasting.success. Development process has to go side by side with the cultural requirements of people and, unless it is got evolved out of the prevailing cultural values of a society, it ends up in a conflicting urban pattern.

Islamic Shariah, subscribing to a single value-system rather than pluralistic value-system[2], is not subjected to cultural conflicts and, as a consequence, facilitates the development of an urban pattern which is consistent with the value system; or in other words, the social acceptance acts as a deterrent for the diffusion of cultural conflicts in urban pattern.

III. THE EMPIRICAL EVIDENCE

There appears to be a consensus in the pertinent literature on Muslim towns about the fact that the physical pattern and organization of these towns resemble each other.[1] The physical pattern of the Muslim towns has generally been characterized by its homogenous organic fabric, relatively high residential densities, hierarchies of mosques and the winding and shaded streets, and socially integrated, inward looking houses with uniform heights and parapet walls on the roofs for privacy.

All these features of physical pattern are obviously not random and can be traced to Islamic Shariah and the climatic conditions prevalent in the hot and arid Islamic countries. Islamic Shariah, as rightly pointed out by Hathloul[2], distinguishes the "through street (*Sharia, tariq nafidh, tariq al-muslimin*), the public way in which all people have right of way, from the land or cul-de-sac (*tariq ghayr nafidh, sikkah, zugag*), which most jurists consider a private road appertaining to its surrounding properties". He further points out that "a notion complementary to this is that of the *"fina"*, an open space around or along a building, which in the conception of most Muslim jurists is considered part of the property. Supervising and maintaining the *suqs* and thoroughfares is the responsibility of the *muhtasib**. In detailing his obligations, the manuals specify that he must keep away

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1   Grunebaum, G.V., "The Structure of the Muslim Town" in hs *Islam: Essays in the Nature and Growth of a Cultural Tradition*, London, 1955, pp.141-158. See also Serageldin, I., El-Sadiq, S., (Eds.), *The Arab City: Its Character and Islamic Cultural Heritage*, Proceedings of a Symposium, Riyadh: Arab Urban Development Institute, 1982.

2   Al-Hathlul, Saleh, "The Role of the Shari'ah in the Transformation of the Physical Environment of Arab-Muslim Cities" in *Preservation of Islamic Architectural Heritage, Proceedings of the Conference on the Preservation of Architectural Heritage of Islamic Cities, held in Istanbul*, Riyadh: Arab Urban Development Institute, 1988. p.215.

anything from the streets and *suqs* of the Muslims that may cause them to be dirty or make them dark or narrow.[1]

Likewise, the socially integrated housing manifests the concept of Islamic brother-hood. The cul-de-sacs, the concept of fina, the uniformity of building heights, and the parapet walls on the roofs signify the concept of privacy in Islam. Its importance is borne out by a hadith that the Prophet (SAW) prohibited a person from sleeping on an unscreened roof of terrace.[2] The inward looking houses focusing on the enclosed courtyards with water fountains and green plants, apart from augmenting the family privacy, further strengthens the family solidarity.

The empirical evidence provided by the old urban patterns of Sevilla, where Ibn-Khaldun used to reside, Cordoba, where Islamic civilization was once at its zenith, Damascus which was the capital of the "Umayyads", Tangier, where Islamic history was made by Tariq Bin Zaid and written by Ibn-e-Battuta; Fez which is known as the city of Islam; Cairo, the city of Salah Uddin Ayubi, the hero of the wars of Crusades and the liberator of Bait-ul-Aqdas, Lahore and Delhi which served as the seats of the Mughals; all lead to the inference that physical form follows the functions. The life style, the culture, the value-system of its inhabitants all get deeply ingrained and fossilized in it. Physical form, unless mutated, never tells a lie!

IV. TRANSFORMATION OF URBAN PATTERN

An analysis of the nature, sequence and some of the contributory causes of urban transformational cycles are necessary for our understanding of the development of urban environment in Muslim communities. The following section attempts to examine these.

The First Cycle

The first cycle of transformation of urban patterns occurred at the peak of Islamic civilization during the Ummayad Era, which completely transformed Hellenistic regular

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1   al-Jarsifi, 'Umar b. 'Usman b. al-'Abbas, "Risalat al-Jarsifi fi al-Hisbah" in Levi-Provencal, E. (ed.) *Thalath Rasa'il Andalusiyah fi Adad al-Hisbah wa-al-Muhtasib*, Cairo, 1955, p.122.
2   Karim, Fazlul, Al-Hadis: An English translation and commentary of "Mishkat-ul-Masabih", Calcutta, 1938/9, Vol.1, p.589.

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*Single and pluralistic value system and the factors implicitly associated with them have far reaching socioeconomic and physical planning implications, whereas, the monolithic social system, like in Muslim countries, have to satisfy only one central tendency, the pluralistic societies, such as USA, have to deal with many differentiated and even conflicting value systems which tantamount to dealing with an envelope of many "normal distributions" having distinctly different central tendencies.

grid pattern of Damascus into an organic cul-de-sac pattern. During this cycle, both the newly founded and the inherited cities with initially highly ordered plans ended up into cities of a similar pattern and distinctly similar character. Von Grunebaum ascribes this process of transformation to a change of focus where the ancient political interest in the community, the classical ideal of city-oneness and the clarity of architectural design have been replaced by a dominant religious interest.[1] Sauvaget ascribes this transformation to the weakness in governmental authority and the continuous instability which, he believes, affected all aspects of urban life during the Muslim period.[2] Hathloul, based on the analysis of several legal opinions of Muslim scholars and court cases, has provided a very logical explanation of this transformation. According to him:

> "this transformation can be accounted for with reasons more deci-
> sive than a mere lack of authority or instability. In effect, we have
> shown that the beliefs and conceptions of the cities' inhabitants
> played a major role in such a transformation. Most of these concep-
> tions and beliefs seem to have continued over a long span of time.[3]

Figure 3 outlines the transformation of urban patterns during the Muslim period as a result of a sequential process in which human functions or value-system of the people emanated from the religious ideology, which in turn regulated the urban pattern or, in other words form followed functions. This urban pattern, due to its acceptance by the society at large, got institutionalized. Once an urban pattern gets institutionalized, it starts influencing the newly acquired territories. The process of transformation can also be explained in terms of the three parameters of development, shown in figure 1. Due to the mutual compatibility between the three intersecting sets, the area of their intersection gets maximized and starts transforming the urban patterns and influencing the other deter-minants of the ecosystem accordingly. However, the first cycle of physical transformation had a limited geographic coverage - it remained confined to the urban areas in the mainstream of Islamic administration in the Middle East.

It may be reiterated that the very fact that the physical pattern got transformed during the first cycle indicates an empirical evidence for the social acceptance of Islamic Shariah. It may be pointed out that the diffusion of Islamic Shariah was not a matter of a few days; it is a time-consuming process. The process traces an S-curve: proceeds slowly in the beginning and picks up speed till it reaches the "saturation" stage[4] and starts transforming the urban pattern in its own mould.

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1   Von Grunebaum, op.cit., p.153.
2   Sauvaget, *Alep*, Paris, 1941, pp. 104-105.
3   Hathloul, op.cit., p.217.
4   Anis-ur-Rahmaan, Bushra, A./R. Al-Shaye, A., "Innovation diffusion in Housing: A Conceptual Probe in Saudi Arabia" in *Journal of King Saud University*, Vol.2, *Architecture and Planning*, 1990, pp.8-10.
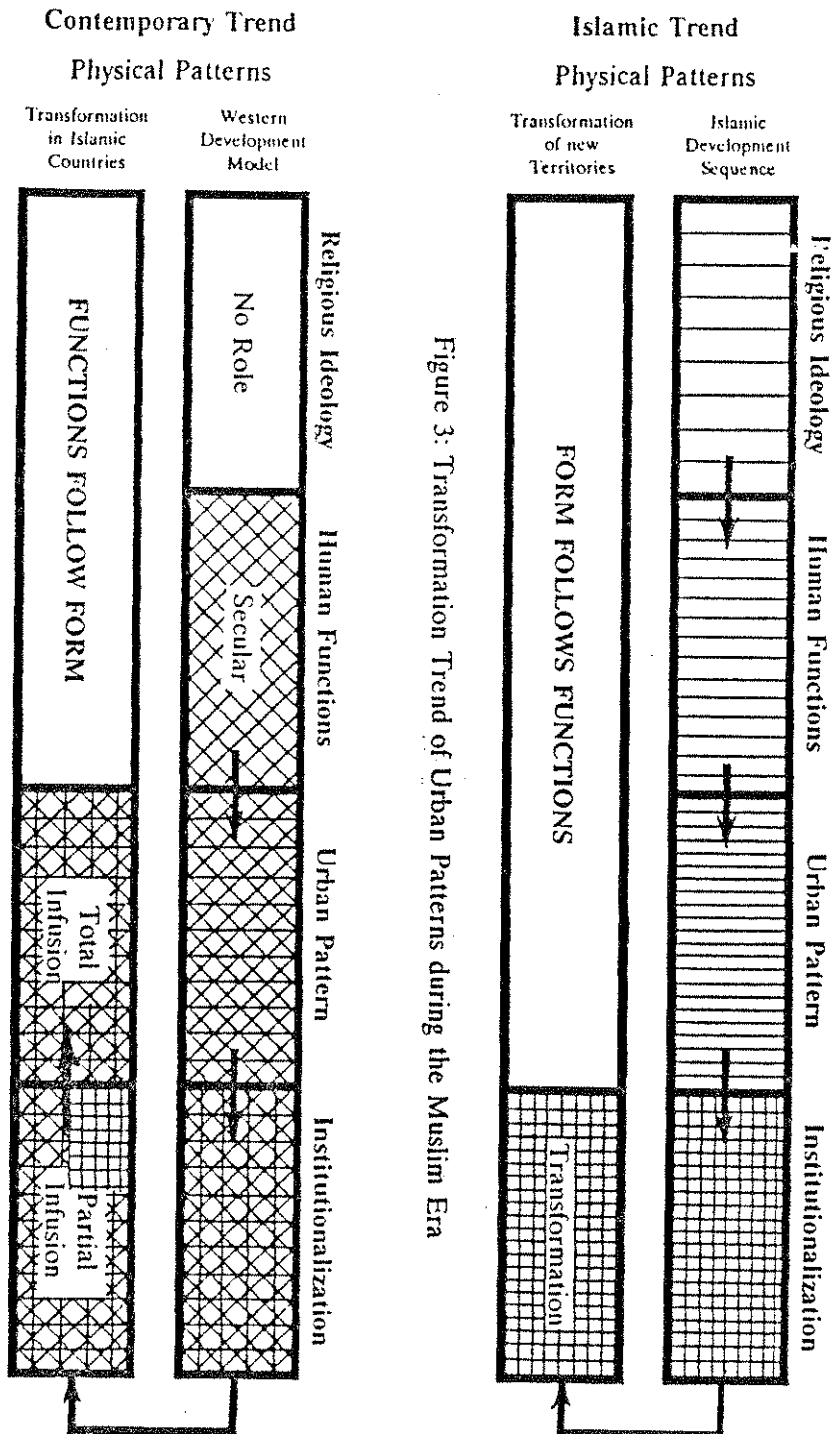
Contemporary Trend

Physical Patterns

Transformation in Islamic Countries	Western Development Model

Figure 4: Transformation Trend of Urban Patterns in Islamic Countries during the Modern Era

Islamic Trend

Physical Patterns

Transformation of new Territories	Islamic Development Sequence

Figure 3: Transformation Trend of Urban Patterns during the Muslim Era

The Second Cycle

The second cycle of physical transformation gathered its strength from the Western culture and is relatively recent in its origin. It is secularly based, technologically equipped and has its roots in materialism. Figure 4 traces the process of transformation of the second cycle. In this transformation, religion plays no role. Human functions, due to their secular orientation, are pluralistic in nature, with many central tendencies. These functions lead to a diversified set of physical forms. Because it is the outgrowth of high technology, its infusion-rate in the developing countries has been very fast, which has resulted in partial or even complete transformation of their urban patterns. Hathloul, in his very instructive article on cultural conflicts in Urban Patterns, has remarked that these conventions, which have been developed in a different social context, are alien to the residents of the Arab-Muslim city and in some cases even run counter to the ideals and notions held by the Arab-Muslim society.[1]

The physical developmental process during the second cycle, as indicated by figure 4, runs counter to that of the first cycle. Being secularly based, it is not in harmony with the Islamic Shariah. For instance, the notion of privacy has been greatly disturbed by outward looking "villa" and the conflicting building heights. The energy-consuming big glass windows have not only usurped the traditional privacy of the house but have also denuded it of its exemplary coolness. Surprisingly, fourteen centuries ago, no less than the Prophet (SAW) himself predicted the conflicts in building heights in Madina Munawara:

> "Narrated Usama: once the Prophet (SAW) stood at the top of a castle amongst the castles (or the high buildings) of Medina and said, "Do you see what I see? (No doubt) I see the spots where afflictions will take place amongst your houses and these afflictions will be as numerous as the spots where rain drops fall.[2]"

The communal cohesion and social integration achieved by the intimate organic pattern and cul-de-sacs has today been replaced by gridiron pattern of streets. The hierarchy of mosques has become lopsided; now there are more Friday mosques than the local mosques because the ideology of "bigger is better" has replaced many smaller local mosques, by fewer and larger Friday mosques. In short, as opposed to the first cycle, the physical development patterns are much more widespread geographically and today the social functions have started following the imposed form, which has been imported from an alien culture.

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1   Al-Hathloul, S.A., "Cultural Conflicts in Urban Patterns: A Saudi Arabian Case Study" in Serageldhin, op.cit., p.76.

2   Khan, M.M. (tr.), *Sahih Al-Bokhari*, Al Madinatu Al Monawara: Al Maktabat Al Salafiat, Vol.3, p.58.

The Third Incipient Cycle

Fortunately, there are already some happy tidings on the horizon. The human civilization appears to be at the threshold of a third cycle of physical transformation. There are some emergent tendencies towards the reversal of a reversed trend! The concepts which complement Islamic Shariah are scientific and innovative rather than traditional; they are now being experimented with and applied by the Western societies. For instance, the concept of Planned Unit Development (PUD) is a step towards mixed uses and socially integrated housing-schemes. It is further augmented by the concept of "inclusionary zoning" (as opposed to "exclusionary zoning") which promotes social integration. Cluster zoning and cul-de-sacs are very much coming in vogue. Performance standards are being talked about as a possible replacement of the rigid land-use zoning provisions provided by the "Euclidean Zoning". The concept of Transfer of Development Rights (TDR) has been introduced to preserve the cultural heritage in urban areas. Emphasis is already shifting from curative measures to preventive measures; and from consumption to judicious utilization of natural resources.

Doxiades has already put forth the concept of a universal city (Ecumenopolis), which will be transnational in its extent and non-racial in character. It will be responsive to the needs of human beings at large (*ummah*) rather than the demands of conflicting and vested political interests - a city "in which mankind will be able to operate as one community".[1]

V. CONCLUSIONS AND RECOMMENDATIONS

The challenge faced by the physical and social planners of today is to eliminate the mismatches between normative human behaviour and built environment, which leads to frustrations at the individual level and inefficiencies in the social system. Adherence to the Islamic Shariah can save the situation, as it provides for a holistic way of life. It not only provides a "code of conduct" for the hierarchic human behaviour in space and time, but also covers flora and fauna and provides for *"Hema"*, the sanctuaries for wild and plant life.

According to Islamic ideology, "prevention" is considered better than "cure". It advocates the utilization rather than wastage of consumable resources; conservation rather than depletion of natural resources; and improvement rather than demolition of built environment. It sets high standards for cleanliness and calls for noise-abatement measures that lead to a very hygienic, serene and calm environment rather than unsanitary, noisy and morbid environment.

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1   Doxiades, C.A., *Ekistics: An Introduction to the Science of Human Settlements*, New York Oxford University Press, 1968, pp.218, 337 & 430.

Since the dawn of Islam, human civilization has experienced two major cycles of transformations of urban patterns. Both the cycles, at their peak, reversed or drastically changed the urban morphology prevalent at the time of their inception. Having transversed the two transformational cycles, the human race appears to be at the threshold of a third cycle.

In order to achieve an urban environment that is in keeping with norms of Islamic Shariah, concerted efforts are required to accomplish congruency of the intersecting parameters of the determinants of sociophysical development within the framework of Islamic Shariah (fig 1). A greater emphasis should be placed on the parameters of secondary and tertiary "resources" and the process of "development". Currently, we are operating under the Western, so called secular and materialistic, doctrine. Westernization has become the order of the day. The brains of our young generation are being washed by Western mass-media in the light of the concepts developed in Western universities.

In terms of the process of physical development, our current planning-system has come to rely on the concepts that are not only alien to Islamic culture but in many cases run counter to it. We have now to formulate our own innovative Islamic concepts, which should use technology rather than get dictated by it. Our institutional controls should promote and encourage the implementation of physical patterns that follow the Islamic functions rather than making the functions follow the form developed in accordance to Western culture.

Last but not least, our value-system has to change drastically; we should learn to take pride in our own culture rather than blindly following the Western materialistic and pluralistic value-system. Social norms of the people are of seminal importance, as they provide a prime moving force for the physical development process. Our physical development is based on the "expressed" demand of the people, which is increasingly oriented towards the Western way of life. We have to take measures to induce appreciation for an Islamic urban environment by manipulating the latent demand of the people; for it is only in such an urban environment that we can have a truly satisfactory Islamic life.

Islamic Thought & Scientific Creativity. Vol.4 (7). 1996

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II. Certificates and Testimonials

A. Letters of acceptance from the refereed journals, symposia and book editors and their particulars.

B. Certificate of Principal Authorship.

C. Resume.

D. List of publications and research papers.

E. Membership of Professional Organizations

    1. Member of American Institute of Planners.

    2. Member, American Institute of Certified Planners.

    3. Member, Canadian Institute of Town Planners.

    4. Life Member of Pakistan Council of Architects and Town Planner (PCATP)

F. Best Professor's Award.

G. Who's Who in the World Certificate (1999).

H. New Century's Award for Outstanding Achievements by Barons' Who's Who (U.S.A).

I. Letters of Appreciation & Recommendations.

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    2. Educational Institutions

Date: 30-10-1420H

Manuscript Code: SED/317/0119

Dr. Anis-ur-Rahman,
Deptt. of Urban & Regional Planning,
College of Env. Design, KAAU.

Dear Dr. Anis-ur-Rahman,

I am pleased to inform you that your manuscript entitled: "A Proposed Framework for Environmental Regulation in Urban Areas with a Specific Reference to Yanbu Industrial City, Saudi Arabia" has been accepted for publication in the Journal. We will send you a copy of the issue along with a number of reprints of your paper in due course.

I wish to thank you for submitting your manuscript to the Journal, and hope that you will take further opportunities to send us future contributions.

Sincerely,

Prof. Abdulrahman A.F. Abdulfattah
Editor-in-Chief

Note: Please provide to us with the following:-

1. Corrected paper in a floppy disk on IBM(Windows) or Mackintosh.
2. All original figures of the paper on the tracing paper.

Form 13.

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ATHENS, 13 May 90

TO WHOM IT MAY CONCERN

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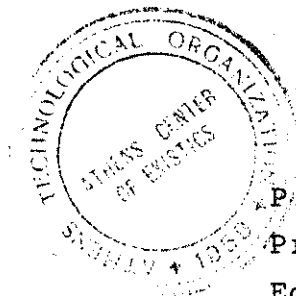
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* Reference:

- "Planning for an Islamic Environment and Urbanization Policies",
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- "The Evolution of Urban & Regional Planning in Saudi Arabia",
  EKISTICS, No.312, May/June 1985.

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the   problems   and   science   of
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11th Feb., 2000

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Dr Anis-ur-Rahmaan,
College of Environmental Design,
King Abdul Aziz University,
P.O. Box 9027,
Jeddah, Kingdom of Saudi Arabia

Dear Dr Rahmaan,
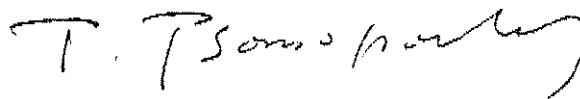
Thank you for your letter of 6th February.

I am pleased to confirm officially that your paper "The Global City of the Twenty-First Century" has been accepted for publication in the Jan./Feb.-March/Apr.-May/June 1999 issue of our journal *Ekistics* on "Futures".

Although there is a delay in the circulation of *Ekistics*, the "Futures" issue will appear within the current year.

With best wishes,

Yours sincerely,

P. PSOMOPOULOS
President, Athens Center of Ekistics
Editor, EKISTICS

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8 Dec. 98

FAX No.0096 2620 6347

Dr. Anis ur Rahmaan
College of Environmental Design
King Abdul Aziz University
Jeddah
Kingdom of Saudi Arabia

Dear Dr. Rahmaan,

        I was pleased to receive your paper "The Role of Power Dynamics in the Socioeconomic and Physical Transformation of Urban Systems" that you sent me some time ago and I am sorry for the delay in reacting to your letter.

        I am now pleased to tell you that the topic of your paper is very exciting and that it has been accepted for publication in a later issue of EKISTICS. I may write to you again about some details when we finish the careful editing.

        With many thanks for giving us priority in publishing your really exciting paper and with all good wishes.

                                Yours sincerely,

                                P. Psomopoulos
                                President, Athens Center of Ekistics
                                Editor, EKISTICS
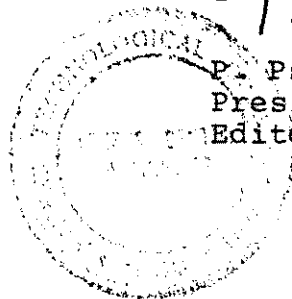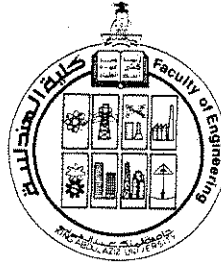
المملكة العربية السعودية

وزارة التعليم العالي

جامعة الملك عبدالعزيز

كلية الهندسة

الرقم : ١٢٩٤/ت

التاريخ : ٣/٣/١٤١٨ﻫ

المرفقات : ١

سعادة الدكتور/ أنيس الرحمن   حفظه الله

قسم التخطيط الحضري والاقليمي كلية الهندسة ـ جامعة الملك عبدالعزيز

السلام عليكم ورحمة الله وبركاته ،

إشارة إلى بحثكم المعنون

"The Role and Implications of Technology and Industrial Base in the Development Dynamics of Saudi Arabia"

والذي تم نشره في السجل العلمي للمؤتمر الهندسي السعودي الرابع ، نود إعلامكم باختيار بحثكم للنشر في مجلة جامعة الملك عبدالعزيز (العلوم الهندسية) ، ووفقا لتعليمات إعداد البحوث التي تنشر بالمجلة والمرفقة طيه فنأمل تزويدنا بإقرار بأن البحث لم يسبق نشره في مجلة أخرى ولن ينشر في أية وسيلة من وسائل النشر قبل نشره في مجلة جامعة الملك عبدالعزيز .

أرجو أن يصلنا الإقرار المرفق بعد تعبئته خلال شهر من تاريخه ليتسنى إستكمال إجراءات النشر ، علما بأنه في حالة عدم وصول ردكم بعد انتهاء المدة المشار إليها أعلاه فإن هيئة التحرير ستعتبر أنه ليس لديكم رغبة في استكمال نشر البحث في المجلة ومن ثم سيتم اختيار بحث آخر .

وتقبلوا أطيب تحياتي وتقديري ،،،

رئيس هيئة تحرير

مجلة جامعة الملك عبدالعزيز

العلوم الهندسية

أ .د. عبدالرحمن بن أحمد فؤاد عبدالفتاح
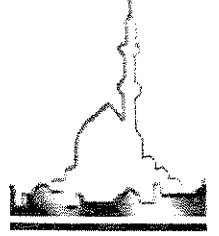
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Date : August 31, 1998

الرقم : ع/١٦٦

التاريخ : ١١/٥/١٤١٩هـ

Dr. Anis Ur-Rahmaam
School of Environmental Design
King Abdul Aziz University
P.O. Box 9027
Jeddah, Saudi Arabia.

Dear Dr Anis Ur-Rahman:

I am pleased to inform you that your paper titled **"The Dynamics of Planning and Design Criteria for Mosques in Saudi Arabia"**, submitted to the Symposium of Mosque Architecture, has been accepted. Please find enclosed, *"the referees' comments and guidelines for authors"*.

Kindly modify the paper according to these comments, enclose clear photos and illustrations, and return it along with a computer disk within one month. We also appreciate providing us a copy of your passport and curriculum vitae.

We thank you for your valuable contribution to the Symposium, hoping to see you in Riyadh soon.

Sincerely yours,

Dr. Abdelhafeez Feda Alkokani,
Chairman, The Executive Committee

No. 166

ندوة عمارة المساجد
SYMPOSIUM ON MOSQUE ARCHITECTURE

Ref. : —————————

الرقـم : ..٤٢/٦٧/ان
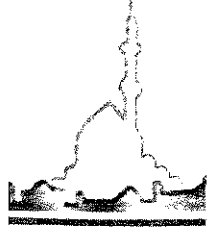
Date : 29 March, 1998

التاريخ : —————————

Dr. Anis Ur-Rahmaan
School of Environmental Design
King Abdul Azziz University
P.O. Box 9027
Jeddah
Kingdom of Saudi Arabia

Dear Dr. Anis Ur-Rahmaan:

On behalf of the Scientific Committee, I am pleased to inform you that the abstract of your paper entitled: **"The Dynamics of Planning and Design Criteria for Mosques in Saudi Arabia"** submitted for possible presentation in the International Symposium on Mosque Architecture has been accepted.

Enclosed, please find information and the *guidelines* to be followed by all authors for publication in the Symposium's proceedings, and a copy of the *Referee's Evaluation Form*, which will be used in refereeing all submitted papers.

Please note that the deadline for receiving the papers has been extended to June 20, 1998, and that the Symposium will be held between January 30th and February 3rd, 1999.

I look forward to receiving your valued contributions. If you have any inquiries, please do not hesitate to contact me.
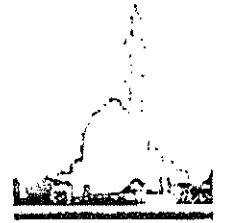

Sincerely yours,

Dr. Abdelhafeez Feda Alkokani
Chairman, the Executive Committee

م١٦٦

بسم الله الرحمن الرحيم

ندوة عمارة المساجد
SYMPOSIUM ON MOSQUE ARCHITECTURE

Ref. : ——————————   الرقم : ——————————

Date : ——————————   التاريخ : ——————————

To: Dr. Anis-ur-Rahmaan   Fax 02-620-6347

AUTHORIZATION STATEMENT
(FOR PRINTING & PUBLISHING RIGHTS)

Paper No.   : 166

Paper Title : The Dynamics of Planning & Design Criteria for Mosques in Saudi Arabia

Regarding the paper mentioned above, I, hereby, accept that printing and publishing rights be transferred to The Symposium of Mosque Architecture. I declare that the paper described above had not been published in any previous scientific journal or magazine. I also authorize The Symposium of Mosque Architecture to make some minor editing to the paper for printing or publishing purposes.

Name of Author : ANIS UR RAHMAAN

Signature   :

Date   : Nov. 3, 1998

Dr. Anis: Please Fax this back to us. 966 1 4673117

Under The Partronage of
The Custodian of The Two Holy Mosques

King Fahd Bin Abdul Aziz Al Saud

To Commemorate
The Centenial of The Kingdom of Saudi Arabia

Proceedings of the Symposium on Mosque Architecture

Volume 5 : The Planning and Design Criteria of Mosque Architecture

College of Architecture and Planning, King Saud University
The Ministry of Higher Education

In Collaboration with
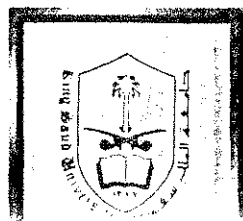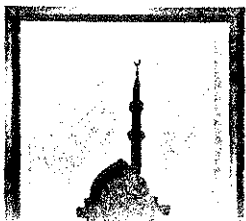The Ministry of Islamic Affairs , Endowment, Da' wa and Guidance

Edited By:
Dr. Mohammad Eben Abdullah Eben Saleh
Professor of Architecture and Building Sciences

Dr. Abdelhafeez Feda Alkokani
Asst. Professor of Architecture and Building Sciences

Riyadh
Kingdom of Saudi Arabia

13 - 17 Shawal , 1419 H
30 January - 3 February, 1999 G

Introduction

Praise to Allah, the Lord of all Worlds, and peace be upon the Most noble Prophet and Messenger, Prophet Mohammed.

The College of Architecture and Planning at King Saud University is honoured to present this volume, which is considered to be one of the main subjects of the Symposium on Mosque Architecture. It contains a comprehensive scientific record of refereed papers on Theme of: *"Planning and Design Criteria of Mosque Architecture."*

This symposium which has been organized by the College of Architecture and Planning at King Saud University, in collaboration with the Ministry of Islamic Affairs, Endowment, Da'wa and Guidance under the auspices of the Custodian of the Two Holy Mosques, King Fahd Ibn Abdulaziz Al-Saud, in Riyadh, Saudi Arabia during the period of 13-17 of Shawwal, 1419H. (30 January – 3 February, 1999G.), as part of the activities of Centennial Celebration on the establishment of the Kingdom of Saudi Arabia.

The personal attention, encouragement and continuous follow-up of his Excellency the Minister of Higher Education Dr. Khalid bin Mohammed Al-Ankary; had a direct effect in accomplishing this work. The logistic and financial support of the administration of King Saud University, headed by His Excellency the Rector of the University Professor Abdullah bin Mohammed Al-Faisal, Vice Rector for Higher Studies and Scientific Research Professor Khalid bin Abdulrahman Al-Homoudi, and the General Supervisor of Financial and Administrative Affairs Dr. Khalid bin Abdullah bin Megren Al-Saud had direct effect on the symposiums performance and activities, and is highly appreciated. The effective participation of the faculty members of the College of Architecture and Planning at King Saud University and the Ministry of Islamic Affairs, Endowment, Da'wa and Guidance members headed by His Excellency Minster Dr. Abdullah bin Abdul-Mohsin Al-Turki, in addition to the fruitful collaboration with universities, governmental organizations and some national establishments in particular "The Bin Laden Group" which had a direct effect on the success of the activities of the first symposium on Mosque architecture.

Research on mosque architecture is an interdisciplinary subject, which is not solely scientific or technical, but it extends to jurisprudential, social, economic and artistic interrelated matters. The success of this symposium may be measured by the overwhelming response from jurists, architects, planners and engineers. The referee's response from scientific and governmental organizations and their interaction had a major effect in emphasizing genuine and significant research issues. The scientific committee selected qualified and specialized referees among a pool of reviewers from Saudi Arabia and abroad to review these papers and arbitrate whether they qualify for publication in the sympoisum to preserve higher standards.

Taking this opportunity, we would like to extend our thanks and appreciation to our colleagues, members of the Executive Committee and other committees of the symposium who participated in the preparation for, and running the symposium, and whose efforts had extended for about three years.

We pray to Allah to accept our deeds and guide us for proper conduct.

The Editors

August 7, 1995

Anis Ur-Rahmaan
School of Environmental Design
King Abdul Aziz University
PO Box 9027
Jeddah
Saudi Arabia

**Centre for Architectural Research
and Development Overseas**

Department of Architecture
University of Newcastle
Newcastle upon Tyne NE1 7RU
England

Director
Adenrele Awotona BSc DipArch MPhil PhD

Dear Anis

Publication of Selected Papers from the "People, Place and Development" Symposium

We are delighted to let you know that a reputable publisher has now agreed to publish some selected papers from the above symposium which took place in CARDO on the 1st and 2nd of December, 1994, in a book format. Your contribution is one of these. The title of the book will be *TRADITION, LOCATION AND COMMUNITY: Place-making and development,* to be jointly edited by us. We, therefore, write to request you to kindly re-edit your paper so that it is camera-ready. We enclose typing instructions as well as sample pages to guide the re-editing of your paper. In addition, please note the following points:

1.   The maximum length of the paper should be twelve single spaced pages, including illustrations, notes and bibliography.

2.   Review your paper once again to make any changes and improvements you may want to do, especially in the light of the discussions at the Symposium.

3.   Do not simply put down your thoughts from the Symposium, but instead realise that you are contributing to an archival volume. Consequently, feel free to cross-reference to other papers or authors in the Proceedings, but delete references in your paper, if any, to "the Symposium" or "this Conference", etc. Instead, refer to "in this book", "in this chapter", etc.

4.   If not already divided into sections, please do so, but without any section numbers.

5.   Try to write (or re-write if necessary) a brief Introduction to give an overview of your paper and to link it to the context and to other papers presented, and if necessary, a brief conclusion.

6.   Carry out a computer spell check and if applicable, have the English checked.

7.   Follow the same referencing system as the enclosed sample pages from a similarly edited book.

8.   Add illustrations (drawings, photographs, labels) that might improve the intelligibility of your paper.

9.   Leave gaps where illustrations are best placed, write the captions at the bottom of the relevant gap, number them and refer to them in the text. Enclose the originals of all photographs referred to in the paper and put lightly pencil the number on the back (do not use ink or pen). All photographs should be supplied as black and white gloss prints.

10.   Underline in pencil on one of the printouts, approximately ten keywords for inclusion in the Index.

11.   Supply a brief (3-4 lines) CV on a separate sheet.
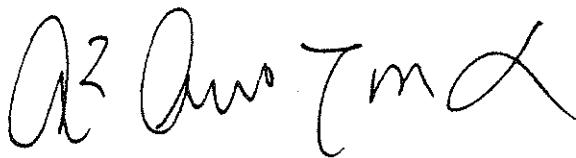
Please kindly send to Dr Awotona at CARDO a 3.5" disc with the formatted text (packed to prevent damage in transit) and two hard copies. Keep a copy for yourself. Please send these not later than 1st October 1995. It is important that we hear from you by that date, even if you do not wish you paper to be included in the book. We are, of course, assuming in writing this letter inviting you to contribute to the book, that your paper has not been published elsewhere, or been presented for publication.

For those who may have difficulty in accessing a word processor compatible with Word for Windows version 2, we should be happy to arrange this for you upon submission of a hard copy at a cost of £50.00.

When we have made further contact with the Publisher we will write again with details of the publication process, instructions regarding copyright, etc. Please note that all correspondence should be sent to Dr. Adenrele Awotona at CARDO, University of Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, England.

I look forward to hearing from you.

Yours sincerely

Dr. Adenrele Awotona
Director of CARDO, and
Director of Postgraduate Studies, Department of Architecture

and

Prof. Dr. Necdet Teymur
Professor of Architecture.
METU, Turkey

AA/MW

13th December, 1995

Dr. Anis-Ur-Rahmaan,
School of Environmental Design,
King Abdulaziz University,
P.O.Box 9027,
Jeddah,
Saudi Arabia

Dear Dr. Ur-Rahmaan,

Tradition, Location and Community: Place-making and Development

With reference to the above book,of which your paper *"Development Alternatives of Human Ecosystem"* forms Chapter 3, we would be pleased to receive your brief c.v. as soon as possible.

Sorry we are late in this request but we have been trying to contact you via fax (00 966 2 620 6347) and e-mail, and the numbers we have are not getting through.

Yours sincerely,

Mrs Maggie Warford
Secretary, CARDO

Tradition, Location and Community

Place-making and Development

Edited by
ADENRELE AWOTONA

University of Newcastle upon Tyne
United Kingdom

NECDET TEYMUR
Middle East Technical University
Ankara, Turkey

Avebury

Aldershot · Brookfield USA · Hong Kong · Singapore · Sydney

Introduction

Adenrele Awotona

This book is the outcome of an international symposium on *People, Place and Development* which was organised and hosted by the Centre for Architectural Research and Development Overseas (CARDO), University of Newcastle, UK. It was held in December 1994 and was an International Association for People-Environment Studies (IAPS) network activity. The two-day symposium covered a number of themes including the following: theoretical issues and methods; place and people's behaviour; place-making processes; tradition, continuity and change; places for special needs; concepts and strategies for place-development; women, housing and development; rebuilding communities after disasters; physical development standards; and agencies for development. The central view which the international gathering overwhelmingly noted, as reflected in the numerous papers that were presented, was that shaping places for people should not only be in conformity with their individual needs and aspirations, but should also be a means for social and economic progress. By strengthening these relationships, shaping places becomes a developmental process of multifarious dimensions: socio-economic, cultural and physical. This process aims at enhancing cultural identity and providing adequate living environments, as well as maximising the use of resources and encouraging income generation.

The structure of the book

The book brings together the selected papers of seventeen architects, social scientists and planners who were amongst the 109 delegates from 23 countries who attended the symposium. It offers a range of original perspectives on the relationship between the design and habitation of the built environment on the one hand and social and cultural development on the other. As an archival volume, it attempts to present a mixture of cross-disciplinary and cross-cultural perspectives.

UNIVERSITY OF
NEWCASTLE

CARDO

Centre for Architectural Research and Development Overseas
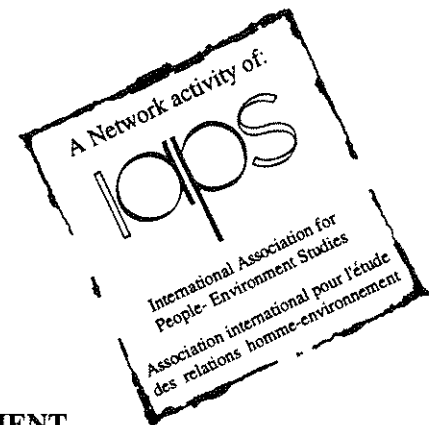University of Newcastle upon Tyne, UK

An International Symposium on:

PEOPLE, PLACE & DEVELOPMENT

(homme, lieu & développement)

1 - 2 December 1994

Keynote paper

Amos Rapoport

Distinguished Professor, The School of Architecture and Urban Planning
University of Wisconsin, Milwaukee, U.S.A.

Themes and topics of the Symposium

PEOPLE & PLACE	PLACE & DEVELOPMENT
Theoretical Issues and Methods	Theories, Concepts and Strategies
Place and People's Behaviour	Women, Housing and Development
Place-Making Processes	Rebuilding Communities after Disaster
Tradition, Continuity and change	Physical Development Standards
Places for Special Needs	Agencies for Development

SYMPOSIUM SPEAKERS

Mohammed S. **Abdu** - Saudi Arabia; Ambrose **Adebayo** - South Africa; Lo Taura **Agata** - UK; M. **Akalin** - UK; Sameer M. **Al-Lyali** - Saudi Arabia; Abdullah M. **Al-Oweid** - Saudi Arabia; Ahmad Y **Al-Zoabi** - Jordan; Bayo **Amole** - Nigeria; Ghulam A. **Anjum** - UK; Homayoun **Arbabian** - UK; Hulya **Ari** - Turkey; V. **Bhatt** - Canada; I. U. **Bajwa** - UK; Ramadan T. **Belgasem** - Libya; Tahar **Bellal** - Algeria; Umar G. **Benna** - Saudi Arabia; Mirilia **Bonnes** - Italy; Gulen **Cagdas** - Turkey; Thereza C. C. **Carvalho** - Brazil; A. **Casault** - Canada; David **Covo** - Canada; Patrick **Devine** - UK; Amr F. **Elgohary** - UK; Amr **Elsherif** - UK; Kole **Esan** - Nigeria; Alireza **Fallahi** - Australia; Aly Hatem **Gabr** - Egypt; Mostafa M. **Gabr** - Saudi Arabia; Isil **Hacihasanoglu** - Turkey; Orhan **Hacihasanoglu** - Turkey; Julien **Hanson** - UK; Elwyn D. **Harlec-Jones** - South Africa; Linariza **Haron** - UK; Albrecht **Herholdt** - South Africa; Jaime **Hernandez** - Colombia; Christine **Holman** - UK; Ramalakshmi V. **Isaiah** - UK; Barabara **Jekot** - South Africa,; Paul **Jones** - Kiribati; K. **Karami** - Iran; Omar **Khattab** - UK; Peter **King** - UK; Rudith S. **King** - Ghana; Arzu **Kocabas** - UK; C. P. **Kotze** - South Africa; Vladimir B. **Ladinski** - UK; Yung-Jaan **Lee** - Taiwan; John B. **Leonard** - UK; James **Lewis** - UK; Kenneth S. **Long** - South Africa; Ali **Madani-Pour** - UK; Michael **Majale** - Kenya; Glen **Mills** - South Africa; Bill **Murray** - UK; Benhamouche **Mustapha** - Algeria; Mark **Napier** - UK; Jesus **Navarrete** - Canada; Rachelle G. **Navardo** - Canada; Ibrahim **Numan** - Turkey; Cathy **Oelofse** - South Africa; Olumide **Okunsanya** - Nigeria; Osuade A. **Oyediran** - Nigeria; James J. **Potter** - USA; Magda Behloul **Rabhi** - UK; Abdul M A **Rahman** - Malaysia; Anis-ur-**Rahmaan** - Saudi Arabia; M. F. **Ramutsindela** - South Africa; Rabee M. **Reffat** - Saudi Arabia; Razieh **Rezazadeh** - UK; Gustavo **Ribeiro** - Denmark; Ahmed **Rifaat** - Bahrain; Moyra **Riseborough** - UK; Subir **Saha** - India; Nagia Abdelmogney **Said** - Egypt; Noor S. S. **Saidi** - Malaysia; Rafiki **Salama** - Canada; Robert **Saliba** - Lebanon; Alaa Eldin N. M. **Sarhan** - Saudi Arabia; Nagwa H. **Sherif** - Egypt; Seung Kwang **Shon** - South Korea; M **Symes** - UK; Necdet **Teymur** - UK; Shu-Cheng **Tseng** - Taiwan; Ola **Uduku** - UK; Charles **Walker** - Turkey; Jack **Wawrzynski** - UK; Karla **Werner** - Sweden; A. Yaprak **Yolal-Dyer** - Turkey.

****

Islamic Thought and Scientific Creativity is published by the Organization of Islamic Conference Standing Committee on Scientific and Technological Cooperation (COMSTECH) as a quarterly journal in March, June, September and December. Its Arabic version is published by Islamic Academy of Sciences (IAS), Amman, Jordan. The Journal publishes original articles on Islamic thought, Muslim contributions to the growth of scientific knowledge, science and contemporary dilemmas and other related areas.

بسم الله الرحمن الرحيم

LAST ISSUE OF THE JOURNAL

Dear Reader,

The Editorial Board of this Journal is sorry to inform you that the present copy of the Journal of "Islamic Thought and Scientific Creativity" in your hands is its last issue as it is no more possible to continue this journal for unavoidable reasons. The Journal was started in January 1990 and was regularly published quarterly for the last seven years. Articles on topics dealing with the philosophy of Islamic Thought and relationship between Islam and Science were published. Most of the published articles were quite thought provoking as the selection of material received from authors was subjected to strict refereeing and evaluation before going to print. The editorial board took utmost care in this respect and tried its level best to present to the readers material of high standard. The editorial board acknowledges with thanks the appreciation of the published material by many of its readers.
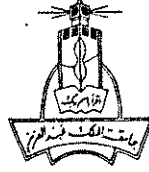
COMSTECH and the Editorial Board take this opportunity to thank the readers for their interest in the journal and wish them well.

Cheerio! *Ma a'salamah.*

Editor

KINGDOM OF SAUDI ARABIA
Ministry of Higher Education
KING ABDULAZIZ UNIVERSITY
SCIENTIFIC COUNCIL
Scientific Promotion Committee

المملكة العربية السعودية
وزارة التعليم العالي
جامعة الملك عبد العزيز
المجلس العلمي
لجنة الترقيات العلمية

Ref. ....

Date ....

الرقم ....

التاريخ ....

افــــادة

لتحديد الباحث الرئيسي في بحث مشترك مقدم للترقية العلمية

عنوان البحث : دور الشريعة الاسلامية في ترقية تطوير بيئة حضرية أفضل

المؤلفون حسب ترتيب ظهورهم على البحث : د. أنيس الرحمن و بشرى أنيس الرحمن

النشر : مقبول للنشر .... منشور (نعم)

جهة وتاريخ النشر مجلة الفكر الاسلامي والابداع العلمي ـ المجلد السابع العدد الرابع ديسمبر١٩٩٦م

نشهد نحن المؤلفون المشاركون في البحث المذكور أعلاه ـ بأن الباحث الرئيسي لهذا البحث هو :

د. أنيس الرحمن .... وهذه افادة منا بذلك لتقديمها إلى لجنة الترقيات العلمية .

أمضاءات فريق البحث : د. أنيس الرحمن
بشرى أنيس

Attestation

The co-authors of the paper entitled The Role of Islamic Shariah in Optimizing the Development of a Better Urban Environment.

attest that Dr. Anis ur Rahmaan

is the principal Investigator of this paper.

(Signature)

Bushra Anis

RESUME OF DR. ANIS-UR-RAHMAAN

PRESENT ADDRESS:

College of Environmental Design   Phones: (Off.)   640-2000 Ext. 68193
King Abdul Aziz University   640-0000 Ext.66552
P.O. Box 9027, Jeddah 21413   (Res.)   (02)620-6347 (Fax)
Kingdom of Saudi Arabia   E-Mail: arahmaan@hotmail.com

PERMANENT ADDRESS:

C/o Dr. Khalid Hameed   Phone: (Res.) (419) 841-3365
6821 Pine Creek Drive
Toledo, Ohio 43617
U.S.A.

I.   Educational Qualifications

1.   Ph.D. in Urban and Regional Planning (University of Wisconsin, Madison, USA), 1976. Emphasis on socioeconomic and physical development policies, programs and plans at local, regional and national levels.

2.   M.Sc. City Planning (University of Illinois, Urbana-Champaign, USA), 1961.

3.   Post-graduate course in Tropical Architecture (AA School of Architecture, London, UK), 1958; was awarded first prize of the course.

4.   B.Sc. Civil Engineering (University of the Punjab, Lahore, Pakistan), 1951, First Division.

5.   Either studied, conducted research or taught urban and regional planning courses in the following institutions of higher learning:

   (a)   King Abdul Aziz University, Jeddah (Saudi Arabia).

   (b)   University of Wisconsin, Madison and Green Bay Campuses (USA).

   (c)   University of Hawaii, Honolulu (USA).

   (d)   University Illinois, Urbana-Champaign (USA).

   (e)   Institute of Social Studies, The Hague (Netherlands).

   (f)   Beoucentrum, Rotterdam (Netherlands).

   (g)   AA School of Architecture, London (UK).

   (h)   University of Engineering and Technology, Lahore (Pakistan).

   (i)   Punjab University, Lahore (Pakistan).

II. Professional and Research Experience

1. Worked as United Nations' Adviser on Urban and Regional Planning in Saudi Arabia for more than nine years (May 1978 - September 1987). During my United Nations' assignment, I completed the following tasks:

   (a) Rendered advice, on a continued basis, to the government of Saudi Arabia on various issues pertaining to urban and regional development.

   (b) Coordinated the research activities of the United Nations' Urban and Regional Development Planning Project and also participated in the formulation of National Spatial Strategy for Saudi Arabia.

   (c) Advised and assisted the preparation of urban and regional development program for Saudi Arabia, and also participated in the preparation of scope of work for Master Plan Projects of various urban and rural areas, and regions in Saudi Arabia.

   (d) Monitored the preparation of comprehensive development plans for the city of Al-Madina and Hail, Al-Baha and Tabuk regions.

   (e) Supervised the preparation of Al-Uqayr Tourism Development Plan in the eastern province of Saudi Arabia.

   (f) Advised the Town Planning Department of Abu Dhabi in the United Arab Emirate and prepared the scope of work for the Abu Dhabi Regional Development Plan.

2. Advised the coastal communities in Wisconsin (USA) on socioeconomic and physical development issues and coastal zone management during 1977-78.

3. Participated in the University of Wisconsin-Green Bay's 'Review' of the Comprehensive Development Plan of the town of Shawano, in Wisconsin, U.S.A. in 1976.

4. Worked in highly responsible positions in the Housing and Physical Planning Department of the Punjab Province (Pakistan). The last position held was Director of Town Planning for Punjab (1970-73). The nature of duties were as follows:

   (a) Formulation of planning policies and preparation of five year development plans for urban and regional planning in the Punjab Province, within the framework of national goals and objectives.

   (b) Preparation of comprehensive development plans for various regions and settlements in the Punjab province.

(c) Planning and implementation of housing projects based on the existing and projected social needs, and preparation of annual development budget for the implementation of these projects.

(d) Rendering day to day advice to the government and local and regional authorities on matters related to urban and regional planning.

(e) Participation in various committees and study groups constituted by the government from time to time, to deliberate planning and development related issues requiring policy decisions. Some of the assignments are detailed below:

   i) Was appointed as a member of two National Committees which were constituted by the Government of Pakistan in 1972 to assess the private sector's investment in housing and to formulate a 'National Housing Policy'.

   ii) Was appointed a member of "Governor's Study Group" which was constituted by the Government of West Pakistan to look into the development and its related problems of the city of Lahore in 1970.

   iii) Was appointed member of two 'Expert Panels' on "Traffic & Transport, and Land Use" by the Government of West Pakistan to study the related problems in the Karachi Metropolitan Area.

   iv) Was appointed as a member of the Study Group of the National Committee on "Economy in Construction and Land-use Planning" in 1966-67.

   v) Was appointed Secretary of the Committee on Legislation, constituted by the Government of West Pakistan to examine the existing Legislation on urban and regional development in 1962.

III. Teaching Experience

1. Teaching Urban and Regional Planing courses, and coordinating research activities in the Department of Urban and Regional Planning of the King Abdul Aziz University, Jeddah, since 1987.

2. Taught Regional Analysis and Planning Courses at the University of Wisconsin-Green Bay from 1975-1978.

3. Supervised a workshop for graduate students and taught a graduate course on techniques and methods of planning during spring semester of 1975 at the University of Wisconsin, Madison.

4. Was appointed as an "External Expert of Town Planning by the West Pakistan University of Engineering and Technology in 1967 and again in 1972.

5. Was associated with the West Pakistan University of Engineering and Technology in the capacity of Visiting Professor, Theses Adviser and Examiner for the graduate and post-graduate courses in town planning from 1962 to 1965.

6. Was appointed a member of the Advisory Committee regarding the establishment of Town Planning Curriculum at the West Pakistan University of Engineering and Technology in 1962. The recommendations of the Committee were accepted in their entirety by the syndicate of the University.

IV. Extra Curricular Activities and Awards

1. Name appears as " Urban and Regional Planning Educator and Consultant in Marquis' 1999, and 2000 editions of Who'sWho in the World.

2. Was conferred New Century Award by Barons Who's Who (USA).

3. Was conferred the 'Best Professors' Award' by the College of Engineering, King Abdul Aziz University, Jeddah in 1990.

4. Was elected as Chairman of the Lahore Chapter of Pakistan Institute of City and Regional Planning in 1972.

5. Was awarded 'International Development Fellowship' by the East-West Center, Honolulu, Hawaii, USA, for pursuing doctoral studies in Urban and Regional Planning at the University of Wisconsin, Madison, in 1967-68.

6. Was awarded senior fellowship by the Government of Holland in 1967 to study the techniques of housing and national/regional physical development planning.

7. Was elected Honorary Secretary of Pakistan Institute of City and Regional Planning for two consecutive terms, 1963-65 and 1965-67.

V. Membership in Professional Organizations

1. Full Member, American Institute of Certified Planners (AICP).

2. Member, American Institute of Planners (AIP) .

3. Fellow of Pakistan Institute of City and Regional Planning, 1961.

4. Member of Town Planning Institute, Canada (M.T.P.I.C.), 1961.

5. Member of Architectural Association, London, 1958.

6. Life member, Pakistan Council of Architects and Town Planners.

PUBLICATIONS AND RESEARCH PAPERS

1. Towards the Formulation of National Development Alternatives for the Third World Countries with Specific Reference to Pakistan. Third World Quarterly, 2000, (Submitted).

2. The Dynamics of Planning Criteria for Mosques in Saudi Arabia. Proceedings of the Symposium on Mosque Architecture, held in Riyadh (KSA), 1999.

3. "The Global City of the Twenty First Century: Analysis of its salient Determinants and their spatial Implications". Presented in the Fourth International Congress of Asian Planning Schools Association, held in Bandung. Indonesia, Sept. 1997.

4. "A Framework for Environmental Regulation in Urban Areas with a Specific Reference to Petrochemical Industries in Yanbu Al-Sanaiyya, Saudi Arabia". Presented in the Fourth International Speciality Conference on Petrochemical Industries, held in Barain, November, 1997.

5. "The Role of Power Dynamics in the Transformation of Urban Systems and its Implications for Human Ecosystem". Presented in the 14th Conference of the International Association for People-Environment Studies, entitled Evolving Environ-mental Ideals, held in Stockholm, July 30-August 3, 1996.

6. "The Role of Islamic Shariah in Optimizing the Development of a Better Urban Environment". Presented in Al-Azhar Engineering Fourth International Conference, Cairo, Egypt, December 1995.

7. "The Role and Implications of Technology and Industrial Base in the Development Dynamics of Saudi Arabia.". Proceedings of the Fourth Saudi Engineering Conference, Vol.1, pp 91-97, 1995.

8. "Development Alternatives of Human Ecosystem: An Integrative and Comprehensive Approach". In Adenrele Awatona and Needet Teymur (eds.). *Tradition, Location and Community: Place Making and Development.* Brookfield, USA: Avebury, 1997, pp. 35-46.

9. "Towards Normative Institutional Objectives for Physical Development: A Futuristic Vision for the Deputy Ministry of Town Planning in Saudi Arabia", Riyadh: UN Urban/Infrastructure Planning Project, Deputy Ministry for Town Planning, Ministry of Municipal and Rural Planning, 1992.

10. "Feasibility Study for the Establishment of an Institute for Urban Development and Management in Pakistan", Islamabad: United Nations Development Programme, 1992.

11.   "Village Cluster Center of Saudi Arabia: their role in integrating and transforming the rural habitat". *Ekistics* **59** :166-169, 1992.

12.   "Environmental Planning and Management for Energy Conservation: A spatial Development Strategy for Saudi Arabia", Presented in the First Saudi Symposium on Energy Utilization and Conservation, held at the King Abdul Aziz University, Jeddah, 1990. Published in the *Journal of King Abdul Aziz University, Engineering Sciences*, Special Issue, 1993.

13.   "New Towns in Saudi Arabia". *Habitat International*, **15**, No.1/2, 1991.

14.   "Tourist Villages: a step towards planned tourism in Saudi Arabia: Presented in the Symposium on Regional and Rural Development Strategies and Programs in the Kingdom of Saudi Arabia, held at King Saud University, 1987.

15.   "New Towns Intown of Saudi Arabia: Their Typology and Role in the Transformation of Saudi Urbanscape". A joint paper published in Al-Ankary, K.M. & El-Bushra, El-S. (eds.), *Urban & Rural Profiles in Saudi Arabia*, chapter 7, pp.91-105, Berlin. Stuttgart: Gebrunder Borntraeger, 1989.

16.   "Innovation Diffusion in Housing: A Conceptual Probe in Saudi Arabia". A joint paper prepared for the World Planning and Housing Congress 1986, held in Adelaide, Australia during September-October, 1986, published in the *Journal of King Saud University (Architecture & Planning)*, Vol.2, 1990.

17.   "Comments on Dr. Aminuz Zaman's Article" 'Design of Integrated Rural Development Program: Some Ideas and Issues' and the extent of its application to Saudi Arabian Case". *International Review of Administrative Sciences*, Vol. LI, No.4, :318-322, 1985.

18.   "The Evolution of Urban and Regional Planning in Saudi Arabia". *Ekistics: Problems and Science of Human Settlements*, No.312, May/June 1985, pp.206/212; also in Arabic in the official Journal *'Al-Baladiat'* of Ministry of Municipal and Rural Affairs, Kingdom of Saudi Arabia (1985).

19.   "Preservation of Islamic Cultural and Architectural Heritage of Al-Madina Al-Munawara" a joint paper in the Proceedings of an International Conference on the Preservation of Islamic Architectural Heritage, held in Istanbul,1985, pp.229-257, Riyadh: Arab Urban Development Institute, 1988.

20.   "A Methodology for the Formulation of Urban Development Plans with application to Al-Madina Al-Munawara" - A paper presented in the Second International Conference on "Development, Finance and Distribution in Islamic Perspectives" held in Islamabad, Pakistan, in 1983.

21. "An Introduction to Planning Standards" - A paper prepared for a planning workshop of professional and para-professional staff in Bahrain, 1981.

22. "Planning for a Hierarchy of Rural Settlements: An approach to facilitate integrated Rural Development in Saudi Arabia" - Presented in the Symposium on Integrated Rural Development, King Saud University, Riyadh, 1981.

23. "Planning for an Islamic Environment and Urbanization Policies". *'Ekistics'* issue on Urban and Regional Planning Education, November-December 1980.

24. "Conceptual Bases of Transmission of Economic Growth to Bangladesh", a paper presented in the Fifth Wisconsin Conference on South Asia (Madison, Wisconsin, USA., 1977).

20. "Conceptual Basis of Land-use Planning: A Coordinative Role of the Universities. Presented at the University of Wisconsin Environmental Education Forum on Land-use (Madison, Wisconsin, U.S.A., 1977).

26. "Land-use and Land-use Controls in the City of Shawano, Wisconsin", Presented to the Planning Commission, City of Shawano, Wisconsin, 1976.

27. "Planning for Urbanization Policies: A Conceptualization with an Application to Pakistan", unpublished doctoral dissertation, Urban & Regional Planning Department, University of Wisconsin, Madison, 1976.

28. Edited the National Report *Urban Development-Implications for Social Welfare* which was published by the Pakistan Conference of Social Work, and presented in the Thirteenth International Conference of Social Work, held in Washington, D.C., USA,1966.

29. "Master Plan for Greater Lahore" in *Problems of Urbanization in Pakistan.* Proceedings of a conference held in Karachi in collaboration with the Agency for International Development, University of Southern California, Los Angeles, USA and the National Institute of Public Administration, Karachi: NIPA, 1966.

30. "Process and Impact of Urbanization in Pakistan", Presented in the Seminar on "Urban Development - Implications for Social Welfare" organized by the Pakistan Conference of Social Work in Lahore, 1966.

31. "Housing Problems of Lahore and some suggested Remedial Measures". Proceedings of a National Seminar on the *Problems of Shelterless People and Squatters in Pakistani Cities*. Karachi Development Authority, 1966.

32. "Report on Legislation for Housing, Town and Country Planning", joint report by the Committee on Legislation for Housing, Town and Country Planning, published by the Superintendent, Government Printing Press, West Pakistan, Lahore, 1962.

33. "Interim Report on the Master Plan for Greater Lahore", printed and published by the Manager, Government Printing and Stationery, West Pakistan, Bahawalpur in 1962.