RESEARCH ARTICLE

THE ROLE OF URBAN LANDSCAPE DESIGN IN ENHANCING PEOPLE'S OUTDOOR PLACES AND SPACES.

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Abstract

The purpose of this paper is to highlight the importance of landscape design principles to enhance people's outdoor places and spaces, as a mean to improve overall community urban open spaces environment. In fact, urban open spaces as a recreational facility were not so adequate to respond to the people's desires and needs. Factors, such as culture and climate that influences the people behavior and their use of the environment and these facilities are ignored in contemporary planning and designing of these urban places and spaces. Alien planning and design concepts gave priority to vehicular systems, without enough regards to pedestrian movements within overall urban fabric of city's morphology. Community open spaces, such as neighborhood gardens, parks, mini-vest pocket parks, campus open spaces, and streetscape assumed to be the primary resource for reformation for family members. They have the accessibility advantage for everyday amusement activities. This is more important if we take into consideration the fact that children, ladies, elders and disabled have no easy; or even appropriate direct accessibility to outdoor urban areas. The ultimate goal is to increase the decision makers' awareness and appreciation of the importance of applying landscape design principles in all process of city planning and design. In other words, this paper will investigates the current process of planning and design of some urban outdoor open space in city of Makkah, Saudi Arabia, and how the landscape design techniques might be incorporated during initial manifests of emergence new people places and spaces urban facilities. However, short notes on THE ROLE OF URBAN LANDSCAPE DESIGN IN ENHANCING PEOPLE'S OUTDOOR PLACES AND SPACES will be briefly mentioned due to their importance in overall urban fabric of the city components of the holy city of Makkah Al Mukarramah, Saudi Arabia.

Introduction and Research Problems:

In Saudi Arabia, the spate of modernization has led to the replacement of traditional urban structure and form by Western models of urban form and design. This has resulted in problematic urban development as Western models...
are adopted without recourse to the underlying principles and socio-cultural background of the traditional form. The spatial organization of cities in terms of structure and forms is rapidly being influenced by economic forces at the detriment of social and environmental factors. For this reason, cities are characterized by physical and environmental problems in terms of inadequate infrastructure, deteriorating environmental quality and congestion. Urban problems do not arise from the inherent nature of the cities, but due to the absence of effective urban governance and management of these sources. The emergence of contemporary urban form in Saudi Arabia started in the 1930's, when building regulations were decreed to guide building construction and street patterns. During this period, imported modern technologies and planning models were introduced to the country, without full consideration to local traditions and socio-cultural factors. The new urban form was established with the grid-iron patterns, and building regulations and zoning outlined compulsory setbacks and site-coverage limits. The new spatial models engendered the construction of freestanding, low-density "villa" dwellings. The contemporary urban pattern is mainly driven by economic considerations and formalized planning legislations. The streets are widened to maintain fast connectivity among different sectors of the city through the automobile. Urban development activities are evaluated mainly by economic efficiency and traffic considerations, with the neglect of socio-cultural and environmental dimensions. The contemporary model of urban design encourages the extensive use of space and the fragmentation of functional spaces. In essence, the contemporary model contrasts the traditional model by being dynamic and mechanical, while the traditional model is static and human in scale. The contemporary/modern model of urban form has been found to be in conflict with some indigenous socio-cultural, environmental, economic and structural concepts. For instance, in the traditional Arab-Islamic society privacy was very important, but the introduction of setbacks allowed adjoining buildings to open their windows outward thereby invading on the privacy of other dwellings. The challenge is to develop a framework of adopting the modern technology and design principles without risking the elements of traditional values, forms and design.

Rapid urbanization and fast growth of cities has occurred without parallel provision or adequate concern for social infrastructure, especially relating to outdoor urban landscape principles, nor to the needs and user satisfaction. There tends also to be significant disparity between network provision and various urban open spaces. The urbanization process in Saudi Arabia was further accelerated in the 1970s after the government started to implement a series of five-year development plans. During this period, and at a very rapid speed, old settlements were expanded in size, new towns were built were laid down, and many other important large- and small-scale urban projects were developed. The basic infrastructures of landscape urban open spaces provision and integrated streetscapes network, as a social concern and responsibility is still not adequately studied, nor incorporated into the overall provision of urban fabric of Saudi cities. Many of the existing outdoor urban open provisions in Saudi Arabia were not so properly planned or designed to reflect basic social, cultural, physical and religious factors. Livability in cities is enhanced by the availability of social amenities including planned urban outdoor open spaces. Urban aesthetics, visual order and cultural characters are reflected in these spaces. The ability of such spaces to express community feelings distinguishes them as important factor for measuring quality of urban life. From examining many of the modern planning and design schemes, it has been found -by the researcher- that some of them were not so comprehensively considered various cultural, and landscape architectural requirements, for individuals and groups. For instance, many public open spaces, as well as pedestrian pavements, are poorly shaped to accommodate Saudi families and their intimate need for privacy for women. Unfortunately, the rapid expansion of existing cities as well as the development of new towns and cities occurred in a very short time, and were dependent on foreign experiences. The local socio-cultural context and the rich urban value of the country's traditional urban environment have been discounted in the design and planning processes of many modern urban projects. Consequently, the country's entire traditional urban structure and morphology have changed.The outdoor urban forms are not adapted.

1 S. A. Al-hathloul, 1981Tradition, continuity and change in the physical environment: the Arab-Muslim city.PhD Thesis, Massachusetts Institute of Technology, USA
2 M. Jenks, R. Burgess, 2000Compact cities: Sustainable urban forms for developing countries.Spon Press, London, UK
to the harsh climate, and also do not reflect or considered of local culture or sustainable residential projects, in the formation of urban open spaces. Fig. 1

Fig. 1:- The outdoor urban forms are not adapted to the harsh climate, and also do not reflect or considered of local culture or sustainable residential projects, in the formation of urban open spaces. Even, pedestrian areas were planned and designed without consideration to sun orientation or providing shade trees or protection from traffic dangerous. Source: author 2014

Open space system form the core of natural resources that enhances social life, provides recreational needs, promotes environmental awareness and protects the city’s Eco zone biodiversity. They represent essential precondition for climatic and hydrological stabilization in human settlements. According to Al-Shahrani, recreational open spaces and facilities do not satisfy the needs of the people nor their culture. There is a growing need for park and recreational facilities and services, due to a continual increase in leisure time and in population. The planners and designers of the outdoor urban recreational areas and facilities were adhered to provided open space provision that were based on inadequate information about what the users need, and how actually behaves. Adding to that, there is no proper consolation with people or users of the recreational facilities they would like. Regarding to physical urban environment, the concept of hierarchy of open spaces and standards, which are based mainly on sizes, neglecting any social and cultural factors and people leisure pattern. In addition, the change in the role of the street, due to the introduction of cars, from human transportation, socialization, recreational and coolant place to mainly transportation places emitting heat, pollution and exposed pedestrian to traffic dangers and accidents. Fig.2. According to the above mention points; this research, will highlight the geniality need of applying urban landscape design principles to enhance people's outdoor places and spaces, as a mean to improve overall community way of life.

6 Adejumo, Tunji( ), DEVELOPMENTAL STRATEGY FOR SUSTAINABLE PUBLIC OPEN SPACE SYSTEM IN METROPOLITAN LAGOS, Department of Urban and Regional Planning Faculty of Environmental Science University of Lagos Lagos.

Fig. 2: There is no proper consolation with people or users of the recreational facilities they would like. Regarding to physical urban environment, the concept of hierarchy of open spaces and standards, which are based mainly on sizes, neglecting any social and cultural factors and people leisure pattern, In addition, the change in the role of the street, due to the introduction of cars, from human transportation, socialization, recreational and coolant place to mainly transportation places emitting heat, pollution and exposed pedestrian to traffic dangers and accidents.

Source: author 2014

Great public spaces are where celebrations are held, social and economic exchanges take place, friends run into each other, and cultures mix. They are the “front porches” of our public institutions – libraries, field houses, neighborhood schools – where we interact with each other and government. When the spaces work well, they serve as a stage for our public lives.  

This paper will suggests that the improvement of the city of Makkah, Saudi Arabia current outdoor urban places and spaces' planning policies and processes and the valuable principals of landscape design could plying significant roles to enhance peoples outdoors environment, and can be considered as models for future design and planning of Saudi Arabian cities.

Main Urban Open Spaces Design:-
The purpose of planning or design is not to create a physical artifact, but a setting for human behavior, there are many economic, technical and aesthetic consideration that shape the buildings we know; they in turn shape the behavior patterns of people who use them. To reverse this relationship, to start from an understanding of human motivation and let this concern shape the form, will require a profound alteration in the basic approach to design.

As essential part of a city’s integrity, open space plays a key role in making complete urban functions, shaping a highly-accepted city image, creating a better urban environment and passing down historic and cultural heritage. Also, it is an important place where people contact and communicate with each other. The open space of a city is seen as the symbol and epitome of its dynamic development. In general, the urban open space of a city includes city squares, neighborhood parks, small-sized parks, pocket parks and the outdoor space of campuses, elderly

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8 http://www.pps.org/reference/grplacefeat/
9 C.M. Deasy, Design for human affairs , (Cambridge, Mass. : Schenkman, 1974), P. 40u
10 Ibid.
11 Wang, Panpan, and Jing Gao2, ( ), Research on the Open Space in Urban Areas of Taiyuan, Landscape Planning and Design, Department of Architecture and Civil Engineering, Taiyuan University of Technology, Taiyuan, Shanxi, 030024, China
residential homes, child’s nurseries and hospitals in a city. The vision for improving the quality of life is centered on the creation of a city that, Protects and enhances its natural systems; Provides a clean and healthy urban environment for its citizens; and, Supports economic growth and a strong cultural identity through high-quality Urban form Figs. 3 and 4.

Fig.3:- The vision for improving the quality of life is centered on the creation of a city that, Protects and enhances its natural systems; Provides a clean and healthy urban environment for its citizens; and, Supports economic growth and a strong cultural identity through high-quality Urban form.


Fig.4:- Public square atop the Palais des congrès parking garage is a good example of Urban Open Spaces Design, that: Protects and enhances its natural systems, Supports economic growth and a strong cultural identity through high-quality Urban form Main Street Garden Park.


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12 Carolyn Francis, Claire • Cooper • Marcus, Humanity place—Urban open space design guidelines for urban outdoor spaces. (2nd version).
The functions of urban open spaces can be classified into the following three Categories:\textsuperscript{13}

The importance of pedestrian environment in the city it is far greater than simply their aesthetic appeal, or even the affordance of an opportunity to spend some time outdoors. According to psychotherapist Joanna Poppink, spending time in an outdoor café or bustling shopping street is more than just a pleasant diversion, it is a necessary element of health urban life. She believes that much of the fear and distrust experienced by urbanites is directly related to a lack of public spaces where different groups can interact.\textsuperscript{14} Therefore, the "Overall Concern" is to draw environmental designer’s attention to focus on the main functions of urban open spaces, to serve the needs of their users; democratic accessible to all groups and providing freedom of action, and meaningful allowing people to make strong connection between the places, their personal lives, and the larger world. People places assumes, first, that public life is thriving in the contemporary industrialized city; second, that an important measure of the success of public open space is its use; third, that the use and popularity of a space depend greatly on its location and details of its design; and last, that we must communicate what is currently known about the linkage between design, location, and use. The problem is not that designers are lacking in creative ideas but rather that they are frequently hampered by not having the time to search out appropriate people – based research.\textsuperscript{15}

1) Environmental and ecological functions include:
   • Noise screening
   • Influencing the hydrological cycle – storm water management
   • Providing habitats for wild plants and animals

2) Social and societal functions include:
   • Providing space and facilities for leisure and recreation
   • Facilitating social contact and communication
   • Access to and experience of nature
   • Influencing human physical and psychological health and well-being

3) Structural and aesthetic functions include:
   • Articulating, dividing and linking areas of the urban fabric
   • Improving the legibility of the city
   • Establishing a sense of place
   • Acting as a carrier of identity, meanings and values

Guidelines on Specific Major Urban Design Issues:-

Development in a fringe area:-
The general principle for development in a fringe area is to respect the natural environment, and to provide visual and physical linkages between urban create an appropriate edge. Figure 5. The linkages should be strong in order to promote the psychological wellbeing of the residents and thereby contribute to the quality of life. Visual linkages should include major visual corridors to the surrounding natural landscape assets and should extend well into the heart of the urban area where possible. Fig. 5.


\textsuperscript{15} Ibid. P. 9
Fig. 5: The general principle for development in a fringe area is to respect the natural environment, and to provide visual and physical linkages between urban create an appropriate edge\textsuperscript{16}.

**Public Realm:**
All aspects relating to urban design make some kind of contribution to the public realm. The measures outlined below can actually add value to the development, such as by increasing the pedestrian catchment for shops. The public realm is as a critical element in making cities work for the health and well-being of their citizens. Public health professionals have joined with design professionals and others in recognizing that quality urban design and a well-designed public realm are key ingredients for the health and wellness of the community.\textsuperscript{17} Fig. 6.

Fig. 6: Public health professionals have joined with design professionals and others in recognizing that quality urban design and a well-designed public realm are key ingredients for the health and wellness of the community.

**Street:**
Responsive and interesting frontage should be provided to make pedestrians’ journey interesting and to enhance vitality at street level. Retail frontage should be encouraged in areas with high pedestrian flows. Plant rooms should be kept to side or rear streets. At appropriate corner sites, identifiable features and setback could be introduced to improve street frontage. Fig. 7.

\textsuperscript{17} http://obrag.org/?p=69259
Fig. 7: Streetscape, in Osaka city Japan, as vital role in facilitating pedestrian movements, within overall urban outdoor spaces and places. Source: author (2013).

**Human scale design:**

Human scale design elements such as perimeter arcades should be provided in order to create an intermediate scale between human and building. Building façade and podium edge, in terms of architectural design, architectural detailing and in the choice of building materials, should have interest, particularly at ground and first floor level. Fig. 8.

Fig. 8: Human scale design elements such as perimeter arcades should be provided in order to create an intermediate scale between human and building. Hong Kong.

Source: author

**Open Space:**

Well-landscaped open spaces with a balance mix of hard and soft landscape should be requirements for active and passive recreational uses. Encouraged to meet the functional detailed micro-scale landscape design should be site specific to maximize legibility, to create a comfortable environment, and to green the city. Focal landmark features should be provided in open spaces to create orientation and a sense of place. Fig. 9.

**Landscaped green areas:**

Landscaped green areas, tree planting and amenity strips along streets, major transport corridors and walkways should be provided to soften the man-made environment. Open space at fringe location where it would be relatively
unused should be avoided. Public accessibility to open spaces should be maximized. Visual linkage can help direct pedestrians to open space facilities and should be enhanced. Fig. 10. The flexible use of open space should also be encouraged to maximize the usage and amenities for the public.

Fig. 9: Well-landscaped open spaces with a balance mix of hard and soft landscape should be requirements for active and passive recreational uses Osaka, Japan. Source: author

Fig. 10: Public accessibility to open spaces should be maximized. Visual linkage can help direct pedestrians to open space facilities and should be enhanced Osaka, Japan. Source: author

**Streetscape:**
Streetscape is perhaps the most important singular contribution to city beautification. Mature street trees provide shade for pedestrians, reduce the urban heat island effect, enhance the visual and environmental qualities of the street, minimize run-off, and provide a buffer between traffic and the pedestrian. They also act as a passive form of traffic calming. Street furniture contributes to the creation of unique streets, and is an essential component of a pedestrian-supportive streetscape. Streetscape is an inclusive term that refers to an overall form and details of the street-scene. The following main goals for streetscape in urban design are relevant:
• Ensure that, wherever possible, all components at street level are of the high quality in terms of design, materials and construction;
• Aim for coherence and compatibility;
• Try to create as much as possible pedestrian-oriented and pedestrian-interested space in core areas; and
• Cater for human scale and the needs of the disabled / elderly.

Fig. 11:- Streetscape is associated with the totality of place. Everything that can be seen and experienced in street is therefore relevant China. Source: author

Pedestrian Environment:
Pedestrian movement in the city is uncomfortable or restricted by the hot and humid periods as well as the wet rainy season. To minimize these negative effects, the designers can provide shade for pedestrians. A safe, clean, accessible and interesting pedestrian environment should be provided with due consideration to micro-climate for pedestrian circulation. Fig.12. Ease of access should be ensured for persons with disabilities. Fig.13. Ground coverage of podium should be reduced to allow more open space at grade and for street activities. To facilitate easy circulation, pedestrian crossings should be located on desire lines. Fig.14. Staggered-crossings at signals which would restrict pedestrian flow and cause inconvenience to pedestrians waiting on the island should be avoided. Fig.15.

Fig. 13:- The designers can provide shade for pedestrians. A safe, clean, accessible and interesting pedestrian environment should be provided with due consideration to micro-climate for pedestrian circulation. Hong Kong. Source: author
Fig. 14:- Human scale design elements such as perimeter arcades should be provided in order to create an intermediate scale between human and building. Hong Kong. Source: author

Fig. 15:- To facilitate easy circulation, pedestrian crossings should be located on desire lines, Hong Kong. Source: author

Pavement Width and Surface:-
Pavement should be of adequate width to accommodate pedestrian flows, street furniture and additionally to allow reserves for utilities installations and street trees / landscaping. In the older urban areas where pavements are of inadequate width to serve present needs, effort should be made to widen these pavements through building setback or reducing coverage of podia when redevelopment takes place. In new development areas, good design and wider pavement should be provided for the creation of a high quality pedestrian environment. In determining the pavement width, all stakeholders like utility companies and relevant government departments should be consulted so that sufficient width of pavement can be allowed at the planning stage to accommodate all requirements. Fig. 16.

Fig. 16:- Pavement should be of adequate width to accommodate pedestrian flows, street furniture and additionally to allow reserves for utilities installations and street trees / landscaping. Pavement surface should be visually attractive and interesting. High-quality pavement surfaces such as patterned blocks, brick paving, or stone finish should be introduced where feasible, Hong Kong. Source: author
Greening and Disposition of Urban Landscape Open Space and Pedestrian:
Area Green open Urban Landscape space and vegetation help moderate the city climate and ameliorate the effect of air stagnation. Planting in open space should therefore be maximized in urban area .Fig.17.

Fig. 17:- For topographically enclosed or valley areas, open space should be provided at suitable location to promote moderation of the climate, and ventilation and dissipation of ambient pollution. Where feasible, vegetation and scrub planting on hillside should be extended to create cooler slopes and enhance cooler slope breezes, Hong Kong.
Source: author

Landscaping:
For individual urban landscape development, the amount and variety of effective green open spaces should be maximized to reduce radiation gain of buildings and associated structures, or to serve as a “filter” for polluted air, if any, as well as, to maximize pedestrian comfort, tall trees with wide and dense canopy should be planted in urban outdoor areas, and setback areas, while causing minimal wind blockage to the pedestrian level .Fig.18.

Fig. 18:- Greening functions as urban lung to offer visual and psychological comfort and relief, which are vital to the health and well-being of people in a high-density and congested environment. Vegetation improves microclimate by, for instance, providing sun shades and windbreaks, absorbing heat and reducing the temperature of hard surface, and enhancing the humidity, Hong Kong. Source: author

A set of Criteria for successful people places:-
After reviewing all the users' studies, of the main outdoor urban open spaces, Clare Cooper Marcus, and others, 18 had been set of criteria for successful people places should be:
1- Be located where it is easily accessible to and can be seen by potential users.
2- Clearly convey the message that the place is available use and is meant to be used.
3- Be beautiful and engaging on both the outside and the inside.
4- Be furnished to support the most likely and desirable activities.
5- Provide a feeling of security and safety to would be users.
6- Where appropriate, offer relief from urban stress and enhance the health and emotional well–being of its users.
7- Encourage use by different subgroups of the likely user population, without any one group's activities disrupting the other's enjoyment.
8- Offer an environment that is physiologically comfortable at peak use times, in regard to sun and shade, windiness, and the like.

9- Be accessible to children and disabled people.

10- Support the philosophical program espoused by the managers of the space, for example, the educational program of a child care center or the therapeutic program of the hospital.

11- Incorporate components that users can manipulate or changed (e.g., sand play in child care, raised garden beds in housing for the elderly, interactive sculpture and fountains in urban plazas).

12- Allow users the option, either as individuals or as members of a group, of becoming attached to the place and caring for it through involvement in its design, construction, or maintenance; by using it for special events; or by temporary claiming personal spaces within the setting.

13- Be Easley and economically maintained within the limits of what is normally expected in a particular type of space (e.g., a concrete park might be easy to maintain but is not what a park is expected to be).

14- Be designed with equal attention paid to place as an expression of visual art and place as social setting. Too much attention focused on one approach at the expense of the other may result in an unbalanced or unhealthy place.

Picturesque Examples of some urban landscape design Projects:-

At this stage of discussions, it might be preferable to present some urban outdoor spaces and places to demonstrate the previous mentioned landscape design principals, to let any environmental designer in Saudi Arabia, to have the ability to compare between well designed urban landscape outdoors areas, and those spaces in which needs ultimate actions of enhancements and modifications. Figs.19 to 24.

Fig. 19: Long Wan Plaza: Provided design consultation services to the Tsinghua University Urban Planning and Design Institute for a new Central Business District outside the city of Hu Lu Dao, totaling 1.6 square kilometers.


Fig. 20: Responding to the client's desire to create an iconic resort style garden, that accommodating the functional needs of modern day senior living. A series of distinctively different spaces – from contemplative to active – are designed to address the different social, physical and spiritual needs of the modern day Chinese senior population. http://www.marksbarfield.com/##/projects/
Fig. 21: The potential to enhance understanding, to connect the elite of the city, whether social, economic or academic, with the wider public of all backgrounds and ages.
Source: http://arqjespalfra.files.wordpress.com/2011/12/5.jpg

Fig. 22: A clean, green and beautiful urban project, is a place where people want to live and work and where people want to visit. It is marketable in terms of economic growth and vitality, it provides a high quality of life for its citizens, and it is a source of pride for all who live there. In short, it is a place to protects, and enhances its natural systems, as well as, it is Offers a clean and healthy urban environment for its citizens; and, Supports economic growth and a strong cultural identity through high-quality urban form.
Fig. 23: A landscape that both reflects and resonates with the existing architecture, creating a uniquely cohesive hierarchy of private to public spaces through the use of interconnected courtyards and plazas. Gracing the design throughout are plantings, security gates, walks, walls, terraces, pools and deck areas. A strong unifying geometry is being created through the thoughtful patterning of trees and planting beds, artfully arranged to reinforce the interconnectivity of the various phased parcels.

Fig. 24: Qingdao Excellence Center: This overlapping of grid, striped pavement, and orthogonal-lattice patterns creates the organizing system in which the landscape elements are situated. The pattern language at the podium level helps define dining, gathering and circulation, and extends to podium rooftop surfaces where it continues to organize the walkways and plant material there.

Conclusion:
It is the time now encourages decisions maker, as well as, environmental designers, in Saudi Arabia, to bear in mind, the importance of developing landscape urban open space system as a means of naturalizing the built up environment. Outdoor places system is often an expression of the concerned of local authority, to respond to the socio-cultural needs of the users, especially the lower economic class. The emerging environmental failure needs quick intervention at the executive and legislative level. The task ahead is enormous and requires private and public cooperation. Open space in the form of parks, gardens, promenades and sitting out areas not only meets the recreation and leisure requirements of the population but also provides major opportunities for greening and a soft setting to improve the network of civic space within the district, especially in the urban area. Landscape plans should be prepared for parks, gardens, promenades and sitting out areas to maximize the greening opportunities. Large areas of hard surfacing are particularly inappropriate. Instead, trees should be extensively used to soften local environments. This paper had covered landscape urban open spaces tips to enhance people outdoor spaces and places. It is becoming clear that urban redevelopment and the transformation of cities will broaden the spectrum of urban open spaces. New forms of space production, new actors, new design visions, and use mixes will emerge. Urban Open spaces can become a component in creative city development that focuses attention even on small-scale changes and on unusual approaches. Without the courage to experiment and to project structural changes into the future, including the emergence of new “urban landscape outdoor places and spaces,” this opportunity for enhancement will produce no more than uninspired “additional greenery” in the city. The ultimate wish is to see Saudi Arabian people places and spaces to be shaped in the light of LANDSCAPE ARCHITECTURE.
References: