Between Traditionalism and Modernism: An Anachronism in Built Form Development in a Rapidly Changing Society: The Case of Riyadh, Saudi Arabia

Mohammed Abdullah Eben Saleh

Professor, Department of Architecture and Building Sciences, College of Architecture and Planning, King Saud University P.O. Box 57448, Riyadh 11574, Saudi Arabia

(Received 27/3/1418; accepted for publication 23/12/1420)

Abstract. Traditional architectural characters and urban built forms in Saudi settlements were mostly unique. They were direct responses to indigenous climatic, social, economic, technological, religious and political factors. The integration of these factors yielded a whole regional character. Change in any factor allow new architectural style or urban pattern to emerge. Each stage of development in any form of habitation, life style or architectural style was a reflection to the needs of the inhabitants and available resources. This is seen in today's architecture and urbanism. Modern architecture and urbanism are faced with complex of interferences between rapidly changing factors especially economic and technological, as response to multi-variant layers of changing parameters and new social needs. This paper attempts to follow the changing architectural style and urban pattern in Riyadh and trace how the influencing factors assimilated into new form of style or pattern. The relationships between the influencing factors and architecture or urbanism are mutual, carrying failure or success to the architectural style or urban pattern. Each new type of style or pattern is assoiated with unique practice. Successful architecture and urbanism aim to verify multiple functional and aesthetical requirements to accommodate the changes that take places in the society. The traditional architecture and urbanism in Saudi Arabia are believed to be successful which is evidenced by their continuation over long period of time. If their forms do not meet the needs of today's dynamic change, they discontinued. The mutable and immutable forces imply static and dynamic influences on the architectural character and urban pattern, which make us see the new in their shapes and forms.

Introduction

Saudi Arabian traditional settlements have over generations developed unique architectural style and urban pattern. Their architectural characters and urban patterns, and construction materials and methods seemed to fit climatic, socio-religious, political and economic requirements. People manipulated the available resources to better suit their culture and the environmental conditions surrounding them. The people

transformed the hardship of available resources into flexible and adaptable built environments of distinctive forms and structures. The traditional environment could be characterized as comfortable, secured and durable throughout successive historical periods..

The evolution of architectural style and built form is viewed as a result of underlying forces of static and dynamic influences. It is difficult to tackle those forces outside the strictly architectural framework defined by anthropological, urban, architectural or social historians. The historical epics of planning and architecture have marked out a path which is hard to avoid, especially when subordinating the history of the built form to the imperatives of the traditional or transitional historic periods. The traditional architectural style and associated built form can be perceived as enduring, permanent three-dimensional architecture, responsive to a set of varying determinant forces such as physical, cultural, social, religious, political, economic, and technological. The transitional architectural style and urban pattern are the result of changing magnitudes in one or more determinant forces.

This paper is concerned with anachronism as a phenomena which appeared in architecture and urbanism since the advent of the industrial revolution in the nineteenth century and the invention of car as the main means of transportation. The traditional formal architectural and urban identity of settlements is alienated with the emerging modern architectural style and urban patterns which have taken place in many settlements in the Kingdom of Saudi Arabia.

Research Methodology

This research depended mainly on visual survey recorded by photographs. Through inspection, the comprehensive variety of photographs on traditional, transitional and contemporary architecture and urbanism of Riyadh, the Capital of Saudi Arabia, provided a base for deep morphological analysis. The morphological analysis of prevailing architectural style and urban pattern enables the architect, urban designer and planner to understand the influence of the underlying structure: economic, physical, social, religious and political factors on architecture and urbanism. Through extensive analysis of the underlying structure of traditional, transitional and existing physical development, the investigation concentrated on building intentions which established and explored the relationship between each factor and its role in clarifying the underlying theory behind them.

The visual exploration is an objective source of semantic significance. It provides basic information about the physical features of the natural and built environment. Such an endeavor entails more than just visual documentation as the urban pattern and architectural character changes over time. In order to build an assessment of the

historical development of traditional built forms of settlements, mutable and immutable forces need to be classified and analyzed.

Underlying theories of architecture and urbanism

Traditionalism and modernism are two contrasting value systems that co-exist in Middle Eastern society [1]. The research hypothesizes that the early Saudi Arabian contemporary architecture and urbanism was based on modernist approaches. The built forms have failed, in a way, to provide the same type of fitness and adaptability that the traditional architecture and urbanism reached. Nor have they shown respect to Saudi rich heritage. Such schism has been observed in several works by practitioners and academicians who practiced in Saudi Arabia. Memtta who was one of the principle architects for the Tunisian Embassy in Riyadh viewed buildings as "an expression of a nation's civilization and culture"[2]. In fact, the importance of buildings with regard to their symbolic, educational and functional values cannot be overlooked. The architectural heritage is not mere architecture, it is an element of life.

Al-Bayati, who designed King Saud University mosque and the university campus southern gate, realized that "the source of architecture and planning in the Islamic world does not follow any theory or philosophy or methodology; nor does it follow any system of proportion, shape or form of building. It is not an expression of any past or present technology, neither it is a particular kind of door or window, arch, dome or minaret. It is architecture created by man's concern for Al-Shar^Ciah, the Islamic law, and his behavior according to it within Islamic society. It is architecture concerned with unity, built by people who have Islamic faith"[3].

Badran, who designed Imam Turki Bin Abdullah Mosque, Qasr Al-Hokm and Al-Darah building in King Abdulaziz Historical Center admitted that there is a crisis in the ability of professionals to analyze the conception of habitation and architecture as an outcome of social, religious, political, economic, geographical and climatic compositions which have culminated in one form or another [4].

The traditional architecture in Saudi Arabia did not rely on any specific set of materials or methods of construction as in Classic architectural styles which depended on stone, marble, brick and timber. Each climatic and geographic region or ethnic group used whatever materials which were locally available and developed their own construction methods to fit context. Thus, one finds mud clay in certain villages, stone or wood in some, and in others, a variety of combinations can be found.

This investigation envisions the house, mosque, marketplace and street as the basic units that shape the built form of any Muslim community. Traditional architecture and urbanism were designed by master builders according to user and contextual requirements. The Muslim family and community adopted the design of the house with remarkable instinct for advantageous siting, functional requirements and optimum security. The design requirements of public and private buildings were passed from generation to generation. Each family would add personal touches to stamp its identity on the home, but local adjudicators were always on hand to ensure that no house encroached on neighboring territory. A sense of pride and belonging and a strong link with the land characterized the traditional built form developed by the community.

Until the establishment of the Kingdom Saudi Arabia in 1932, a stagnant economy, slow population growth, and minimal demographic change maintained the indigenous architectural style and urban pattern of settlements. Cultural, political, technological, economic and religious influences which helped to shape indigenous architecture and urbanism altered very little and there was no major change in Saudi Arabia's climate. Adaptations to the climate, the need for security, and the scarcity of national resources produced distinctive built forms that reflected the integration of environmental assets and liabilities. Adaptable solutions were gradually introduced over successive generations without sacrificing the basic requirements of climate, culture or security. The change in the urban form of spatial structure of the community was seldom noticed. Any changes in the design or construction of an old or new building did not affect the ideal way in which the space in the community function.

This investigation assumes that traditional architecture and urbanism climaxed in insular contexts like Najd (the central part of the Arabian peninsula), at a time of extreme political disintegration prior to 1932; followed by the unification of Saudi Arabia. The political change aimed from its emergence in 1902 to establish the dominance of the rule of Shari ah (Islamic Law) on all aspects of life which abolished the inter-tribal raiding on settlements and between the tribes too. The need to plan and design community to conform with aggression became null. This implied the continuity of building with traditional materials and construction techniques. However, the arrival of the car in the 1920's necessitated the widening and straightness of streets to conform with this new alien motor vehicle. This situation lasted three decades before the dramatic change took place in the late 1950's when the government adopted modernization as a goal. In this period, the professional architect replaced the indigenous master builder, the contractor replaced the client in preparing labor and construction materials and the concrete replaced the adobe and stone as a main building material. This period can be labled as "the transitional stage of development". It lasted almost three decades as well and was followed by "the contemporary stage" which is in action since the Mid 1980's. The architectural and urban development presently taking place can be attributed to architects, planners, sociologists, psychologists, politicians, and anthropologists and may be viewed as an anachronism between traditionalism and modernism, with mutable forces as the synthesizer.

After the unification of Saudi Arabia in 1932, planning and design of new neighborhoods took new shape as settlements were free from the dominance of a defense requirement [5]. With the resulting population growth and health improvements, new neighborhoods were required to absorb such demands. The affluent economy and modern building technology provided the means for change. At that period, the scarcity of local professional architects and contractors made the continuity of building and design in accordance with tradition impossible.

As in many other parts of the developing World, there is an urgent need for new buildings and housing schemes to be planned and built to accommodate such changes. Saudi Arabia was then compelled to provide rapid solutions to construct without reliance on traditional design and building technique. Modern forms, emerged largely influenced by exotic (Western) cultures where building design and technology has reached an advanced level of modernity and sophisticated level of achievements. The use of gridiron schemes and the importation of skills in design and construction into Saudi Arabia have resulted in numerous cultural problems [6]. The imported schemes and methods of design and construction are believed to be incompatible with the local culture and local environment. The physical environment is not merely a description of artifacts but an assessment of the physical context and the way in which these artifacts came out in the Saudi Arabian traditional settlements. Over history, traditional architecture and urbanism showed a remarkably high degree of cultural and environmental interdependence.

During the transitional stage, the planning and design in Saudi Arabia has suffered an architectural and urban identity crisis as a result of the implementation of exotic modernist design and planning trends and building techniques. The foreign architects and city planners neglected the assimilation of local heritage either by intent or ignorance. This type of practice affected and harmed the local architecture and urbanism as it lost it's identity and motivated the rise of indigenous concern to drive contemporary architectural practice and urban planning solution with local reference.

An assessment of architecture and urbanism

In order to induce lessons from the traditional, transitional or contemporary architecture and urbanism in Saudi Arabia, a close examination of the underlying structure is needed [7]. Historically, traditional architecture and urbanism were visually measured under the ravages of time and nature (Fig. 1). Essentially, architectural character and urban pattern validity should be evaluated on how well both satisfies immutable demands (privacy and cultural concerns) and mutable demand (physical factors, economic and political factors) as determinant forces exerted upon them (Fig. 2). The architectural character and urban pattern carry mutual characteristics and denote visual expressions of political, economic, technological, social and religious meanings. The treatments of immutable forces (religious, social and cultural) and mutable forces (technological) within the architectural character and urban pattern are manifested by visual quality and contrast of the built form especially in the dominance of solids on voids in exterior facades. The successful physical response of the determinant forces (visible and nonvisible) is seen as an environmental balance provided by specific historic periods. Al-curf (tradition) and Al-Sharicah (Islamic Law) as promoters of local planning and architectural regulations, established guidelines assuring affirmity and historical continuity (Fig. 3). The urban pattern and architectural character have to adapt to the changes imposed on the community by immutable and mutable forces, provided that technology in the meantime is the dominant means in the interpretation and implementation process of these changes (Fig. 4).

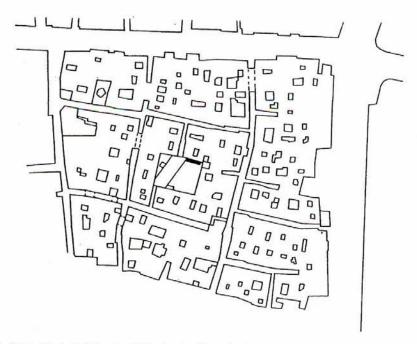


Fig. 1. Part of a traditional neighborhood scheme in Riyadh shows the pattern of streets and compactness of built form.

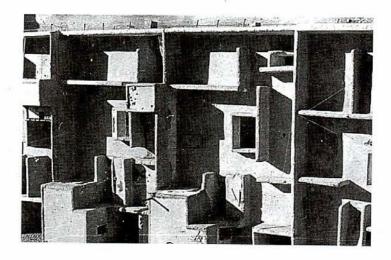


Fig. 2. Arial photograph of a group of traditional attached houses shows the parapets of roofs and small courtyards.

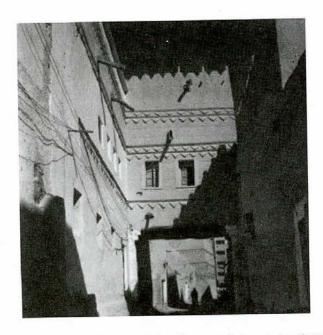


Fig. 3. Al-Sabat, the bridge that connects two traditional houses and characterizes the traditional urban environment of Riyadh

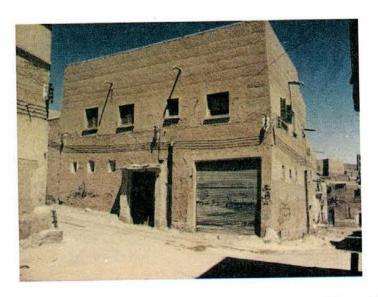


Fig. 4. A photograph shows the regional architecture of where adobe is the main building material.

It is necessary to examine historically the urban pattern and architectural character of one place in Saudi Arabia and build schematic relationships to immutable religious and cultural forces and mutable technological, economic and administrative forces (Fig. 5). The morphology of the built environment developed, and is still developing, under the influence of mutable and immutable forces. Immutable forces are viewed physically where change is not permissible. While mutable forces are viewed also physically where change is permissible like style, design, materials and technologies (Fig. 6).



Fig. 5. A photograph shows the courtyard of one building in Riyadh.



Fig. 6. A street in transitional neighborhood in Riyadh shows wide streets and cement buildings.

Worldwide, people are under the influence of multi-variable changes in economics, transportation, communication and technology through the propagation of knowledge. Since four decades ago, Saudi Arabia is experiencing rapid change in all aspects of life (Fig. 7). It shares economic and technological development with the international community, but due to the fast pace of development, people and practitioners are trapped by the inability to assess the consequences of these changes. Therefore, the planning and architectural professions are facing obstacles in their attempt to adapt to the changing determinant forces and the assimilation of new demands in a balanced way.



Fig. 7. A photograph of one of the transitional houses shows the character of transitional architecture of where cement blocks and plaster are the main building materials replacing adobe.

The assessment of mutable and immutable forces on the development of traditional settlements seems to be engaged in one issue: the notion of the settlement itself, as matured, unchanging and extraordinary in its features and planning. An assessment involves descriptions and analysis of the overall urban pattern and architectural characters, as well as an analysis of the mutable forces which required change and upon which planning was implemented. The assessment explains how the settlement's spatial components were developed and are currently developing.

People in traditional settlements have for security, economic or cultural reasons emotional difficulties toward change. Undoubtedly, the political stability after the establishment of Saudi Arabia in 1932 brought momentum for change. The economic prosperity is seen after the implementation of six five-years development plans in the 1970's, such provided an opportunity for drastic change in architecture and urbanism (Fig. 8). This is what made the entire Saudi culture in a process of continuous change. This tendency of change has not hindered choice in the design of new architecture or urbanism. Old towns were communities; their built forms expressed a sense of community, while the suburbs that we built today do not [8].

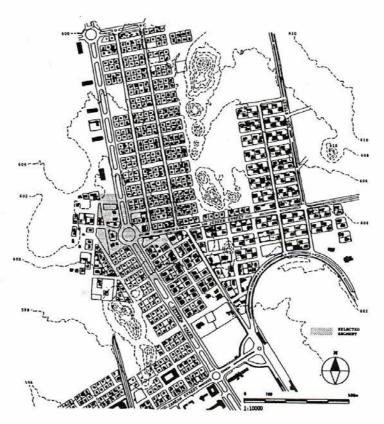


Fig. 8. Modern model of gridiron land subdivision development in Riyadh. The level of street widths and lot size yield significant status.

The political stability and economic prosperity are both demanding advanced technologies. The interface between these forces (political, economic and technological) generated new built form. Planning policies and building regulations are needed to govern the adaptability of such interface. Contemporary technological advancements in

building and construction provide professionals with the ability to harness determinant forces as climate and the situations under which they exist. The technology provides professionals with freedom of choice and increases their capacity to solve environmental problems. Although technological developments generate their own possibilities, liabilities and influences, most are observable within the physical and non-physical categories.

The anachronism in built form is observed in the difference between the locally developed architecture and urbanism and the imported ones. The newly planned and designed ones are considered to be alien to the indigenous as observed by several authors.

Contemporary architecture and urbanism are oriented toward the assimilation of emerging technological aspects rather than human aspects which were traditionally employed in older settlements. New architecture has emphasized the role of technology to remedy the fault of architects in solving environmental issues, which is contrary to the traditional architecture which depended on the master builder. Conceptually, technological affluence is needed to allow the built form to respond to changing determinant forces. The adaptable architectural form need to be framed to meet environmental conditions and considerations. It can become more regional, adapting needs and desires of change, and allowing new implementations. It can reflect personal identity and manifest changes in economic situations and social expectations.

From a cross-cultural perspective, it is clear that traditional architectural form and urbanism are not primarily a product of the human genetic make-up or of environmental adaptation, at least not in any predictable, deterministic fashion [9]. It is the product of the history and culture of people. Its shape is a cultural construction. The bulk of the built environment of cities and towns as evidenced in Islamic cultures was the aggregate product of citizen decisions and actions [10]. The meanings and values of an architectural form are attributed to it; they are not inherent in it. The same physical form may have quite different meanings and values attributed to it by different peoples.

Recently, the practice of customizing individual physical identity of designs, in which an appropriate atmosphere of determinant forces cannot be found, has made it difficult to sustain Saudi traditions.

Grabar questioned whether any culture could be meaningfully understood through its application of techniques developed outside it [11]. It would be difficult to grasp the meaning of a culture without practicing it. This can be seen in the works of foreign planners and architects attempts at interpreting Muslim culture. At best, non-Muslims can provide information and perhaps some comparable experience, but they cannot

supply the precepts that are derived from membership in a Muslim culture. When the architect goes with these principles (immutable), he is free to design what ever he thinks possible.

The dilemma of modernism

The historical period dating from the mid-twentieth century is known in Saudi Arabia as the modern era. It is identified with dreams of the perfectability of human society through rational management and the development and implication of Modernism thus has two faces, one rational, orderly and planned, the other alienated and rule breaking [12]. Both tend toward the abstract, breaking down objects into component shapes and forms and unfolding the surface of realty to reveal underlying structures and forces. Thus modern architecture's elimination of ornamentation and reduction of buildings to their functional elements symbolize the triumph of rationality and planning (Fig. 9). Modernism consisted in a rejection of tradition, a self-conscious determination to reinvent the purposes and techniques of all the arts and (in some arts) a rejection of realism in favour of exploration of the unconscious on the one hand and the self-validating image on the other [13]. Modernism is particularly important in architecture and is most properly identified with the Modern Movement which sought to find an architecture appropriate to modern society by means of full use of modern technological advances [14]. The modernism as an idea was built around the concept of need (Fig. 10). The need as a formgiver has multiple flaws: it is not encyclopedic enough to contain all the parameters which influence the built form. A generic concept is necessary to replace the concept of need which can act as a stimulus, not as a chance response, presented by determinant forces which exert dynamic pressure on the built Contemporary planning and architectural practices can be classified into two approaches when regarding the dynamics of change. With the modernism approach, prevalent today, the planner or architect is actuating for a single issue in time and while trying to predict the future; the immediate matter suggests the solution. In such an approach, the architectural achievement represents only one point in the continuum of change. Contemporary architecture considers the acceleration of social, economic and technological changes, as determinant forces which are physically significant (Fig. 11). The goals which develop and formulate the architectural concept are advanced. They either must be uncomfortably accommodated within a rapidly outdated built form, or they force planning and architectural practice to be remodeled, destructed or replaced. A rapidly changing lifestyle suggested modifications to the built form and to the environment. The influence of the modernism ideal was expressed in the planning and design of Saudi's post traditional era in the late 1950's. The imprints of successive phases of urban development and their planning principles are still evident in the morphology of newly built neighborhoods.



Fig. 9. Modern architecture of Riyadh where villa is the main house type and reinforced concrete is the main building material.



Fig. 10. The infuluence of road system in Riyadh enhanced the urban sprawl.

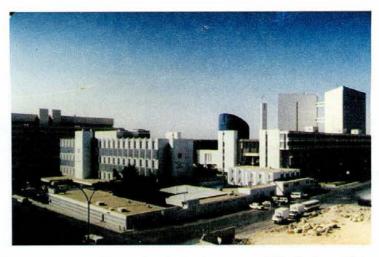


Fig. 11. The contemporary architectural and urban development of Riyadh adopted highrise buildings for office and residential space. The level of high technology yields the change.

The second approach is the functionalism approach, represented by the design principle of space, either inside or outside, which formulate the built form. The desire is to design space that can meet any functional demand (Fig. 12). Perceived solutions using this approach are anonymous and universal. Planning and architecture practices are not adjusted in regard to function or place. It is difficult to accept the concept that all built forms should fit all tasks. The result is planning and architectural practices without regional identity.



Fig. 12. Drastic change in building form from opaque (adobe) to transparent (glass) manifested in one of the buildings in Riyadh.

Anachronism: The decline and rise of regional style

An anachronism is something that is out of chronoligical order. It is the misplacing of an idea or custom in time [15]. In the past, the geology had a dominant influence on the use of building materials and techniques. Also, the compactness of settlements provided the designers of residential buildings with the opportunity to design and orient the roofs of buildings toward courtyards, taking the advantage of the cool breeze wind during summer nights. Natural barriers protected or enhanced the movement of cool winds in the winter season on residential buildings. But at the present, the building materials and techniques and professionalism have a dominant influence on the architectural and planning practices.

A new design approach coincides with the issue of how tradition is implied into the physical development (Fig.13). It is a hot issue facing sociologists, politicians, and intellectuals. Present day planning practices in Saudi Arabia show the existence of good examples from which to create precedents. Planning and architectural practices which can ensure the continuity of tradition need planning, design regulations and guidelines as well as the establishment of a code of practice to govern and control the proper implications of immutable forces, regardless of whether the technology is new or traditional. The development of residential, commercial, institutional and recreational facilities that allow the dominance of immutables will produce distinctive designs and forms of possible regional identity. These new forms can then be considered achievements.

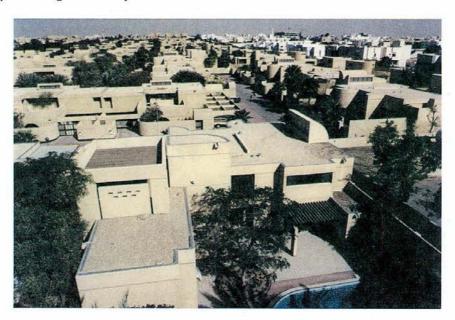


Fig. 13. The planning of self sustained and controlled neighborhoods started to take place in Riyadh. The planning, design building and implementation are taken by one sponsor.

Architecture as a human-made activity is presently influenced by economic, cultural, political and technological impacts. Technological development in areas which are generally considered outside the field of architecture are significant to the evolution of new architecture through systems, materials and building techniques. Currently, cultural and political impacts are manifested in the change of the decision making process while an economic impact is manifested in the availability of new building materials and techniques in addition to increased professional involvement in the process of planning and design.

Tradition and technology are built form generators (Fig. 14). The new built form arises from practiced planning, design regulations and policies, and economic incentives. It is contemporary technology and tradition which may provide Saudis with the ability to harness other aspects of determinant forces and improve the situations under which they exist. Technological advancement provides grounds for building constraints. It provides professionals with freedom of choice, increasing their capacities to solve problems and provide multiple alternatives. Although the technological developments generate their own possibilities, liabilities and influences, most of them are observed in the change that takes place within the physical and non-physical categories.

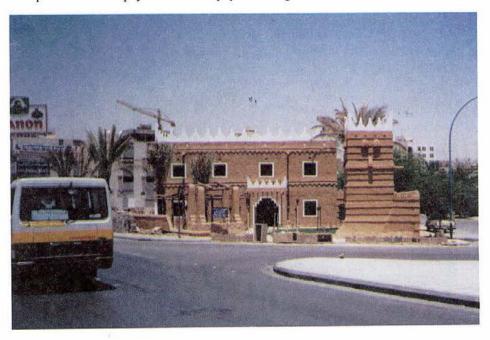


Fig. 14. New vernacular architecture provides drastic change in contemporary built form.

It is increasingly necessary to develop a distinctive built form consider the determinant forces. To develop an approach which permit the professions, such as physical planning, urban design and architecture, to accommodate and assess these determinant forces and the circumstances under which they exist is the ideal. The desired approach may build its principles on assimilation of flavor and hint of traditional physical planning and architecture ideas in a new mode of practice. Such application is capable of adapting continuous and accelerating changes. This adaptation may find many new concepts of significance of being able to embrace change. Under contemporary architectural and planning approaches, the built form is likely to become inadvertent from a functional perspective, before it becomes shakable and in need of physical changeability. The physical form should not shackle the change process, creating an instability between determinant forces and built form. Planning and architecture should be adaptive, and the natural forms should encourage the forces to develop, mutate and change. The assimilated character and pattern of the traditional experience can encourage a new aesthetic and a new concept of the built form. This should be inherent in the new physical planning and architecture practice.

The assimilattion of determinant forces into the new architectural character and urban form will create many changes to traditional planning practices and on the way professionals think. This can be recognized as a continuous process. It is necessary for the planner or architect to continually determine and evaluate the influence of the determinant forces. Through this process, assimilated characters and patterns as concepts in planning and architecture will be significant. Professional work should be seen as the continuous implementation of determinant forces change. Such process suggests periodic developmental principles over a period of time. The task for concerned professionals is to develop an implementation process that will allow for better comprehension of the determinant forces and define techniques that will allow for continued evaluation. As soon as design improves, the ability to comprehend determinant forces should also improve. Planning and architectural decisions should be based on expanding quantitative and qualitative information, and this necessitates systematic studies.

The establishment of a vocabulary for this new approach is the first step. In order to develop such a vocabulary, the planner and architect have to search the interdisciplinary fields of the humanities, science, and the applied sciences. New materials, new building techniques, labor, life expectancy and physical appearance have to be considered. Planning and design excellence with top-quality, long-lasting infrastructure and materials are certainly the main pillars of such concepts.

Consequently, aesthetic measures will eventually emerge. Many factors will influence the new architectural pattern and built form, especially the identity and the sense of place. The new approach should be ready to accept change at any time. An assessment of the place and the type of force or change should be expected in broad terms. The approach inherents new planning and architectural attitudes especially

regarding the cause and effect of changes in the determinant forces and the product of chance. The final task for professionals will be to emphasize the visual aspect of the pattern and character.

It is important to consider that this adaptation of patterns and built forms does not, in principal, have malfunctions whereby the assimilated pattern admits built form changes to verify the influence of determinant forces which cause it. The planner or architect is able to generate a variety of patterns and built forms to satisfy a variety of determinant force changes.

The future of this new approach is attracting attention as it strengthens the assimilation of traditions in the urban patterns. It will effect current professional practice, society's way of life and the natural grouping of people in the built environment. This approach is also oriented toward the implementation of appropriate technologies keeping in mind the capability of the approach to change, to a more regional architecture or to an architecture with identification. The approach will be capable of assessing the direct correlation between people, their way of life, and the degree to which the built form responds to these factors.

Any new planning or architecture should be able to present the architectural form and urban pattern of the present and future, and not just the past. It should be a practice that allows for flexibility, the implementation of new ideas, and searches for new outlooks. The new planning or architecture should be considered optional not mandatory, offering flexibility in choice where the client can become a part of the design process. The adoption of the new planning or architecture is not an economical undertaking. This would keep the new architecture static for long periods of time allowing change in accordance with the owner's desires.

Physiological and psychological interactions with the new planning or architecture differs with each individual. Acceptable planning or architecture for one client, may be unacceptable for another. The desire of human beings to adapt their environment and to their needs is the essence of change, in spite of the possible harmful side affects of the change in social, environmental and ecological terms.

Professionals who are willing to consider and implement the new approach must identify user needs in advance. Implementation is dependent upon the degree of adaptability to the determinant force changes and the realization and validation of each stage in planning and architecture.

In the evolution theory when force has no effect, an element may disappear or mutate whenever change takes place since the response between physical force and the natural form is direct. In Saudi Arabia, the country's unification ended in tertribal raiding resulting in the abandonment of defensive structures. Similarly, but less dramatic are the

changes on the newly developed streets which were narrow alleyways and were replaced by wide, paved roadways. New road networks, electrification and the abandonment of defensive structures and increased resources are allowing urban transformation to proceed on a large scale.

In an intricate human-made environment presented by built forms, an artificial mediator, either the master builder or the owner as a decision maker in traditional society, or the physical planner, urban designer, architect, or contractor in contemporary time, interprets and assesses determinant forces. In the new approach the task lies on professionals who must be able to assess the apparent and hidden determinant forces which act upon built form (Fig. 15).

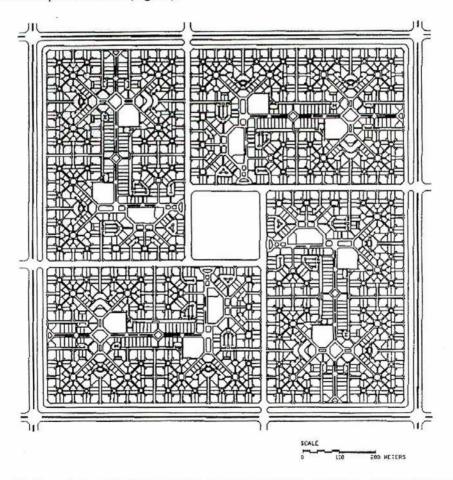


Fig. 15. Conceptual model of the proposed development of land subdivision. Feeling of this model should produce continuity of tradition.

Concluding Remarks

Traditional planning and architecture decline is a common phenomenon in almost all parts of the world. The abandonment of traditional approaches in design in favor of modernist approaches resulted in loss of architectural identity, which was stamped by vernacular solutions. This study is not merely a history of urbanism or architecture for the transitional era, which took place in Saudi Arabia where technology transfer especially in architectural designs, materials and construction techniques is changing the country rapidly. It is an attempt to provide a unified view of the role of underlying forces in creating a distinguished architectural style that shapes our environment. The indigenous knowledge influences technology transfer and guides the rapid change.

In the early days of modernism adoption, the society was so impressed by the modern that it blindly took it for granted as symbol of progress before discovering its failure to adopt the imperative needs of the society. The dilemma comes in two folds: Firstly, whether the society, with a strong tradition as Islam, can internalize new technology and adapt to it without discontinuing the tradition. Secondly, whether society can save what is of value and attract the same.

After the failure of modernism as an architectural school of thought in the early 1970's, new trends such as post-modernism or new-traditionalism/new-vernacularism emerged as an observed phenomenon in the industrial world, and culturally rich world respectively.

The new-traditionalism / new vernacularism trend involves a wide range of architectural characteristics which give a traditional framework to the present architectural development.

It is too early for architects and architectural critics to predict the success of such emerging trends. The new traditionalism/new vernacularism trends may contribute to the formation of a local but distinctive architectural language assimilating the growing turmoil in Saudi society.

References

- Al-Kodmany, Kheir. "Residential Visual Privacy: Traditional and Modern Architecture and Urban Design". Urban Design, 4, No.3 (1999), 283-311.
- [2] Memtta, Ajami Preservation of Heritage. In: Albenaa, 10, No. 55, Moharram-Safar 1411 H./Aug.-Sept., 1990.
- [3] Al-Bayati, Basil. "Community and Unity". Academy edition, New York: St.Martin's Press, 1983.
- [4] Badran, Rasem Opinion: The Problem of the Contemporary Ways of Judgement, Albenaa, 10, No. 55, Moharram-Safar, 1411 H./Aug.- Sept., 1990.
- [5] Eben Saleh, Mohammed Abdullah, Al-Alkhalaf: A Traditional Defensible Settlement of Southwestern Saudi Arabia, Building and Environment, 31, No. 2 (1996), 179-195.

- [6] Al-Mubarak, Faisal A. "Urbanization Urban Policy and City form: Urban Development in Saudi Arabia'. Unpublished Ph.D. Dissertation, University of Washington, 1992.
- [7] King, Geoffrey. "Some Observations on the Architecture of South West Saudi Arabia". In: AAQ, 8, No. 1 (1976).
- [8] Safdie, Moshe. "Form and Purpose". John, Kettle (Ed.). Boston: Houghton Mifflin Company, 1982.
- [9] Rapoport, Amos. "On Regions and Regionalism". In: Markovich, N.C. et al. (Eds.), Pueblo Style and Regional Architecture, New York: Van Nostrand Reinhold, (Paperback edition), 1992, 272-294.
- [10] Hakim, S. Besim. Culture and Urban Form in Islamic Cities, 9, No. 4 (1992).
- [11] Grabar, Oleg. "Reflections on the Study of Islamic Art". In: Mugarnas, vol 1, 1983.
- [12] McLeish, Kenneth (Ed.). Key Ideas in Human Thought, New York: Facts on File, Inc., 1993.
- [13] Cascardi, Anthony J. The Subject of Modernity, Cambridge: Cambridge University Press, 1992.
- [14] Drucker, Johanna. Theorizing Modernism: Visual Art and Critical Tradition, New York: Columbia University Press, 1994.
- [15] Kohl, Kerbent T. From Archite Type to Zeitgeist: Powerful Ideas from Powerful Thinking, Boston: Bittle, Brown and Company, 1992.

بين الأصالة والمعاصرة: المفارقة التاريخية في الشكل المعماري والعمراني في مجتمع سريع التغير " حالة منطقة الرياض - المملكة العربية السعودية "

محمد بن عبد الله بن صالح قسم العمارة وعلوم البناء، كلية العمارة والتخطيط، حامعة الملك سعود ص.ب ٧٤٤٨ الرياض ١١٥٤٧ ، المملكة العربية السعودية (قدم للنشر في ٢٢٠/١/٣٧هـ)

ملخص البحث. تعد الأشكال المعمارية والعمرانية التقليدية في مستوطنات المملكة فريدة من نوعها. نتحت تلك عن الاستحابة المحلية للعوامل المناخية والاجتماعية والاقتصادية والتقنية والدينية والسياسية السائدة في ذلك الوقت. وقد شكل التكامل بين تلك العوامل طابعا إقليميا مميزا. يرى الباحث أن أي تغيير يحدث من جراء أحد العوامل يسمح ببزوغ طراز معماري ونمط عمراني مميز يعكس ذلك التغير. كل مرحلة نمو عمراني في أي شكل من أشكال الاستيطان عبارة عن انعكس لحاجة السكان وللمصادر المتوافرة، وهذا ما نراه في التنميات العمرانية والمعمارية الجديدة.

تحاول الورقة تتبع التغير في الطرز المعمارية والأنماط العمرانية في مدينة الرياض، وكيف انسجمت العوامل المؤثرة مع الطراز والنمط السائد، حيث تواجه العمارة الحديثة والتخطيط الحديث تداخلا وتعقيدات بين عوامل تغير عدة وخاصة الاقتصادية والتقنية كاستجابة لعوامل متغيرة واحتياجات اجتماعية. تعتبر العلاقة بين العوامل المؤثرة من جهة والعمارة والتخطيط مسن جهة أخرى تبادلية من ناحية الإخفاق والنجاح في إيجاد طراز معماري ونمط عمراني مميز.

يستنتج البحث أن كل نوع من الطرز أو الأنماط مرتبط بممارسة فريدة تحقق متطلبات وظيفية وجمالية متعددة لتوائم التغييرات التي تأخذ مكانما في المجتمع. الأشكال في العمارة التقليدية والتخطيط التقليدي في المملكة السعودية ينظر إليها على أنما ناجحة من ناحية تلبيتها للظروف التي عملت فيها، والدليل على ذلك استمراريتها على مدى عقود زمنية طويلة. وبما أن أشكالها لا تفي باحتياج اليوم المتغير والمستمر؛ لذا توقف الإنسان عن الاستمرار في تطبيقها. فالثوابت والمتغيرات تتضمن تأثيرات مستقرة ومتغيرة في الممارسة المعمارية والتخطيطية مما يجعلنا نرى طرزا معماريـــة وأنماطا تخطيطية جديدة.