

## GLOBALIZATION CHALLENGES IN ARCHITECTURE

*Ibrahim Mostafa Eldemery*

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*The new millennium is confronting the tension between the forces of globalization, which has been widely debated as a distinguishing trend of the present moment, and its impact on local architecture and the efforts to ensure local identity and distinctiveness through architecture, where globalization is seen as a multidimensional phenomenon. Architects very often find themselves at the center of two opposing forces existing as a result of past or present contrasting cultures and architectures, along with their attendant values and methods of expression. The objective of this article is to assert both the potentials of new technology and new concepts represented in globalization and its contribution to the development of the built environment. This will be done through case studies that were influenced by addressing a rethinking in order to emphasize adapting the trend of globalization and the impact of new technology both positively and negatively. The article also demonstrates successful attempts at developing ways of thinking about, approaches towards, and concepts of how to cope with the globalization trend and benefit from the new technology by acting both locally and globally and not isolating our locality from any modern development, with the aim of building a powerful form of grass roots globalization.*

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## INTRODUCTION

Rapid urbanization and technological advances have resulted in more and more standardization of built environments, depriving human habitats of cultural and regional identity, in which the trend of standardization is becoming an international malaise as the same building methods, materials, and styles are applied. The art of building is forever high on the agenda of many of the conferences, symposia, and community group meetings searching for methods and concepts that could lead to better and more equitable cities. In recent years, world cities (synonymously called global cities) and globalization have become key concepts of social scientists, architects, and economic geographers observing, experiencing, and describing the profound changes that new technologies have been causing for worldwide economic and spatial development. Planners soon followed the academic interest and tried to explore ways and means of promoting cities and city regions to world cities, followed in turn by architects analyzing and criticizing the negative local and regional impacts of such globalization (Lo and Yeung, 1998).

Place exists not only physically but also in peoples' minds as memories. The identity of a specific place becomes interesting when it brings about a certain experience, evoking associations or memories. In this context, the article tries to address globalization as a distinguishing trend of the present moment and its consequences on the architecture of the Arab countries, roots of the Middle East, by demonstrating case studies representing both the positive and negative potentials of globalization while encouraging the importance of adapting the advanced technology into sensitive projects that reflect local cultures and are linked to global forces.

Dealing with the globalization process raises three key questions:

- What does it mean in architectural terms?
- What are the potential positive and negative implications for developing countries?
- How have countries managed to benefit from the process of globalization while minimizing the risks?

## GLOBALIZATION FORCES IN ARCHITECTURE

Cities and regions are facing great challenges as a consequence of globalization. The term "globalization" was coined in the latter half of the 20th century, but the term and its concepts did not permeate popular consciousness until the latter half of the 1980s (Chris, 2006). Serving as a buzzword of the decade, the phenomenon of globalization has attracted more significant global attention than perhaps any other issue in recent memory, yet the term is used in so many different contexts, by so many different people, for so many different purposes. Giddens defined globalization as the intensification of worldwide social relations that link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa (Oncu and Weyland, 1997). In that sequence, globalization is considered a discourse of knowledge that elevates awareness of the links between various scales of life. The Encyclopedia Britannica defines globalization as the process by which the experience of everyday life is becoming standardized around the world (Adam, 2008). It is also a contested discourse exhibiting many variants, some of which are clearly more influential than others.

The tension between anti-global and pro-global forces has long existed, with two opposing forces affecting architectural globalization. One force seeks to safeguard and promulgate established indigenous architectural traditions, forms, decorative motifs, and technologies. It advocates historical continuity, cultural diversity, and preservation of identity, all symbolized by a particular architectural vocabulary, just as spoken languages and local dialects impart identity. The other force promotes invention and dissemination of new forms using new technologies and materials in response to changing functional needs and sensibilities. It places a premium on systemization, flexibility, and interchangeability (Lewis, 2002). For some, globalization entails the Westernization of the world. Some see globalization as generating increasing homogeneity, while others see it producing diversity and heterogeneity through increased hybridization.

Global change represents a new class of problems that severely challenges our ability to achieve sustainable development. These problems are fundamentally nonlinear in causation and discontinuous in both their

spatial structure and temporal behavior. Acting in the present age involves understanding the matrix of global and local forces, of domination and resistance, and of a condition of rapid change and great transformation brought about by the global restructuring of capital and multidimensional effects of trends and new technologies.

### ***Trends***

In an ongoing dialogue between architects and society, architects consider globalization a distinguishing trend of the present moment, whereas theorists see it either as a necessary and positive vehicle of progress and diversity or as a force of insipid homogenization and destruction. Architecture addresses our meta-physical, philosophical, and cultural identities within a material context. It challenges us to look at history and, therefore, at architecture in a new way (El-Husseiny, 2004). Architectural history is filled with movements opposing cultural and aesthetic diversity while sanctioning particular philosophies of architecture for national and international distribution. Pro-global design sponsors include governments using architecture for symbolism, companies employing architecture for corporate purposes and product identification, and zealous, sometimes self-righteous, architects preaching their own theories.

In the early 20th century, many architects argued stridently that the modern age demanded new architecture in response to new industry, technologies, mobility, and social and political orders. Thus was born the "International Style," epitomized by German architects Mies van der Rohe, Walter Gropius, and others. Today, pressure to globalize architecture primarily springs from two sources: the culture of commerce and the culture of design. The global culture of commerce is driven by changing consumer expectations, market opportunities, and business agendas. Their architectural manifestations include iconic, sky-scraping banking towers, chains of standardized hotels, franchise restaurants, and shopping malls full of all-too-familiar name-brand stores. The global culture of design is supported by architects who study what other architects are creating, no matter where. With fabulous photographs in slick magazines and professional journals, trend-conscious designers can scan and span the globe, sharing high-style concepts rendered in stylish materials. Glass, aluminum, stainless steel, copper, titanium, and natural stone are readily available. If they cannot be acquired locally, they can be imported. Answering the first of our key questions, we can symbolize the accelerated momentum of globalization in architecture by the glossy facades of mega capital, which have changed the skylines of major cities around the world. Office towers house multinational corporations, transnational banks, world trade centers, and five-star hotels (Oncu and Weyland, 1997).

To develop our findings about both globalization's influence on architecture as a raging topic of discussion in recent years and its impact, we should study the technological changes and their consequences on the modern movements of architecture that resulted in our contemporary built environment, where architectural history indicates that changes in architectural styles have been brought about by advancements in technology and, consequently, philosophy.

### ***Technology***

It is certainly arguable that during the past decades, the world has been undergoing the most significant period of technological innovation and global restructuring since the first decades of the 20th century. Cities have always been centers of civilization and vitality that, through the years, have led to human progress through material and scientific advances. Globalization is now an unstoppable historical process led by technological change and involving the dissemination of science and new technologies. Rapid urbanization has only been made possible by the introduction of modern technology as a part of the development process.

In one of the oldest treatises on architecture, Vitruvius proposed three essential requirements for all good architecture: *firmitas*, *utilitas*, and *venustas* (Morgan, 1914). In order to guide the quality of a building, one should consider the technical means, the practical and functional aspects of the building, and the aesthetic results. Auguste G. Perret also defined architecture as a living art that faithfully expresses and visualizes its time through the manifestation of contemporary construction techniques (Schoon, 1992). Complex construction and advanced building design require a mastery of structures and construction technology, and as

Michelle Addington (2006:64) mentions, “Technology is often considered the handmaiden of design and, as such, is meant to be subordinate: design is the why and the what, whereas technology is the how-to.”

New technologies are changing the nature of work — with its multidimensional effects — by creating new forms of leisure, including the hyper-reality of cyberspace, new virtual realities, and new modes of information and entertainment. Dramatic change and innovation have been part of modernity for centuries, as has technological development and expansion. A new global culture is emerging as a result of computer and communications technologies. Transitional forms of architecture are traversing national boundaries and becoming part of a new world culture. The new wave of technologies in electronics, robotics, telecommunications, new materials, and biotechnology has given rise to a new technology paradigm that accentuates the role of the world cities (Lo and Yeung, 1998). Thus, the adoption of appropriate technologies is a natural and unforced consequence of appropriate architecture. Together, they offer valid forms and images to take the place of models offered by industrialized nations, and as Shahin Vassigh (2004:112) mentions, “The practice of architecture is a delicate balance of art and science — a creative endeavor which also requires that the architect master a broad array of technical skills, including engineering.”

### *Place Identity*

Within the last few years, globalization has become a catch phrase in architecture associated with a loss of place identity. There seems to be a general consensus that identity plays a significant role for the continuity of man’s culture; otherwise, he will be cut off from his past. Place identity is attracting increasing interest from both architects and planners, as well as in social-science research. The phrase “place identity” conveys many different dimensions such as physical size, tangible versus symbolic, and known and experienced versus unknown or not experienced. Place also includes that which influences the meaning occupants give to it through personal, social, and cultural processes (Altman and Low, 1992; Burd, 2008). Hence, place can be described in terms of many multidimensional physical and psychological environmental attributes.

Individuals’ psychological sense of place identity can be understood in many ways: as an experience, a convergence of cognitions, how residents feel towards their town, or an assessment of the extent to which they agree with the sentiment “this is not the place for me.” Place identity is sometimes described as an implicit psychological structure; it is also considered a cognitive structure that contributes to global self-categorization and social-identity processes. It emerges from involvement between people and place. It is described as the individual’s incorporation into the larger concept of self. Harold Proshansky (1978:152) stated that “there is no physical setting that is not also a social, cultural, and psychological setting.” He coined the term “place identity” to denote the dimensions of self that define an individual’s personal identity in relation to physical environment (*ibid.*). Proshansky later attached the concept of place identity to “belongingness.” Identity, or more precisely, place identity as discussed by Proshansky, refers to conscious ties between the community and its residents as these develop over time. Hummon (1986:34) reinforces the view by defining place identity as “an interpretation of the self that uses place — a significant, symbolic locale — as a sign or locus of identity.” He considers places environmental contexts with real consequences for people and lays a great deal of stress on ties between the place and the people. Proshansky, Fabian, and Kaminoff extended identity theory to the area of environmental psychology and proposed that place identity is a “physical world socialization of the self” (Proshansky, *et al.*, 1983:62). When defining the concept of identity, Rapoport recognizes the complexity of identity formation; his method of establishing the desired functional and symbolic connections between an environment and people privileges ethnicity above all other identity-constructing factors. This occurs because of his use of the “culture-core” concept to attempt to drive key features of tradition that need to be supported (Rapoport and Hardie, 1991). The analysis following from the use of this concept assumes that identity comes from using available cultural resources from a spectrum of cultural presentations extending from “traditional” to “modern” (Mthethwa, 2002).

Place identity is also defined precisely as a set of cognitions about physical settings. The concept of place identity underpins the collective sense of cultural identification with a particular building and its design features. This concept considers the debate around decisions with regard to buildings and the sources of architectural elements used in the design project or building. It implies that there are essential natural characteristics that identify a place and that, in effect, these are latent and without structure but can be

released by a sensitive design solution. Under this criteria, a locally appropriate building or proposed project is determined by a general consensus on the building and/or proposed project with incorporation of an acceptable architectural language drawn from vernacular design aspects, including site, vernacular architectural forms, materials, and symbolism. It also considers the setting of buildings and the sources of architectural elements used in the design project or building. Under this, a locally appropriate building or proposed project could be determined by a general political consensus on the proposed project with incorporation of an acceptable architectural language drawn from the national vernacular language. Obviously, we mean a totality made up of concrete things having material substance, shape, texture, and color together determining the essence of place, where place is seen as a product of physical attributes.

How did these theoretical developments with regard to the concept of identity impact architectural thinking? More specifically, the study focuses on the expression of identity in architecture to assist us in improving our understanding of the nature of the relationship between built form and culture through identification of pertinent elements in the built environment.

### *Local Architecture*

The building environment of Arab cities in the Middle East has undergone major transformations, where the last two decades have witnessed numerous scientific achievements that have resulted in significant fundamental changes to architecture. Due to the forced pace of modernization, the conflict between traditional values and imported ideas has been quite sharp in some countries, and recently the resulting resentment gave rise to fundamentalist movements (Saqaf, 1986). Today there is a massive import of architectural language, a stereotype vocabulary of built form that is essentially Western in character. Yet it is being associated worldwide with images of progress, prestige, and future orientation. In turn, it has largely influenced the indigenous values of architecture. Dramatic change and innovation have been part of modernity for centuries, as has technological development and expansion. Yet these phenomena, bound up with globalization in its current phase, have created enough novelties to require a rethinking of social theory and politics in the current situation as a response to new developments in society and culture.

Architects working in the ivory tower of their rational dreams produce architecture that is universally applicable but lacking truth and relevance, as it is no longer supported by a corresponding cultural identity. For some theorists and architects, globalization is seen as a process of standardization in which a globalized media and consumer culture circulate the globe, creating "sameness" everywhere, thus bringing to light the bland and boring universality in modern projects. The Middle Eastern architect is currently afflicted with a state of being a scatterbrain between the culture of the East and the method of the West, which is reflected in his architectural and intellectual production. He very often finds himself at the center of two opposing forces existing as a result of past or present contrasting cultures and religions and their attendant values and methods of expression.

### *Arab Architecture*

During recent years, large-scale development projects have been exported to many Arab countries where they are implemented as complete packages without recognizing the fact that the physical forms of these projects have grown out of an alien ideological matrix and imply different codes of behavior and different environmental conditions. To catch up with modernity, the Arab city started, whether intentionally or unintentionally, to lose its local image, uniqueness, and ability to meet its particular needs. It has experienced dramatic changes in cultural arenas where architecture has been characterized as culturally alienated and Westernized. This characterization, which is, ironically, publicly known as "progress," is related to the search for national identity. This change resulted in an attempt to be freed from the past. Those countries have adopted and transferred foreign architectural forms without any deep consideration of the underlying changes in the social or cultural structures that developed them, with the exception of some successful cases that linked local and global forces.

Some are trying to seek architectural regionalism within an international framework, some are trying to recover architectural traditionalism, and others are trying to contrive traditional types within their modern

forms. Thus, the views contradict each other, and the theories are at variance despite the fact that all of them seek to develop local architectural individuality and to formulate it within its time and space dimensions. In most countries, the framework of surviving local traditions provides continuing cultural bonds, while at the same time, Western institutional, political, economic, and educational systems are adopted that, to some extent, contradict vernacular customs and beliefs (Bianca, 2000; Doratli, *et al.*, 2007).

## RESEARCH PROBLEM

Identity is one of the essential goals for the future of a good environment. People feel that some part of the environment belongs to them, individually and collectively, some part for which they care and are responsible. Egypt, like other Arab countries, started to receive a major influx of foreign ideas very different from its local architectural heritage. The past became a matter of history, science, curiosity, or romantic nostalgia that was considered a defunct state of being. Arab countries were eager to practice the simplistic version of Modernism, for it gave them a fresh visual start. Concordant with these new mental patterns, the built environment was subject to the polarization between conservation of historic elements and aggressive, technology-driven modernization and development.

Local architecture is grappling with the problem of assimilating globalization into its traditional cultural heritage; due to the forced paces of modernization, the conflict is now recognized between traditional values and imported ideas. This impact is often exacerbated by the insensitivity of foreign planners, architects, and contractors to whom large-scale projects are assigned, which has led to the dichotomization of cultural perception, where the historic cultural heritage is identified with the past, backwardness, and poverty, while the image of “progress” is borrowed from elsewhere, namely the West (see also Sibley, 2007).

The research problem is how to deal with the new technology and trends to readapt them as an important tool in achieving locality and preserving place identity in new forms. Answering the second question about the potentials of globalization for developing countries and the competing positive and negative forces, the article demonstrates case studies clarifying these potentials represented in the Prophet’s Mosque extension project and Alexandria’s new library project.

## PROPHET’S MOSQUE EXTENSION

The Prophet’s Holy Mosque in Medina is the second most important sacred site in the Islamic world after Mecca. To provide a dignified place of prayer for the tens of thousands of pilgrims who congregate daily within its walls, the mosque has been extended through a series of traditional open courtyards. The Prophet’s Mosque occupies the place of the Prophet’s former house, the courtyard of which served as the first social and religious center of the early Muslim community. Later the building became the heart of the small city that grew around it. It was rebuilt several times during the Mamluk and late Ottoman periods, but the green dome above the Prophet’s tomb has remained the landmark of the historic city and the symbol of the second holy city of Islam (Bianca, 2000).

Vernacular architecture in the Islamic world came as a perfect response to the living conditions of the natural environment, based on age-old regional experiences with local building materials and appropriate techniques of climate control. To counteract the effects of the searing daytime heat (local temperatures can rise to over 45° Celsius in summer), innovative measures were used to shade and cool the courtyards. Designed by Bodo Rasch and engineered by Buro Happold, the two principal courtyards next to the tomb of Muhammed are shaded by parallel rows of lightweight, convertible, umbrella-like structures.

### *Retractable Umbrellas*

Each court contains six hydraulically synchronized umbrellas, which unfold like huge flowers to create a translucent vault spanning between the columns and arcades. The umbrella arms are connected to a centrally located hydraulic cylinder, which controls movement.

FIGURE 1A. Retractable umbrellas.

In summer, the operation of the umbrellas is linked to the air-conditioning of the building, with outlets at the base and capital of the column, dispersing cool air around the courtyards. The translucent Teflon membranes evoke archetypal forms and imagery: plants, blossoms, chalices, baldachins, white cloths, pilgrims, and clothing; soft, adaptable forms that let in light. Pilgrims draw both physical comfort and visual delight from the slow, silently moving umbrellas and their sophisticated environmental control systems. The graceful canopies also retain contact with the sky and surroundings, enhancing the ethereal dignity and power of one of Islam's most sacred places (Slessor, 1998) (see Figure 1A).

### *Sliding Domes*

A covered extension to the existing mosque measuring 450 m x 250 m incorporates some of the latest technological solutions to address some environmental problems. Twenty-seven open courts are distributed within the area for light and ventilation. Each court is covered by a sliding steel dome, which rolls on rails from a parked position over the roof. The whole system is

FIGURE 1B. Umbrella and lighting structures (left) and sliding domes (right).

controlled by the mosque's building automation and control system to ensure environmental control during summer and winter (Ashour, 1998) (see Figure 1B).

### *Lighting Structures*

Lighting the huge square outside the mosque, together with the elevations of the mosque, is a most complex system. Traditional lighting systems were totally unsatisfactory, so completely new lighting systems were developed. "Spot decomposition" using faceted mirror systems was the most effective method. It depends on an aluminum primary reflector unit that directs the light from a spotlight source onto a secondary reflector and illuminates a defined surrounding area (Ashour, 1998) (see Figure 1B).

### *Evaluation*

The case study is an attempt to show a project that emphasized the positive potentials of globalization. It emphasized the techniques of and the interaction with the advanced science of technology, producing architecture linked to the local roots of identity (the tent as an encapsulated personal space from the infinity of the desert) and coping with the potentials and challenges of globalization. The project successfully mixed and incorporated the use of advanced technology with this sensitive Islamic cultural project by achieving building function and using new air conditioning and lighting systems, as well as using technology for moving the domes and folding the retractable umbrellas to light and ventilate the prayer space when the temperature is adequate. Although architects used modern techniques, materials, and building automation and control systems, the locality of the Islamic style and heritage was well respected by the designer, who incorporated new materials in a way that would not contrast with the existing project.

## ALEXANDRIA'S NEW LIBRARY

Egypt generally, and Alexandria particularly, possesses a multi-architectural heritage that ranges from Pharaonic, to Coptic, to Islamic. Looking at them, one can easily understand that architectural qualities are a natural outcome of distinct cultural conventions and synergetic living processes that create a consistent built environment.

Alexander the Great founded the Greek city of Alexandria in 331 B.C. In 30 B.C. it became a part of the Roman Empire, and with the spread of Christianity, it be-

came an intellectual center of the Christian world. In 1517, the Turks conquered Egypt to make Alexandria a part of the Ottoman Empire (Haag, 2004). The city was the capital of Egypt for more than 1,000 years. For several centuries, the library there was the cultural center of the Western world. With the intention of reviving the most famous library in antiquity and housing and preserving some eight million books, the new library is being constructed on almost the same site as its predecessor. The aim was to resurrect the prestigious structure erected in the city of Alexander the Great, which housed the works of Homer, Euclid, and Herphitus. The idea of rebuilding the library was revived in the late 1980s, when the United Nations Educational, Scientific and Cultural Organization (UNESCO) issued an international appeal for contributions. An international design competition was organized and opened to the entire international professional community. The prize was awarded to the architecture firm Snohetta, of Oslo, Norway, in September 1987.

FIGURE 2. Elliptical cone building.

Designing the library has raised a multitude of questions, especially with regard to the position of the Egyptian architect in such a competition. Opinions were diverse. They were in search of symbolism, especially after the extinction of all the library's vestiges. Its orientation is dictated by the crucial importance of keeping the amount of direct sunlight entering the building to a minimum. The exterior of the new library presents a monochromatic expanse in the form of the cylinder's perimeter wall (the inner wall) as it rises above pavement level. Far from being a smooth, metallic, high-tech skin, the wall is a curving cliff face of roughly cleft gray granite quarried in Southern Egypt in Aswan. Visitors to the library will first encounter a curved expanse of rough, gray granite. The only interruptions in the granite face are the large letters carved into its surface, which have been taken from many alphabets — Latin, Roman, Hieroglyphic, and Arabic (Best, 1998) (Figure 2).

### *Evaluation*

The case study represents modern technology in construction and implementation of the project, following the prevailing international trends without addressing the place identity and the ground on which the project is executed. One can see this project in Europe, or in any other country in the world, but cannot identify the best or the most suitable place for locating said project. It is very clear in the design concept that the architect ignored the heritage, history, and impressive Pharaonic and Islamic cultures representing Egyptian architecture in his design process.

Architects were expecting the design to be a synthesis of Alexandria's past, responding to the present and reflecting cultural continuity. Forms were expected to be culturally readable and functionally relevant as a new source of inspiration. Numerous cultures, notably the Pharaonic, the Hellenistic, and the Islamic, have blended together to form a rich synthesis that is unique to the Egyptian context. The library was expected to be a continuation of this process of cultural overlays — its authenticity derived from its ability to draw on historic precedents, transforming them into forms that are modern, yet culturally readable and relevant.



## CONCLUSIONS

Cities are immense laboratories of trial and error. Cities are also becoming increasingly alike, or are at least faced with similar problems and prospects all over the world. As we enter the 21st century, architecture in Arab countries still seems to be fluctuating between the adoption of Western models, as a vehicle conveying notions of modernity, affluence, and efficiency, and a return to traditional historical and vernacular models as a statement of national pride, confirming and conveying the country's heritage.

FIGURE 3. Threats vs. opportunities.

In the world of architecture, the struggle between globalization and anti-globalizing forces will continue, as it has for centuries. Even a hundred years from now, countries such as Egypt, Italy, and France will still retain their traditional architectural allure and will still be worth visiting, regardless of which force prevails.

Throughout most of the Arab mainstream, architects, as well as the general public, seem to a large extent to disengage themselves from the architectural models of their local heritage, which they consider outdated, inferior, and no longer able to cope with modern requirements, and instead gravitate strongly towards Western concepts.

It is important to clarify that localization has no connection with isolation. The article asserts the fact that communities the world over are breaking their isolation and entering into direct contact and collaboration with one another. While one can assert that Arab cities have managed to build a few successful individual projects, most of the built environment does not reflect the locality where it stands, due to the loss of a contemporary Arab architectural identity. This in turn has led to the absence of a paradigm that expresses the broader cultural shifts coming as a result of worldwide technological change, not only within the architectural community, but in the overall value system.

### *Opportunities and Threats*

From the previous analysis of the demonstrated projects, one could summarize some lessons and see how global and local forces can interact, either by mediating or eradicating the architectural forms expressing cultural identities. In the Prophet's Mosque extension project, one can see the positive potentials of and opportunities for global and local forces to interact with and mediate each other, where the designers attempted to interact with and mediate the positive aspects of the advanced technology of globalization by linking it to the local forces and translating and integrating them into contemporary design language with architectural forms expressing the regional and local cultural identities and historical roots. In the Alexandria library project, the negative potentials and threats of globalization are clearly apparent in how it is cut off from the past and ignores the place identity and architectural heritage to satisfy the values of the architect, which are imposed on the public. The project defies its older neighbors. It tries to shock rather than sympathize. Figure 3 summarizes the threats and opportunities of globalization on our contemporary projects, from which we can conclude whether or not an effective blending has been achieved in a particular design to strengthen the sense of place identity.

Opportunities represent the positive potentials in which globalization can be adapted effectively to strengthen the sense of place identity. In adapting globalization, it is important to get benefits from the heritage values of the place in order to adapt the new technology to produce new forms that are not cut off from the past and are suitable for the time. Opportunities also emphasize the utilization of the theories and concepts to compromise solutions related to local and global thinking. Place considerations and regionalism are considered assets that should be utilized, using tradition and culture while considering community

aspirations, in order to produce new homogenized developments within the communities' built environments to promote residents' ties with the communities, thus promoting place identity.

Threats represent the negative influences that should be taken into consideration while acting globally and locally. New forms and modernity sometimes lead to architects and developers becoming fascinated with new, impressive forms in order to be distinctive, disregarding local considerations. Negative potentials or threats are also represented in using technology, imposing standardization, and producing bland architecture that deprives human habitats of cultural, regional, and national identity by not adapting them to produce modern local developments. Threats are also represented in producing buildings that could be built anywhere — what is called international architecture — in order to produce juxtapositions ignoring the context for personal gain. Figure 3 addresses threats versus opportunities in order to conclude design guidelines for future projects.

From the previous analysis we can determine design guidelines that can be operationalized and applied to future design projects for decision makers as a tool to decide whether the proposed project assimilates modern technologies and trends without losing architectural identity:

- Advocating historical continuity by respecting the dominant styles as a reflection of heritage consciousness.
- Architectural forms expressing regional and local cultural identities and the historical roots of a place without being cut off from the past.
- Incorporation of an acceptable architectural language drawn from vernacular design aspects (essence of place).
- Interaction with the advanced science of technology and techniques producing architecture linked to the local roots of identity.
- Integrating the positive aspects of the advanced technology by using modern techniques, materials, and building automation and control systems.
- Addressing the project to the place identity and the ground on which the project is executed, reflecting local cultures and linking to global forces.
- Design homogenization within the architectural context (sympathize rather than shock).
- Distinctiveness (acting both locally and globally).

### ***Recommendations***

In answer to the third question about how countries manage to benefit from the process of globalization while minimizing risks and developing better Arab architecture, Arab architects simply must face such a future with new thinking and methods dealing with globalization, in order to confront new circumstances and requirements, both at the local level within their frame of work and at the Arab level in which they interact. The architect should possess diverse qualifications and combine skills from several professions, expressing both the modern technologies of the age and the richness of Arab architectural heritage, to absorb and assimilate foreign cultural influences without losing identity. This can be implemented by encouraging designers to respect the dominant styles in the locality in order to achieve a degree of consensus among Arab intellectuals.

Changing living patterns and technological innovations have to be taken into consideration in applying traditional approaches to the new situations. Identity is dynamic; therefore, it is changing continuously in application. When considering globalization, architects and planners should well perceive the opportunities that the globalization trend provides, the benefits from place-identity considerations, and the threats that affect our heritage and local considerations, in order to link local culture with global technology and modernization.

Architects should think “glocally,” a composite term to convey looking back to the local from their global position. The aim is to unite both approaches and to find balance between them, reinforcing a distinct national identity while at the same time remaining open to foreign influences. A kind of “glocalisation” is, therefore, both global and local in orientation.

This requires that one grasp the connections with the past, as well as the novelties of the present, to capture both the continuities and discontinuities of identity and modernization in order to make sense of our current predicament.

We should associate our thinking with adaptation of technical innovations in order to absorb and integrate them into a meaningful cultural system and to transform them from being just huge technical projects into a realization of our consciousness and maturity of vision, of our true identity deeply rooted in our history and heritage, where new models of built form and of direct interaction with the traditional modes of building need to be established.

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Additional information may be obtained by writing directly to Dr. Eldemery at the Ministry of Housing and Urban Utilities, Eygot, 87, Tahrir St., Dokki, Giza, Egypt; email: imeldemery@hotmail.com.

#### AUTOBIOGRAPHICAL SKETCH

Ibrahim Mostafa Eldemery is Assistant Professor in the Department of Architecture at the National Housing and Building Research Center in Egypt. His research interests, designs, and teaching include architectural theories and the application and impact of modern movements on cultural heritage and aesthetic values. He received his Ph.D. in Architecture from Cairo University in Egypt.

Professor Eldemery is working as a consultant engineer for several projects and as a project coordinator of several design projects and research works. He has participated in and won prizes in architectural competitions. He is participating in the preparation and implementation of training courses in the field of architectural project management.

Manuscript revisions completed 28 October 2009.