

## Architectural Education in the Arab World and Its Role in Facing the Contemporary Local and Regional Challenges

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### Abstract

This research discusses the academic architectural education and its role in facing the challenges caused by the Arab revolutions that commenced in 2011, also known as “The Arab Spring”. It begins with a review of the most important issues of the present Arab world and continues by demonstrating the role of architecture in developing society and improving the quality of life. It also explores the appropriate architecture for the current phase, which must be design-based with a humanitarian-social dimension and respect to both “sustainability” and “participation”. Subsequently, the need to review the academic architectural education is addressed so that it conveys the current developments of society and becomes able to shape and create architects qualified in the field of the desired architecture. This may be done by introducing new resolutions related to social architecture, launching the Design/Build studio alongside traditional architecture studios, and indulging students in the field of participatory design. In addition, architectural research of students and their graduation projects should be directed to address the local issues, aiming to serve society and promote its development. Finally, recommendations to universities and higher education institutes are raised so that they can act their intended role in the development and improvement of their societies.

**Key words:** Architecture education; Arab Spring; Humanitarian architecture; Participatory design; Design/build studio; Final year project

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### INTRODUCTION

Architecture is the mirror of society; it reflects its values and physically embodies its lifestyle. Architecture in its simplest definition is science and art in the service of the individual or the community. It provides a social function linked to a society of a specific time and place. Thus, architecture is not based on fixed axioms and principles, but rather affected and transformed according to the changes that occur in communities and among peoples (Hoteit, 2015a). Consequently, the education of architecture should not be static. Instead it should be characterized by flexibility and the ability to change and develop in response to any urgent social, political, economic or environmental challenges (Hoteit & Fares, 2014).

This research discusses the academic architectural education and its role in facing the challenges caused by the Arab revolutions that commenced in 2011, also known as “The Arab Spring”. It begins with a review of the most important issues of the present Arab world, including rise in poverty and unemployment rates, spread of violence and mental illnesses, disintegration of the social structure and low sense of citizenship, deterioration of the built heritage, displacement and the consequent housing problems, as well as emergence and spreading of illegal settlements. It continues by demonstrating the role of architecture in developing society and improving quality of life. It also explores the appropriate architecture for the current phase, which must be design-based with a humanitarian-social dimension and respect to both “sustainability” and “participation”. Subsequently, the

need to review the academic architectural education is addressed so that it conveys the current developments of society and becomes able to shape and create architects qualified in the field of the desired architecture. This may be done by introducing new resolutions related to social architecture, launching the Build/Design Studio alongside traditional architecture studios, and indulging students in the field of participatory design. In addition, architectural research of students and their graduation projects should be directed to address the local issues, aiming to serve society and promote its development. Finally, recommendations to universities and higher education institutes are raised so that they can act their intended role in the development and improvement of their societies.

## 1. SOCIAL CONSEQUENCES OF “THE ARAB SPRING”

Since the year 2011, and as a result of the ongoing movements that commenced in 2011, most Arab societies today face great structural changes (Arnaout, 2014), which affect social organizations and contribute to the generation of many social, economic, and environmental problems. These issues which can be observed in troubled states such as Tunisia, Libya, Egypt, Iraq and Syria, and in their subsequent neighbors (countries like Lebanon and Jordan) include: rise in poverty and unemployment rates; increase in budget deficits; accumulation of debt; insufficiency of aid and donations; damage to various economic sectors, especially the real estate and tourism sectors (Abdul Latif, 2012); brain drain; emigration of large numbers of young people in search for better life opportunities; the spread of communal violence due to proliferation of weapons and power escalation of the armed militias; and low sense of citizenship on account of growth of sectarian, tribal, ethnic and regional belonging. It must be maintained though that the severity of these issues varies between states.

Furthermore, mental illnesses are on the rise due to loss of family and property, deterioration of economic conditions, and a growing sense of despair and frustration especially among youth and in rural communities (Bedrossian et al., 2016). Probably, the most common prevalent condition is Posttraumatic Stress Disorder (PTSD), which results from living under violent conditions and being exposed to stressors live or via media, such as scenes of murder and torture. This results in increasing rates of depression, stress, insecurity, and aggressiveness (Fares & Fares, 2013; Al-Arab, 2014). Children are the most affected by this category of disorders (Fares et al., 2013), especially those living in Syrian refugee camps, Iraq, Yemen, and Libya.

Moreover, a comprehensive amount of cultural, architectural, artistic, and historical heritage have been—and continues to be—subjected to destruction and vandalism (Hoteit, 2015b). Areas that are mostly affected

are: Mosul in Iraq; Aleppo, Homs, and Palmyra in Syria; in addition to the archeological monuments in Yemen (Figure 1).



**Figure 1**  
**Destruction of Ancient Houses (That Date Back to the 11<sup>th</sup> Century) in the UNESCO-Listed Heritage Site in the Old City of Yemeni Capital Sanaa, Yemen, 2015.**  
Source: AFP/Mohammed Huwais.

## 2. THE ROLE OF ARCHITECTURE IN DEALING WITH THE ARAB SOCIAL REALITY

*Architecture... is a social art and must rest on the social and cultural base of its time and place. For those of us who design and build, we must do so with an awareness of a more socially responsive architecture. (Mockbee, 1998)*

Architecture is closely linked to society; the social aspect constitutes an essential pillar in the formation of architecture, alongside both artistic and technical aspects. Architecture is the group of elements that make up the urban environment, occupies space and place, and directly affect human behaviors and interactions. It embraces the individual's life, his work, and activities (J. Tuqan, personal communication, July 6, 2012). Thus architecture is one of the basic factors that affect a human-being and his mental health, considering its fundamental connection to each moment of his life.

In addition, architecture helps in shaping the community, improving the quality of life, and achieving a comprehensive and sustainable development; all levels of development must be embodied physically through the architectural work or the building. It is true that sometimes architecture does not solve a problem entirely; however, it creates an appropriate environment that assists in reaching the proper solution (A. Lepik, personal communication, September, 2015). Architecture alone cannot bring to social change; change may come only through human will. It is, however, the means by which the human will is translated (Kassab, 2014). The architect has a major role in this context. He/she is required, along with

sociologists, economists, and psychologists, to be a social reformer and an environmental activist that contribute to the development of solutions to the urban problems.

In the face of these crises that are devastating the Arab world, and the reconstruction operations to be done in the future—after the end of the war and the return of the refugees—one wonders about the architecture that will be appropriate for this period, and how will it deal with the poor and marginalized classes which are the most affected by these conflicts and wars. Will the “Architecture of Stars” be appropriate? Here, the architects seek to develop their own brand, prioritizing it over the architectural work itself. It is also expensive so that only a limited class of wealthy clients can afford its cost. Or will a formalist architecture be better fitting? One that sanctifies the aesthetic and cognitive vision of the architects regardless of the contemporary social issues (Arnaout, 2014), and imposes on societies from above despite of their problems and priorities (Hoteit, 2015c).

It is established that any architectural approach must reflect the social, political or economic status experienced by the society at the time. Architecture, according to Jafar Tuqan (personal communication, July 6, 2012), is the most reliable reflection of the reality of a time and place. Most Arab countries have suffered from the control of tyrannical totalitarian regimes, a far cry from democracy and freedom of expression. They also suffered from the dependency on Western countries and their guardianship. Most of the current political systems have flaws such as corruption and bureaucracy, which were either destroyed by the recent revolutions, or are on the verge of collapse. The entire Arab world is witnessing very complex developments. There is a lack of trust in most of the current political systems, their ideas and promises, and in the architecture on which their regimes are based. Architecture in the Arab society has reached a critical point which requires reconsideration of the way that it is approached. It is not exercising its role as a mean to push civil society towards a structured system suitable for human development and prosperity. In addition, it is not attaining the same importance as it does in Western societies (Kassab, 2014).

What Arab societies need today is a sustainable, humanitarian, social, and participatory architecture. An architecture that reflects awareness of the state’s economic, social, and cultural reality, and distances itself from excessive expenditure. An architecture that recognizes the challenges of its country, and resorts to the use of local materials and techniques that rely on human labor more than on industry (J. Tuqan, personal communication, July 6, 2012). An architecture that is based on local participation as an essential factor in the development of local communities and in strengthening one’s feeling of belonging to his surroundings (Hoteit,

2015d). Finally, Arab societies need an architecture that is more authentic and aware of the identity of its land and people.

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### 3. PARTICIPATORY DESIGN IN ARCHITECTURE

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Participatory design is a democratic approach to design (Banna & Barakat, 2013), which is based on the right of local communities to participate in the planning and decision-making that affect their living and working conditions. The experts may master methodology and technique, but alone they are helpless in dealing with the problems of the society. People are more conscious and aware of their needs. Therefore, designs must stem from the people, and decisions must be welcomed by them as well (Ghanem, 2009).

Since its emergence in the early nineties, there has been great interest in participatory design in advanced societies, to the point that many international grants require community participation as a prerequisite of the funding requirements (UNDP, 1995). It is considered one of the basic approaches underlying social and humanitarian architecture, and is regarded as one of the most important trends in contemporary architecture, to the extent that it was chosen as the subject of the Biennale-Venice architecture exhibition for the current year of 2016. Additionally, the Chilean architect, Alejandro Aravena, a pioneer of this approach, was awarded the Pritzker Prize for 2016. When explaining the reason for awarding him the prize, the jury announced:

...He has a deep understanding of both architecture and civil society, as is reflected in his writing, his activism and his designs. The role of the architect is now being challenged to serve greater social and humanitarian needs, and Alejandro Aravena has clearly, generously and fully responded to this challenge.

In addition to the abovementioned, the local and regional labor market, especially within the Arab world, will witness the demand for experts with this approach, as the affected areas in Iraq, Yemen and Syria are in desperate need for this kind of approach in order to solve the problems facing reconstruction and to find shelter for the displaced. Likewise, it—that is, the humanitarian-social approach—contributes to promoting citizenship through the participation of local communities in decision-making. People of these communities will feel that they are influential, active and non-marginalized. This humanitarian-social approach will also contribute to the development of these communities in a sustainable manner by launching their hidden resources and empowering their capabilities. Development, according to Rahif Fayyad (2013), is based on “disengagement with the Western center and abandoning the attachment to it, and trying to build something different”.

However, the question remains: Can this approach be adopted in Arab societies? Are the Arab universities ready to teach it and comply with it?

#### 4. UNIVERSITY AND SOCIETY

“The profession of Architecture needs reform and education was the place to start” (Mokbee, 1998).

A university is a social institution created by society to serve part of its objectives. The university affects society through its functionality and is affected by the surrounding variables imposed by society and its activity (Bakeer, 2011). Thus, in face of the current reality of Arab societies, it is essential for university education to rise in an attempt to meet all these challenges. The university plays a path-finding and leading role in the development of society (Hassan, 2009). Therefore its expertise and programs must conform to the development plans and meet the special needs of the community and its urgent problems.

In the last three decades, many academics and researchers strongly criticized the teaching of architecture. They highlighted the need for architectural education to ensure that architects graduate with more awareness and a sense of responsibility towards the social needs of contemporary societies (Solanki & Sankat, 2015).

According to Salama (1995), the most prominent problem of architectural education is that it does not simulate interaction with customers and users, which is what distinguishes real life architectural practice. This results in a gap between what students learn and what they practice.

Most of the educational curricula of faculties of architecture in the Arab World are based on traditional approaches to design, ranging between two models. The first being the intuitive model, like the Black Box approach (Jones, 1970), in which the design process is internal. It occurs inside the minds of the designers with an incomprehensible or unjustifiable design process that even the designer himself cannot figure out. The other traditional approach is the rational model, referred to as the Glass Box approach, in which the design process is transparent and can be proved or justified and even recorded (Ibid.), although the design may not provide convincing justifications for each decision (Solanki & Sankat, 2015).

The contemporary or relatively new approach is the participatory approach, also known as Community Design (Sanoff, 2004). It is the result of the involvement of the end-user and all stakeholders actively and effectively in all stages of design, to ensure that the final design meets their needs.

The implementation of this approach requires skills and techniques in which the student or architect must be trained. Thus the academic architectural education must include in its curriculum articles and courses that enable

students to apply this approach. This could be achieved through a variety of techniques, including: simulations, undertaking published studies and research, conducting on-field studies, observations, interviews, engagement or living within the study population, and study and comprehension of the effects of the customs and traditions on the design. Additionally, it is necessary to develop courses that will include participatory design curricula in the architectural design studios. The local universities must also develop workshops that will facilitate participatory design in order to improve the ability of communities to make their demands and confirm their presence. It must also include among its expertise Design/Build programs that play a prominent role in the field of humanitarian architecture.

##### 4.1 Design/Build Programs

In the past two decades many non-profit organizations emerged to address poverty and other social problems of the marginalized communities. These organizations have contracted projects with many important and prestigious universities in the world. As a result, these universities took Design/Build programs into consideration within their expertise to meet the challenges and urgent materialistic needs of marginalized communities worldwide (Figure 2). These programs use the multidisciplinary fieldwork approach for teaching university students (Galvin, 2007). Sustainable building strategies for affordable building are used in collaboration with local residents and organizations.



**Figure 2**  
**Neighborhood Design/Build Studio at the University of Washington, Seattle, WA, United States**

Source: <http://arch.be.washington.edu/>

Design/Build studios play a major role in the field of social-humanitarian architecture. They prove to be effective in the application of strategies for sustainable growth in disadvantaged areas. They provide experiential learning and community-based research opportunities for students, and contribute to the development of the hosting community (Figure 3). Students graduate from the “academic classroom” and move to the “social classroom”. They acquire communication skills and become more capable in coping with the problems of the society (Hinson & Miller, 2013).



**Figure 3**  
**METI Handmade School, a Primary School for 168 Students Located in Rudrapur in Northern Bangladesh, Was Built With the Assistance of Local Craftsmen Making Use of Traditional Materials, Primarily Mud and Bamboo. An Example of Sustainable Architecture, the Project Received the Aga Khan Award for Architecture in 2007, Not Only for Its Simple, Humane Approach, and Beauty But Also for the Level of Cooperation Achieved Between Architects, Craftsmen, Clients and Users in Bangladesh. This School Is Considered to Be One of the Most Famous Buildings in the Humanitarian Architecture Field**

Source: Kurt Hörbst - [www.kurthoerbst.com](http://www.kurthoerbst.com)

Within the Design/Build studios, practical solutions to the problems of construction are developed. Students learn the manual work, and sometimes communicate and interact with construction workers in other countries and cultures, giving them the opportunity to discover other materials, such as bamboo and clay, for example (Heringer et al., 2013). Technology becomes more pronounced for students once it is integrated into its actual context. Hands-on training allows students to acquire familiarity with structure and composition as well as construction techniques and strategies.

Finally, the real Design/Build studio lessons aim to help students recognize the importance of their role and the feasibility of their work as architects. It also emphasizes important values such as: fortitude, perseverance, self-reliance, teamwork, and service to others.

#### **4.2 Final Year Projects and the National and Regional Challenges**

The outcome of academic architectural education crystallizes in the final year projects, where much effort and work are put in. They are approached from various aspects and supervised by a group of specialists in the field of architecture. In order not to waste this effort, a study mechanism is proposed that links these projects with national development plans and programs.

At first, and for the university to fulfill its role in serving the community, the final year projects in architecture in any country should reflect the themes of the social, economic and political reality of that country and contribute to the development of solutions for its problems and challenges (Hoteit, 1993). Therefore, choosing the subject of the final year project and how to approach it are considered two basic and important matters.

##### **4.2.1 Choosing the Subject of the Final Year Project**

The party that chooses the subjects differs from one university to another in the Arab world. In some universities, such as the Institute of Fine Arts at the Lebanese University (Lebanon), the choice is left to the student, who submits three proposals from which an assigned committee chooses one. Other universities, such as the Damascus University (Syria), impose on the student a range of topics to choose from. There are also universities, such as the American University of Beirut (Lebanon), which give the student the option to either submit a proposal, or choose from the departmental list of topics.

In order to realize the objective that is sought, a panel within the Department of Architecture—The final year project panel—can be formed. One whose task will be to prepare and propose subjects for final year projects that meet the needs of society. This can be done by communicating with various governmental institutions involved in public works and the urban sector, in addition to municipalities and strategic planning centers. This panel could also receive suggestions from non-governmental organizations or from the students themselves, resulting from their observation of an architectural or environmental problem. The work of this panel begins in the semester preceding the semester of the final year project completion. Its task also includes facilitating access to various project-related documents, maps, and information from the relevant official parties, which will facilitate the work of students later on. Its mission may also extend to include the promotion of final year projects, turning them into potential projects in the future.

##### **4.2.2 Approaching the Final Year Project**

When approaching the final year project, the following must be considered:

- The student should be aware of his responsibility to the community in which he lives and his role in improving the quality of life in it. This will happen through the contribution to the establishment of long-lasting humanitarian facilities (UNESCO/UIA Charter For Architectural Education, 2011), and the production of architecture that is relatable and cherished by its owners.
- Such projects should be designed from local and global perspectives. In the first perspective, the focus is on the elements of the local community

and its local resources. The architecture must grow from the daily lives of individuals and groups, i.e. it must follow a design strategy from the bottom upwards rather than top-down (A. Lepik, personal communication, September, 2015). This is because planning from the top downwards is based on solutions and standards, the implementation of which is not always in the best of people's interest. It does not take into account the reality of the local community or the privacy of the people for which it is designed. As for the second perspective, it is global and open to contemporary techniques in a manner that the architecture is characterized by innovation and development. The architect should, in short – and according to the title of the architectural exhibition, which was held at the Goethe-Institut Cairo in 2015— think globally and build socially.

- The approach should be according to the principles of sustainable development which focuses on the importance of community participation in decision-making, and in which the architect is a mediator, not just a planner. His role extends to guide and facilitate participatory operations.

## CONCLUSION AND RECOMMENDATIONS

Finally, for the university to realize its role in community service, it should not limit itself to the task of teaching; however, it must emphasize the importance of scientific research and its role in advancing the development process by providing scientific solutions to social and economic problems. This will not be achieved unless the universities are connected to research centers, which, regarding architecture, play a key role in maintaining the development of final year projects and making them feasible. In addition to its role in activating the role of the university, the research center helps the university to communicate with the various governmental and non-governmental institutions, and make use of its workshops as production centers.

Regarding the curricula: They must be constantly reviewed to keep up with the needs of the labor market and be able to accommodate the current developments and future technologies imposed by the nature of the era. This will help to secure the scientific and cultural needs of the students, develop their skills and abilities, and to link them to what is happening within their local environment and beyond.

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