An Architectural Tale of the Two Cities

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ABSTRACT: A comparative study of the corresponding styles of Western and Iranian modern architecture has hardly ever been carried out in detail. This paper aims to sketch out an outline for such an investigation and to present a summary of empirical evidence accompanied by field observations to elaborate the ongoing trend of relationship between architectural styles in Iran and that of the West. This is particularly the case from the last decades of the 19th century onwards in which a number of styles of architecture, commonly referred to as the imported/modern urban architecture, have had significant impact on our national architecture.
This paper will compare a number of cases in European cities and Tehran and examines their merits and interactions. It will be argued that despite the current professional contempt and the official disregard of these predominantly strong examples of modern architecture in Iran, they represent a valuable legacy of practice for architectural students, as well representing an important era in our urban history.

Keywords: Architecture, Neo-Classicism, Revivalism,Golden age,City

INTRODUCTION

It is intriguing to see the abundance of familiar architectural features and styles in both Iranian and European cities, when, spending time in either of these urban environments. This is particularly true of the legacy of modern architecture, as found in the various types of buildings, constructed, preserved or demolished in the cities concerned during the past two centuries.

The emphasis is not on sharing the current planning rules that apply, almost universally, world-wide. Nor is it about the lay-out of public spaces, streets, boulevards, shopping arcades, or even the movement of pedestrians and vehicles following the same pattern in modern cities of today.

It is about the direct correlation and impact of trends and styles of European architecture on the formation of various styles of architecture in Iran, and the lasting effects it may have had on the image of the cities in this country.

Before discussing this any further, it might be necessary to note that European architecture has passed through a number of stages since the early decades of the 18th century, ranging from:

- Neo-Classicism; from 1765 to around 1820 CE.

- Revivalism; from 1800 to 1910 CE. This period includes Art-Nouveau; Greek, Egyptian and various local revivals.

- Modernism; from 1910 to the present time; this includes Bauhaus, Functionalism, Art-Deco, Fascist architecture and the International Style.

To observe the aforementioned influence and to analyse the way in which European architecture has interacted with the evolution of Iranian architecture now, one might begin to look back a bit further and into the stages of different European architecture surfacing in this country; and the way in which the Iranian elite gained acquaintances to its elements and styles.

Qajar period (1796-1925) and Iranian Neo-Classicism

The earliest important contact between European and Iranian architecture would most probably have taken place around the early decades of the Qajar period (1845-1915) where, after two disastrous wars with Russia, the Iranian elite were suddenly forced to turn their attention to the West. Although this encounter was more a notice of the level of military progress and material achieved by the enemy, it effectively opened avenues of extensive interactions between Iran and the West. Among other things, a number of Iranian emissaries, politicians, and later even few Shahs, travelled to various capital cities of Europe and Russia.

The role of Istanbul, in that early contact, as the capital of the Ottoman Empire and with its magnificent architecture, should not also be forgotten. The public buildings and urban spaces

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of Istanbul presented a unique blend of both Western and traditional Islamic architecture that left a lasting impression on the Iranian elite visiting the city. This was a period between 1800 to1860, where Neo-Classicism was the dominant style of architecture in Europe and every country displayed a vast array of buildings in this style.

It was after such observations that Iranian elite of this period came back with some notions of neo-classical architecture in mind, and thought about constructing similar buildings in their own country.

The first group of buildings to be adorned with Neo-Classical features in Iran were the palaces and private dwellings of

internal layout and functional arrangements remained largely traditional.

This is perhaps unsurprising as the patterns of social structure in the Qajar period still had a long way to go before exhibiting fundamental change; even after the Constitutional Revolution of 1905.

The number of projects built in this manner, also, remained relatively small, and were predominantly confined to a limited number of clients from the members of urban economic/ political elite.

In the country at large, however, the impact of European Neo-Classicism was reflected in a more effective and profound

Fig. 1: Academy of Economics in Bucharest
Source: http://www.skyscrapercity.com/showthread.
php?t=920774&page=5

Fig. 2: Meydan Hasan Abad in Tehran, late 19th century
Source: Taken by Author

courtiers of different social standing and other members of the urban elite.

It can suggested that the early examples of this style were mainly constructions superficially affected by European architecture; so that while their façade and decorative features might have reflected an observable amount of the European Neo-Classicism and even traces of Baroque influences; their

form in other unexpected domains. Its significance was the emergence of a new local architectural style, which in its maturity, produced enduring examples of refined Iranian architecture. Unlike the early imitations, here a number of Iranian architects took the essence of "classicism" to heart and created buildings on the basis of their own classical architecture. The most noticeable examples of this style in

Fig. 3: Old Parliament Building 19th century
Source: http://www.arianews.com/tehraninf/Photo/htm_ptoto/4.htm

Fig. 4: Private residence of Mas'udia 19th century
Source: http://www.tebyan.net/index.aspx?pid=41824

Iran included buildings for newly emerging governmental functions, schools, and other public offices.

The newly established polytechnic school (Dar-ul-Funoon), founded by the reformist prime minister, Amir-Kabir (1851) is such an example. Here, while the usage of rectangular madrasa

Alburz College in Tehran (1920) is another example of modern Iranian schools built in this style during the first Pahlavi period, in which traditional architectural elements are used to create a modern public space.

One of the last examples to be constructed was the new post

Fig. 5: Dar-ul-Funoon 1851   Source: http://www.flickr.com/photos/aryamehr/sets/7215761095998176

Fig. 6: Alburz College 1920   Source: http://www.flickr.com/photos/aryamehr/sets/7215761095998176

plan, structural arches and decorative tile-work has created a pseudo-traditional architectural space, the concept of creating a building to encompass a modern educational establishment is rather innovative.

The overall result of this and other similar buildings can be seen as the dawn of a simple, appropriate and relatively successful style of architecture that can be considered Iranian "Neo-Classicism".[1]

This particular style remained attractive for a number of decades and very few other buildings of this style were created in subsequent years.(Wilber)

office building in central Tehran (1928) in which elements of nationalist/pre-Islamic architecture appeared in elevations, a signature of the Revivalist architecture set to emerge under Reza Shah.

A comparison between European and major Iranian cities of this period reveals little resemblance in the two architectural styles except in the original notion of re-inventing classical architecture.

The last decades of the 19th century witnessed the emergence of the Art Nouveau style of architecture in Europe that had no chance of being represented in Iran; and its effects (if

Fig. 7: Iranian national Museum 1937   Source: http://www.flickr.com/photos/aryamehr/2878029023/in/set-72157607425528014

Fig. 8: Central Post office Building 1928   Source: http://www.flickr.com/photos/aryamehr/sets/72157608408800119/

any) remained limited to some obscure wall-paintings in few homes. This was perhaps due to the lack of contact with the evolving trends of European architecture in this period, due to the turbulent years between 1890 and 1905 that preceded the Constitutional Revolution in Iran.

Revivalist and Fascist architecture in Iran (1925-1941)

The emergence of the Revivalist movement in Europe can be traced to the 19th century. Under this banner, a number of distinct styles of architecture were practiced in different European countries including Britain, Germany, France and Russia. The products of this were later termed with different names, such as Edwardian, Greek/ Egyptian/ Baroque Revival, and of course Art-Nouveau.

Iranian architecture of the time was also affected by this trend, and a similar Revivalist movement subsequently appeared in Iran. Iranian architects used their own previous experiences of local

The eventual end of the Qajar's despotic rule was another contributing factor that opened the way for the inclusion of "common people" within the traditional-tribal based circle of the ruling elite.(Ardalan)

The new dynasty needed to establish itself as distinct from the past both in form as well as the content. Reza Shah's government favoured a Revivalist architectural style that could present a blend of authoritarian/nationalist disposition within a pre-Islamic imperial guise. Ideological support for this movement in Iran also came from the growth of the Fascist governments in Europe, with highly symbolized monuments represented in their contemporary architecture.

The Iranian political authorities were thus encouraged to advance the cause with similar examples. This notion of reflecting power and authority in public buildings added a further dimension to the new Revivalist architectural style in Iran and produced a local style of the Fascist architecture, especially visible in official projects.

Fig. 9: Exposition Hall for International shows Brussels1936   Source: Taken by Author

Fig. 10: Ministry of Justice in Tehran
Source: http://www.old-tehran.net/15_1.jpg

Fig. 11: Revivalism   Source: Taken by Author

Fig. 12: fascist architecture in Tehran
Source: http://www.flickr.com/photos/aryamehr/
sets/72157610256589010/

neo-classicism, to produce a significant number of Revivalist projects. A pertinent basis for these architectural changes was the Constitutional Revolution of 1905 which to some extent altered the public and the ruling class composition, resulting in a limited degree of social change.

The authoritarian regime of Reza Shah collapsed in 1941 and a period of political chaos and social freedom ensued in which Iranian Fascist architecture also came to an end. But the advance of modern architecture in Iran was only just beginning.

Fig. 13: European Fascist architecture in Brussels and Rome 1930's   Source: http://www.flickr.com/photos/ary-amehr/3322766819/in/set-72157607866628652

Fig. 14: Fascist architecture of Reza shah period in Tehran   Source:http://salehat.ir/index.php?option=com_joomgallery&func=detail&id=172

The golden age of modern architecture (1930-1950)

Contrary to the imposing style of the governmental buildings, there were other public and private buildings that followed the early examples of modern European architecture with relative success. In a wider sense, the introduction of modern architecture in Iran was a by product of the Pahlavi regime's desire towards embracing the symbols of modernisation, to create a new bureaucratic system, a new army, and various other public establishments, including the Tehran University.

A number of European architects, such as Andre Godard, Maxime Siroux, and a handful of Iranian graduates of European schools of architecture, such as Froughi, were the protagonists of modern architecture in Iran.

Fig. 15: Art -deco building in Old Meydan-e Imam (left top corner)   Source: http://www.skyscrapercity.com/showthread.php?t=920774&page=5

Fig. 16: Hotel Union of Bucharest 1930's
Source: http://www.phalls.com/vbulletin/showthread.php?19827-%DA%DF%D3%E5%C7%ED-%DE%CF%ED%E3%ED

If the Iranian National Museum was a refined example of the Revivalist style by Godrad; his master plan for Tehran University was a clear introduction of the International style that had its roots firmly set in Art-Deco/Bauhaus and the modern tradition rather than the traditional Iranian architecture. Fittingly, is within Tehran University that new generation of Iranian architects were trained on the foundations laid by Godrad and his Iranian colleagues, all educated in Europe, particularly in the French des Beaux-Arts tradition.

As far as the impact of this new drive in Iranian architecture on ordinary buildings and urban housing schemes is concerned, the image of cities was gradually changed, from the traditional mud brick structures into brick, mortar and cement constructions, reflecting the contemporary European style of the time.

The most striking examples of ordinary buildings and corner blocks in this period of modern architecture were produced by generation of architects whose works are abundantly found in central Tehran, Enghelab Avenue, and around Tehran University (and all now sadly in grave danger of total demolition!).

The clarity of design principles, lines and volumes, plus fidelity

Fig. 17: Exposition Hall Brussels1936
Source: Taken by Author

Fig. 18: Fine Arts Faculty, Tehran 1934
Source: Taken by Author

Fig.19: Military academy, Bucharest 1930's
Source: http://www.skyscrapercity.com/showthread.
php?t=920774&page=5

Fig. 20: Fine Arts Faculty, Tehran 1934
Source:http://en.wikipedia.org/wiki/File:UTEH_FA1.jpg

Fig. 21: Art-deco motivated housing style in central Tehran   (Source: Taken by Author)

Fig. 22: Bucharest, 1930's
Source:http://www.skyscrapercity.com/showthread.
php?t=920774&page=5

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Fig. 23: Art-deco motivated style buildings in Tehran
Source: http://www.flickr.com/photos/ary-
amehr/3145030862/

Fig. 24: Bucharest, 1940's
Source: http://www.skyscrapercity.com/
showthread.php?t=920774&page=5

Fig. 25: Hotel Laleh, Lale-zar Avenue, Tehran 1940's   Source: http://www.flickr.com/
photos/aryamehr/3166440290/

Fig. 26: Modern architecture in Bucharest
Source: http://www.skyscrapercity.com/
showthread.php?t=920774&page=5

Fig. 27: Ferdosi Super-store Building Tehran, 1930's
Source: http://www.flickr.com/photos/aryamehr/
sets/72157609735133937/

to the original features of modern architecture in this period is so overwhelming that neither the ravages of time, nor the accumulated junk covering their facades, has been able to hide them completely from the view.

The same observation is true about the multifunctional/residential-commercial buildings built in this period that one might still find intact, concealed behind their simple aesthetic elegance and the seemingly ageless functionality.

These are the similarities of forms and styles that an Iranian visitor would find familiar in European cities. But unlike in Europe, the architectural products of this period are not favoured in Iran, hence, they have mostly disappeared, are partly or immensely damaged, and their numbers are generally in sharp decline.

They are still not recognised as historical assets or culturally valuable buildings to be preserved. In fact, at this precise moment in history, there are bulldozers at work, under the nose of the country's leading college of architecture, to clear the neighbourhood around Tehran University of these works to make room for its proposed expansion.

The legacy of Iranian modern architecture is yet to be acknowledged registered and preserved by the Iranian architectural establishment.

Therefore, the period after 1950s, which coincides with the advancement of the so- called International style of architecture, is not within the scope of this paper. In particular, owing to the rapid urbanisation process in Iran during the 50s, 60s and beyond, the character, organisation and the quantity of the architectural projects undertaken was staggeringly altered. By this the dominant form of architecture in Iranian cities firmly followed the international trend and the result has been almost like any other major city around the world.

There have arguments stating that the case for cities is different. They are chaotic, jumbled and partly dysfunctional, we have been told. In Tehran, like some of other major Iranian cities, there is a sense of desperation and nostalgia for the past, often giving rise to criticism of the current state of affairs.

But is there really a difference that architecture alone has made? Of course part of the answer might be in the pace of change in each society; the way that rules are applied, the very construction details.

It has, however, a lot to do with an acknowledgment and preservation of architectural legacy in each country. Possibly, to demolish the fruits of our own labour, gradually and systematically, has become an unconscious convention for us in Iran.

Fig. 28: Art-deco style building in Bucharest
Source: http://www.skyscrapercity.com/showthread.
php?t=920774&page=5

Fig. 29: famous coffee-shop Building in Tehran, 1930's
Source:http://yaldabox.com/photo/

Economic change and the rapid urbanisation period (1950-1970)

The focus of this paper has been to put forward a possible lay-out for a comprehensive study of the legacy of modern architecture in Iran. A possible investigation is required to shed light on this forgotten, and often ignored, period of Iranian architecture.

While, the products of the period discussed were wiped out during the past forty years, or snarled at and taken to pieces on every occasion, in other cities, like Brussels, they have been recognised and kept as a partial history of urban growth, as with many other examples of the past that they have kept intact. Perhaps, it is this sense of continuity that grants them order, tranquillity and satisfaction with their own urban image.

CONCLUSION

As observed, Iranian architecture of the19th and 20th century has been gradually and invariably influenced by changing trends in Western architecture. The pace and the nature of this interaction, however, have gone through various stages.

Soon after early contact between the two traditions, Iranian architects seem to have moved from a period of utter fascination - reflected in the public and private buildings of the early Qajar period where the eagerness to adopt the European architectural themes, elements and motifs is evident- to a period of architectural renewal and local Neo-Classicism.

In that period, attempts were made to create architectural works, using traditional motifs and materials, to bestow upon them a distinct Iranian character. A number of native and non-Iranian architects were involved in this process and the result of their conscious and dedicated efforts has now remained a valuable architectural heritage.

An anomaly of this period was, however, the effects of political upheavals in the West which led to the emergence of the fascist and dictatorial regimes in Europe. The adverse result of the European fascist architecture on Iranian architectural practice was the emergence of a similar style of architecture in which the pre-Islamic motifs and elements were predominantly used to create a number of imposing and repressive public buildings. The collapse of the Reza Shah's regime and the rise of Mohammad Reza Pahlavi during the latter years of the Second World War was a period of direct contact between Iranian architects and their Western counterparts. A number of these people were educated in European universities, lived there for a while, and upon their return to Iran, they came to establish the foundations of the modern architecture there. As observed, the projects produced in this period, both in form and style, directly correspond to those of their analogous examples in the West.

This level of enthusiasm and familiarity between Iranian architects and European trends remained steady throughout the first half of the 20ᵗʰ century until the oil boom and an age of rapid urbanisation changed the momentum.

During the late 50s and after, the Iranian style of architecture followed the so-called International Style mainly derived from the North American examples.

A combination of accelerated urban development, the utilisation of new building materials, and a sense of breaking free from tradition, produced a vast array of architectural projects, in different forms and styles. According to the professionals, the overall impact of these hasty productions has been negative. Our current architectural reserve has been regarded as hotchpotch ensemble of different tastes and styles, ranging from the totally hideous to reasonably successful examples; an ongoing trend that is still in motion.

Is it right to now propose that Iranian cities of today and their encompassing architecture lack a cohesive urban image or some sort of common identity, as some critics have suggested? Are we correct in branding them as "bastards" to their native traditions?

To find the answer, we might need to observe the relationships between these and the global trends of architectural changes in our own time; and to consider the current products as the results of historical events relating to the growth of the urban economy, population and material progress.

Comparing the modern architecture of the European cities, with that of Tehran tells a different story. It demonstrates the fact that cities in the age of expanding globalism, to some degrees, have experienced the same influential forces of change and innovation. The forms, styles and outcome might, also, not have been too far removed from each other.

Perhaps, it is only our professional self-confidence and historical assessment of our own products that makes the difference. Compared to cities such as Brussels, our violent reaction to demolish our buildings in Tehran and other major Iranian

Fig. 30: Anomaly of modern architecture in Brussels 1999; any different from Tehran!
Source: Taken by Author

Fig. 31: Tradition versus modernity!
Source: Taken by Author

Fig. 32: Brussels 2011
Source: http://www.futuregov.asia/photologue/photo/eu-com-mission-building/

cities every ten to twenty years has deprived us from observing harmonious architectural changes in the fullness of time.

Perhaps, we could enhance our urban image if we tried to understand, care and preserve, the best of our past; to maintain a gradual rhythm of transformation in our urban architecture and let it be decided by its own merits. Historically, it has never been possible to clean, as we have often tried to do, and hope for our utopia to independently materialise.

The inclusion of Brussels in the European Union, for instance, has so far opened a new chapter in its urban image and has brought to light a number of new architectural works relating to the needs of the EU. This historical event has of course transformed part of the city, and altered its sky-line noticeably. Yet, so far it has not been devastating to the architectural heritage of the city, and remaining as it is, will be a welcome addition to the city's vast collection of architectural styles.

Now, if so much change and difference in spatial design and the introduction of styles are practical, acceptable and even desirable for a capital European capital city, then why do we have to assume that the arrival of any changes in Tehran has been equal to chaos and disorder? It is probably because we perceive the "change" differently.

ENDNOTES

1.It has been also termed as "Neo-traditionalism" in other writings; see for example: Intellectual Trends in the Contemporary Iranian Architecture and Urbanism (1979-2003), M.Habibi, Cultural Research Bureau, pp.9-49

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Table 5: Green architecture, sustainability indicators Source: Authors

Row	City	Sustainability indicators of green architectural
1	Mawson Lakes	• Directing the buildings toward the light of north. • Spreading the glass in appearance of the building. • Using the trees that offer shad in summer and prevents light passing in winter.
2	Teviot Downs	• Keeping the environmental life condition.
3	Nathanvale	
4	Beddington	• Using the natural form of the site. • Choosing the material that their sources are not further than 60 kilometers. • Using natural, recyclable and reviving materials. • Using materials that are less allergic. • Weather harmony. • Directing the buildings in a way that gets sunlight in the winter and keeps it out in summer. • Natural efficient ventilation.
5	Subi Centro	
6	Christie Walk	• Designing through natural factors.
7	New RoseHill	• Designing the building in a way that directions of the windows are convenient for using the natural ventilation. • Edged roofs for creating shade. • Using the materials of the region, like: lumbers of the region's jungles. • Using the ceiling fans for natural ventilation. • Using green concrete (60% recyclable) for concreting the directions of bicycles and pedestrians. • Used materials in construction should be recyclable.
8	Austin	• Constructing green space.
9	Boulder	• Management of loses and prevention of pollution. • Controlling the water quality through educational plans of pollution test.
10	Chattanooga	
11	Chittenden	
12	Metro-dade	• Reducing the dioxide carbon.
13	phoenix	• Reducing loses and recycling the trashes. • Reducing loses and green road plans. • Prevention of pollution through burning the trashes.
14	Portland	• prevention of air pollution through planning in transportation field. • Attempts for reducing the pollution through helping the local societies for changing into fuel. • Increasing knowledge of the people about urban polluters and storm waters.

RESULT AND DISCUSSION

In this paper, it has been attempted to describe and evaluate the sustainability indicators of The United States, Australia in order to adapt them with new towns of Iran. The pattern of the sustainably developed city can be manifested in forms of history, culture; economic of the region .Codification of sustainability indicators is considered one of the main strategy of sustainable development. According to the figure 1, we conclude that less than 50% of the residential areas have studied the land use .It seems that sustainability indicators of land use have been less under attention against their importance. Also this figure shows that Beddington with the most privilege is the most sustainably developed city according to the sustainability indicators of land use. Subi Centro is in the second place and Teviot Downs is in the third position and Portland, Metro-dade, Boulder cities are of the same rank.
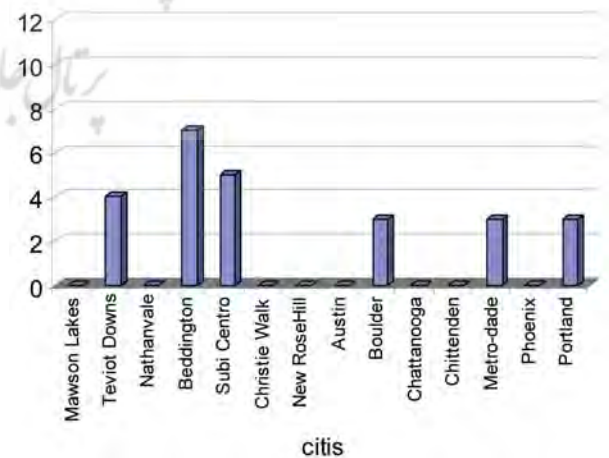

Fig.1: Indicators of sustainable land use in the American and Australian cities   Source: Authors

According to the figure2, we conclude that just about 35 percent of cities studied the sustainable development transportation that is a low percentage .This figure, shows that Bedding ton city is in the first position in terms of transportation and Subi Centro, New RoseHill and Austin are respectively in second, third and fourth position.
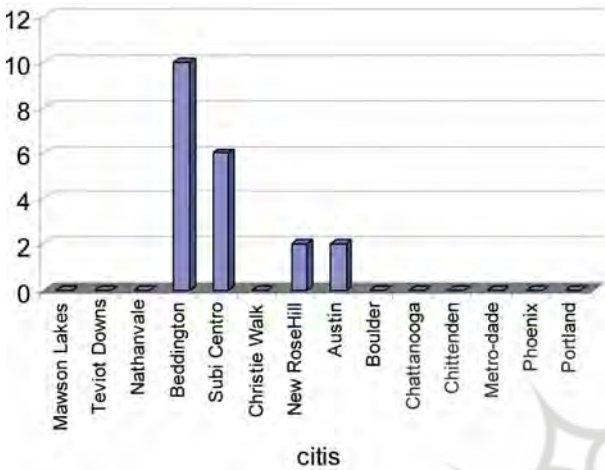

Fig. 2: Indicators of sustainable transport in the America and Australian cities   Source: Authors

The figure3 shows that according to the ecological sustainability indicators, Chattanooga with grade of 18 is in the first position and Chittenden and Nathanvale with grade of 14 are in the second position and Subi Centro with grade of 13 is in the thired and Teviot Downs is in the forth position and phoenix, Boulder and finally Metro-dade and Beddington are in the next positions. It seems that most of the cities have been studied in terms of the ecological sustainability Indicators are more applicable through them.
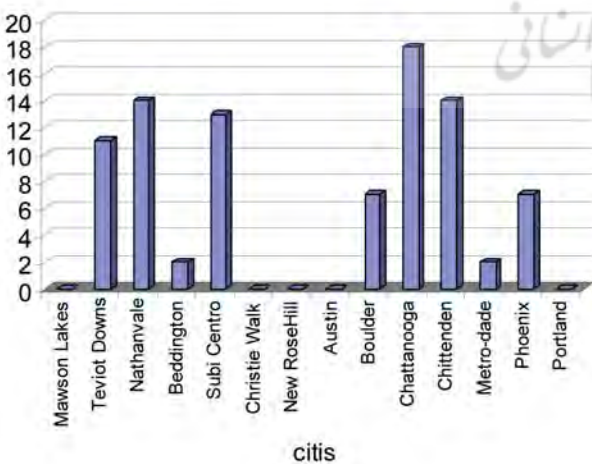

Fig. 3: Indicators of ecological sustainability in the America and Australian cities Source: Authors

According to the figure4 we conclude that just 20% of the cities do not have the energy and recycling indicators. In this study, Beddington with the most privilege is in the first position and respectively Mawsonlakes with 28 privileges is in the second position and phoenix with privilege of 26 is in the third position and Austin with 24 privilege is in the fourth position, then respectively Christwalk, Chattanooga, New RoseHill, Teviot Downs, Portland, Boulder, Chittenden are in the next positions.
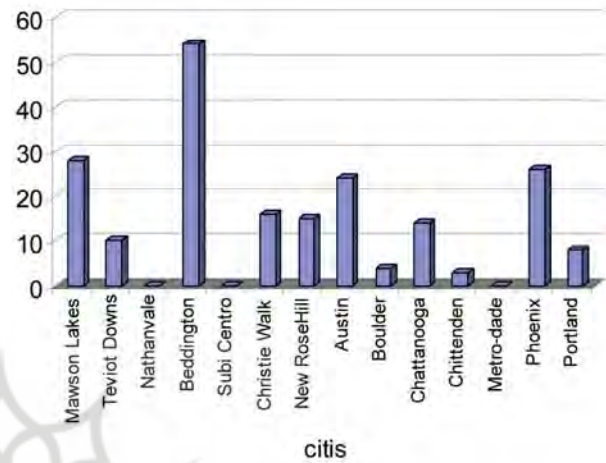

Fig. 4: Indicators of energy sustainability and recycling in the America and Australian cities   Source: Authors

Trough studying the figure5 it can be said that Beddington with 25 privilege is in the first position .New RoseHill with 22 privilege is in the second position ,Portland with 18 privilege is in the third position and then Mawsonlake, Metro-dade, phoenix and Subi Centro are respectively in the next positions. Trough this explanation, it can be concluded that just less percentage of cities that have no green architecture sustainability indicators have not been studied.
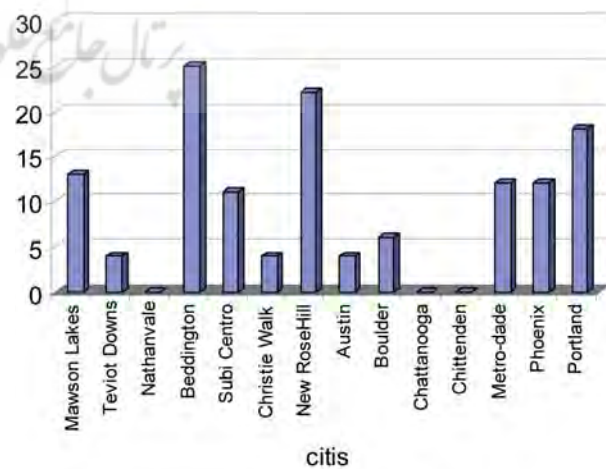

Fig. 5: Indicators of green architecture sustainable in the America and Australian cities   Source: Authors

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CONCLUSION

An analysis of the environmental sustainability indicators is an effective way in offering methods to make a framework environmental indicators of Iranian new-towns. It might be concluded that environmental sustainability in sustainably developed cities totally depend upon their local and environmental conditions. Depending upon its environmental condition each city has different sustainability indicators. In order to find a complete framework for environmental sustainability indicators of Iranian new-towns, a study of samples from different environmental dimensions is necessary. Based on the present study it can also be concluded that energy and recycling and green architecture are the most principle fields in making the environmental sustainability indicators the most important issues among the cities under study. The energy and recycling and green architecture with a frequency of 78.6% are the two studied principle issues related to the sustainability among cities. The third factor is the ecology with a frequency of 64.5%. The fourth effective factor in urban sustainability is the land use which has a frequency of 43% among the cities under study. Finally. Transportation, with a frequency of 30% is the last effective factor in urban sustainability. Thus, through codification of sustainability indicators in fields such as: 1. Energy and recycling 2. Green architecture 3. Localoly and finally, transportation an effective step can be taken towards environmental sustainability in Iranian new-towns.

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A Review on the Extent of Urban Design Intervention in Iran's Architectural Structures for Interaction with Architectural Innovation

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ABSTRACT: The intervention of urban design in Iran's architectural structures has been for many years a challenging issue for architects and urban designers over their professional realm. The preservation of architectural structures in Iran has always resorted to extremes. This control and direction has sometimes resulted in exclusion of architecture position and has sometimes, once faced with lack of proper direction, led to confusion in urban realm and environment. This study reviews the theoretical literature including issues such as context, urban design realm as well as urban design control and then investigates a number of case studies selected from urban design measures carried out in Iran in order to identify the weaknesses and the reasons behind them. In regard to the theoretical basis achieved through literature review and the current procedures in Iran and also an analytic framework research, it seems that through modification of the executive system, implementation process for projects, application of urban design review tools for projects controlling, attention to gradual enlargement of cities and lack of certainty in design predictions in urban design process, the current challenge in Iran among architects and urban designers can be minimized. So the results of this analysis will illustrate a new vision- a native one - for alternative policies in relation between architecture structures and urban design controls.

Keywords: Flexibility, Context, Urban Design Control, Creative Architecture, Urban Space

INTRODUCTION

Since the introduction of urban design as an independent major, the trace of the subject of this study is indirectly considered in some parts of the theoretical literature of urban design. For instance: within the studies which urban designers have conducted in order to determine the urban design realm, they have proposed a variety of different viewpoints regarding the position of architecture and the influence of urban design. (Stein, 1955, Barnett, 1982, Gosling et al., 1984)

In theoretical literature of design which deals with contextual architecture, landmarks and monumental architecture, a number of related issues can be found. Emphasis on the context and architecture's imitation of context or attention to it in designing single monuments of architecture in addition to defining the position of landmark architecture in the realm of urban environment is among this group of theoretical issues.

(Brolin, 1980, Cantacuzino, 1994, Kunibert et al., 2010) Different perspectives in experiences and transcripts pertaining to urban design, which deal with issues related to urban environment, particularly visual control, indicate the significance of this subject in the scientific and professional circles of urban design.

(Scheer et al., 1998, Duanyet al., 2000, Carmona, 2009) Although there is no definite answer for this challenge in world theoretical literature, proposing this issue in different realms of urban design intensifies its significance. In Iran, the facts such as "urban environment is a new phenomenon, urban design is a new major and the confusion and irregularity arising from recent irregular construction" have resulted in the emergence of an uncertain atmosphere in terms of controlling and methods of controlling architectural structures which increased the challenge between architects and urban designers. Therefore, adding up the literature of this issue with the science of

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urban design in Iran can pave the ground to fill one of the shortcomings urban designers (who are typically architects themselves) face in their challenge with architects and in the process of designing an urban environment.

1.Literature Review

The literature review deals with three subjects of responsibilities of urban design and the extent of urban design intervention in the realm of architecture, context and its opposition with architectural innovation and urban design control tools, which constitute the related theoretical branches. At the end, a summary will be provided on this issue.

1-1.Urban Design Intervention in the Realm of Architecture

It is obvious that urban planners deal with the allocation of resources for future needs and architects just pay attention to the information on the basis of which single constructions can be built. However, there is a substantial middle ground between these two professions which cannot be filled by either one completely (Barnett, 1982). Therefore, urban design is a bridge between urban planning and architecture (Beckley, 1986). In addition, it is a part of the process of planning which deals with the environmental physical quality (Shirvani, 1990).

Determining the responsibilities and the realm of urban design intervention is an overwhelming task. Although the responsibility of urban design is to design the physical and spatial design of the built environment (Shirvani, 1990), there are two perspectives in regard to the realm of its intervention: one of the roles of urban design is the creator and the other one is urban design as the guide of urban environment and not its creator. The first perspective is clearer for the early theoreticians of this profession. The latter perspective, however, does not consider urban designers as the creators of the built environment and are confidence that they make decisions which enable others to create and establish a built environment. In fact, they set "the game rules" for architects and other related professions (Trieb, 1974) and these rules can be seen in the form of visions, guidelines, and standards. In urban design the intention is to show the built environment without designing the details (Shibley, 1982: Lai, 1998). Therefore, urban design is considered a higher order, in such a way that it is indirectly related to the subject of design and is one step away from design; thus it is regarded as a second order design.

1-2.Architects Creativity Opposed to Contex

"Context is referred to as a number of general aspects of architecture, colors, repetition of components and physical components which exist on the edge of the streets and are considered as the factors of its unity and identity" (Zekavat, 2002). The establishment of new buildings in the available context and maintenance of available buildings as the context have become serious concerns. Some are of the conviction that contextualism is a reaction to post-war constructions

(Cantacuzino, 1994) and some others believe that it is a reply to the education that modern era architects have gone through (Carmona, 2009). In the historical path of the 20th century, three main approaches are clear in regard to the attention or absence of attention of architecture toward context:

The first approach emerged along with the beginning of modernism and attention to historical break. The architects in this period such as Le,corbosier and other modern pioneers supported this perspective. They believed in ignoring the context with the aim of establishing architectural contrast and creation (Brolin, 1976). This approach pays attention to the issue of architectural design as a pure art and believes in slight or lack of intervention in what a single designer or artist performs. They regard the further tyranny against the emergence of their creative art as being rooted in the context and restrictions that have been imposed on them (Carmona, 2009).

John Lang states that the majority of significant architectural works do not regard the role of the building they design in having good streets, unless they use the context as the background for a play. The majority of architectural critics support this issue. They regard building as artistic works. From this perspective, people have to live with some achievements under the name of art (Lang, 2005).

The second approach was formed with the fall of modern movement and the emergence of post-modern thoughts in the realm of architect believes in the priority of context to architecture. This group doubts the significance of creativity in urban environment (Carmona, 2009) and is of the conviction that the individuals or groups that can challenge the avant-garde by their designs are in fact moving towards another problem with their opposition against following the general rules. Defending art will result in an opposition with enjoyment of city (Lang, 2005). Based on this issue, giving priority to city and its landscape in contrast to individual creativity of architects, the priority of context to innovative architecture is emphasized (Brolin, 1976).

The third approach supports the interactive perspective which is manifested in the viewpoints of recent urban designers and has become manifested in the recent literature review by going through post-modern thoughts. The priority of architecture on urban environment is definitely not desirable; however, to get rid of the opportunity of avant-garde architecture is impossible. What is being constructed must be innovative and creative and go beyond the boundaries of art (Cantacuzino, 1994, Alexander, 2010).

1-3.Tools of Urban Design Control

The challenge faced by architects and urban designers reaches maximum when urban design attempts to control and guide architecture. In the urban construction of other countries, the controlling tool for urban design can be identified under the framework of urban design guidance and urban design review documents. The urban design system in other countries is mainly implemented whether separated or linked to planning

process (Carmona et al., 2003, Talen, 2009).

For instance, urban design control in the UK is totally separated from the planning process. In this country, in order to evaluate projects, urban design review is used at all levels from policy-making at beginning to request for issuing permissions (Hall, 1996). In Germany and French, strategic plans are provided for large projects and they are usually completed at the national level. In the strategic plan, urban design guidance has the controlling role; however, in some cases urban design review is being used (Carmonaet al., 2003). In Asian cities, local governments attempt to add urban design controls to the zoning system but it has not been very successful in regard to enhancing environmental quality (Punter, 1999).

In line with minimizing the challenge between architects and urban designers, the flexibility of controls plays an important role. The prescriptive degree of the criteria or its flexibility depends on the desirable control level. Lack of flexibility in the guides or urban design review encourages the imitation and lightening the validity of location (Scheer et al., 1998).

The problems regarding urban design control can be categorized into four groups, including:

1. The controls which deal with superficial issues such as the color of protections which do not add the environmental quality.

2. The controls that go to extremes and try to make decisions for all design-related issues and thus result in acting according to a formula and make the designer architect's presence unnecessary (Scheer et al., 1998).

3. The controls which are used regardless of congruity or location.

4. The controls which focus on simple violations to achieve the desirable design.

All these issues are the result of reductions or lack of flexibility and will lead to lack of variety, excitement, and happiness in the urban realm. Therefore, instead of reducing the control's flexibility, it is better to review the efficiency and the issues related to it. In addition, if we pay attention to the fact that the formation of a city is gradual by nature and is not sudden (Alexander, 1987, Row, 2011); the necessity for lack of policy-making for all the components of a building and flexibility in policies will become clearer.

Therefore, the theoretical literature review is on the one hand the result of agreement in the perspectives of a large number of contemporary urban designers, dealt with by Varkki George, Trieb, Shirvani, Shibley, and Carmona who introduced the urban designer as a second-order agent in designing urban environments. On the other hand, in regard to context-related issues it refers to viewpoints of recent theoreticians who have interactive viewpoints on both sides of the matter, i.e. attention to the available context while maintaining the role and position of the original architect.

It is also based on Alexander's idea in regard to the nature of gradual formation of the city and advocates the fact that definite prediction of the impact of urban design intervention is not possible in the majority of cases due to the gradual nature of urban development. Therefore, it is useless and unrealistic to set responsibilities for all the components of architecture.

2. Study and Evaluation of Current Trend in Iran

Based on the variety and complexity of urban design measures in Iran, this part of the study attempts to identify and categorize the measures, select a number of case studies among them and then identify and appraise the problems in the current trend of urban design measures in Iran using the results gained from the study and analysis of such cases.

2-1.Categorization Urban Design Measures in Iran and Selection of Case Studies

Identification and categorization of urban design measures in Iran is very complex given that urban design is a new major in Iran and on the other hand, most of the measures which are conducted under the name of urban and regional planning projects, environmental design, landscape architecture and even architecture are urban design by nature. In addition, most of the projects defined as urban design projects are different from the major. This part of the study is conducted to categorize the urban design measures in Iran with the aim of identifying selected case studies. It seems that urban design measures in Iran can be categorized based on the following criteria:

1. Implementaion.

2. Type of development including infill development (development inside the existing texture), annexation development (creating new development along with the existing texture) and new development (constructing a new urban area).

3. Actions scale which includes three levels of enormous, average and small.

4. Area of urban environment domination which is opened according to the significance and the service that the environment provides in the city.

5. Development on the basis of process-oriented or product-oriented perspective.

6. Urban design measures in which design is done by architectural teams or in which the design teams have the main responsibility.

7. Urban design measures which are not regarded as urban design but by nature deal with urban design.

8. Categorizing based on the product and result of the design process that includes text, 3 dimensional pattern or both at the same time.

9. Categorizing great integrated developments (in which the employer is the same as the project's architect) into two groups. One is formed based on an urban design project and the other lacks urban design.

10. The decisions taken as bylaws, decisions of expert and non-expert committees and their impacts on urban environments.

11. Perception and awareness of employers on whether

employers have command of the design process and formation of urban environments.

In order to introduce and analyze the case studies, on the one hand, it is important to categorize the cases on the basis of their distinguishing features and on the other hand it is not possible to consider clear and vivid boundaries for issues due to the significance of the study's quality. In addition, it seems that all different types of the existing urban design projects, no matter what the category is, are considered as a type of development in such a way that they are either new developments or infill development and annexation development.

After investigating 32 cases related to the subject of this study, 9 cases, which are more prominent and secure higher subject matter variety, were selected. Among the new development projects which have been constructed in Iran, three new cities of Baharestan, Parand, and Pooladshahr have been selected. Among the few annexation developments in Iran the three developments regarding Shoshtar No, Navab Safavi highway, and Saheb Al-Zaman streets have been selected. Among infill developments, three projects pertaining to Tehran's Inghelab Ave, Isfahan's Charbagh Abasi Ave. and Bam's Imam Khomeini Ave. are studied. Table 1 illustrates the status of the selected urban design projects as categorized according to the abovementioned urban design measures.

2-2. Results of Study and Analysis of Case Studies

The results obtained from studying the selected case studies indicate that there is a large challenge between architects and urban designers in country. Further investigation of the documents related to case studies led to identification of three

fundamental factors pertaining to this huge challenge; First, the challenge resulting from **weakness of the legal position of urban design in Iran's urban construction system** and its impacts on controlling single architectural constructions, Second, **the prescriptive controls** which are done regardless of the scale, type and nature of urban development, Third, the existence of **comprehensive control** to the extent of an architectural construction details.

The results of the weakness in the legal position of the urban construction system in Iran eventually results in the challenge between architecture and urban designers because in Iran's system, which is legally based on a comprehensive and detailed project, on the one hand, there is not a potential for identification, understanding and control of the quality-based aspects of the city and the result is priority of quantity-based aspects over quality-based ones in urban projects. In addition, this is due to absence of arrangement between legal and official tools of urban construction in Iran and the quality layers of the city as well as the application of quantity tools for quality control. This significant issue results in the fact that controlling single architectural construction moves towards a strict easy-going approach so to match it with quantity-based tools of control. This orientation is in contrast with creativity, which is an inseparable principle for architectural design. Consequently, the challenges will emerge.

On the other hand, the role of urban designers will be weakened in the realm of urban environment and it will result in the exclusion of interactive perspective. Even if this control is in the form of an integrated large architecture by architects (since everything is pre-determined in such projects), the position

Table 1: Identification of selected case studies among urban design measures in Iran   Source:Authors

Type of development		New			Annexation			Infill	
Name of urban design measure in Iran		Parand new city	Pooladshahr new city	New Shushtar	Navab Safavi highway	Shohada Ave and Sq. in Mashhad	Inghelab St. in Tehran	Charbagh St. in Isfahan	Imama Khumeini st. in Bam
implementation	implemented	✓	✓	✓	✓	✓			
	Un-implemented						Under construction	✓ Under construction	Under construction
scale	Enormous	✓	v	✓					
	average				✓			✓	✓	✓
	small					✓	✓			
Action area and domination	Enormous					✓		✓	✓	✓
	average				✓		✓			
	small									

Table 1: Identification of selected case studies among urban design measures in Iran   Source:Authors

orientation	product-oriented			✓	✓	✓	✓		v	
	Process-oriented	✓	✓					✓		✓
Result of the project	Text	✓	✓							
	3D pattern			✓	✓	✓			✓	
	Text and 3D pattern						✓	✓		✓
Profession of designers	architect	✓		✓	✓	✓			✓	
	Urban designer		✓				✓	✓		✓
Integrated large development	Without urban design	✓	✓						✓	
	Based on urban design			✓	✓	✓	✓	✓		✓

of innovative architecture will be removed, and this is what happened in New Shushtar and Navab.

The high level of prescriptive aspect in urban design controls in Iran, which is itself one of the main reasons behind the emergence of large challenges between architects and urban designers, has emerged due to different reasons. In Iran, the ending of the design process of an urban design project will be the ending of the activities of design team. This is while most of the events are manifested in the implementation phase of the project, which itself requires decision-making. Therefore, lack of trust in the executive system of the projects and its inefficiency in the majority of cases results in urban design control to become prescriptive and also a clear emphasis on the issues which might change the future of the project in the long-run. On the other hand, the low level of prescription might result in misuse of regulations and it will change the future of the project. This is while if certain grounds are provided in the process of implementing the projects, logical decisions might provide architects with the opportunity to have innovations and it will eventually enhance the quality of urban environment.

The undeniable impact of non-expert decisions on the face of cities, whether it is due to the intervention of non-expert employers or designing single constructions, enhances the excessive prescriptive controls on single architectural constructions. The examples are Bam's Imam Khomeini St., Mashad's Shohada Sq. and Mashad's Sahib Al-Zaman St. however it seems that reforming the factors affecting implementation process of projects, and this problem will be minimized.

The third is the effects arising from comprehensive controls, at the level of architectural details, which is the result of the absence of trust in the future of the project with regard to its current trend in Iran as well as doubts on the formation of architecture in line with the objectives of the project and the existence of large integrated projects that are the result of comprehensive control in all aspects and designing to the level of architectural details. Absence of attention to the nature of gradual growth in urban developments in Iran is one of the

other issues which results in comprehensive control. However, in urban projects it is necessary to pay attention to two factors of time and location and have the required flexibility for confronting the unknown and uncertainty in common predictions of planning. In addition, it should not be forgotten that the expectation of employers affects this issue as well. In the majority of urban design projects, the employer guides the project towards comprehensive control in all aspects. Therefore, reforming the current trend in Iran and providing the grounds are among the important factors which need to be taken into account in line with minimizing this challenge.

CONCLUSION

Regarding the findings of theoretical literature of the project, which is the key for establishing interaction and minimizing the challenge between architects and urban designers, they are categorized into three groups of urban designer as a secondary order in designing, establishing interaction between context and architectural innovation, and attention to the gradual growth of the city, the current condition in Iran dictates a number of issues which have propelled urban design towards excessive prescription of controls. It seems that in order to have better conditions for stimulating the innovation of the architects and enhancing the quality level of urban environment, it is necessary to establish reforms in the perception of creators of urban environment and in the country's system in order to establish interaction between architects and urban designers. Therefore, the results of this study can be summarized under three groups; context of urban design, controlling tools of urban design, and attention to the identity to urban design.

In Iran, the balance of perspective towards priority of context and creating opportunities for providing monument and out of context architecture and avoiding context imitation in architectural works, flexibility of controlling tool and attention to the quality of urban design in contrast to its quantity, reforming the system of implementation of the project using urban design tool review, enhancing the professional skills of executors, reducing the impact of people on the future of

Table 2: introduction and categorization of the findings   Source:Authors

theoretical framework	issue	reforming the method of intervention of urban design	reforming the current procedure in Iran	
Urban design is first-order -design	context	attention to the type of context instead of controlling the appearance of the construction	reforming the absolute context-based vision in Iran	
		attention to the identity of location architecture instead of imitating context architecture		
		providing opportunities for introducing out-of-context and monument architecture		
	urban design control tool	correlation between urban design intervention and development scale	enhancing the legal position of urban design in the urban system of Iran	strengthening quality aspects in comparison to quantity aspects in control tools
				avoiding quantity-based controls for quality matters
		using flexible control tool	reduction of prescription level	using urban design review along with guidelines
				presence of design team in implementation phase
		reduction of prescription on controlling urban design	reforming executive system	enhancing the professional skills of the project's executors or substituting them with capable ones
Piecemeal urban growth	attention to substantial fact of city	attention to the process-oriented aspect of urban design	reforming the executive system	reduction of the effect of people (clients) on the process of urban design and substituting them with expert group
				changing the perspective of employers and attention to the aspect of uncertainty in design predictions
		urban design to the level of defining the small aspects of the growth changes	avoiding sudden decisions and avoiding large-scale and integrated architectural projects	

projects and forming expert teams in the execution body, avoiding large-scale and integrated projects are among the findings of this project. The following table illustrates introduction and categorization of the findings (see table 2).

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