ANALYSIS OF THE INTERNATIONAL EXHIBITIONS OF THE CONTEMPORARY ARCHITECTURAL TYPOLOGY AND ITS IMPACT ON URBAN DEVELOPMENT

Seyedeh Aida Sajadi1-*, Gholamreza Talischi2

1. MSc of Architecture, Faculty of Art and Architecture, Islamic Azad University, Sanandaj, Iran

2. PhD of Architecture, Faculty of Art and Architecture, Bu-Ali Sina University, Hamedan, Iran

ABSTRACT:

Received: 08 Feb. 2014 Accepted: 26 Apr. 2014 Revised: 25 Mar. 2015 Published: 25 Jun. 2015

*Corresponding Author

aa.sajadi@yahoo.com

E-mail:

pii: S238315531500002-4

are urban mixed uses manifested in a complex building. These spaces are born in the industrial age, and have developed a dramatic record in the history of contemporary architecture. Today, in concurrent with the development of industrial societies and the transition to post industrial era, the need to construct such spaces in various scales associated with other spaces in the city has been doubled. In this way, the exhibition architecture features represents the latest enhancement of contemporary technologies and are considered as a real plot of developments in contemporary architecture. From a sensitive aspect, architecture exhibition have a significant part in determining the application of new technologies in developing cities. These research efforts to develop guideline for architectural design of contemporary exhibitions and its relationship to urban development that is conducted through study of the typological characteristics of contemporary exhibitions architecture. Therefore, this study initially has formed typology theoretical framework using archival and library research. In this regard, using the method of interpretation- historical, review of documents and similar experiences in the world, effective indicators, standards and typology indices have been developed. This research showed that using three macro, mid and micro levels and also nine useful indicators using the more important indicators to designing. And planning purposes), a systematic process can be achieved to exhibition and typology. And we finally concluded that the exhibition in associated with urban development can be divided in to two general types.

Exhibitions as the public spaces in the city are simultaneously centres of economic, social, and cultural, etc. activities with a comprehensive overview can be stated that the exhibitions

KEYWORDS:

Exhibitions, Indicators, New Technology, Typology of Architecture, Urban Development.

INTRODUCTION

Exhibition set up is an affecting factor on consolidation of technical and economical basis of society that institutionalizes certain relationships with the application of the exhibition and use of the existing capacity. Exhibitions have a large role in communication and commodities imports from the past. Today, also they are a place of reflection and display the various technologies in many lands. Exhibitions are born in the industrial age, along with the industrial developments, need to create such spaces in the massive scale and display various commodities, and are created. These exhibitions created the spirit of competition and the driving force for development, and any country reputable manufacturer is trying to parity with its rivals. Thus, there was a huge movement in any discipline, and architecture was no exception [1].

In the nineteenth century, architecture along with building technology development found an opportunity to display. In the latter of the nineteenth century, with the industry boom and efflorescence,

And the second sec

To cite this paper: Sajadi SA, Talischi GH (2015) Analysis of the International Exhibitions of the Contemporary Architectural Typology and Its Impact on Urban Development, *J Art Arch Stud.* 4(1): 09-17. Journal homepage: www.jaas.science-line.com industrial exhibitions that were created in this era created many facilities for architectural improvements.

Global exhibitions were created at the same time with new industry. The expansion of industry in all its branches and subsidiaries with these exhibitions had more speed. The exhibitions were a collection of objects of the nineteenth century, and promised the changes in human life, in industry, in the sense of men and the environment. They were a part of industry development and were depended on industry's destiny [1].

This study tries to investigate the physical_ shapes features of the exhibitions not only in describing their shapes, but also in the planning and effective classification, and answer to below question: what spatial and density parameters are effective on variety of exhibition, and whether they can be used as a systematic for typology of exhibition, To answer the question, this study tries to provide the public perception of its concept that is typology, and identify the underlying and typology standards of exhibition with the help of the

Journal of Art and Architecture Studies (JAAS)



10

theoretical framework from these concepts, and develop effective indicators. Finally, using these indicators at macro, middle and micro levels, we classify exhibition into two types, to planning and design guide for urban.

MATHODOLOGY

Typology Exhibitions

To address the issue of typology, it is necessary to define type and its criteria. Data classification based on common principles and characteristics, is an important step toward understanding the phenomena. So objects classify using geometry and order or in other words typology, has a long history in architectural theory.

Type: Type is also a key concept in architecture and urbanism and has been studied by many authors [2-4]: Type as a concept refers to type, class or category of people or group of objects that have common certain characteristics, and these features distinguish them from other people or group of objects [4].

Typological study: Typology is an attempt to put a set of complex objects in an ordered series to achieve a more generalized knowledge and planning [4]. Although the overall usefulness of the typology is doubtful, but it can be useful for three purposes: first, tools of describing the urban structure in terms of the different characteristics, second, analysis tools and to create links between environmental and socioeconomic data's of various type defined and their analysis, third, planning tool with providing a deep understanding of urban types, which flat the way to plan and the most appropriate design at macro, middle and micro levels [3].

Regulation of typology: For typology regulation so that it can be used in order to plan, rapport proposed principles that will be used in this research.

• The necessity of using multiple criteria (typology of multiple attribute) instead of using a single index (single index typology): in single index typology despite sharing among members of a species in an indicator, the possibility of differences among its members is very high and this means an increased likelihood of exposure different members in nature in a species. Using multiple indicators avoids the scientific controversy over the way species are classified [4].

• Avoid ideal and pure species detection: "in a multi criteria typology, there are groups of objects that a large proportion of its indexes have in common with each other, but not necessarily are not common about any one of these indicators with others. This kind of typology rejects the existence of an ideal or necessarily pure type [4].

• The lack of emphasis on present all shared aspects in all members of the species:" to determine the species it is not necessary to all members having all indicators, instead of that the researcher may find



a range of variable in determined extent, so that each member of a species have a large number of indicators, and each indicator in shared among a large number of members [4].

• A reasonable criteria selection to avoid excessive proliferation of indices: the greater the number of indicators is, typology will be more carefully. On the other hand, the proliferation of indicators means reproduce of the species and excessive distribution of them. Rapport says: "the researcher faces two opposite principals in typology. First, the fact that the researcher seeks a classification that possibly has the greatest information richness and therefore the number of classes will increase. Second, to reduce cognitive load and to identify any type as a good set, and decisions about them, the researcher needs the lower classes [4].

• According to the definitions of species and typology, to obtain the required indicators and ultimately to reach the exhibition types we will consider different levels at first, whose classify the required parameters in these levels, here we will review the exhibitions at the macro, mid and micro levels (Figure 1):



Figure 1: the level of survey of exhibitions typology

Macro Level

Macro level is an analysis in which we consider the structure of the exhibition in relation to its land, its location, its influence and its correlation to urban spaces. In macro level the following parameters are discussed:

Locations: An activity is to select the proper setting for the particular application, that analysis the capabilities of an area in terms of adequate land and also its relevance to a particular user as well as urban users. Natural environment and geographical location parameters, usually space organizing are done with the aim of optimize the places and also organize the functions and activities [5]. Location means conscious and intentional organizing of human relations, activities and space to give them discipline.

Influence area: Urban influence area is one factor that has a close associate with urban relations, and is a new issue that has shown its place in urban issues in the 1960s, and have been raised about the other human settlements in recent decades. Some groups consider the cities as super structural and know their existence because of their influence is,

Journal of Art and Architecture Studies (JAAS)



The term influence area represents the social, cultural, economic and political context and the set context around it. Influence area does not have a specific and certain extent; rather it is discussed as the spectral of intensity relation between base settlements and surrounding settlements, and the intensity of these relations decrease as we get away from the foundation settlements. Influence area is an area around the under study sport, that enjoys the highest contact.

With it and/or the residents are obliged to get services from the size and radius of the influence area of a settlement expends on its amount and impact. It means that the settlement has much more drivers, roles, scope and radius of its function is larger. Whatever the influence area of settlement is larger, it has more power in guiding the growth and development of the area and its radiation beam in different social- place contexts increases. Other factors such as the unevenness or natural and manmade terrain like political boundaries and easily access, impact the extent of influence area. But nowadays due to the increasing development of cars and other vehicles of communication and technological advances, their importance has diminished, and the boundaries of the influence area cannot be determined only by these. In this section the main discuss has focused on service and service capacity of settlements (functional communication), that is fact it can be account as a functional area.

Functional area that is correlations and functional relationships between the components of area, are defined in terms of solidarity and services (functional). For exhibitions the influence area can be reviewed in the international, territorial, regional and urban parts.

Scale: This section reviews the scale of the exhibitions, that in what measures they are proposed. For exhibitions the scale can be reviewed in the international, national and regional parts.

Associated with urban spaces: Today, urban planning discussed in relation to the architecture of the city as a bridge between architecture and city planning, by inking the building with the city. This model of city and building combination, let to the development of the relationship between an architectural project and its context. On the other hand, urban design term often used to organize the relationships between the built and not made places in a particular portion or the entire city. According to Cowan [6]'s theory, urban design are considered as the relationship between streets, buildings, squares, parks and other spaces that shape the public domain, as well as the relationships between the parts in a city and the patterns of movement and activities, as a short the complex relationships between all elements of built and not made spaces [6].

The aim of urban design is gradually and three dimensional arrangements the locative_ physical composition of urban structure and its activity and structural elements composed of two mass and space elements. We review the exhibition structure in conjunction with urban traffic networks, adjacent control and the role of these exhibitions in the city.

Associated with network traffic: Transportation forms the main part of cities and has a fundamental impact on the shape and the orientation of urban development. Concentrate and emphasize and greater facilitate movement of motor vehicles in every possible way, at the first half of the twentieth century until the early 60s, became on integral component of any transportation and traffic planning in the cities. Kenzo Tange [7] also emphasized the development of urban transport in the mid twentieth century. According to Tange [7], urban spaces as a basis for communication must be coordinated more with the transportation system. And that "the main field of urban planning is thinking about the organization as a network of communication and as a living statue along with the growth and change" [7].

Associated with adjacent user: In this section, we review the users around and adjacent the exhibitions, and what new users are created because of these exhibitions, or what users are required to be near the exhibitions.

The role of exhibitions in the city: Here we review the role of exhibition in the city that is all the roles overtimes. Many of the exhibitions have played the same role in the city overtimes, but many other exhibitions have user changed into applications such as parks, commercial and urban open spaces after the end of the exhibitions period (Figure 2).

MID Level

Mid-level study is an analysis in which the parts, functions and structure of exhibitions are analyzed. In fact in the mid-level we review the following indicators:

Space-practice organizing: Depending on the exhibition function and the needs of the people involved in them, the exhibitions could be divided into the following general categories:

• Intercommunicate area of presentation and display spaces (exhibition area): this area forms the main motivation for exhibition creation. Due to this area, we can gather group of people together. Halls and pavilions are the main parts in this area.

• Service and welfare areas: supply the essential needs of people present at the exhibitions is the purpose of this area. Restaurants, buffet, toilets, etc. can be cited as the main parts of this area.

• Administrative area: this area provides the essential facilities to better adjustment of exhibition sets. Companies, banks, police station can be cited as the main division of this area.





• Cultural area: this area is in order to meet mental and spiritual needs of participants in the exhibition. Mosques, museums, theatres, seminar rooms, etc. are the subdivision of this area [8].



Space- shape organizing

In fact, the exhibition layouts depends on its shape and form, can be divided into following general categories:

• Liner layout: exhibition area linked together in a linear relationship in this layout. In this kind visitors will be required to visit each of the halls along the line linking halls within or outside of them.

• Central layout: the exhibition halls in such a layout are usually formed around a center. So the halls are around this center. Transfer from one hall to another is usually from the center.

• Combinational layout: in this type of layout not only halls are around a center, but they also have common walls that provide the transfer of a hall to the others either from one hall to another or from the center. Halls do not have only one center, rather they form around a main center and sub centers.

• Linear central layout: more exhibitions with central halls are formed in a space by combining central and linear or checkered layout or a combination of some central form spaces. Thus the position of halls around a central square is not a restriction, and there will be more rooms for different exhibitions.

• Checkered layout: each hall visitors can have access to the adjoining halls in this layout, and each hall will be associated with two or four adjacent rooms. This connection can occur outdoor or indoor corridors.

• Scattered layout (urban): halls in this exhibition have combined together as separate cities.

• Single space layout: some international exhibitions have formed of one or more mega_ structure with a large area, that each of them includes several halls. Thus the exhibition halls are separated only by internal dividers and they have same structure.

Spaces combining style

Designing of elements communication in each space is one of the main issues in the design and space planning. Here most of the reviews will focus on the full and empty places in the mid-level, and in this area the relationship between architectural elements, environment and landscape elements together, and the connection between full and empty places is investigated. In this section we focus on the distribution of spaces in existing sites and the ratio of full and empty spaces.

Circulation

Circulation can be thought as a sensory string, that connect the spaces of a building or indoors and outdoors spaces INS complex. Because when we are moving into a series of spaces, we experience the spaces in relation to where we go. The main components forming the circulation system are positive elements that impact our understanding of the forms and spaces in a building. Circulation areas include reaching to and the building entrance, the path and space connection and the form of circulation space.

In this section, the roadway and pedestrian pathways into the exhibition spaces and their circulation have been studied (Figure 3).



Figure 3: mid-level indicators

Journal of Art and Architecture Studies (JAAS)



To cite this paper: Sajadi SA, Talischi GH (2015) Analysis of the International Exhibitions of the Contemporary Architectural Typology and Its Impact on Urban Development, *J Art Arch Stud.* 4(1): 09-17. Journal homepage: www.jaas.science-line.com

Micro Levels

At micro level, we enter the series of exhibition and see it with a vision camera; on micro scale we describe the micro architecture features: indeed, we examine the following indicators at micro levels:

Appearance: What is mean here is the general form of halls, pavilions and elements within the site and we examine the overall appearance of the halls and pavilions

Structure: The industry world; consequently with the emergence of industry, some places are needed, in order to show the manifestations of it. It is the need of such places that results in creating enormous spaces and halls with large craters. So, from the very beginning it can be seen that in the Crystal palace and other samples and the Car hall, creating enormous spaces and large halls has been considered. This point in the history of exhibition, as we are going to mention, causes an obvious leap in arching and the progress of openings in exhibitions, and the progress of these craters and better utilization of the constituent structures for this purpose reaches its climax in the Car hall.

In international exhibitions, buildings of theatres and conference halls have specific characteristics. Due to the great and sometimes enormous scales and also the flexibility in utilization, these buildings are to have a special constructional system and usually form from a repetitive rhythm of structural elements.

In order to construct the enormous craters of halls a special technology is to be used, which space structures and compounded trusses are the first choices in this area, However cable structures are also seen in cases? These structures provide the possibility of creating

Halls with the ability to develop which are also economically optimal, But what is important, is the constructional system of the halls, which is usually on structure and it should be done at the construction site by equipped machines. Other controls and several experiments on the structure should be done at the construction site by equipped machines. Utilization of light building elements and advanced components and materials is recommended for the other architectural elements of the collection (Figure 4).



Figure 4:micro level indicators

RESULTS AND DISCUSSION

Case Study Sample (International Exhibition of Tehran

Tehran international permanent fairground is located on Cham Ran highway, in the northern Tehran. The total area of the exhibition is about 850000 square meters. 120000 square meters of this area are covered and 35000 square meters are open. About 22 hectares are green space, and 21 hectares are ways to access to the halls and outside of the fair.

At Tehran exhibition, the main exhibition halls are formed around a pivot. Here the halls are linked through a central square, an open space: that is, each hall is related to its two adjoin halls and the central area of the exhibition. Tehran exhibition is formed by a combination of a space with a central layout and a space with a linear_ chequered layout beside it (Table 1).





Figure 5: location and placement of the doors of Tehran international exhibition (top) the placement of parking lots and uses around the site of Tehran international exhibition(bottom)



To cite this paper: Sajadi SA, Talischi GH (2015) Analysis of the International Exhibitions of the Contemporary Architectural Typology and Its Impact on Urban Development, *J Art Arch Stud.* 4(1): 09-17. Journal homepage: www.jaas.science-line.com

Journal of Art and Architecture Studies (JAAS)



Table 1: the table of levels and indicators of Tehran international exhibition

		The venue of Tehran	international is at northern Tehran, Cham ran highway, Cham ran	
	Location	The venue of Tehran international is at northern Tehran, Cham ran highway. Cham ran highway is located at the northern part of the exhibition site, and Se Oul street and Yadegare imam street are located at the western part of it.		
	Influence area	In terms of service potency and service range, the influence area can be considered as local_ international.		
	Scale	The scale is presented in the international part		
Macro level	Connection with urban spaces	Connection with traffic networks	Pedestrian: pedestrian entrance to the exhibition is through the pedestrian crossroad entrance, where the doors are located in the north, south, west and southwest of the site. Cavalry: there are several taxi and bus stations around the site, in order to service the visitors. However, these are 3 bus stations at the northern part of the site, specialized for the western part. Aerial: access to the airport is through Cham ran highway which is located at the northern part of the site.	
		Connection with adjoining users	One of the significant adjoining applications is tourist attraction application, hotel Azadi, hotel is located at the western part of the site. Other significant applications are transport and storage applications, such as parking lots around the site and class parking's. There are also buildings around the site, as well as the meeting hall.	
		The role of the exhibition in the city	This exhibition generally advances its exhibition role and it is sometimes used for functions such as holding conferences and seminars.	
Mid- level	Space organizing	Space –functional organizing	In this exhibition, exhibit and administrative functions are as spots in the central and linear part, and service zones are scattered at all parts of the site for easier access.	
		Space- shape organizing	The exhibition has a central-linear layout, so that the main halls are formed around a center.	
	The style of combining spaces	The filled spaces of the exhibition are located around the central pool, as exhibition halls and a mosque, and under this space there are other linear halls. Open spaces amidst the halls are surrounded with green space; and finally a centralist set is formed.		
	Circulation	Public roadway access is possible around and on the edges of the site, however roadway access to the transportation and the layout of the exhibition stands is embedded inside the exhibition, and the design of interior site access is based on pedestrian traffic.		
Micro- level	Appearance	The halls features of the space are mostly located as pure cube forms at the entire site. Only the mosque of prophet Abraham with its single minaret and pyramidal dome is seen at the entire site.		
	Structure		d column structures are used in the office buildings and amenities; and nree- dimensional trusses are used in the halls.	

Applying the Criteria for Typology

Studies have shown that exhibitions have a variety of different types, what causes the separation and variety of exhibitions, Is the purpose of establishing them. Here, we evaluated the types randomly and homogeneous, at different micro, mid and macro levels, with different parameters; and we reached the conclusion that exhibitions can be divided in to two general types:

The first type (Expo exhibitions): These exhibitions are held in countries bearing technology, for scientific and technical purposes. The time of their establishment is generally longer than a month.

Expo is known as a place of showing the future technology, and the technological aspects of the

exhibitions are priorities over the commercial and economical purposes.

Expo exhibitions are usually held each four or five years at a broad level and with different aims, in order to close the nations of the world in a region with high technology. In these exhibitions, the participating countries often show all their economic, social and cultural developments, in fact, all the characteristics of a country are open to the public as a brief series.

These exhibitions have an idea or a main theme, which is the main motivation of holding the exhibitions. They usually serve purposes which are beyond commercial- economical purposes. In fact, these exhibitions provide an area for meeting people from all over the world, and the civilizations talk is



To cite this paper: Sajadi SA, Talischi GH (2015) Analysis of the International Exhibitions of the Contemporary Architectural Typology and Its Impact on Urban Development, *J Art Arch Stud.* 4(1): 09-17. Journal homepage: www.jaas.science-line.com

Journal of Art and Architecture Studies (JAAS)



done with its broadest form. An obvious example these exhibitions were Expo 2000, which was held in Hanover, Germany, for six months, under the title of human, nature and technology. An overall conclusion of the properties and features of this type of exhibitions is made at macro, mid and micro levels, and the indicators are fully investigated: (Table2).

1 abic 2. t	Table 2: table of evaluating the levels and indicators of the first type exhibitions					
	Location	Expo is mostly in countries with high development and technology, and also their location is where necessary access to sufficient land, air and sea communications is provided. In present samples. Some of the expos are located in the port, in order to be directly related to marine docks.				
	Influence Area	The rang of influence of the expos can be considered international, in terms of the ability to service and the scope of services.				
	Scale	The scale can be considered in international part.				
Macro level	Connection With Urban Spaces	Connection with traffic networksPedestrian: the exhibitions often have several entrances for pedestrians, and also in most of them. There is a main entrance devoted to pedestrians, in which the structure of the main focus of the exhibition is located. Cavalry: the exhibitions have special subway, bus and urban taxi lines. Railways (train): if the exhibitions are located in cities with no access to the harbours, they definitely have rail routes. Aerial: the exhibitions often have direct access to the airports, or most of them have special areas for landing helicopters.				
		Connection with adjoining users Around these sets are usually tourist-attraction application(hotels), green space application(parks), transport and storage applications (parking lots, terminals, airports), and also cultural- artistic application (museums)				
		The role of the exhibition in the city After the expos, a series of stands is dismantled or destructed, another series of stands change its application, and get a new application, some other stands are relocated to other countries and new applications are defined for them, many other expos are changed to parks and recreational sites. Many of the expo buildings designed in such a way that can become an urban area when the event is over. However, after the expos the sets lose their exhibitional performance.				
Mid- level	Space Organizing	Space -Here, the exhibitional functions are located as stands at all parts of the site,functionalservice and official applications are scattered along exhibitional levels, andorganizingcultural function are seen as a few spots in the site.				
		Space- shape organizingThe sets can have different layouts for the pavilions of their own, however, most of them have scattered urban layouts.				
	The Style Of Combining Spaces	The exhibitions have full, empty and semi-open spaces. The full spaces, which mostly contain pavilions are scattered in the site, and the empty spaces, containing the spaces between pavilions, are mostly green spaces; and if the set is located in the ports. The spaces are waterways.				
	Circulation	Because of the large area of these sets, pedestrian and public transport traffic is possible within the site. Which pedestrians are more prior, and the design of internal access of the site is based on pedestrian traffic, and riding access is rotating and revolving around the site, or linearly between the pavilions.				
Micro- level	Appearance	The expos are comprised of pavilions and other are comprised of pavilions and other components such as exhibition axis and cultural buildings. The features of the pavilions and other components are technological and upgraded, that actually display the latest technologies.				
	Structure	In such exhibitions, structures with high technology and temporary are used. In exhibitional zone, the dimensions needed by the space. Require structures beyond conventional beam and column systems; such as space structures, pneumatic structures, arch frames, trusses				

The second type (trade exhibitions): These exhibitions are held for commercial purposes and they are generally short(less than a month).

Commercial exchanges and scientific and cultural ties can be achieved within these exhibitions. One of the main purposes that holding such exhibitions



To cite this paper: Sajadi SA, Talischi GH (2015) Analysis of the International Exhibitions of the Contemporary Architectural Typology and Its Impact on Urban Development, *J Art Arch Stud.* 4(1): 09-17. Journal homepage: www.jaas.science-line.com

Journal of Art and Architecture Studies (JAAS)



follow is export and import markets. Such exhibitions are usually held in the permanent fairgrounds of the cities. Due to the manner of holding and radius of their functions, trade exhibitions are divided into five groups, as follows:

- International specialized trade exhibitions
- International informative trade exhibitions
- specialized exhibitions
- local- international exhibitions

It is to be mentioned that the five cases focus more on the exhibitions and the manner of holding them in connection with the contents, not the container of holding them; that is in the fair place. Any of the five above can be established in appropriate cases. For example, numerous international exhibitions and also exhibitions with national scale are held at the location of Tehran exhibitions, and our focus is more on the container or the place of the establishment (Table3).

Table 3: table of evaluating the levels ar	d indicators of the second type of exhibitions
--	--

Tuble 3. table of evaluating the fevels and indicators of the second type of exhibitions				
Macro level	Location	The location of the exhibitions is where the appropriate access to necessary land, air and sea connections is gained and the location of the exhibits is often in the ports. Which are in direct connection with marine docks, or are located in places close the highways or main road of the city and further away from the center of the city.		
	Influence Area	The rang of influence can be considered international, regional or local, in terms of the ability to service and the scope of service.		
	Scale	In fact, according to the application, the scale of trade exhibitions can be considered in each the three sections of international, national and regional.		
	Connection With Urban Spaces	Connection with traffic networks	Pedestrian: the exhibitions have usually several entrances for pedestrians, and the main entrance is pedestrian entrance. Cavalry: the exhibitions have subway, bus and urban taxi lines. Railways (train): if the exhibitions are located in cities with no access to the harbours, they definitely have rail routes. Aerial: the exhibitions often have direct access to the airports, or some exhibits with international scale have special areas for landing helicopters.	
		Connection with adjoining users	Around these sets are usually tourist-attraction application (hotels and restaurants), green space application (parks), transport and storage applications (parking lots, terminals, airports), and also cultural- artistic application (museums) and commercial application (shopping centers).	
		The role of the exhibition in the city	Trade exhibitions mostly have exhibitional roles, and some have also convention spaces within the exhibition. Which are used for the functions of conferences, meetings, gatherings?	
Mid- level	Space Organizing	Space –functional organizing	Exhibition and administrative zones are each in the form of a concentrated spot, because of the multiplicity of the sub-sections and the feature of each, service zone is distributed in the set, in a manner that can connect closely with the exhibition zone.	
		Space- shape organizing	A series of these exhibitions have consistent single-space layout, and the other examples have set (cluster) organizing, according to the multiply of exhibition components and the requirements of components; which is an appropriate organizing for an exhibition series.	
	The Style Of Combining Spaces	If the layout is a single-space one. The filled space is a lump in the middle of the site, and covers much of it. However if it a set, the filled space is clusters, and covers much of it, Which finally forms a centralist set.		
	Circulation	Roadway access is possible around and on the edges of the site, in order to service the units, it necessary. The design of internal access of the site is based on pedestrian traffic.		
Micro- level	Appearance	Exhibitional components are typically technological and upgraded, so that technical figure is considered as a subjective identity for an exhibition. Exhibitions employ different structures for their settlement.		
	Structure	In service and administrative zones, the dimensions and internal division are in a way that the conventional structures are responsive to the need. In exhibition zone, the dimensions needed by the space, require structures beyond conventional beam and column systems, such as space structures, pneumatic structures, arch frames, trusses.		

CONCLUSION

This study has codified a theoretical framework for typology, by exploring its concept and the underlying principles and fields in this concept. Then it has reviewed the different experiences and research in this field, by selecting the physical context of morphology studies, for plan and design guide for the exhibitions. It has determined the criteria, factors and indicators influencing on



Journal of Art and Architecture Studies (JAAS)



the typology of exhibitions. And finally it has provided practical solution for using the indicators for the typology of exhibitions, by distinguishing three levels and thirteen key indicators. Through this approach, two exhibition types can be codified, based on macro, mid and micro, levels and also appropriate indicators. They can be used for more accurate planning for the urban area. Thus, a codified manner was provided for the typology of exhibitions. In the end, two cases are to be mentioned in relation to the study: first, this study has reached to expo exhibition type and trade exhibition type, by determining the levels and indicators. Second, this study has proposed how to prioritize the indicators, which has been classified from macro to micro level. International experience shows that indicator priorities are determined based on the needs resulting from planned targets, and it is possible to determine the priorities without determining the micro planning goals.

REFERENCES

- 1. Gideon, Z (2006) Space, time and architecture, pp: 212-214.
- Moudon Ame V. (1997) Urban Morphology as an Emerging Interdisciplinary Field, in Urban. Morphology Journal, Herson press, Birmingham, No. 1, pp: 3-10.
- Radberg J. (1996) Towards a Theory of Sustainability and Urban Quality: A New Method for Typological Urban Classification, in Gray M.,(ed.), Evolving Environmental Ideals: Changing Ways of Life, Values and Design Practice, Book of Proceedings for the 14th Conference of the International Association for people Environment Studies, Stockholm, pp:384-392.
- Rapoport A (1990) Vernacular Architecture, in turan M., (eds); Current Challenges in the Environmental Social Sciences, Avebury, Aldershot, England, pp: 48-96.
- Ibrahimzadeh, I (2007) Analytical modeling in organizing the spaces in the area. Geographic Journal, No. 59, pp: 35.
- Cowan, Robert (2005) The Dictionary of Urbanism. Tisbury, Wiltshair, Streetwise press, pp:40.
- Tange, K (1970) Architecture and Urban Design, Zurich: Verlag Fur Architecture Artemis, pp:128-129.

- Heidari M (2003) Sanandaj regional exhibition, imam khomeini international university, pp: 4-16.
- 9. Francies DK Ching (1998) Architectural: form, space and order, pp: 246.
- 10. Taghizadeh, K (2008) the functional design and its impact on architectural design, No. 34, pp:60-61
- 11. Zaker Haghighi, K (2010) formulation of parameters affecting urban typology, Journal of City Identity, No. 7, PP: 6-8.

Journal of Art and Architecture Studies (JAAS)



