

The Critical Review of Tall Building in Terms of Contextualize (Case Study: Tehran International Tower)

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Abstract: Since the high-rise building in today's society, it is very important multi-dimensional and should be paid special attention to this important matter. Because these days we cannot find a place where there are not a tower or tall buildings. Especially, in the big and crowded city which is Tehran one of them. So with the rise in high-rise buildings, buildings should be designed and implemented in such a way that does not harm the urban landscape and on the other hand, the identity of the site and its context. Especially Iranian high background of architectural identity. In this study, I have tried to examine the coordinate of Tehran International Tower building in terms of the context and responding to the needs of the site and whether this building represents the architectural identity of Iran? According to the criteria of high-rise buildings in Iran and other parts of the world and according to the visual inspection, unfortunately, I should say that the building does not coordinate with the site and its context and you cannot see Iranian identity in this building. Only an imitation of Western high-rise buildings. No matter the color, material, form consistent with the architectural identity of Iran.

Keywords: High-rise buildings, Tehran tower, background, contextualize

1. Introduction:

One of the important problems in urban development today is done without any planning and construction of skyscrapers and high-rise building. If the situation goes likewise, harsh consequences will follow, such as Destruction skyline, back to the historical background and context and Inattention to climate and relationship building site. One of the most important factors that will be discussed include the items listed above is the background. Unfortunately, today less attention. By examining the high buildings, it is clear that heterogeneous urban fabric of these buildings have problems.

1.1. The Aim of Study:

- Understanding the impact and effectiveness of elements related to the field of high-rise buildings.
- Assessment the strengths and weaknesses of Tehran international tower.

1.2. Questions:

- In the design and construction of a high-rise building what cases should be considered successful?
- Has builder been paying attention to contextualize in Tehran international tower?

1.3. Methodology:

The aim of this study was the importance of context in the design of high-rise buildings. Because of this I choose Tehran international tower as a case study and using analytical commentary for the observer, is examined in terms of the physical and environmental of the building. The major factor that this research was followed by a discussion regarding contextualize.

2. Theory:

Contextualize issue is one of the most important issues in the world because of this Iran should also be considered. Multiple items, such as context backgrounds should widely to be addressed. For example, economy, culture, Identity, history, climate, art. One of the most important things in the coordination of context is the impact of tall buildings or high-rise buildings on the view of the context. The views in three different range of short, medium and long can be considered. Another issue is, how tall buildings fit with masses and the environment with is important In terms of aesthetics and function. Any building has advantages and disadvantages. On the below, we can see advantages and disadvantages of tall buildings or high-rise building.

ADVANTAGES	DISADVANTAGES
Enhance of legibility environment.	Became blind of the city views by tall buildings.
Enhance of the urban quality.	Create visual anomalies in the surroundings.

Improve the quality and impact of this type of buildings in the urban landscape To create a place with identity.	Creating wide and massive shadows
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TABLE.1. advantages and disadvantages of tall buildings.

3. Tall Building:

There are three type of buildings:

1. Short building which is maximum 15 meters (3 or 4 floors).
2. Semi-long building which is from 15 to 50 meters (to 12 floors).
3. Tall building which is from 50 to 150 meters.

There is another definition that, any building which broken the line of sky and be longer than other building is high-rise building.(SPD, Newcastle, 2005).

There are three types of buildings in terms of Height:

1. Short buildings (50 meters)
2. Semi-longer (100 meters)
3. High-rise building (150 meters)

And finally, the buildings more than 150 meters call skyscraper. (RICHARD ROGERS PARTNERSHIP, 2005).

4. Regulations and Criterian of Tall Buildings:

- | | |
|------------------------------------------------|-----------------------------------|
| 1. Urban context | 2. location |
| 3. impact of culture | 4. Preparing the ground |
| 5. Scale and Volume | 6. Form and the quality of design |
| 7. Urban patterns, alignment and street spaces | 8. Public spaces |
| 9. Public access | 10. Open space |
| 11. The impact of climate | 12. Stability |
| 13. Transport and infrastructure | 14. Lighting |

(Richard Rogers Partnership,2005)

If any building has built with studying, thinking and planning can be having positive result. The following are some interaction effects in this context have been mentioned as:

1. Tall buildings can be a good thing and for sustainable development through:
 - Global meeting
 - Promote and intensify urban situations
 - Facilitate reconstruction
2. The policy of high-rise building must be positive and enable.
3. High-rise construction site must be examined in terms of its social and cultural role.
4. For that high-rise building has positive impact must consider three factors:
 - Pattern of structure
 - system of values and beliefs
 - social and economic impact (Richard Rogers Partnership,2005)

5. Function and Performance in the City:

One of the most important issue in high-rise building which is that due to their Height and volume can be considered as an urban index. But what are the quality of indicators? Lynch believes that “if public buildings which people have more related to them have evident façade May be more people's attention and ultimately used, otherwise not notice them. On the other hand, the performance of this type of buildings in the urban landscape is important.” If this potential is used properly, it can be expected that enhance the character of a city. Most of the major problems of high-rise residential buildings, the result of non-compliance with social and climatic characteristics of the country. The most important determinant of comfort conditions in the building is proper orientation. Social behavior Residents of tall buildings, under the influence of several factors that may be only a small fraction be building plan. Our physical environment, effect on our mental attitude. Obviously, in an environment with pleasant or exciting, whether Natural or man-made, morale is strengthened.

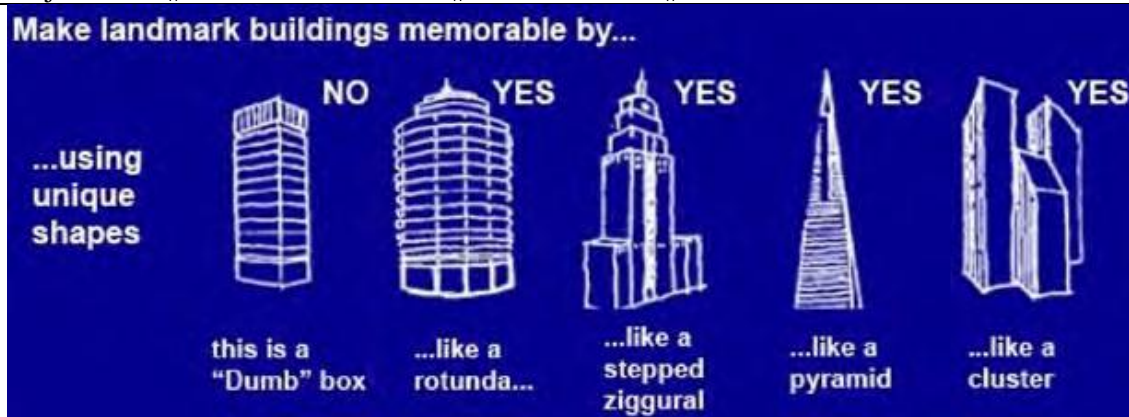


FIG.1. various forms of high-rise buildings. (Richard Rogers Partnership, 2005)

As you see in fig.1, it is clear that volumes rigid and heavy cube are not suitable for high-rise buildings. Various other forms, depending on the circumstances and context has to offer.

6. Comparing Other Example with Tehran International Tower:

One of the most important and most effective architects in based on high-rise buildings is **Antony wood**. He has a lot of Theory about high-rise building and he has focused on contextualize. According to his theory we are going to discuss Antony's theory from the different aspect:

6.1 Environment Characters of Location:

Tall buildings should communicate their environmental character. This is perhaps the most important aspect is the stability of tall buildings. In tall buildings should not only consider the physical and climatic issues. Using these measures can reduce negative effects of wind, light, and rain. (Wood, 2015).



FIG.2. ACROS Fukuoka Prefectural International Hall, Japan. Emilio Ambasz and Associates.1994

In fig.2 we can see a building in Japan. It is very clear and obvious that architect and designer how much paid attention to the culture of Japan. Because in Japan, the mountains are the symbol of resistance and perseverance. This issue is very important. On the other hand, the step ladders building shows us the old culture of architecture in Japan and we can see that the architect special paying attention to organic architecture and respect to nature which is very important in the architecture of Japan.



FIG.3. Tehran international tower



FIG.4. Up view of Tehran international tower

In above picture, there is a view of Tehran international tower. As you can see, we cannot find any historical roots and regardless of the symbols of the Iranian culture in this building. Also, in fig.4 we can see the up view of the building and shows us the main form of the tower which is tripetalous and this form does not have any proportionate and compatible with the architecture of Iran and is without the identity of Iranian architectural. The biggest issues in this tower are color, material and light that is very clear. Now, my question is “**what has caused this neglect take place?**”

6.2. Physical Characteristics of Location:

All cities have their own natural heritage and physical infrastructure that makes up the city. Such as Street, urban areas, urban-oriented, ancient monuments and many other things. (Wood, 2015).



FIG.5.

Bank of Kuwait, Kuwait, SOM Architects, 2004. (Wood, 2015).



FIG.6.

National Commercial Bank, Jeddah, SOM Architects, 1984. (Wood, 2015).



FIG.7.

Menara Batavia, Indonesia, Architects Pacific Group, 1997. (Wood, 2015).

The important things to note is that in the neighboring countries, new thinking of the legacy of the past. These thinking are clear in fig.5.6.7. For example: in fig.5. the form and volume of the building show us designer`s significance to the site of the bank.Features such as materials used in the area, skylights, High climate of the heat and a good designer have to consider these points. In fig.6. National Bank in Jeddah which is as well as other successful examples in this field and to what extent the culture and history of the region have been effective in building design. Also in fig.7. We can see another example that According to traditional architecture and its past is designed to reflect its regional identity.



FIG.8. another view of Tehran international tower

Another issue about Tehran international tower is the lack of attention to the identity of traditional architecture of Iran as well as the enduring legacy of the past. In this study, we are going to discuss contextualize and identity of the building. Here, I should say this building in terms of structure and method of built is very good but our focus in this article is on the identity and contextualize.

6.3. Cultural Character of Location:

The culture of a nation is associated with patterns of life in a city. (Wood, 2015). Our discussed until here was about the elevations and façade of the building but for the design of building interior, issue must be important. Especially, in Iranian architecture that has considered in the interior of buildings. But unfortunately, these days` designers do not pay attention to the interior design and related to culture and identity of the country. In these pictures we can see a building in Kuala Lumpur which shows us designer`s consider in terms of lighting and interior design according to site and environment.



FIG.9 & 10. Menara Dayabumi, Kuala Lumpur. BEP Architects(wood, 2015)

Another example of this is the case, which shows the proportions according to the division of space, light, and materials and is built form.



FIG.11 & 12. Islamic Development Bank, Jeddah. Nikken Sekkei Architects

These pictures are about the environment of around Tehran international tower which show of disregard for the important topic-based site design field. Divisions, proportion, perspective, respect of nature, light, color, materials and many other items that show the crisis is in the field of architecture and urban planning.



FIG.13. the environment of around Tehran international tower

7. Variaty by Using the Change of Height in Form:

Tall buildings should not design linearly and vertically, but also, should be different in terms of Height and form.(Wood, 2015)



FIG.14. Taipei 101, Taiwan, CY Lee & Partners.



FIG.15. Jin Mao Tower, Shanghai. SOM.

Another important issue in architecture is the form of building. Because it has direct effect on the urban and Perception of citizens. For example, in fig 14, 15 there are a building in Taiwan and other building is in china. As you can see, on the one hand, there is variety of form and on the other hand there is variety in Height which is designer`s consider to culture of far east. Here we can say that the designers of Tehran international tower did not consider to the form of building according to the culture of Iran or Iranian architecture.



FIG.16. material and windows in Tehran tower

For the last note, I should mention again to the material and color of building that unfortunately, designers have chosen without thinking. As you see in fig.16 the main material of building is concrete. Because of the uniformity of large-scale and indent windows on the wall, always there is a uniform shadow and these issue for the audience are very boring. Moreover, according to the pollution of Tehran, no measure for the presence of nature and plants for tall buildings, have not been considered.

Conclusion:

Finally, high-rise building is something that can be ignored, because, that is growing dramatically. But the important point that must be considered in the design of high-rise is the lack of damage to the site and urban landscapes. Because of the height and volume of the building are urban monuments. In this article, I chose Tehran international tower as a case study. Because this building is the tallest residential building in Iran. I surveyed this building in terms of contextualizing and identity of Iranian architecture. Evidence suggests that the shape and design of the building unable to achieve success and become a city landmark. The building that is taller than their fellows in the country and this issue is certainly very important and should be introduced as a model and a prime example. Unfortunately, we cannot choose Tehran international tower as a landmark in the city. If the designers follow this building, in future we will see a city without any identity and architectural identity. Especially, Tehran which is a capital city of Iran which is full of architectural identity.

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