

Rethinking Iranian Urban Housing — A Review on the Housing Attributes under the Current Development of Tehran

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Abstract: Housing in the private sector in the metropolitan of Tehran in the past decades has been very much tied to the economical considerations. The current urban and building standards and regulations are believed to have very much contributed to the undermining the many social, environmental and visual potentials of the neighborhoods and to what we face today as congested apartment atmosphere where and the monotonous character of most of the neighborhoods as a result of the very same plans and regulations applied to their development namely the setbacks, land coverage ratios and floor to land area ratios with no regard to the very different characters many of these neighborhoods once had, either traditional and long-established or scenic and natural. The purpose of this paper is to briefly review the current state and trend of urban housing in Tehran and search for practical measures to improve the environment and character of urban housing in the city.

Key words: Urban housing, land coverage ratio, floor area ratio, melak-e amal, tarh-e tafzili, Tehran.

1. Introduction

The Iranian society has faced many challenges in the recent decades namely changing political and social environment, huge demographical changes, economic growth and rapid urbanization, mainly for the rural to urban migration for employment opportunities and better living conditions in cities [1]. Considering the dynamic and sophisticated nature of the relationships between individuals and society in different circumstances, and their ability to respond and adapt to many of these changes and the challenges of the new principles, the society had to reevaluate and challenge many values in a short period of time. Moreover this could be regarded as part of the recently acknowledged “crisis of identity” which has become a major concern and is experienced among the various groups and generations within the society. In this short paper, the

authors refer to Le Corbusier who believes that incorrect accommodation of the humans is the prime reason for much social unrest in the recent decades [2].

Tehran, as the capital and largest city of Iran, is home to more than 7 million people in the city and more than 13 million in the greater metropolitan area [3]. The city has experienced the largest population growth in recent decades being the center of growth and many industries which created many demographical and social changes. Huge number of migrants arrived in the city to seek new jobs and opportunities during the economic growth while others had to take refuge from the border cities and provinces during the war, all contributing to the very diverse character of the capital now home to people from all over the country, from very different backgrounds, cultures and lifestyles (An estimated number of 496 thousand migrants arrived to Tehran over the period 1976–1986; this number rose to 568 thousand between 1986–1996, and further to more than a million between 1996–2006 which makes Tehran the first choice in

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attracting migrants in the country with 31% percent) (Table 1).

At the present the population growth has decreased to a lower rate partially to the government's family planning efforts since 1989 and the dismal economic conditions and general decline in living standards for the average Iranian household [5]. However the result of the population growth in the past decades is significant. Tehran, therefore, has been constantly developing mostly in the housing section in order to accommodate increasing population, which led to mounting land prices in the city throughout the last decades.

The situation in the private sector housing development, therefore, in the metropolitan area tended to be very much tied to the land market and the profit of the developers.

Last year there was 71% increase in construction in nine months in Tehran which includes 157,000 new housing units, 30,000 more than that from the previous year. It has been discussed that the sudden increase in the housing construction is owed to the "propaganda for the implication of the new detailed plan" of as well as the increase in housing market prices in some areas. The former has motivated developers to participate even more in housing market before the likely constraints by the new detailed plan [6].

In this housing market which is tightly controlled by economic considerations, what happens is the mass development and construction of medium to large-scale housing projects merely to accommodate

inhabitants. What happens is the likely incoherence among the dwellers coming from different backgrounds and cultures, living in residential districts with dense apartment characters, disclosing itself in various types of disorder. Coming from different environments, many of the residents had different habits of living as many of them used to live in houses with yards or gardens while many others have lived in big families with different types of living arrangements but now are bound to live in the apartments. However the contemporary apartment environments and the current concept of housing do not fulfill many of the residents' desires as many architectural, environmental and more importantly cultural thoughts are not given consideration but compromised for the solemn priority of providing affordable and structurally reliable housing. Living in apartments which are getting smaller, disappearance of private spaces along with the change in the form of lifestyle and workspaces has resulted in urban buildings becoming similar and lack many architectural elements.

After years inhabitants have adopted some behavior of living in apartments, a concept new to many of them. But still it is obvious that they are compromising a lot for living in such environments as the contemporary apartments provide the least and just the about basic requirements for the households. Children, for example, have neither space to play outdoors, nor there are enough semi open spaces such as balconies or terrace spaces provided in the new apartments. Many of the daily habits of living associated with these spaces are now being compromised for economic considerations (see Section 2.2).

In the recent housing market the developers demand for more area to be constructed as possible, unless them or the client is not looking for the immediate financial return of his investment or else designers often have no choice other than to come up with the very routine arrangements for the apartment blocks. Therefore the apartments have been treated very much as investments rather than housing environments.

Table 1 Population growth in Tehran [4].

Year	Population (thousands)	Growth rate
1930	250	2.4
1940	540	6.6
1956	1560	5.5
1966	2719	5.1
1976	4530	2.9
1986	6058	1.3
1991	6497	0.78
1996	6758	1.3
2006	771	

With the current state of the housing market, design for the apartments is mostly limited to be accomplished inside their interiors or on their facades. The designers can only explore their ideas within the already decided frame for designing the apartments which is to be in some certain size and shape. In this situation the very remains of the land in urban plots in almost every apartment will practically lead to turn into left green spaces and unsuccessful mock of a garden where in most of cases will not been taken care of after some time.

2. The Current Planning Laws in Tehran

The planning laws now under practice are believed to have contributed to the many destruction of scenic, environmental and visual potentials of the neighborhoods around the city and for what we have today as a congested apartment atmosphere and the monotonous character of the many streets and neighborhoods throughout the city as consequences of the very general and similar urban regulations implemented for them with no regard to the very different characters many of these neighborhoods have, either traditional and long-established or scenic and natural, but now all being vulnerable to lose their identity to the very same character, and that of what the land prices dictate. Urban development laws at the present only indicate the location of the building within its boundaries, and number of floors according to its ways of access, namely the setbacks, land coverage ratio and floor area ratio regardless of the zone with no further distinction. What is missing in the construction for individual residential projects is the relation to its neighbors and the street, sizes and frequency of openings. Public and private spaces are their composition is not defined within the requirements of any development [7].

Here the lack of awareness and inability to assess the historical, traditional and environmentally values can be discussed in the wake of rising land prices and economic development having the opportunity to take

advantage of the house and apartments as very good sources for profit, which particularly made possible due to the very general planning laws. Therefore, what has developed throughout the city has been “construction”, rather than architecture [7]. One of the measures taken to deal with the increasing demand for housing and to provide a new financial source for the municipality was the chance given to the developers to purchase extra floor area aggregate in early 1990s, which attracted many developers and property owners to reconstruct their properties and enjoy the new incentives. The new policy was practiced almost in every district throughout the city without taking local and social attributes of the zones. In some areas the Floor area ratio selling was legalized up to 385% [8]. Although this practice of selling zoning variance allowing a floor area ratio has been discontinued for seven districts since April 2002, it resulted again in a sharp increase in land prices as the decrease of allowable FAR, which resulted in a potential increased demand for land as more land would be required for building the same amount of floor space [9]. As a consequence, it caused a lot of disorder in the characters of neighborhoods after many of the owners took advantage of the new regulation to benefit the most since more area would naturally mean more profit. Gradually, the city was filled with mostly bulky and box-shaped apartments.

2.1 The Criterion of Tehran

Currently, the development in the residential districts of Tehran is under an interim plan known as *melak-e amal* or The Criterion, since 1997 as a temporary reference until the latest comprehensive plan of Tehran is prepared. However the zonings and specifications on building constructions are very general in the Criterion and are limited to the location, land coverage and maximum floors and these laws on building coverage ratio, to name, are not specific to each zone — sixty-percent of the plot building coverage — and thereafter is applied and practiced in

developments in every zone throughout the city except very few designated areas, e.g., Shahrake Gharb District which has its own development regulations.

According to The Criterion of Tehran, developments are basically divided into two categories: buildings up to five stories and buildings of six stories and higher the latter to be constructed along streets of 12 meters or wider. Hence development and/or increasing floor area ratio to the existing buildings were allowed to the maximum of five stories. For six-story or higher buildings, there are certain requirement and considerations, e.g., for the location of the buildings in relation to urban infrastructure, earthquake faults, historical monuments etc. [10]

2.2 Setbacks, Terraces and Balconies

There are no setbacks requirements for the developments in The Criterion, moreover projections are allowed from the first floor (Buildings are allowed to have maximum 2 meters of projection from the first floor) (Fig. 1). Setbacks from those blocks in behind, in the current development laws are only required to have minimum areas and widths depending on type of spaces they provide light for (Minimum of 12 square meter and 3-meter wide for those backyards providing light for living spaces; and 6 square meter and 2-meter wide for those provide light for either kitchen or storage spaces for buildings of five stories or less. Further requirements apply in The Criterion of Tehran). Once this minimum requirement is met the rest of these spaces can be constructed to the site rear boundaries, which again, results into more walled facades and surfaces the neighbors, in this case on the back, are exposed to since there cannot be windows on the walls abutting the neighboring plots (Figs. 2a and 2b).

Terraces and balconies were part of people's daily life experience for many activities namely sitting, drying cloths and putting vegetation; simply experiencing living in semi-open spaces however disappearing or decreasing to the minimum spaces in the new developments as providing them is not a requirement and moreover they are counted as less



Fig. 1 New development beside the contemporary; open spaces are absent in the newly developed urban blocks (taken by the author).

floor area aggregate as if they were indoor, meaning less profit for the developer (According to the Criterion of Tehran, balconies and roofed terraces less than 3-meter deep would count as 1/2 of FAR if they are open on all sides, and 2/3rd if closed on all sides) (Figs. 3a and 3b).

Therefore architectural features such as transitional spaces and consequently concepts of intimacy or privacy have been absent in the recently developed apartments, what used to be essential vocabulary in the Iranian houses. The connection between indoor spaces and open spaces, as explained earlier, has now turned from courtyards and gardens to merely small patios and minimum setbacks for light and parking access; as Haeri discusses as constant reduction and mono-semantic of architectural elements has been extended to various scales from housing units to the neighborhoods and streets, including mixture and ambiguity of public and private spaces between passers-by and the residents [7].

As mentioned earlier, after 1995 in some areas of Tehran, developers are given more floor area ratio aggregate as an incentive once they have certain setbacks from the street, and later as indicated in The Criterion of Tehran, those of 12 meters and wider boundary or in some areas if they follow certain requirements including setbacks and certain distance kept from neighboring buildings and forming the



Fig. 2 Incoherent developments resulted in disharmony, visual disorder, walled facades and visual chaos in the neighborhoods. While earlier developments enjoyed more open spaces and setback, the later development take full advantage of the urban plot and development benefits (taken by the author).



Fig. 3 Voids, setbacks and open spaces such as terraces and balconies are absent in the new developments for more floor aggregate (taken by the author).

structure into a pyramid shape to allow for more light to the streets (Figs. 4a and 4b) however many high-rise developments do not follow the same pattern in the lack of ordinance of the planning laws. Despite the visual diversity these developments bring to the repetitive façade character of many neighborhoods, I believe, their random placement particularly those not located near highways or wide streets has added more congestion to the many of these neighborhoods as well as visual chaos.

3. The New Detailed Plan of Tehran (*tarh-e tafzili*)

Tehran has been waiting for its detailed and extensive city planning law for more than forty years. This year it has been legislated and is expected to be implemented by the municipalities in the metropolitan, after many revisions.

The latest soon to be put into practice detailed plan, or what can be interpreted as city planning law of Tehran could be regarded as a chance to protect and



Fig. 4 Pyramid-shaped higher developments in northern Tehran. More floor area ratio aggregate has been given as incentive for setbacks and less land coverage ratio (taken by the author).

Table 2 The general residential zone (area of 197 sq km) has been categorized into areas where different number of floors can be constructed: One-story and two-story residential 1,063 hectares; 3-story 4,525 hectare; 4-story 11,018 hectare; 5 story 1,772 hectare; 6 story 1,350 hectare.

1-digit code	Major zones	Zones	General character of sub-zones	Maximum floor area ratio	Number of floors	Maximum land coverage ratio
R1	General residential	Low density residential	Single story/ double story 3-story residential	120% 180%	2 3	60% 60%
		Medium density residential	4-story residential 5-story residential	240% 300%	4 5	60% 60%
		High density residential	6-story residential	360%	6	60%

improve those left neighborhoods from the huge scale developments, if fully supported and implemented.

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In the new detailed plan the total Residential Zone is estimated 248 sq km and has been defined as two main categories: (1) general Residential zone and (2) specific residential zone. Each one further can be subcategorized: general residential zone into low-density (R11), medium-density (R12) and high density (R13) residential zones. In each of the above

mentioned categories, different floor area ratio, building coverage and numbers floors have been specified.

However, there are yet provisions in the new detailed plan for an extra floor added to the buildings for all the categories in return for reducing the building coverage area, and still there is maximum 60% land coverage area specified for general residential zones. There is also no provision for open spaces in the plots such as the setbacks. The most significant change here is the final recognition of different characters of the neighborhoods and stipulating specifications for each zone regarding maximum floor area ratio and maximum land cover ratio.

The specific residential zone has been introduced as those of natural, historic, cultural, and of identity or

Table 3 The specific residential zone categories [11].

1-digit code	Major zones	zones	General character of sub-zones	Maximum floor area ratio	Number of floors	Maximum land cover ratio
R2	Specific residential	Rural valuable residential context	Single story/Double story residential 3-story residential	120% 180%	2 3	60% 60%
		Historical valuable residential context	4-story residential 5-story residential	240% 300%	4 5	60% 60%
		Contemporary valuable residential context	6-story residential	360%	6	60%
		Green valuable residential context	Less than 2,000 sq m	-	2	10%
			Between 2,000-5,000	-	3	7.5%
			More than 5,000	-	4	7.5%
		Special central zone residential	Central zone residential	250%	5	50%
		Special urban axes zone residential context	7-story residential 9-story residential Special residential (high rise)	280% 315% 600%	7 9 12 and more	40% 35% 30%

any specific area where has its own specifications [11].

For specific residential zone (R2) in area of 51 sq km, there are six subcategories: valuable rural (R21), valuable historic (R22), valuable contemporary (R23), valuable green (R24), valuable central district (R25) and urban axes districts (R26).

4. Conclusions

The city and shape of its buildings are expressions of the present values of the society which portrays social, cultural and economic values of the society [7].

Sustainable development of Tehran lies under an extensive and responsible city regulation to promote generations' meaningful connection with their living environment. The definition of the "Iranian Home" is to be rediscovered and if necessary challenged within its new setting of urban apartments. In the recent decades, however, the evolution of urban form in Tehran, being influenced by the complicated interaction between market forces, politics, public investment and regulations, which the latter has been changing and are not often monitored, has resulted to the city being developed rapidly and with significant inefficiencies. The continuous postponements in

revising and implementing the new plan are only keeping this situation.

Once the new detailed plan is implemented, fully and responsibly, it will be the first step to control and diversify the density, scale and sights of the neighborhoods and save them from further deterioration. However, it is unlikely to change the already tradition of stretching the buildings to all sides of the plots and leaving no open spaces around as it has no further specification except those mentioned on the (Tables 2 and 3) Further steps need to be taken into consideration regarding notions such as open or outdoor spaces, the proximity between adjoining buildings also their connection to their open spaces, and incorporate these concepts as requirements to improve the atmosphere in the residential districts and individual developments.

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