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Typical Construction Regulations in Turkey: Standard Housing – Standard Human

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Abstract

"Standardization" which enabled the increase of production in the 19th Century, took a whole different dimension through the Industrial Revolution as the product became widely distributable and marketable. From chairs to cars, aside from many products of varying scales, "House" that is arguably one of the most decisive factors that indicate the identity and heritage, now became a standardized product which led to a shift in collective societal and spatial understanding. While the cities were spatial networks with their own "continuity, boundaries and rhythms" up until 19th Century, in the 20th Century, they became an order in which independent standardized units standing in a "disjointed and sparse" manner. The escalation of this situation led to a country-wide standardization with the aid of the Typical Zoning and Construction Regulations that determine the construction criteria in Turkey. Therefore, this process that developed without regard to local values formed its own dynamics and persisted, led to the threat of the formation of a new country identity that ignores the subjectivity and dwells in uniformity with a standard planning approach.

Within the scope of work, Urban transformation process in Turkey and Standardized TOKI Housing Projects throughout the diverse Anatolia Region with different cultural, geographical and historical backgrounds which both trigger this ever growing problem, are to be examined in order to reveal the status of standardization in Turkey. In addition to that, a critical approach will be utilized towards the dynamics that encourage the facilitation of "standard housing" – "standard human" and as a reaction, the possibility of a new building standard which would strengthen the local identity and merge with the social, cultural and geographical texture will be hinted. In this paper, taking the city of Kocaeli as a case study, the typical zoning regulations that shape the housing typology in newly built settlements will be criticized and the possibility of new regulations that would enable the prioritizing of local identities and local strategies that will be hinted.

Keywords

typical zoning and construction regulations, urban transformation, mass housing, standardization, local identity

1. Type / Archetype / Standardization in Housing Production

Architecture witnessed political struggles throughout the history. The debates over style in architecture started with the idea of nation and brought out the problem of national identity. It is natural to search for an identity to signify and reinforce the national integrity in the process of becoming a nation. At the start of the 20th century, a new synthesis was tried to be made from these oppositions by the Modern Movement and its logic of the "type production".

"Type production" may be associated with "standard production" in daily life, but actually it carries a conceptual and completely different meaning. On the other hand, "type concept" and "typology" gained different meanings through different periods of time. The first time the type concept was used in the architectural literature corresponds to the work of A.C. Quatremère de Quincy at the end of the 18th century. The idea of "type" that he put forward carries similarities with the theories in the natural sciences. He puts a significant emphasis on type as an abstraction and additionally, he gives the following as the key properties of type:

- distinction between "type" and "model",
- type as a result of a deep-rooted tradition,

- flexible structure of type.

These three key properties set forth the abstract and historic structure of type along with its relation with evolution. According to Franck and Sckneekloth who define the purpose of type as to produce the material world, reproduce it, and give meaning to it; “Types help us to understand what we produce, change, destroy, and protect while also helping us to determine how we realize these actions. Types are both conceptual, imaginary, and material.”

Usage of **type** as a substitute both for **archetype** and **prototype** leads to different meanings. Archetype, etymologically, consists of the Greek words arkhe (origin, beginning) and typos (type). As Arseven: “Archetype: The first type, the first example. The main model, first example and type to produce an artifact” [1] (Celal Esad Arseven, a.g.e., 1943). As Bilgin: “**Type**, is the emerging abstraction of a logical operation and a mental struggle; it is the most abstract yet understandable expression of common qualities between akin elements in a meta language. **Archetype** on the other hand, is material; it is without any doubt the “one”, the first stance, the one that completed first; they are the commonly recognized self-similar things” [2] (İhsan Bilgin; Mehmet Karaören, “Aldo Rossi’de Akıl ve Hafıza”, Defer, 1992, Sayı 18: 53).

Type refers to the abstract, while archetype refers to the material. Type explains everything that it has gathered while it does not mean anything on its own. Archetype just explains itself. **Prototype**, etymologically, consists of the Greek words protos (first) and typos (type). This definition can be expanded by the encyclopedic definition of “**the first original example as a model for the production process**” [3] (Eczacıbaşı Sanat Ansiklopedisi (İstanbul: YEM Yayınları, 1997), Cilt 3: 1523). Arseven defines prototype as “**the main model that forms the basis for other models**” [1] (Celal Esad Arseven, a.g.e., 1943).

Significantly at the start of 20th century, an important distinction between **type** and **prototype** was lost in the discipline of architecture. **Modern Movement, with the logic of mass production, created many examples under the definition of type which were actually prototypes.** Mass housing typologies or the concept of type project can be given as examples to this approach. Domino House is the most important example of this theme among all of the “industrial” drafts that was proposed by Le Corbusier during 1920s and late 1930s. Later on, Unité d’Habitation became a clear example of that kind of attitude.

From that time on, buildings were started to be designed as machines that satisfy and form human needs according to the economic criteria. At this point, the image of the city was under a radical change and it was transforming into a hygienic urban utopia dissolved in the green. Together with the proposed typology to control the city in its mass reality, the city has lost its certain characteristics such as “artifact” and “polis”. Thus, Italy based Tendenza Movement in the second half of the 20th century which brought out the concepts of type and typology, emerged from the issue of “lost city”.

2. Turkey from Traditional to Modern: Standardization of Housing Typology

The Modernity Project which was born and developed in Europe, continued as an international project after the Industrial Revolution. Starting from 1840s, it began to transform the Ottoman economy and organizational structure. The effects of the “modernization” project which began in the second half of the 19th century and continued as segmental applications after the proclamation of the Republic, over the settlement and residential areas, created an irreversible urban typology.

Cities were spatial patterns with continuity, limits and rhythms until the 19th century. Distinct cultural habits and their living spaces were taking their place in the urban pattern while also forming their own spatial hierarchies. The traditional urban space contained spaces for political, religious and commercial activities and also transition spaces that created additional functions within this whole. The most important aspect of these transition spaces were their connecting and separating qualities at the same time.

This spatial hierarchy carried major differences compared to today’s modern city concept. The most important difference from the 20th century cities is the “fragmented and porous” urban space of 20th century city versus the “dense and compact pattern” of pre-modern times. As a result of this reconstruction, the relation between the street which is designed for pedestrian circulation and the housing is redesigned.

In addition to that, the production of “international typologies” appeared as an answer of the modern world to the problems regarding the housing demand caused by the large urban migration together with the increase in the urban population. Consequently, this led to the construction of a new design concept which can meet the housing needs without knowing the specific user. The change in the housing typologies caused other changes both in the scale and form of the settlements which resulted in new life styles and new public-private relations or in other terms, it transformed both of the housing – housing and housing – public relations.

Turkey first witnessed this transformation between the 1839-1930 years of the Tanzimat Period. Railroad constructions to establish a connecting network between harbors, coastal towns and other towns is the first sign of the **Importation of Modern Housing Typologies** in the scale of Anatolian Region. In this period that is also known as the **“Fragmented Planning Period”**; the transformation started with the city centers and modern business lines started to appear near the central marketplaces. This way, new public relations were formed and the old mechanism regarding the pedestrian movement was replaced by means of the public transportation such as cars, trams, and suburban trains. As a consequence, new social classes appeared and **class based distinctions came to be a definitive factor between residential areas together with national distinctions.**

The first planning actions in Turkey were put into practice in İstanbul. Van Moltke’s initial planning between 1836-1837 took small areas into consideration and realized a spatial transformation in the urban housing pattern for the first time. A regulation about the construction technology by the Enbiye Law of 1848 was the most important factor of this transformation. Fire regulations in this law strictly prevented the construction of the **“traditional typologies”**. Consequently, **timber frame buildings were replaced by masonry buildings** and the variety in spatial and structural typologies that makes up the Anatolian towns was limited.

The second most important transformation in Turkey was realized between 1930-1950, during the years of the republic. Better planned transformations started with the principles of modernist planning. **A new urban housing typology, “Garden City” Model,** came out by the name of “house with garden typology”. This low-density and low-rise typology was used in the new public housing and cooperative housing constructions which were increased during the republic period and caused an evident difference in the spatial typology of Anatolia’s traditional housing organization. These changes also caused an obligatory transformation on the side of the intended users of the new housing supply.

The most important reason behind the typological similarity between today’s Anatolian cities is the build then sell logic in the apartment block typology which dates back to the property laws to prevent the illegal spread of squatter zones between the years of 1950-1980. This period is defined as the period of the capital, industry and technology exports in universal scale. The consequences of the rapid urbanization were overcome by the “Law of Property Ownership” which allows the residence of multiple users in the same plot. This new multi-storey housing typology led to the separation of the house from the garden, and caused important social transformations regarding the privacy of house. Detached and attached examples of the “Apartment block typology” which makes up the 40-45% of today’s Anatolian cities were constructed completely from this new **prototype**, excluding minor changes caused by different plot areas.

However, the capacity of this new build then sell logic and squatter zone constructions failed to satisfy the further needs. **Mass Housings, or “Modern Satellite Cities” based on point block typologies, came out as a solution for this problem in the Liberal Period after 1980. Eventually, traditional housing construction technologies were replaced by their latter technological examples. Through that, the process of breaking with tradition was completed with the mass housing typology that creates one lifestyle at a time.** Additionally, loan opportunities by the Mass Housing Law in 1984 supported a cooperative housing movement which led to a rapid, fragmented and displacement based expansion process out of the city that is generally independent from the master development plans.

This rapid housing production continued after 1980, under the names of **“urban renewal”** and **“urban transformation”**, and led to the start of a new period of flashy, prestigious, and expensive projects that at some cases handed particular neighborhoods and cities over international corporate

investments with the effects of globalization. Following this period, 2000s witnessed the start of both small scale and large-scale projects with such possible extents as neighborhood, city, or region, based on the strategic perspective (Robert and Sykes 1999, AnnBeswick 2001: Eren 2006).

3. A New Type of Identity in Turkey: Toki Housing

The start of the legalization and marketing of the squatter zones in the pre-1980 period affected the **socio-economic** structure of this period. The organized construction of the squatter areas provided the basis for this situation. The increased production of squatter houses both by private means and illegal organizations increased the tenantry and ownership of such buildings. Additionally, present slums within the city transformed into 4-5 storey apartment blocks. Possible disastrous consequences of this situation for a country with a high earthquake risk were tried to be prevented by popularizing the construction of mass housing projects. Despite the place of mass housing projects in the social housing policies as a fast and easy way of housing supply, these projects are among the most controversial subjects in the world's and Turkey's agenda. These settlements are mainly built as **prototypes** so as to meet the immediate housing needs. Consequently, these operations affected the urban identity and created fragmented settlement zones in the city.

These settlement zones are planned with maximum number of floors in a matter that fits maximum number of housing in minimum area. Additionally, their construction operations mostly make use of mass production and cheaper building techniques. However, these settlements fail to meet their prior socio-economic aims. Such features as quality, spatial continuity, and totality are ignored during the planning and construction. Mass Housing Administration TOKİ, appears to be the most influential establishment that is concerned with problems regarding the housing and housing need. However, an analysis over TOKİ housing "types" in different cities shows TOKİ's negligence in regional, climatic and cultural differences. TOKİ housings that are mainly built for middle and low income groups are expected to be economically and spatially rich prototypes that synthesise passive climate control techniques with the cultural, geographic, and climatic aspects of the country.

Nevertheless, examinations shows TOKİ's absence of a certain design principle or a guide that can be used during housing projects and applications. Besides, a TOKİ funded research project by METU MATPUM Project Group in 2010, "Research on the Data Compiling Techniques Regarding the Human-Environment Relations in order to Establish Environmental and Urban Standards in Mass Housing Areas" stands as an interesting fact. This research includes both exterior and interior design principles in mass housing areas.

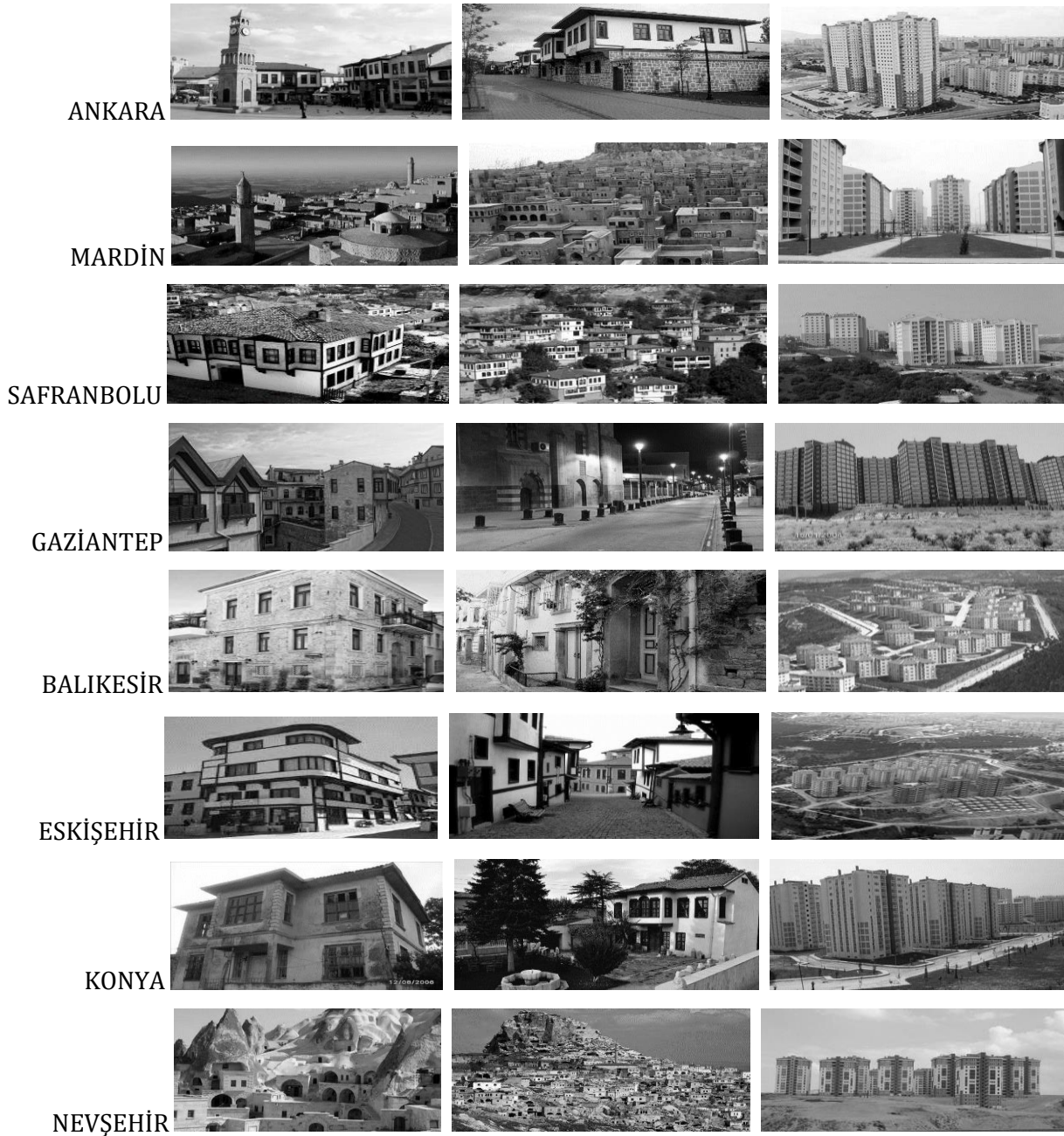
According to METU-MATPUM (2008); the residential environment should encourage people to gather in open areas. Exteriors should be designed as agents that empower and sustain the life in housing. Streets, squares and green areas ought to be considered as essential parts of the human life and designed as gathering areas to spend time (Yeğin 1993; Tavukoğlu 2008).

Yet, current mass housing examples by TOKİ disregard not only the local design typologies but also modern architectural debates. Thus, as it seen, the administration with the largest share in housing production, TOKİ, lacks a certain design criterion, principle or standard to apply/embrace/consider. **TOKİ disregards the social, cultural, spatial, and environmental aspects together with the different user profiles during the design and production processes; and leads the way in the creation of the standardized subject by producing standard prototypes in a country with such distinct characteristics.**

4. Conclusion

The large scale involvement of the construction sector in Turkey with the housing production is a widely known fact. The cities have been continually growing and disconnecting from their context because of the typical design operations of the urban transformations since 1950s. These constructions both by the state and private sectors have changed the image of the city, especially since 1990s. The urban transformation policies in the city centers and the new settlement areas around the city are creating a situation that is away from an integrated and social perspective and revokes the urban rights of the poor while serving the rent seeking of the rich classes. In addition to these consequences related

to social segregation, unqualified projects by TOKİ and private sector create a spatial danger. This lacking quality, point block settlements that completely disregard the aesthetics of their exteriors are becoming artefacts that define our environment.



Turkey from traditional to TOKİ

Ongoing debates on the subject of identity since the times that the idea of Modern architecture started to shake in 1960s, have continued as debates between “natural identity or international identity” in Turkey. The search for a natural identity during the Early Republican Period failed to come up with a permanent solution. On the contrary, international typologies took over our cities without any concern on their context in a short time.

However, the Third World and Islamic Countries required the largest attention in questioning the relevance of modern typologies, while compared to the rest of the world. These countries failed to produce an effective idea and consequently; break with their tradition in the most devastating way and contain the most unsuccessful examples the modern architecture. Yet, they built incompatible urban fragments with the “imported typologies” from the West and squeezed in the daily life.

The lack of a significant urban identity that comprises the current building stock either by conscious/planned/authorized or unplanned/unauthorized/random choices in a modern or traditional notion is a known reality. Currently, identity is searched either in a noble past or a savior future (a contemporary and progressive image), while failing to cope with the present reality. Unquestioned acceptance of both the past and future styles is hardly a solution for our cultural sustainability in the current state that is disconnected from the culture by the common actors of our cities, apartment blocks. First of all, the systematic properties that define the traditional urban identity or the resulting typological properties should be defined in order to interpret (reproduce with our own terms without direct imitation) the Anatolian housing tradition in a contemporary way.

An important aspect of the traditional fabric in Anatolia is the attached sense of the actually detached houses from the street because of the integration of houses with their garden walls. This garden walls which gives the quality of positive space both to street and courtyard serves as a transition ground between the forms of house and city. This typology allows the uppers floor to break this continuity in order for the house to gain its singularity within the context. A flexible fabric form is made possible by this "urban perimeter wall" and the role of this urban element in the formation of urban space stays in the same richness separate from the changes in its physiognomy because of the regional conditions and tectonic aspects.

The shortcomings of the fragmented and undefined settlement plans by the current apartment blocks in creating a feeling of being in a spatially continuous street is a fact. These shortcomings of the contemporary settlement plans result in the loss of the identifying aspects for a street which was evident in the traditional settlements. The "spatial hierarchy" in the traditional is a result of the cultural habits and also forms the social organization. Type is an abstraction and it is not possible to speak of a single "type" in Anatolia. It is the spatial definition of the life habits that is resulted from a long term geographic, climatic, and cultural variation. Additionally, it stands as an important spatial element that forms such dialectics as interior-exterior and private-public; and creates the city specific connecting typology.

On the other hand, the dominant concept in the current housing market repeats the same groundless block prototype within the mass housing settlements that are free from zoning regulations. This concept can be summarized as the positioning of the common apartment blocks with maximum number of floors on a close to arbitrary road scheme, which eventually leads to a circulation disorder. Recurrence of this mass housing project concept even in the educational foundations that should actually be free from the market laws stands as an intriguing fact. Thus, as well as pushing our authority limits; raising the level of our professional competence which actually corresponds to our design skills appears to be the ways to cope with the current market conditions.

The important points are to overcome the poverty of typologies to enhance the sensational richness of the space and its functional value; reveal the subject; or shortly **highlight the principal elements of architecture** instead of the worries about style. Actually, according to many architectural theoreticians; architecture is more about "making" than anything else. Architecture has always been a creative act. However, this creativity does not mean to create something from nothing, but actually refers to "revealing" in terms of recreating, or poesies. Poesies calls for giving up the idea of seeing world as a whole of **available objects** while standing in the middle of the world, learning to hold back, and gripping the flow of the nature to be part of it rather than being a spectator. In this context, the knowledge of making is not obtainable merely by the way of rational abstractions. This learning process requires the acts of seeing, listening, contacting, preserving and taking part. Nevertheless, the dominating way of "making" in the modern world is technology. The reality of the world is thought, produced, developed, and controlled based on technique. Type and style are perceived as obstacles on the way to creativity rather than means to achieve it in the first half of the 20th century.

Herein, laying emphasis on the "professional values and ethics" which is a must for every architect, rather than suggesting "a body of rules, models and procedures" is more appropriate for the variable structure of architecture. The solution for the superficial, individualist and arbitrary concepts that are the consequent results of the current time's momentum lays in the search for an architecture that can connect the separate realities of the world and the community, "takes hold within the cultural layers", and protects its integrated and authentic structure rather than the imposed procedures. In this sense, "types" that are intricately coherent in daily life should be reinterpreted by realizing the geography specific body of types.

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