	and the second
RESEARCH ARTICLE ARAŞTIRMA MAKALESİ	
A New Concept For Comprehending The Changes In Today's Cities: "Urban Container" and Examination of The Term Regarding Turkey	
Pırıl Kuğu İŞCAN Yildiz Technical University, Graduate School of Science and Engineering, Architectural Design Program / <u>pkuguiscan@gmail.com</u>	KENT
12/11/2019 / 10/12/2019	AKADEMİSİ
Pırıl Kuğu İŞCAN ORCID: 0000-0001-7609-3571 M. Tolga AKBULUT ORCID: 0000-0002-3020-0789	
İŞCAN P., K., AKBULUT, M., T. (2019). A New Concept For Comprehending The Changes In Today's Cities: "Urban Container" and Examination of The Term Regarding Turkey Article, Kent Akademisi, Volume, 12 (40), Issue 4, Pages 846-859.	How to Cite
	A New Concept For Comprehending The Changes In Today's Cities: "Urban Container" and Examination of The Term Regarding Turkey Prrl Kuğu İŞCAN Yildiz Technical University, Graduate School of Science and Engineering, Architectural Design Program / pkuguiscan@gmail.com 12/11/2019 / 10/12/2019 Pırrl Kuğu İŞCAN M. Tolga AKBULUT İŞCAN P., K., AKBULUT, M., T. (2019). A New Concept For Comprehending The Changes In Today's Cities: "Urban Container" and Examination of The Term

Günümüz Kentlerindeki Değişimleri Anlamak Adına Yeni Bir Kavram: "Kentsel Konteyner" ve Türkiye Üzerinden İncelenmesi

Pırıl Kuğu İŞCAN¹ M. Tolga AKBULUT²

ÖZ:

Günümüz kentlerinde, kente ilişkin birçok işlevi bir arada kullanıcılarına sunan yeni yapı tiplerinin ortaya çıktığı görülmektedir. Bu yapılar, konut, eğlence, ofis, okul, otel, alışveriş, sağlık, kültür, sanat gibi çok sayıda işlevi bir arada bünyelerinde barındırmaktadırlar. Şehircilik ve mimarlık ortamında bu yapılar bir araya gelen işlevlerin özelliklerine ve yoğunluklarına göre alışveriş merkezi, rezidans, alışveriş-yaşam kompleksi, karma kullanımlı yapı, kapalı site/yerleşim, kültür kompleksi gibi kavramlarla ifade edilmektedirler. Dünya'da ilk olarak felsefeci ve bilişimci iki akademisyen John ve Schuilenburg tarafından birçok işlevi bünyesinde barındıran bu yapılar "Kentsel Konteyner" olarak nitelendirilmiştir. Tez çalışmasına dayanılarak oluşturulan bu makale kapsamında literatüre giren "Kentsel Konteyner" kavramının mimari bakış açısından irdelenmesine ve "Kentsel Konteyner" olarak nitelendirilen yapı tipolojilerinin dünya örnekleri üzerinden değerlendirilerek Türkiye ölçeğinde gelişiminin izlenmesine ve sınıflandırılmasına çalışılmıştır.

ANAHTAR KELİMELER: Kentsel Konteyner, Kapalı Siteler, Karma İşlevli Yapılar, Konut, Lojmanlar.

ABSTRACT:

It is observed in today's cities; a new architectural structure type is arising. These buildings contain various functions like residence, entertainment, office, school, hotel, shopping, health, culture and art. According to features of the combined functions and intensities, in urban and architectural aspects, these buildings are identified as shopping malls, residences, shopping and living complexes, mix-used buildings, gated communities and cultural complexes. Alex de Jong and Marc Schuilenburg who are academicians in philosophy and information technologies subjects referred to these structures as "urban container" for the first time. In this article, which is based on the thesis study, it

Article Title: A New Concept For Comprehending The Changes In Today's Cities: "Urban Container" and Examination of The Term Regarding Turkey Journal of Urban Academy | Volume: 12 Issue: 4 | ISSN: 2146-9229

¹ Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Mimari Tasarım Programı, Mimar Sinan Güzel Sanatlar Üniversitesi, Mimarlık Fakültesi, Mimarlık Bölümü, <u>ece.altinkaya@msgsu.edu.tr</u>

² Yıldız Teknik Üniversitesi, Mimarlık Fakültesi, Mimarlık Bölümü, mtolga@yildiz.edu.tr

is aimed to examine the Urban Container term in the architectural aspects and by reviewing structure typology examples in the world, which are called Urban Containers, to observe and classify its development process in Turkey.

KEYWORDS: Urban Container, Gated-Communities, Mixed-Use Buildings, Housing, Lodgments.

INTRODUCTION:

"In modern day cities, city centers or urban fringes, it is seen that an architectural structure type has been growing rapidly which locates on various infrastructure tangle points or transportation axes, and concerning the living, working and recreation functions in itself, offers its users a new urban living space by unifying functions that exist separately in the city such as housing, office, entertainment, health, school, hotel and art center. These structures that changes social structure by affecting urban life directly and creating a spatial separation are expressed with the concepts of urbanism and architecture such as mixed-use buildings and gated-communities" (Kuğu İşcan, 2010, p:viii). But these concepts are insufficient to define the formations that constitute a part of an order, which is comprised of elements like surrounding, keep together, separation, creating identity and supervision. These structures were referred to as "Urban Container" for the first time under a new classification in a book named "Mediapolis Popular Culture and the City" (Jong Schuilenburg, 2008) by Alex de Jong and Marc Shuilengurg, who are academicians in philosophy and information technologies subjects. Jong and Schuilenburg expressed urban container as a sociological term and studied its developmental process through history and its typologies in the world. So, it is of high importance to make a study about it regarding Turkey in order to understand the changes in our cities.

1. "Urban Container" Concept

"Container' comes from the Latin word *continere*, which is a combination of the words *com* (together) and *tenere* (to hold). This is what these large scale complex do: enclose and keep together. In the Urban Container, the major social institutions of modernity – offices, schools, prisons, hospitals, shopping centers – have been turned inside out and pressed into one architectonic space. Just as in the shipping trade, the Urban Container stands for standardization and optimization of the available space. The economic credo applies here: '*Small space, less costs*''' (Jong and Schuilenburg, 2008, p:44).

The "urban" prefix is chosen specifically in order to define the architectural structure type that the term refers to, as it constitutes the logic of containers' system which stocks different coexistent materials by using a restricted amount of space with maximum efficiency through urban functions.

To this day, urban planners and architectures have used the terms "mixed-use building" and "gated-communities" to define the living areas that are demanded to be defined through urban containers in the city. It will be to the point to define these terms; in order to indicate the differences and similarities between them and urban containers.

- According to Bilgin, mixed-use building is using more than one program related to each other, by creating a unity. The mixed-use building term in architecture, on the other hand, is used meaning gathering various function groups to form a structural program. (Bilgin, 2006).
- According to Blakely and Snyder, gated-communities are residential areas that contain privatized common areas and a controlled entrance. These are commonly secured housings that have controlled entrances which block outsiders' access by means of some parameters designed as walls or fencing. (Blakely and Snyder, 1997).
- According to Atkinson and Flint, gated-communities are residential areas or a development that is fenced or walled-off from its surroundings, either prohibiting or controlling access to these areas by means of gates or booms (Blakely and Snyder, 1997).
- According to Candaş, gated-communities are residential areas, separated from their surroundings by means of a wall or fencing, privatizing common spaces like pathways or green fields, offering social activities to their users and are secured by a special security 7/24 controlling the access. (Candaş, 2007).

Based on this, we can compare the urban container term that Jong and Schuilenburg created to understand the



structures in the city and the forms of living, to the terms "mixed-use building" and "gated-communities", abiding by the definitions in the sources:

- Urban containers are mixed-use buildings. But not all mixed-use buildings can be accepted as urban containers.
- In urban container concept, formation should be related to a present city. When acknowledging a mixed-use building as an urban container, its relationship with the city is of high importance. In this sense, a mixed-use building in a rural area should not be described as an urban container.
- Urban container offers its users the main urban functions (living, working, recreation) and services (infrastructure, electricity, water, heating, waste/junk system) that exist separately in the city, all together with the maximum efficiency in a restricted, secure and controlled area. Urban containers are structures, which work as a city in the cities. For instance, a court building or a hospital complex, as well as being a mixed-use building, should not be defined as an urban container.
- If we examine the definition of gated-community, we can see that it carries some similar characteristics to urban containers. But the concept of urban container can be defined in an upper scale that involves gated-communities, too. Urban container can be defined as a concept that has occurred in many forms throughout history and has typologies in today's cities. Based on this, gated-communities can be examined as a typology of urban cities.

"Urban container is an approach that gathers multi-functional places and application areas organically and builds the city concept via this structure. By offering all the services covering the city (electricity, water, heating, waste/junk system), presenting the need in an ecological and transformational way, it constitutes a reference for utopic city images. In today's growing and unlimitedly global urban cities, migration, complicated sociocultural patterns and class conflicts, ecology, war, terror and privatization form an ongoing trigger. Housing and using space on a minimal scale are big problems individually. In this sense, is urban container able to solve the complicated social problems and problematic characteristics of cities? Urban containers, which involve housing, office, social institutions and malls, formed as stacked up, interconnecting, mobile forms with minimum possibilities of use, are structures qualified enough to provide the need of social class with high income in a privatized and technologically secured city." (Tan, 2008, p.59).

Based on this, the common traits of structuring and lifestyle that urban container term means, can be defined as follows: (Kuğu İşcan, 2010, p.140)

Urban Container;

- Offers its users the functions of living, working and recreation altogether.
- Involves urban infrastructure services. Such as paths, water, heating...
- Is established in the city center or urban fringes.
- Is constituted on transformation axes and important intersections.
- Offers a safe living space in a controlled area.
- Contains a certain social group.
- Stores urban functions.
- Offers its users opportunities of socialization.
- Forms a new public space for many cities.
- Creates social disintegration.



- Is an indicator of social status.
- Owns a brand value.



2. Historical Development Of "Urban Containers" and Typologies of "Urban Container" in the World

"Although it is difficult to specify the place and time of the first Urban Containers, a historical parallel can be given. The modern Container displays many correspondences with the medieval walled town. Here, too, there was a tendency to seek protection and to exclude undesired persons. For a long time the walled town was an example of the way in which large communities could be accommodated in a bounded space within which the world could unfold (Figure 1). In the medieval model, the town and the countryside can be easily located. They are often clearly delineated places with their own specific physical, social and symbolic characteristics. However, with the new geography, an end has gradually come to the clear demarcation between wild nature and stylized human culture: the transition from the 'interior' of the demarcated urban culture to the 'exterior' of wild nature has vanished." (Jong and Schuilenburg, 2008, p.45).

Figure 1. City of Jerusalem in the Middle Ages (Bible-History.com)

Economic, social and cultural developments in the historical period have made the urban structure change and caused new urban typologies to occur. It can be said that in this process, urban containers, which occurred to provide the need of urban people, are defining a new way of living and a new typology of structure.

Article Title: A New Concept For Comprehending The Changes In Today's Cities: "Urban Container" and Examination of The Term Regarding Turkey Journal of Urban Academy | Volume: 12 Issue: 4 | ISSN: 2146-9229

849

In addition to the company towns that are accepted as a typology of urban containers in the world; compounds and ecities, mixed-use buildings which are modernist structure typologies of their time, city-in-city or themed-cities are also examples of urban container structures that are listed in urban container typologies (Figure 2).



Figure 2. Chronological table of "Urban Containers" and their typologies (Jong and Schuilenburg, 2006)

Industrial institutions growing in industrial cities focused on production, created dwelling areas around the factories located in the urban fringes for workers and their families, with the purpose of increasing efficiency. These accommodations, which include urban functions such as school, hospital, shopping centers, entertainment centers and religious locations, are gated-communities that serve as a town in the city. These dwellings, which serve as a town in the city, offer their users several different urban functions in an enclosed atmosphere and carry all the characteristics of urban containers, are named as company towns and classified as a typology of urban containers by Jong and Schuilenburg. Pullman Palace Car Company, built in the southern California in 1880, is a good example of company town. (Jong and Schuilenburg, 2006, p.51) (Figure 3).





Figure 3. Pullman Company Town general view (GrangerAcademic.com)

"The Urban Container has been shaped along various lines. On the one hand, it developed from the company town model, whereas, on the other, the juxtaposition of a number of divergent social functions within spatial boundaries is an important characteristic. The latter ensures that proponents see a perfect reflection or reproduction of society in this structure. The world ceases to exist outside the Urban Container; the world unfolds within the Container. The company town described above helps us understand developments in countries such as Saudi Arabia and Jordan (Figure 4). There, the various features of the Urban Container are given shape in the *compound*" (Jong and Schuilenburg, 2006, p.51-52).



Figure 4. Tahran Aramco compound (Wikipedia.org)

"The typology of the Arabian compound is illustrative of this. In this compound, the rules of the Saudi Arabian law do

Article Title: A New Concept For Comprehending The Changes In Today's Cities: "Urban Container" and Examination of The Term Regarding Turkey Journal of Urban Academy | Volume: 12 Issue: 4 | ISSN: 2146-9229



not apply; there are detailed prescriptions that entail a unique normality or exceptional situation. Those protocols lead, as it were, to local jurisprudence. The exact aim of the control over the residents is not further defined, neither is the extent of its applicability. It is exercised by precisely-described internal rules that 'govern' life in the Container. In a reverse movement, the relationship between architecture and life is closed. Refusing to accept a protocol means exclusion from the compound" (Jong and Schuilenburg, 2008, p. 53).

Another example of urban container typologies is e-city. Urban containers that develop under a structure in city centers, transform in urban fringes and by growing more, compose e-cities also known as gated-communities. Gated-community, an important type of structure of today's cities, is highly demanded by people who prefer to get away from down-town and live in bigger and more luxurious places.

"The claim that a different society leads to a new space can also be reversed: a different space can result in a new society. Large-scale Urban Containers appear where information flows of the network society converge. This is the



case at hubs or points of intersection of infrastructural networks. This is most visible in Asian cities such as Hong Kong, Shanghai and Beijing, where mega structures are being built at large infrastructural hubs such as metro and train stations (Jong and Schuilenburg, 2008, p.53). Kingswood Villas in Hong Kong are a typical example for e-cities (Figure 5).

Figure 5. Kingswood Villa, Hong Kong (Wikimedia.org)

By offering its users several urban functions at once, urban container term, which defines a different lifestyle with specialties like encapsulating, keeping together and surrounding, has varied in time and reached its present form today in our cities. Urban container defines a new lifestyle with increasing numbers in our developed cities such as mainly Istanbul, Izmir and Ankara.

Urban container, which is stated in the book named "Mediapolis Popular Culture and the City" and said to have typologies such as company town, compound and e-cities in the world, can also be expressed to have typologies in





Turkey such as lodgments, gated-communities and residence mall-dwelling complexes (Figure 6).

Figure 6. Chronological development of urban containers in Turkey (İşcan, 2010)

Article Title: A New Concept For Comprehending The Changes In Today's Cities: "Urban Container" and Examination of The Term Regarding Turkey Journal of Urban Academy | Volume: 12 Issue: 4 | ISSN: 2146-9229

3. Equivalents of "Urban Container" Typologies in Turkey's Scale

It is seen that urban container typology, which is expressed as company town according to the worldwide examples of it, shares some similarities with lodgments that developed in the following years of foundation of the republic in Turkey. It can be said that the first examples of company towns developed in the United States of America like Pullman and Ford Company Towns, possessing powerful private capital, and the private dwellings, building up around factories, included functions like accommodation, housing, school, entertainment and shopping for the employees. Company towns, in which the main goal is to provide maximum efficiency in production by offering factory employees a healthy and private habitat, still maintain their functionality today. Modern worldwide companies like Google, Microsoft and Samsung, establish settlements that allow many social and cultural functions within, in order to increase productiveness of the employees. Lodgment units in our country that correspond to company towns in the world, are usually built by government for officers, employees and military service attendants and their families; though there are several examples built by private companies for their employees, too. This type of lodgment can be described as the first example of urban container typology in our country, regarding the lifestyle they offer and the functions they possess. It is also should be said that the lodgment settlements, which constitute the first examples of urban containers in Turkey, were developed for the middle-income groups.

Sümerbank Kayseri Fabric Factory and Lodgments is a typical example of lodgment (Figure 7). There are other examples like Cement Factory Lodgments, Petkim Lodgments, Turkish Petroleum Corporation Lodgments that locate in Batman, Sugar Factory Lodgments that locate in Kayseri, Eskişehir, Muş, Sakarya, Ankara and many other cities in Anatolia and Carriage Factory Lodgments (Figure 8). Although gated-lodgment examples decrease in number nowadays due to the new government policies, it is seen that some examples, belonging to military and some private companies, still maintain their functionality because of the security reasons especially in eastern regions of our country.



Figure 7. Sümerbank Kayseri Fabric Factory floor plan (Asiliskender, 2008)





Figure 8. Lafarge-Aslan Cement Factory general layout (Google Maps)



The secondary urban container typology in Turkey is gated-community. We see that gated-community include three types. First of them is satellite town, planned residential areas in the urban fringes, started to be established in Istanbul



in 1990s. Although they don't possess a fully closed environment, they still maintain their functionality today as they include all the urban equipment within. Bahçeşehir and Ataşehir are of important satellite towns of today (Figure 9).

Figure 9. Bahçeşehir Satellite Town general view (Estonsehirmahallem.com)

The second of them is luxurious housing estates increasing rapidly in number nowadays. Buildings like Uphill Court, Ağaoğlu My World, Varyap Meridian locating in Western Ataşehir are typical examples (Figure 10). They can be expressed as a similar example of the e-city urban container typology that we examined worldwide, in Turkey.



Figure 10. Ataşehir Satellite Town general view (Skyscrapercenter.com)

The third type is gated community, separated effectively from its surrounding environment by means of a wall or fencing, built usually in the form of a mansion, villa and multi-storeyed blocks in the urban fringes as a product of luxury, which include rich recreation zones within. The two most popular examples of it are Kemer Country and Beykoz Mansions (Figure 11).

856



Figure 11. Beykoz Mansions general view (Beykozkonaklari.org)

"Structures that we call "residence mall-dwelling complex" are the most important urban container typology in Turkey. These structures, growing in number in big cities, are established on transportation intersection points in the busiest regions of city center, unlike other urban container typologies. These buildings, acknowledged as a source of prestige for our country, are structures that are built on a restricted land rising vertically and serve as a city on its own, offering shopping, housing, office, business and entertainment zones within. These formations, that are our example of city-in-city structures we discussed through the development process of urban containers in the world, are structures that high-income groups prefer" (Kuğu İşcan, 2010, p.141).

It is seen that high-income groups, which prefer luxurious gated-communities in the urban fringes, as a result of migrations from the center towards the outskirts in the process of cities' physical growth and lack of social equipment and attracting opportunities which urban life offers, tend to prefer living spaces that offer environments locating in the city and still stand clear from the city, with high brand value, especially because of recently increasing transformation problems in big cities, particularly in Istanbul.

These organizations, possessing the potential to provide all their users' needs within the boundaries of the compound, begin to obtain an important role in urban life, as they also offer service with malls and living spaces free for public access. After these structures started to be used and it was accepted that they were profitable, the process that began with the construction of Akmerkez, continued with Metrocity, Kanyon, Sapphire and Trump Tower in Istanbul and has been going on increasingly in all cities with the construction of similar structures today (Figure 12).



Figure 12. Trump Towers - İstanbul general view (Mimdap.org)

CONCLUSION:

It is seen that structure types defined as urban containers, are preferred by users, due to their possibility to offer so many urban functions together in a secured living area. On the other hand, the changes and growth in consumption patterns of our society show that products are preferred according to the brand value they have, rather than their quality and properties. For some users, the image of "Urban Container" is perceived as a social status and has an important role for the reason behind the preference for this type of structures. In the formation process of brand value, marketing strategies also have a crucial role, undoubtedly. With marketing strategies, Urban Containers are presented as privileged living-spaces and a perception is created that inhabitants of it form a special group and are privileged regarding social status. It can be said that a privileged life is presented in these structures, where the latest technological products are used, all facilities of the digital world are offered, with the protection means of visual and virtual control mechanisms; and this idea of a privileged life is accepted by users.

As a consequence of the changes in the distribution of income which started with the process of globalization; though it is thought that the preferences of high income group increasing especially in our cities and their desire to disintegrate from society and to become introverted, result from the capitalist order of today's world; it can be claimed that this disintegration shows up in different ways in the world in every period, where the gap between the social classes grows. It can be said that, in an economic world order, where big differences exist in distribution of income, middle income groups demand to disintegrate from lower income groups, while high income groups desire to disintegrate from and even get scared of lower income groups. The reflection of this situation on living spaces occur as income groups with similar economic levels –especially high and middle-income groups-, living with people coming from the same economic and socio-cultural levels in voluntarily established ghetto areas. Consequently, economic and socio-cultural disintegration that emerge in our cities cause spatial disintegration and spatial disintegration cause social disintegration.

In a rapidly changing world order with the impact of technological and sociological developments, though now it is really hard to tell what kind of cities waits for us in the next century, it is possible to predict that urban containers, which increase in number in today's cities, will exist in some way, just as they did in the past. Just as Italian futurist Antonio Sant Elia said in 1914: "Each generation has to build their own city." Undoubtedly, this issue will remain as a major subject for urban planners, sociologists, architects and social scientists in the upcoming years as well and will provide a basis for important discussions and researches.

REFERENCES:

Asiliskender, B. (2008), Modernleşme ve Konut, Cumhuriyet'in Sanayi Yatırımları ile Kayseri'de Mekânsal ve Toplumsal Değişim, İTÜ Fen Bilimleri Enstitüsü Mimarlık Anabilim Dalı, Mimari Tasarım Programı Doktora Tezi, İstanbul.

Atkinson, R. Ve Flint, J., (2004), Fortress UK? Gated Communities, the Spatial Revolt of the Elites and Time-Space Trajectories of Segregation, Housing Studies 19(6), November 2004.

Bilgin, M., (2006), Karma Kullanımlı Merkezlerin Kent ve Günlük Yaşam İçerisindeki Yeri: İstanbul'dan Örnekler, Yüksek Lisans Tezi, Gazi Üniversitesi Fen Bilimleri Enstitüsü Mimarlık, Ankara.

Blakely, E.J. ve Snyder, M.G., (1997), Fortress America: Gated Communities in the United States, Brookings Institution Press Washington, D.C.

Candaş, E., (2007), İstanbul'da Dışa Kapalı Konut Sitelerinin Tasarımında Güvenlik Konusunun İrdelenmesi, Yüksek Lisans Tezi, İstanbul Teknik Üniversitesi Fen Bilimleri Enstitüsü, Mimarlık Anabilim Dalı, Mimari Tasarım Programı, İstanbul.

Granger Academic, Pullman, Chicago., The independent model town founded in 1881 by George M. Pullman for the employees of his Pullman Palace Car Company, and annexed by Chicago in 1889. Wood engraving, 1885.

İşcan, P.K., (2010), Kentsel Konteyner Kavramının Dünya ve Türkiye Ölçeğinde İrdelenmesi, Yüksek Lisans Tezi, Yıldız Teknik Üniversitesi Fen Bilimleri Enstitüsü, Mimarlık Anabilim Dalı, Mimari Tasarım Programı, İstanbul.



Jong, A. ve Schuilenburg, M., (2006), Mediapolis: Popular Culture and the City, 010 Publishers, Rotterdam.

Jong, A. ve Schuilenburg, M., (2008), Kentsel Konteyner'in Mekânsal Devrimi, Arredamento Mimarlık, 2008/03: 63-67.

Kurtuluş, H., (2005), İstanbul'da Kentsel Ayrışma: Mekânsal Dönüşümde Farklı Boyutlar, Bağlam Yayıncılık, İstanbul.

Tan, P., (2008), Mikro Ölçekte Kentsel Mekan: Mimarinin Ötesine Geçmek, Arradamento Mimarlık, 2008/03: 58-62.

ONLINE REFERENCES:

City of Jerusalem in the Middle Ages, Bible of History Online, Retrieved from https://www.biblehistory.com/jerusalem/firstcenturyjerusalem_overview.html

Pullman Company Town general view, GrangerAcademic Educational Picture Archive Web Site, Retrieved from https://www.grangeracademic.com/results.asp?image=0060138&itemw=4&item f=0001&itemstep=1&itemx=17

Eagleann, Tahran Aramco compound, Wikipedia Web Site, Retrieved from https://en.wikipedia.org/wiki/Saudi_Aramco#/media/File:AramcoCoreArea.jpg

Wing, HK Kingswood Villas Kenswood Court, Wikimedia Web Site, Retrieved from https://commons.wikimedia.org/wiki/File:HK_Kingswood_Villas_KenswoodCourt.jpg

Lafarge-Aslan Cement Factory General Layout, Google Maps, Retrieved from http://maps.google.com

Bahçeşehir Satellite Town General View, Eston Şehir Web Site, Retrieved from http://estonsehirmahallem.com/blog/etiket/konut/

Ataşehir Satellite Town General View, The Skyscraper Center The Global Tall Building Database of the CTBUH Web Site, Retrieved from http://www.skyscrapercenter.com/building/varyap-meridian-c-block/9778

Beykoz Mansions General View, Beykoz Konakları Web Site, Retrieved from http://www.beykozkonaklari.org/icana.asp?step=13

Trump Towers - İstanbul General View, Mimdap Web Site, Retrieved from http://www.mimdap.org/?p=6586

Kent Akademisi

