

The Design of Space in the Airport, the Effect of Glass on the Design of Space: Ankara Esenboga Airport/ the Case of Turkey

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Abstract: In our days, human being and space with its quality and quantity generated in the human environment, therefore the “*concept of place*” becomes subject to certain changes. In the modern cities where locality and diversity gradually increasing, the new spatial designs are turning into “placeless spaces”, that cannot create any relation with time and place. Airports as one of these urban cases are thresholds between countries and cities as “placeless/timeless spaces”. These gigantic spaces with great emptiness where the terminal programs take place create the feeling of emptiness for the individual in the fast flow of time. This feeling of emptiness is generated with the spatial design, which the individual cannot take as reference or experience before. In the spatial design the glass material, which enables the transition from massive to transparent with the addition of the psychological effects it creates on the space, offers the user different expansions. In the present study, the concept of placelessness/timelessness has been exemplified over the design of space has been examined in the planning of the Ankara Esenboga Airport, which was constructed recently in Turkey according to the results of competition.

Key words: Placelessness/timelessness • Glass • Terminal • Ankara Esenboga Airport

INTRODUCTION

The new world city is seen in an infinite process of destruction and reconstruction as if it was a movie studio, superficial, without any history, layer or strata. In this city, the streets are lifeless, the public areas and highways are emptied in favor of speed. The public sphere is disappearing by replacing with television, media and means of mass communication. The people are looking and buying the vision and image. The space is losing its massive and concrete features and become a fact which is not directly experienced but passively observed from a certain distance.

The “*concept of place*” gathered different meanings in accordance with the changing and transforming needs of people in the historical process. In this process, the concepts of space-time are discussed with different points of view. According to these points of view, the *concept of place*, which is discussed within the critique of postmodernism by anthropologist David Harvey, appears as *non-place* in the works of anthropologist Marc Augé.

In the modern world, in the course of time, the places are turning into non-places. Especially the buildings such as *shopping malls, hotel rooms, airports* are non-places. The architectural language and functions of these buildings display similarities in all geographies. These spaces, which do not correspond to the culture and building terminology of the culture they take place, oppose to the spirit of the place (*genius loci*). The incongruity and independency they include give them an important freedom in the designing process, except the technical requirements [1].

In the present study, the concept of non-place is discussed upon the building structures of airports, where the time and space are re-organized by the programmatic structure of airports and upon the meanings ascribed to the space by the use of glass material in the design of these buildings.

The Space-time Perception in the Airports: The buildings of the airports display an example for the concept of non-place, which was discussed above as non-places. The fastest means of public transportation to

go from some place to the other are found in these areas. The idea of speed that lies beneath the use of these spaces, adds the same dynamism to all of the programs of the terminal. The programs and applications are in a certain order and structure due their operation in the optimal speed.

Paul Virilio, in his book *The Information Bomb*, discusses the disappearance of the geographical space caused by the effects of globalization and the temporal compression resulted from the ultra fast communication. The terminals are exactly the buildings where the situation mentioned by Virilio is experienced [2]. Such kinds of spaces are the areas that remain within a certain time interval and in which any kind of emotionality cannot be experienced during the interval. These gigantic places with great emptiness where the terminal programs take place, during the fast flow of time, create for the individual an emotional sense of emptiness. The sense of emptiness is generated by the spatial design that cannot not be taken as a reference by the individual nor can be experienced before. Therefore, with this sense of emptiness the individual starts asking questions about time and space. In this respect, when the terminal building in which the individual waits becomes insufficient to cover the emotional emptiness, the individual loses his/her references. His/her past, acquaintances, briefly the aspects that create the personality, start to become vague by remaining in the memory. The individual in order not to lose his/her personality, as a counter reflex, tries either to call back his/her past via the memories or to take a familiar image as reference. The very reflex can end up with reading a magazine of the popular culture or calling the friends on the phone. Therefore, the individual tries to create a border for himself/herself to avoid from getting within the emptiness resulted from the non-placeness of the terminal [3].

At the same time, the passengers are totally passive in the terminal. Where they wait; where they enter check-in; from which gate they embark the plane, are directed out of their control. Even they keep the control of time as a result of their choice on flights, they feel the anxiety of a possible delay. With these feelings of anxiety, the passengers have a tendency for being schizoid [4]. Being schizoid (the dissociation from the societal relations) starts from the lack of internalization of the present space and the loss of the temporal fact. This situation is developed further since it is nearly impossible to build social intercourse even though there are a lot of people around. The only purpose of the limited communication is to enable the passenger to find the seat that belongs to him/her in the entrance of the terminal. All these limitations create a sense of entrapment.

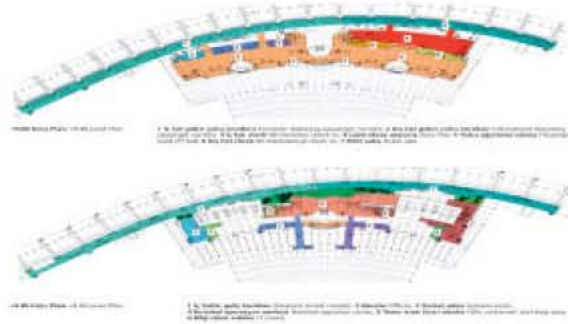


Fig. 1: The Floor plans for Arriving and Departing Passengers

The Ankara Esenboga Airport, which is constructed as a result of a recent national architectural competition, has an international reputation due to the spatial experience it creates. It brought the airport programmatic original designing suggestions with distinct structural solutions and with the uninterrupted visual continuity. The airport programs, which do not belong to the place and time of the present environment can be transformed into spaces where the passenger relaxes psychologically and can create relations without anxiety due to the designer's spatial design.

The Case of Airport Constructed via a Resent Competition in Turkey: Ankara Esenboga Airport: Since the previous terminal building of Ankara Esenboga Airport could not respond efficiently to the air navigation and as a result of the need for a modern airport, the State Airports Administration organized a national architectural project competition on 1998. The project that took the first prize created by the ESSA group, Ercan Coban, Suzan Esirgen, Suleyman Bayrak and Ahmet Yertutan. The construction of the project whose floor plans are seen in the Figure 1, however, continued until 2004.

The call for tenders by the General Directorate of State Airports Authority won by the TAV group in the beginning of 2004 and the airport construction was completed less than 24 months. The Ankara Esenboga Airport built in two years and will be managed by TAV Airports Holding for 15 years and 8 months, was completed with an expenditure of 250 million _ and it was opened with ceremony on 13 October 2006, on the 83rd Anniversary of Ankara's being the capital of Turkey. Esenboga Airport in the Cubuk district of the province Ankara, provides service on 182 thousand square meters as the second largest Airport of Turkey. The passenger number per year for Ankara Esenboga is thought as 10 million. The most important attitude of the designing criteria of the project is the creation of comfortable and



Fig. 2: The interior space of the Airport and the continuity of the interior and outdoor integration also in the sky



Fig. 3: The continuity of the visual integration in the interior space horizontally and vertically

commodious spaces before, during and after the arriving and departing passengers' passage from a range of machines. To achieve this, the architects use the natural light factor as much as possible. Such spaces created due to the transparency of the glass are designed to ease the anxiety in the beginning or at the end of the journey. To hinder the chaotic environment in the airports which have considerably complex programatics, transparency and a perceptible integrity are displayed. This approach built on a simple understanding aims to obstruct confusions.

A general gaze at the Esenboga Airport would show that it is composed of three major parts. The terminal in which the entrance spaces take place and the arrival and departure procedures are operated is composed of the main body block; the valley created to provide a visual continuity between the arriving and departing passengers and the last volume to get on the plane; the catwalk attached to the apron. These three different blocks are the indispensable parts of a whole designed according to different insights.

The building shell seen in Figure 2 which creates an image of a cloudy sky is composed of the membrane cover by wavy metal constructions built to control the light



Fig. 4: The water and green valley designed in the interior space

entering to the volumetric gap. Generally in the domestic terminal there is not much space in comparison with the international terminal. The passenger comes to the domestic terminal, completes check-in, passes to the gates and then embarks and leaves. Arrival is also similar; the passenger gets off and passes to the baggage carousel after the control and gates, takes the luggage and leaves. The operation is relatively simple. Yet, the international terminal has a more complicated structure.

This terminal needs different spaces for security, check-in, passport control, duty-free shopping, connecting flights or transition to domestic terminal and exchange offices. To deal with all these different functions and to enable their intelligibility is the biggest problem to be solved for the airlines.

As it is seen in Figure 3 of the Esenboga Airport, the domestic and international lines are designed together and the problem is solved by their being positioned in spatially different places. Via the use of the glass material nearly in every place of the building starting from the entrance, it becomes easy to direct passengers to the point they want to go. In the entrance hall, the opening of the wide glass surfaces to the sky with the carrier system design and their defining the apron side offer the passengers a wide and comfortable space and enable them to find their way easily.

With the valley placed in the heart of the design, a visual interaction made possible between the arriving and departing passenger traffic and at the same time, the obligatory top level security practices are moderated on the perceptual ground with the use of water, landscape and transparent glass material. The water and green valley seen in the Figure 4 continuing along the interior space without interruption enable the fast flow of time of the terminal to be seen calm and stagnant.

As it is seen in Figure 5, by the reflectance of the glass on the surface the interior and exterior spaces meld and while the passengers easily see the landing and departing planes in the waiting and recreation sections, the silhouettes of the planes reflect on the apron fronts.



Fig. 5: The relation of the spaces for recreation and waiting with the exterior space

The transparent vertical circulation elements as seen in Figure 6 do not interrupt the continuity of the outlook and the urban silhouette perceived from the gaps is carried to the interior spaces. The design of the interior railings, stairs, escalators and panoramic elevator surfaces, spatial fractions by the use of glass becomes important in terms of the *visual continuity* between the arriving and departing passengers. Due to the special glasses used in the design, the top level security barriers in the airports are not perceived and therefore the passengers and passenger relatives can move freely without seeing any threat for themselves.

The airport programs used as an example for placelessness are communicating with the place and the time of the place with the use of glass material. The Ankara Esenboga Airport built as a result of a recent architectural competition in Turkey has been analyzed in this respect. In the Esenboga Airport, the *glass* has a frequent use in order not to interrupt the visual communication between the interior and exterior spaces. The first expectation in the airport design is, for the departing and arriving passengers, their passing from a range of machines and after that the creation of wide and comfortable places.

CONCLUSION

The present study includes a research on the discussion of the architectural effects generated by the use of glass and its consequences in the airport accepted as one of the building types which are defined as “*non-place*”. The airport structures generally include the characterization of *placeless/timeless* and involve a close program. Despite the withdrawn spatial design, the

relation constructed with space and time is realized with the possibilities the glass includes. In the spatial design; the designer’s increasing the visual integration of the interior with exterior via the use of glass connects the airports with place and the time of the place. By this way, the concepts of placelessness and timelessness that appear in the programmatic structures, which are withdrawn and detached from place and time, are transformed from massive to transparent.

Throughout the years, the structure of airports has been transformed from the structure typology of massive-airdrome to transparent-light structures. In the airport designs of our time, covering the volumetric gap created in the front shell by glass leads the glass to reach beyond the dimension of a window and create totally an identity for the building and therefore the generation of the *front face*. Along with the Industrial Revolution, the complementation of the iron and steel structure design with the glass enabled the wide gaps to be covered by transparency. The efforts of the human to integrate the light inside the building proceeded fast in every period and the massive stone walls were replaced with wide *glass surfaces*.

In conclusion, the sense of placelessness situates the individual or the passenger in the position of nomad without reference. This type of spaces, with the sense of the spiritual gap, creates the feeling of anxiety in the passenger who cannot coincide with any code from his/her culture or past [3]. In this empty area s/he enters even though the placelessness brings anxiety, the *glass* organizes this emptiness by drawing its borders. With the use of the glass material in “*placeless/timeless*” building types such as airports, these places start to *belong the place* and to hold on to it. The placeless programmatic after that point are physically and psychologically build a relation with the place and re-evaluate the body-space relation again by the glass design.

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