STRUGGLE OF AIRPORT TERMINALS TO ESTABLISH A RELATIONSHIP WITH PLACE: THE CASE OF ESENBOĞA AIRPORT

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ABSTRACT

In the world of today where architecture is accepted as a language imparting meaning and spirit, the rules of this language should be internalized. The communicative character of architecture is underlined through the organic integrity between the form of an architectural product and its meaning in defining the problems arising in the composition and usage of designs in harmony and creating proposals to solve these problems; in short it is emphasized in every step. A closer look at the history of humans and their relation with the environment reveals that depending on the needs and external factors new urban spaces came into existence that underwent, in the course of time, a rapid development and change. New spatial constructs brought to life in modern cities with an ever decreasing sense of locality and variety turn into non-places in time. All of them are of the same type as a system and they do not belong to the place they are in. Airports, one of the most significant examples of "non-places", carry, beyond the local traits of the country or the region they are located in, the characteristics of the global consumer culture, a phenomenon that is mainly attributed to the social change which occurred in the post-industrial period. Airports, ''non-places'' in essence, are spaces with terminal areas characterised with emptiness. They create, in the rapid flow of time, a sense of emptiness in individuals. This feeling of emptiness is formed by the space design, which one cannot get reference to, which he could not experience before. Airports, which form a reference point for towns, have also become, in recent times, significant spaces in the urban memory. This study aims to investigate the terminal building of Esenboğa Airport, built within the scope of a competitionin terms of spatial context and meaning, with its quality of being a reference point of the city of Ankara, the capital city of Turkey where culture, art and politics are integrated in a pot and also of being the first point where visitors from home and abroad gain the first impression of the city and country. The study only focuses on the terminal building, being the first point of entry into and exit out of the airport where the units serving the arriving and departing passengers are located. Analysing the structure in terms of form and meaning, the study further examines the struggle of airports, as spaces with non-place character, to establish, with their external and internal spatial construct, a relationship with the place.

Keywords: Esenboğa Airport, Non-place, Formal and Semantic Analysis

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1. INTRODUCTION

In architectural constructs, space and humans are in a continuous interaction. Humans view and qualify the space on the basis of their acts, adding to it a new dimension by deciphering it in their own way. In this regard, Wright said: "The interior space is a part of the space which is the spirit of a building, belonging to, being with and growing out of it. When the space in which it is lived is considered as such as a whole, this space is the architecture itself." The quality of establishing a mutual relation between humans and space is considered to be an importantfeature of the high-quality urban life. Here reference is made to the emotional relationship established with spaces. These spaces are places with or towards which humans can develop a relationship, a sense of attachment, a sense of belonging, a sense of identification, as places always remembered with a sense of longing.Spaces humans like to visit and enjoy a stay in create a sense of belonging in them.To belong to the space is made up of spaces that seem meaningful to people.Perception and realisation of a space by users necessitate a form and meaning process which should be constructed in an appropriate manner. Humans identify themselves with spaces which rather promise a better life quality for them; they feel that they are a part of such spaces, always remembering them with attachment and devotion (Mazumdar, 2003).

Within the concept of space lies the concept of space. The place is the whole of the values that the place has. Such values are physical, emotional, cultural, individual as well as those marked with past experiences. Spaces can be identical in terms of forms of approach to, and usage of, individual spaces; on the other hand, they are all unique in respect of values embedded in them. The space, which is the basic product of architecture, has become an object that has been produced and consumed in social practices over time (Yırtıcı, 2002, s.9). We are now living in an environment built on the concept of consumption, in which, as a consequence, all the relationships ultimately refer, in one way or other, to consumption. The direct existence of consumption in the network of relationships does also affect the spatial structures. With the effect of the whole on the concept of time, space, in other words ''place'', has also had its share out of this network of relationships. Nowadays, space is not defined, contrary to the definitions in the past, as a sui generis phenomenon, but it is defined, so far as possible, based on the economic and social values. With such a value, added by rapid progress to the concept of space, space, wherever in the world it may exist, has gained a universal identity; in other words it has become an element of transition one can have access to from everywhere. According to Augé, ''place'' is identified through identity, association and background. The physical area, on the other hand, which is void of such values, is a "non-space'' or a "non-place". The global world produces "non-spaces", "non-places". These "non-places" cannot get integrated with the existing "places", but they always remain in a distance; it is not possible to establish an emotional bond with such spaces (Auge,1997).

The spaces embedded in airport terminals are areas where people, in passage from one country to another, from one town to another, from one community and culture to another, get the first, or sometimes the last, impression of a country, town, community or culture Since each country has its own unique cultural characteristics, it is expected that airports will also have a structure or content that is shaped in this cultural identity or contains these cultural codes (Elgün vd, 2013). In this sense, it is of great importance that the form-meaning relation in these spaces should be built on a strong design. The scope of this study has been limited to the terminal building, on the grounds of its character of being the first point of entry into and exit out of the airport where the units serving the arriving and departing passengers are located. The design

of an airport terminal basically aims to create walking distances, a pleasant environment, services, security, cost efficiency and aesthetical design (Trani, 2002).
Taking these criteria into account, this study analyses the terminal building of Ankara Esenboğa Airport in terms of form and meaning and investigates the space in respect of its struggle to establish a relationship with the place. In the examined airport terminal, observation and photographing techniques were used from observation data collection method. Also in the building, the connections between all the spaces and commercial spaces used by the passengers were examined through passenger orientations, lighting and material observation methods. In order to be able to evaluate the selected airport terminal building from an architectural point of view, the architectural project includes the structure of the terminal building, the location and the necessary information about the spaces used by the passengers (location plan, floor plans, sections and views). For this reason, information about location and building elements was taken from the architectural project and evaluated.

2. NON-PLACE CONCEPT IN AIRPORTS

Airports, train stations, shopping centres, highways are examples of non-places. These spaces do not belong to the geographical region, cultural values and background they are in; in short, they do not belong to the place they are located in. Features unique to such spaces can be found almost everywhere.The volumetric size, the materials used, elements providing the sustainability of the system (control, direction, information, ways of holding people within the space, entertainment etc.), signboards, guide boards, guide lines and signs showing speed limits are the same, everywhere without restriction. They do not have a common value, a common name. They cannot be classified. Contrary to the “places” where people enjoy facetoface relations in direct contact with each other, the communication in “non-places” is established based on written and visual elements (Auge,1997). The identification of the customer or passenger loaded on you at the shopping center or at the airport is equal to everyone and communication is provided in writing. In the non-place, the dominant element is "moment" as mentioned, "instant". Therefore, "non-place" doesn’twear off because it is not influenced by the concept of time, and it is impossible to establish a relationship with it. Another feature of the non- place is that it is defined through its size. The reflection of interiors to the exteriors is provided with facades.In this case, emerging faces of facades are a reference source in the description of the place (Çiğan, 2009). The concept of time in space can not be understood with these faces.
The relationships and values that form culturally and sociality add to the integrity of the space in which it is found. In this respect, İl said: “Even though the relationships, reflections and attitude patternswhich constitute the social structure and cultural values also determine the factors that specify and transform the place concept, such factors do also carry, pragmatically, social and perceptual powers (İl, 2005). For this reason, they make it possible that the wholeness of the spatial effects can be seen, becoming tools enabling us to question the space we are living in and its character as entity.’’ The airports are small worlds that are set up to sit, wait, and even wait. It is a line of transition where, all of a sudden, all types of people from all around the world come together for a common purpose. Humans turn into passive actors in these spaces; in other words they get imbedded into the space, ceasing to be an actor performing individually. A personin "non-place" is anybody like the others. When he is in "non-place", he moves with everybody in his time and lives the time together with the others.

3. DESIGN OF THE TERMINAL BUILDING OF ANKARA ESENBOĞA AIRPORT

The most important point in the design of airports is to make travel and provide passenger comfort.As the old terminal had lost its character of an airport proper for a capital city and could no more satisfy the needs of the increasing air traffic in Ankara, the need arose to build a new and modern airport. For this purpose, completion of the project, which was determined by the National Architectural Project Competition opened in 1998 by the State Airports Authority, was extended until 2004.The project awarded in this competition was completed in a process that lasted until 2004. It was set as a priority within the project, originally based on a 10 million passenger capacity, to build comfortable and spacious spaces for departing and arriving passengers in and outside of the customs area.There are restaurants, kitchens, café-bars, airline companies, technical centers, CIP and VIP saloons, commercial units, conference hall,prayer room, post office, travel agencies and banks in the terminal building which is built with Build-Operate-Transfer Modelreception hall (http://www.esenbogaairport.com, 2017).

3.1. Formal and Semantic Analyses

Esenboğa Airport is a complex structure that collects domestic and international terminal under the same roof. These terminals are separated horizontally on the land side and on the air side (Demir,2011). Transition between terminals can be done on the land side. The area 1 on the passenger floor, which goes to the inner and outer lines, represents the passenger linear compartment going to the air side(Figure 1).

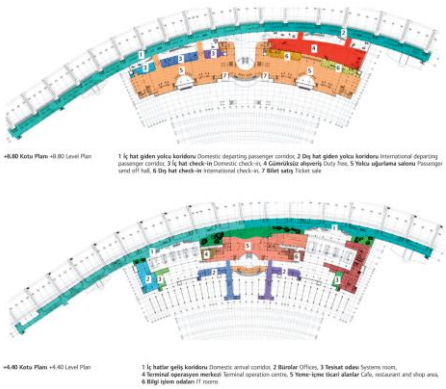
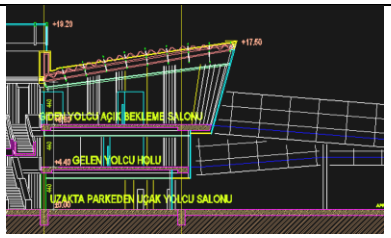
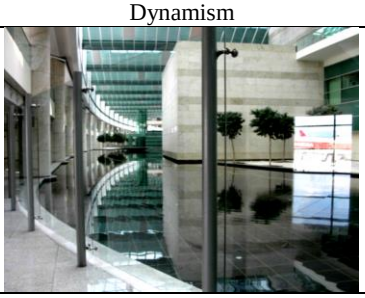
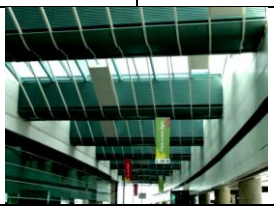


Figure 1. Plans of the Floors for Arriving and Departing Passengers (Anonym, 2005a)

The formal and semantic analyses carried out in the study focus on the passenger reception lounge, areas for common use, common area, valley construct, waiting lounge, lounges for arriving-departing passengers and luggagecompartment located in the floors for domestic and international flights in the terminal building.

Table1 1. Form-Meaning Relationship in Spaces in Domestic Terminal

1-a	**Check-in Lounge**	 **Entrance**	 **Roof Cover**	 **Port**
	Form	Natural Light, Linear Scheme, Visual Quality	Natural Light	Natural light, Curved lines
	Meaning	Spacious, Perceptible, Transparency	Integrity, Transparency	Mobility, dynamism, Transparency
1-b	**Central Area**		 **Passage Viaduct**	 **Access to apron elevation**
	Form	OrganicDesign, Transparency, lines from Nature	Water, Green, usage of Stone, Organic Design	Transparency, Curved lines
	Meaning	Visual quality, Spacious, Reliability	Meaningful, Transparency	Transparency, Dynamism
1-c	**Valley**			
	Form	Usage of Transparent Material	Water, Green, Stone, Curved lines	
	Meaning	Meaningful, Transparency, Visual	Transparency, Visual quality, Mobility	
1-d				
	Form	Natural Light	Colours	Transparent Materials
	Meaning	Perception of Time	Mobility, Dynamism	Transparency

1-e				
	Form	Functionality, Form indicating meaning	Curved Lines	
	Meaning	Attractive, Spectacular	Dynamism	
1-f				
	Form	Directing and Marking interior space form	Natural Light, Transparent Material, Curved Lines	
	Meaning	Interiors establishing a dialogue with the architectural form	Time, Spacious, Mobility	
1-g				
	Form	Visual Quality, Transparent Materials	Natural Light, Transparent Materials	Natural Light, Transparent Materials
	Meaning	Transparency	Perception of Time, Spacious	Perception of time, Spacious

The control device placed at the entrance of terminal has a design allowing an unhindered circulation of passengers. At the control point, the roof cover and façades stand out with the design which allows a good penetration of natural light. Passenger acceptance desks are designed in accordance with the linear scheme proposed by ICAO[3]; it is a good choice in terms of easy perceptibility by the passengers and providing possibility to form long queues. The purpose of natural light, guidance and lighting integrate with visually and transparency offered to passengers. By means of the transparency of glass, the structural system of building become lighter andthe visuals desired at the airports have been gained. The acceptance hall ofpassengers is designed with sufficient width and length. Metal and glass materials were used in facades and roof covers and the integrity was ensured by columns cladded with importedmaterials. The departing passengers can reach the port at the main terminal block without changes in elevation. Passengers and their relatives go to restaurants and cafés for their food and beverage needs where are located at the intersection of the domestic and international

[3]ICAO: International Civil Aviation Organisation

lines and also the last point of this area. Passengers using bridges can easily reach the gates 101-114 with the transit viaduct without level change. The long walking distances resulting from the linear port design were solved with walking bands that did not disturb the passenger flow (Table 1-a).

The passengers can observe the domestic-international line port, the waiting units, the apron and the valley from the central area at the junction point. The plan of the departure hall and the architectural design of the common spaces provide the passengers a wide and spacious perspective allowing them to conveniently access any point and easily view the whole area from any point in the space. Passing through the control point, the passengers reach the port accompanied by the same view. The architecture of the port is designed in linear scheme. Thus, passengers easily access the waiting points thanks to guiding boards. The passage to the port is designed with 2 passage viaducts. From this area, one has a view of the airside of the international line, valley, port, departing and arriving passenger floors, luggage compartment. The architecture of the terminal is designed on the comfort and satisfaction ofpassengers. The passengers in the planes parking at a distance pursue theflow paths of other passengers. Using the elevator and stairs in the port building, the passengers in this hallarrivethe distant waiting lounge at apron elevation (Table 1-b). The barrier-free terminal for disabled passengers has been implemented in all areas. The passengers reach the remote plane waiting hall with the green field visual following the arriving passenger lounge and luggage compartment. On this hall, eating, drinking and toilet areas were created.

The valley frame, which is the separating space between the terminal and the port, has increased the perception of the interior space towards the port. The border between the earth and the sky in the entire terminal has been completely removed with roof skylights, valleys and glass facades. As far as possible, green areas and water are created in the design of valley. These are areas adding value to the terminal (Table 1-c).

The waiting halls are designed at the lateral surfaces of the boarding gates at the apron façade. The façade of the apron covered with glass allows that the natural light easily penetrates into the space. Thus, spacious and visual waiting units were created before the flight. All the gates are open and the halls are arranged with enough seating units (Table 1-d).The variety of colours of seating units and the harmony of colours dominating the whole terminal refer to a conscious design approach. Non-closed waiting rooms provide optimum convenience and comfort for passengers. Waiting units are designed for eating, drinking and toilet units. All boarding doors are in the passengers' view with the structure that embraces the main terminal of the linear port structure. The closed waiting room, designed at the intersection of the domestic-international lines, is surrounded by transparent walls. In this way, both the safety and the aesthetic design of open waiting lounges have been made compatible. The transparency of the terminal, which started on the first entry, was also continued on the passenger bridges. Transparent walls separating the remote plain waiting lounge from the luggage compartment have provided a spacious space effect to the passengers by eliminating the oblateness of hall. The seating units, which are located in sufficient number in the plain waiting lounge, added refreshment with their colors (Table 1-d).

In the design the bridges for arriving and departing passengers are completely independent from each other. The bridges used by the departing passengers have a curved design. Steel and imported glass materials were used in the bridges. The port concept comprises of the lounge for departing passengers leading to the 2nd floor, the lounge for the arriving passengers in the mezzanine floor and the departing passengers' hall in the apron floor. The sloping façade design of the departing passengers lounge allows the lighting of the waiting lounges by the natural light, giving also a visual quality to the port. The interior architecture of the terminal

has been reinforced by enriching elements such as pool, genuine plants, stones and boards. The flow of the departing and arriving passengers at different elevations has removed the passenger confusion in the design phase. The passenger bridge has steel structure, aluminum joinery and colored glass. Bridges are terminal parts that use the daylight effectively during day time and also lightness in the nighttime thanks to lighting system (Table 1-e).
The arriving passengers reach the hall of the passenger who comes to the side of the air at +4. 40 elevation of bridges by using the bridges. The passengers have access from the lounge to the luggage compartment with a single level change. The flow of the arriving passengers is simple and understandable so far as possible. Passengers reach the luggage compartmentby using the elevators and stairs. The arriving passengers can observe the valley, green area and shopping units with terminal design. Passengers who enter the terminal from transparent bars can easily reach the luggage compartment with the same visuality and transparency (Table 1-f).
The arriving passenger lounge is surrounded by transparent walls for security reasons. In the luggage compartment, there are 5 luggage handling conveyors. The distances between the luggage handling conveyors have affected the passenger flow positively. The roof cover of aluminium joinery with double glazing enables that the natural light, penetrating deep into the space-in-between, diffuses to the lounges for arriving and departing passengers at the airside. The roof cover of the intermediate space spreads over the 2 ends. The transparent and uninterrupted design of the roof cover is in harmony with the terminal. The passengers who take their luggage first arrive at the greeters'halland then they exit out of the terminal. In this lounge, there are restaurants, catering units, waiting areas, telephone and WC areas. Transit passengers can reach the lounge for departing passengers using the stairs from the lounge of arriving passengers.The luggage compartmentand the greeters'hallareseparated by transparent glass walls. The greeters'hallisa common space where the integrity of space is felt (Table 1-g).

3.2. Overview of the International Terminal of Esenboğa Airport

On the land side of the architecture of the International Terminal consists of a departing passenger lounge, a mezzanine with a restaurant café and bars, and an arriving passenger's lounge. The air side port architecture consists of the floors for the departing and arriving passengers and apron floor. The concept of the terminal architecture has a versatile extension feature, multi-story and flexible plan. In the general layout plan, the main terminal and port are designed in linear form. There are a total of 12 fixed passenger bridges, 6 groups of double bridges, which are connected to the floors of arriving and departing passengers in the design. The design allowing passengers to flow on different bridges is an approach which eliminates the confusionin terms of passenger flow at the design stage (Figure 1).

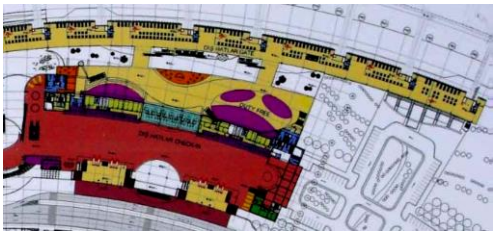


Figure 1. General layout plan of the International Terminal (Anonym, 2005a)

The departing passengers pass through the control points and reach the passenger greeters' hall. The number and placement of control devices allow a proper flow of passengers. Passenger reception compartments are placed just opposite the main entrance. Linear acceptance islands transform the acceptance hall into large, spacious processing areas. This design reduced passenger confusion to the lowest level and provided sufficient tail distances for passenger circulation. The colors and textures used in the passenger acceptance hall are in harmony with the colors used on the facades of the terminal. The natural light that penetrates through the roof cover diffuses down to the whole hall. Thanks to the steel roof system, this spacious hall has been built without using columnsand it provides the maximum width and flexibility in the lounge. Thanks to the steel material used in the whole terminal, terminalreflects the lightness and spaciousness (Table 2-a).

Table 2. Form-meaning relationship in the spaces in International Terminal

2-a				
	Form	Colours	Curved Lines	Water, Green Areas, Stone, Curved Forms, Originality
	Meaning	Attractive Design	Mobility, Dynamism	Meaningful, Transparency, Visual Quality, Mobility
2-b		 **Luggage Compartment Hall**	 **Arriving Passengers' Passport Control**	
	Form	Colours, Natural Light, Transparent Materials	Colours, Transparent Materials, Simple, Plain	
	Meaning	Spacious, Functional	Plain Design, Functional	
2-c				
	Form	Colours, Natural Light, Transparent Materials, Repetition	Colours, Natural Light, Transparent Materials	
	Meaning	Spacious and Functional	Dynamism	

The passengers who have completed the admission procedurescan have eat and drink in the restaurants and cafes located in the same hall and in the upper floor and have a rest in the related areas which serve as common areas for domestic and international passengers. After the formalities have been completed here, passengers reach the port, passing through the control points. Passport control points, equipped with 18 passport counters and 6 control devices, are placed between the reception counters in the middle position allowing passengers to easily notice it. In front of the passport control banks, queuing distances are left so as not to interfere with the passenger reception hall. At the east side, between the main building and the port building, there is a distinctive, bright, green space valley fiction.The arriving and departing passengers have a view of this area. This area with metal and glass materials in the roof cover allows the maximum natural light penetration into the space. Thin-sliced elements in the roof cover not only facilitate the diffusion of the light, but also have an effect in terms of reducing the massiveness of the structure and providing it integrity. The architectural design of the terminal, completely based on the orientation of passengers, allows them to go always forward, without the passengers returning.The terminal architecture designed according to the passenger orientations fulfilled this purpose. All the passengers pass into two viaducts from passport control points and from there to the related halls (Table 2-a).
The arriving passengers first arrive at the passenger lounge,which is on the air side, and from there, to the apron-rigid luggage compartment by single level change. The flow of arriving passengers is simple and understandable. For passengers with transit flights, they are allowed access from the arrival floor to the departure floor. Arriving passengers pass through 18 passport control points designed on a linear schematicand reach the luggage compartment.There are 4 luggage handling conveyors in the luggage compartment (Table 2-b).Passengers who have completed their luggage transactionsfirst arrive to the greeters'halland then get out of the airport.
The passengers of the planes that are parked away pursue the flow routes of other passengers. Passengers reach this hall by escalators and elevators. The passengers eliminate 2storeysdifferences in the waiting hall by marching along the valley and luggage compartment.The distant plane waiting room and luggage compartment for arriving passengers are separated by transparent glass walls. Passengers reach the plane waiting room by passing through control points. Waiting rooms include eating and drinking and WC units. The waiting rooms are arranged with enough seating units. The apron façadecovered with glass windows ensures natural light penetration into the space.The colours and texture of the materials used in the interior architecture of the hall are in harmonywith each other (Table 2-c).

4. CONCLUSION

Even though airport buildings are generally defined such as non-place/timelessness, airports are linked to the time and place by increasing the the use of glass as visual design continuity between interiors and exteriors. Concepts such as transparency, lightness, security and reputation, which are seen with the use of glass in airport buildings, change its massive introverted andcumbersome structure and provide the visual continuity of the arriving and departing passengers. In this regard, when Atatürk Esenboğa Airport is considered, the transparency of the terminal is striking everywhere. It is seen that every detail in the terminal are designed in a manner to guarantee the maximum penetration of the natural light. In order to understand the concept of time, architects used natural light factor as much as possible. Such places, which are made possible by the permeability of the glass, are designed to provide the

passengers a stress-free atmosphere before and after their flight. Contrary to what is done in complex airports, transparency and perceptible integrity have been created as much as possible. This approach, which is based on a simple understanding, aims not to cause to complexity.

In airport design, nowadays the idea of allowing the penetration of natural light intothe interiors at the upper level is remarkable. Another important aspect of the designs is the consideration to create natural life indoors. The valley which is designed inside of Esenboğa Airport is especially a space that flow from inside to the outside and external elements such as stone, water, tree, flower, daylight and even birds find a place in interiors. This makes it possible that the interiors and exteriors get intertwined with each other. Thus, the building is connected to the place, and the place is connected to building, too. Hence, the structure and the place establish a bond with each other.Natural lighting has strengthened the perception of interior space in the valley structure and towards the terminal. The use of genuine plants and natural stones made it necessary to convert airports into green spaces. Although the airports are public places where the most placelesscome into prominence perhaps, it seems that Ataturk Esenboğa Airport is in a struggle to establish relations with the place with some of the criteria it has set in its design.

It is thought that in nowadays that everything is mechanized, the consideration of design criteria such as the maximum usage of identity related, cultural elements, natural light and transparency for the future designs of non-place spaces such as airports are considered to be effective in the formation of the feeling of belonging and therefore will be pleasant for the human soul.

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