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Evaluation of Antalya Bus Station Information Element Designs in terms of Visual Aesthetic Quality

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Abstract

A The concept of information, known as information expansion, has been at the forefront in terms of the needs of societies from the past to the present. Recently, especially with the development of technological facilities, the importance of information design systems has increased considerably. Information and guidance elements exist in every field of social use, enabling the transfer of information; It is an important element in providing interaction for information and orientation within the spaces and gaining the functional and visual aesthetic appreciation of people with effective visual communication tools. As a social use, bus station structures also stand out as an important public space in the design of information and guidance elements. Within the scope of the study, focusing on the informatics language of bus station structures; It is aimed to determine the signage systems in the building through the example of Antalya Bus Station and to evaluate these designs in the context of graphic design space. In the evaluation of the identified signage systems, semi-structured interview techniques and descriptive analysis methods were used. In the first stage of the study, passenger, and employee opinions about the information-guidance qualities of the existing signage systems were taken. Within the scope of the interview data obtained, signage systems were evaluated by making descriptive analyses in the context of design elements and design principles as information-guidance design components determined in the existing literature. As a result of the evaluations, it was seen that most of the signage systems in the bus station structure were insufficient in terms of functional and visual aesthetic quality and that identity was not given to the bus station space and the city. As a method criterion, the study is expected to be a source for researchers from many disciplines that are active in the information and guidance design of bus station structures with approaches and elements appropriate to the identity of the city.

Keywords:
Information, information and guidance design, visual aesthetic quality, bus station structures, antalya bus terminal

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INTRODUCTION

Interest in the concept of information, which is known as one of the ways of transferring information from past to present, is increasing day by day, and the need for people's need for information is growing.

People who experience a space need information before they can make decisions or act. The process of receiving information is achieved by looking, touching, or feeling. For this reason, appropriate design elements should be used in the spaces where users should be informed (Akaydın and Türkyılmaz, 2018). In the spatial sense, knowledge means that it is appropriate to design and place various elements in space to obtain information (Ertaş, 2012). Ergonomically, the organization of information in space describes the process by which a person easily accesses and distinguishes information before deciding or acting. In this process, when information data is incomplete or insufficient, problems such as confusion and incomprehension arise.

Although information and guidance design are mentioned as a very new concept in various sources, it is a current field of design with an important and historical background that is discussed in many respects. The observance of information and guidance design, which cooperates with different disciplines and works with different disciplines, has become more effective thanks to the developing communication and transportation channels (Güler, 2008). Design elements that provide information and guidance within spaces help users move easily by providing their understanding between spaces and accelerating workflow. Especially in structures with complex organizations such as hospitals, schools, libraries, and bus stations, the quality of the information network; allows users to understand the spaces and move easily between the spaces.

Erik Spiekermann (2009), an active designer in information design, while discussing the process that he calls information crisis, also stated that we are in an environmental order that forces us to constantly look, listen and react in the transmission of information and that the information we need is often not well designed, citing instruction manuals, highway signs, and bookmarks as examples. Terry Irwin (2002) stated that he encountered many definitions for information design, especially the concepts of useful, informative, helpful, pure, powerful, accessible, collective, general, inclusive, meaningful, and functional concepts that shaped information design.

From informatics to communication, information, and guidance design, which has a wide range of places from engineering to architecture, is examined by many different disciplines (Durukan et al., 2020). Information design involves engineers, graphic designers, architects, industrial designers, and experts from different disciplines. In this context, it is possible to say that information design has turned into an interdisciplinary field and the importance of the discipline of architecture in this field has increased in planning design processes and visual aesthetic values.

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In this context, it can be stated that functional and aesthetic qualities are effective in the design of information design systems. One of the goals of these systems is to transform complex information data into visual expressions and make use of symbols with universal meaning (Crnokrak, 2008). Information and guidance elements should appeal to all kinds of audiences in both aesthetic and functional terms, making it easier for people to need information and receive information.

Information and guidance design is influenced by many areas such as typography, colors, materials, urban texture, ergonomics, readability, interaction, icons, and identity. Successful information and guidance design has meaning and creates identity in terms of visual aesthetics as well as the information it contains. When these systems are examined, the space it is designed for should be considered and all visual design decisions, from their form, color, and typography to dimensions, should include information about this spatial identity (Irmak, 2009).

Information and guidance design elements that are designed without considering their relationship with the space can cause many problems in terms of functionality and visuality. In orientation and information design, many principles, and elements such as typeface, material, color, the symbol used, visual formatting, and location selection affect the visual aesthetic quality of design elements. In summary, information design is a way of multiplying information daily with a common language formation that can appeal to everyone. In the spaces we use, collective, unusual, creative, and interesting designs made for people should be revealed (Gibson, 2009). Since information and guidance designs appeal to a wide audience, they should be impressive and memorable in terms of visual aesthetic quality.

Orientation design, which is one of the information components, was first developed for transportation spaces such as highways, train stations, airports, and bus stations (Ay, 2021). Bus stations are used to provide road transportation within and between cities, to achieve their roles, bus stations are equipped with information and direction signs, door nameplates, ticket offices, platform numbers/locations, etc., and become public spaces that contain areas that require design.

The review of current literature indicates that there is very little research on the design of information and guidance in different cities of Turkey and the world in terms of bus station structures as the use of public space in a large part of this research, was seen that the functional nature of the existing information and guidance elements and design suggestions were included. In the current literature, it has been determined that the information and guidance elements are not evaluated in terms of visual aesthetic quality, and design solution suggestions are not made in this respect. Within the scope of the literature and sample field investigation, it was seen that the designs for the signage systems in the bus station structures were insufficient in terms of visual aesthetic quality.

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In this direction, bus station structures, which are among the examples of buildings with complex organization, are discussed within the scope of the study. This study aims to determine the visual aesthetic adequacy of the information and guidance design elements at the bus stations and the problems for design solutions. The study discussed Antalya's existing intercity bus station as an exemplary space. In the selection of this spacious area, the fact that it is in a central location that can easily reach every point of the city by public transportation and that it is obtained through the architectural project competition as a qualified bus station structure has been a factor.

Within the scope of the study, focusing on the informatics language of bus station structures; It is aimed to determine the signage systems in the building through the sample of Antalya Bus Station and to evaluate these designs in the context of graphic design and space relations. Evaluation of the identified signage systems was carried out in two stages; At the first stage of the evaluation, the opinions of passengers and bus station employees about the information-direction qualities of the signs used in and around the Antalya bus station were taken. Signage systems were evaluated by making a descriptive analysis in the context of design elements and design principles as information-guidance design components determined in the current literature within the scope of the data obtained through the verbal interview.

EVALUATION of INFORMATION COMPONENTS FROM the POİNT of VISUAL QUALITY

With the influence of technology, language and perception have developed rapidly in recent years in information design. One of the reasons for this is the prevalence of computer graphics that allow the presentation and sharing of information. Today, the need for information design has increased with the transformation of visual language and perception into an aesthetic value as the design circles have been named. As Vignelli (2009) points out, "Changing the world is not the job of designers but protecting and beautifying the environment visually is something we can do."

Information and orientation design uses an interdisciplinary approach and focuses on shaping functional design consisting of multiple complex strings. For designs to be inspiring, enlightening, entertaining, and functional at the same time, they must carry some visual aesthetic elements. In the design of information and direction, visual aesthetic values should be at the forefront as well as the content. Developing methodologies in order not to look subjectively at the design processes, getting help from other disciplines, and being analytical give visual meaning to the information given in terms of design (Makal, 2009).

Information and guidance designers use design principles and elements to organize and use information, considering the user and the circumstances; thus, explanatory, and instructive writings are improved

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to understand complex materials, to easily access this information, and at the same time to maintain visual appeal (Segalini, 2009). While informative and orientation designs visually present information through typography and graphic elements, they carry out the identity communication of the structure by helping us to understand the architecture and infrastructure (Galindo, 2012). According to Sayın (2021), the principles in design are how to make a design; elements are concepts related to what will be used in a design. Each informational design element is designed to convey designated messages to a specific audience. In this context, when the existing literature on design elements is examined:

In the aesthetic perception of information and orientation design elements, grid system, font and typography, color, image, movement and sound, use of form, use of materials, suitability for space, location selection and application size are the basic design elements used in design (Topaklı and Nas, 2019; Ay, 2021; Durukan et al., 2020; Keskin, 2017; Becer, 2019; Lupton, 2006; Dinek et al., 2017; Baer, 2008; Öztuna, 2007; Sayın, 2021; Codur, 2010).

Table 1. Design component parameters those are active in the design of information and guidance elements

Information and Guidance Design Components			
Elements in Information and Guidance Design		Principles in Information and Guidance Design	
Font-Typography	Uyan Dur, 2011; Keskin, 2017; Becer, 2019; Lupton, 2006; Gibson, 2009; Fişenk, 2012; Sayın et al., 2009; Calori et al., 2015; Felici, 2003; Bringhurst, 2001; Ambrose and Harris, 2019; Ay, 2021; Durukan et al., 2020; Topaklı and Nas, 2019;	Order-Hierarchy	Becer, 2019; Sayın, 2021; Ambrose and Harris, 2014; Ay, 2021
		Balance	Becer, 2019; Sayın, 2021; Ay, 2021
Color	Dinek et al., 2017; Keskin, 2017; Öztuna, 2007; Bulut and Uslu, 2017; Baer, 2008; Sağocak, 2005; Lidwell et al., 2010; Topaklı and Nas, 2019; Uebele, 2007	Contrast	Ermiş, 2012; Uyan Dur, 2011; Sayın, 2021; Ay, 2021
		Ratio-Proportion	Ay, 2021; Becer, 2019
Forming Usage	Codur, 2010; Ay, 2021; Durukan et al., 2020	Weighing (Rhythm)	Becer, 2019; Aslan, 2002; Sayın, 2021; Ay, 2021
Material Usage	Topaklı and Nas, 2019; Gibson, 2009; Fişenk, 2012; Calori et al., 2015; Ay, 2021	Integrity / Unity	Keskin, 2017; Sayın, 2021; Ay, 2021
Relevance to space	Topaklı and Nas, 2019; Durukan et al., 2020; Ay, 2021	Emphasis-Focus	Uçar, 2019; Keskin, 2017; Karaalioğlu, 2015; Ay, 2021
Positioning	Topaklı and Nas, 2019; Okcu, 2007; Ay, 2021	Continuity	Becer, 2013; Keskin, 2017; Sayın, 2018; Ay, 2021

In the aesthetic perception of information and guidance design elements, the concepts of order-hierarchy, balance, contrast, ratio-proportion, weighing (rhythm), integrity-unity, emphasis-focus point,

and continuity stand out as the basic design principles used in design (Sayın, 2021; Ambrose and Harris, 2014; Ay, 2021; Becer, 2019; Ermiş, 2012; Keskin, 2017; Uçar, 2019).

Information and guidance design elements in bus station structures in terms of transportation spaces that are multi-use and complex; draft elements such as font-typography, color, forming usage, material use, material usage, relevance to space, location selection (positioning), and design principles such as order-hierarchy, balance, contrast, ratio-proportion, weighing (rhythm), integrity-unity, emphasis-focal point, continuity was evaluated (Table 1).

Evaluation of Information and Guidance in Bus Station Structures from the Point of Visual Quality

The concept of a bus station is defined by the Turkish Language Association (TDK) as "the place where intercity and intra-city motor vehicles pick up and drop off their passengers". The need for travel is compelling because people travel less frequently to meet the necessities of daily life. Mobility is an indispensable feature of social life, defining the ability to participate in modern society (Schofer, 2020).

Bus stations are dynamic and effective places that can be the scene of all kinds of functions that appeal to the residents of the city as important social and public spaces of the city. Often at large bus stations or transfer points, the sense of anxiety and anxiety created by the complex and chaotic environment destroys the positive emotions and thoughts in the minds of people traveling. At the beginning of the problems that cause this negative effect, architectural space and design solutions are included. The passengers' comprehension of the space, reading, finding their direction, and effortlessly going to the places they want to access depend on the performance of the space organization and information element designs. In terms of these aspects, a qualified design arrangement creates a positive psychological and spiritual effect on people. Visual aesthetic quality is a very important criterion in the design of informing and directing people to give a sense of alarm anxiety or peace-confidence in such spaces.

One of the important factors in the performance of the systems in bus station structures is the concept of time covering the times before and after the journey. In bus station structures, efficient use, and minimization of the time until the arrival of the bus to the platform, passenger reception, baggage loading, and departure are possible with the successful design of the movement areas and information systems (Ay, 2021). While designing information and guidance elements in bus station structures; solutions should be developed for the following questions: which way people or vehicles are going, which road they use, which places they are directed, where information needs are needed and how guidance elements can help them.

Information and direction signs such as bus waiting areas within bus stations, offices where we buy tickets, entry and exit points, wet

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volumes, infographics, administrative units, food and beverage places, and direction graphics showing incoming and departing passenger platforms are used. Within the scope of these structures, in cases where it is difficult to communicate and agree verbally, there is a need for information and guidance designs that enable people to reach their goals well and quickly. The main objectives to be followed when designing information elements are; to create appropriate and legible images that can appeal to different audiences, to create an original design with a simple aesthetic that works well by using the third dimension, resistant to temporal processes when necessary (Wyman, 2009).

In the design of the information elements in Taşcıoğlu and Aydın (2015), the authors emphasized that the designed system should be developed by anticipating where and what the user will need and that it should be able to convey the right information to people at the right point. At this point, in the design of information and guidance elements; It is important to produce quality designs that consider current needs and produce solutions that appeal to all users, and that conform to visual aesthetics.

EVALUATION of ANTALYA BUS STATION INFORMATION ELEMENTS in Terms of VISUAL AESTHETIC QUALITY

The project, which was awarded the first prize within the scope of the architectural project competition opened by Antalya Municipality in 1987, wain terms designed by Hazan Architecture, it was made with the joint work of experts Yakup Hazan and İlhami Özkese. The project building was produced in 1987 and Construction started in 1996 and was completed in 1997. Within the scope of the competition, the desire to solve the intercity and city bus terminals together formed the basic points in the design of the structure. The design is based on a horizontal structure positioned between intercity bus traffic and urban traffic and the movement of passengers at ground level between the two traffic flows of the building area (Itez, 1996). In the building space organization, the functional flow was ensured by separating the incoming and departing passengers in the planned plane (Figure 1).

Figure 1. Antalya bus station layout plan and bus station entrance section (Hazan, 2021)

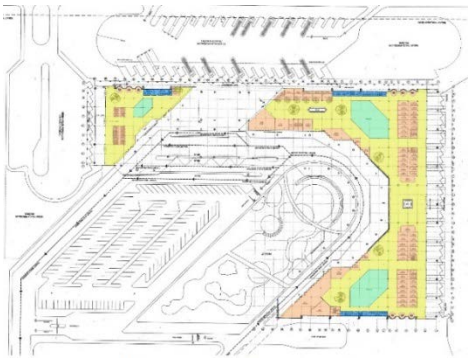
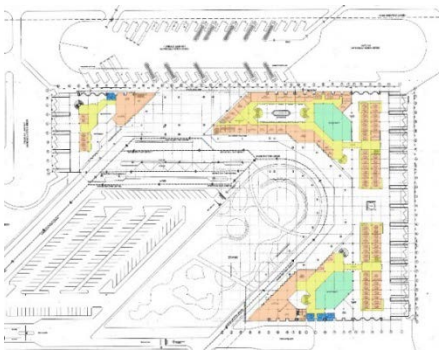
In the planning scheme of the bus station, the city and intercity terminal buildings relate to a design of wide eaves. This was used in the design of the shade as an accentuating element in the fringe plan. However, passengers arriving at the terminal meet the city without entering the structure under the eaves. One of the main points of the design is that the broken plate console is planned to take passengers under the shadow of the buses waiting afternoon as a remarkable detail. (Figure 2).

Figure 2. Antalya bus station eaves and broken plaque design (URL 1)

In the interior of the building, all the carrier and mechanical systems are designed visibly. Under the eaves, the façade of the building is covered with nine meters-high glass surfaces, and the eaves shade a part of the interior from the glass surfaces. An atmosphere that provides a microclimate is created with the internal gardens designed in the structure. The water element designed in the interior garden was also used as an effective element in balancing the air quality and temperature indoors (Figure 3).

Figure 3. Antalya bus station interior visuals (Y. Hazan, personal interview 21 December 2021; Original, 2022)

Table 2. Bus station structure places on the ground and first floors

Ground Floor	First Floor
	
Counter & Commercial Spaces Circulation Areas Indoor Gardens Wet Volumes	Counter & Commercial Spaces Circulation Areas Indoor Gardens Wet Volumes

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The building consists of 2 floors. On the ground floor: Inside the building, there are ticket offices, wet areas, bus waiting areas, food, and beverage areas, and outside the building, under the eaves design, there are bus platforms and passenger circulation areas. On the first floor, are office spaces that are not in use, administrative units, technical room uses, few eating and drinking places, and wet volumes (Table 2).

Methodology

Information and guidance designs can be classified as stationary, moving, and interactive signage systems. Stationary signage systems are the most used forms of information. As printed graphics, user interaction is limited to seeing and reading only. Motion graphics are systems that present information on a screen in a certain amount of time. Examples of these systems include digital clocks or passenger information monitors that provide routing. Interactive infographics are systems that can present information, visuals, and control over visual thinking to the reader digitally and with the interaction of the user.

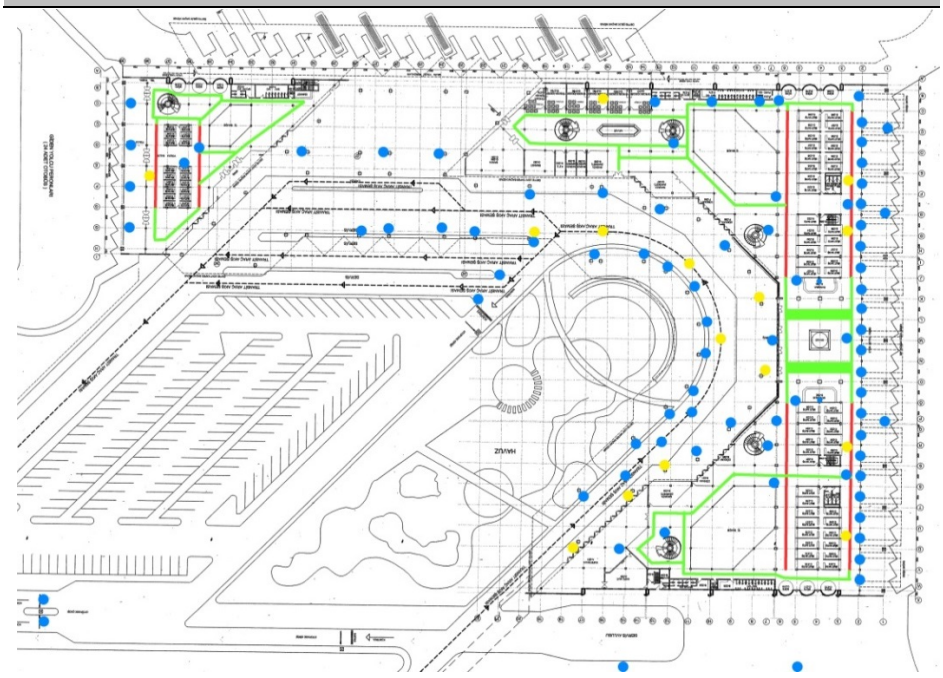
In this context, when the information and guidance elements of the Antalya bus station were examined, it was determined that stationary/static signage systems were mostly used. In the bus station building, there was no information element other than the digital signs hanging on the ceiling plane and the bus departure times as a moving information element. There is no interactive information or guidance staff in the bus station building (Figure 4). In the bus station building, it was found that information elements were mostly used within the scope of the ground floor where circulation is the most intense. Within the scope of the first floor, it was found that some of the technical spaces and management venues were not used, and these places were informed and guided over the ground floor. In this context, the information and routing elements of the bus station building were examined within the scope of the ground floor.

Figure 4. Antalya bus station moving signage systems (Original, 2022)

There is an information and guidance system that serves 3 different purposes in the bus station building. The first of these are the signs that provide the direction of the space inside and outside the building, the second is the company signs that define the ticket sales/office spaces, and the third is the information and warning signage systems that

provide information in case of a mandatory or emergency inside and outside the existing building (Table 3).

Table 3. Location of Antalya Bus Station Information and Guidance Staff

Location of Signs in Ground Floor Layout

Signs for Location/Location Orientation — Circulation Areas
Ticket Sales/Office Signs — Information and Warning Signs

In this part of the study, the information and guidance staff at Antalya Bus Station are discussed through three headings. Since the information and guidance elements examined in this direction provide in-building and out-of-structure orientation, the visual aesthetic quality of these elements in spatial organization and information design was analyzed within the scope of design components and user opinions determined in the context of the existing literature.

The information and guidance elements in Antalya bus station were examined within the scope of compliance with the design components; The positive and negative aspects of signage systems in terms of structural compatibility, perceptibility-readability, functionality, and aesthetic quality have been determined. In this context, in the first stage of the study, 20 departing passengers, 6 company employees, and 3 business managers were interviewed using a semi-structured interview technique. In the selection of the interviewed users in line with the semi-structured interview technique; Company employees and managers, who are the people who could experience the existing structure the most, as well as departing passengers waiting along the 1st and 20th Platforms were preferred.

In the oral interview conducted within the scope of the research, users were asked questions directly about the signs that could be seen

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from their location, and about the signs that could not be seen, about the design elements given in Table 4 through the marked places in the plan of the building and the printed photographs. In line with the oral interviews, user opinions for design elements and basic design principles affecting the visual aesthetic quality of these elements were used in the description-based analysis of signage systems.

Table 4. Interview questions for the evaluation of signage designs within the scope of design elements

Font Element
• Do you find the writing on the signs readable and perceptible? • Do you find the fonts on the signs appropriate?
Color Element
• Do you find the color of the signs generally appropriate and compatible with the space? • Do you find the color of the signs perceptible?
Form and Material Element
• Do you find the shapes, sizes, and materials used for the signs appropriate? If there are elements you find inappropriate, what are they?
Location Selection and Positioning
• Do you find the positions and positions of the signs correct? • Are the signs placed frequently enough where necessary?
Relevance to space
• Do you find the signs placed suitably for the place in general?

Within the scope of the interview data obtained in the second phase of the study, signage systems were evaluated by descriptive analysis in the context of design elements and design principles as information-guidance design components determined in the existing literature.

Evaluation of Signage for Space/Place Orientation

The signs for spatial orientation in the bus station structure are generally the signs showing the entrance and transportation directions of the space, emergency exit and meeting places, platform-box office locations, and numbers in the interior space. On the exterior of the building, there are sign systems showing vehicle traffic regulations, entry-exit, and parking-tram transportation.

When the signs for in-building and out-of-building space/place orientation were examined, 11 different types of use were identified (Table 5). Signage systems are classified within the scope of their intended use and formal qualities. When these signage systems are evaluated within the scope of design elements-principles determined in the context of the literature and user opinions for the existing signs.

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Table 5. Examination of signs for space/place orientation in the context of design components

Signs for Location/Location Orientation					
TYPE 1	**TYPE 2**	**TYPE 3**	**TYPE 4**	**TYPE 5**	**TYPE 6**
					
TYPE 7	**TYPE 8**	**TYPE 9**	**TYPE 10**	**TYPE 11**	
					

Design Elements	**Explanation**
Font-Typography	The signs used in the orientation of the venue generally do not have a specific writing form and size. However, the many repeating plates 1,2,4 5,8,9, and 10 both in the interior of the building and outside the structure have a certain font and size consistent in themselves.
Color	The signs used in the space orientation do not have a general color wity. However, a large number of repeating platform numbers, routing signs, and types of signs indicating box office queues have a certain standard color consistent in themselves.
Forming Usage	Certain standard forms were used in the repetitive signs; forms in the form of arrows were selected on the exterior direction signs, rectangular forms were selected in the direction and place name signs in the interior, circular forms were selected in the platform numbers and a three-dimensional rectangular prism-shaped form was selected in the box office sequence numbers.
Material Usage	The signs used in the space orientation are mostly made of metal materials painted in matte colors, and some of them are made of plastic materials.
Relevance to space	Blue type 1 signs, which contrast with the cream color used mainly in the interior and are used with firmness, and circular labels showing platform numbers are suitable for the space with their font, color, form, and material components. However, portable and yellow signs (type 3 and type 7) are not suitable for space because they do not provide linguistic unity and integrity with blue-colored signs used mainly in spatial orientation and weaken perception.
Positioning	The places where the signs are positioned are generally the right places that can be easily detected by the user.
Design Principles	**Explanation**
Order-Hierarchy	The signs pointing to the neighborhoods, platforms, emergency exits, assembly areas, and toll booths within the building and regulating the traffic outside the building, and directing it to the tram line are in a sequential and repeating order.
Balance	Although each sign group has a balance within itself, there is generally no linguistic unity.
Contrast	The signs in type 1 and type 4 groups provide the principle of contrast with the color contrast they create in the space, and the signs in the type 5 group provide the principle of contrast with their circular forms located in a gridal façade layout. However, it cannot be said that the principle of opposition is provided in other signs.
Ratio-Proportion	All types of signage have proportions that can be perceived and noticed within the space.
Weighing (Rhythm)	The platform, the signs indicating the toll booth numbers, and the traffic regulatory signs are repeated on a certain line and the venue

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	direction signs are repeated in a regular rhythm at the intersection points of the structure.
Integrity / Unity	Different types of signage groups show integrity in color, font, and size, but they do not show integrity with each other.
Emphasis-Focus	The focal point of the signs in the Type 1 group is the color contrasts of the signs both within themselves and with the space in general. The focus of Type 5, 10, and 11 signs is the rhythmic repetition of the signs. The focus of type 2 and type 9 signs is their location. It is not possible to speak of a focal point for other types.
Continuity	Signs that are located in various positions in groups or that repeat in certain rows are continuous in themselves. However, it cannot be said that the different types of signs used in the building form a linguistic unity or are continuous.

Although the signs for the space/place orientation used in the Antalya Bus Station structure do not provide a complete language unity, it is seen that the principles to strengthen the user perception are followed in terms of font, color, texture, form, size, material selection and positioning of the signs in general. The fonts and sizes used in the signs, the contrast created by the space where the sign is located and the background colors of the font colors and the symmetrical and repetitive placement of the signs at the necessary points, and the material choices are the design elements and principles that strengthen the user perception.

In the interviews with the users, the main problems identified within the scope of the design components in the signage systems are the orientation of the bus waiting areas as the main transportation places, the bus platform numbers, and especially the inadequacy of the signs that guide the ticket sales venues in terms of readability and perceptibility (Figure 5).

Figure 5. Antalya bus station entrance hall, placement of toll booths, and box office direction sign (Original, 2022)

In the interviews with the users, it was generally taken that the writings used in the space direction signs were in the appropriate style and readable sizes and that the sign's colors and sizes were easily noticeable. However, 18 outgoing passengers, 6 company employees, and 2 business managers stated that the materials and colors used in the signs should be updated by today's technology. In the interviews, 15 departing passengers, 4 company employees, and 3 business managers found the places where the signs were placed generally appropriate. However, it has been reported that the placement angle of the signboards at some points makes it difficult to perceive the writings

texts and becomes perceptible and readable only when they get close (Figure 6).

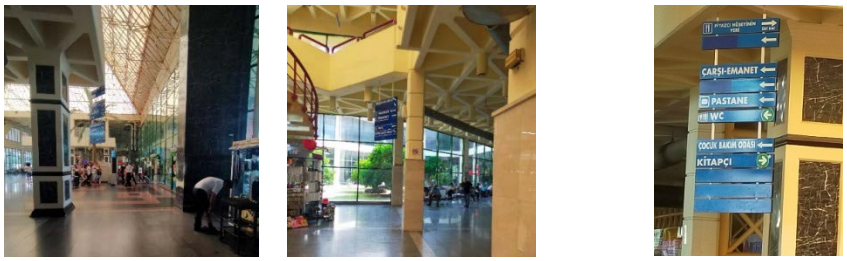

Figure 6. Angled orientation signs (Original, 2022)

Evaluation of Signs in Ticket Sales / Office Spaces

There are 2 different types of ticket sales and office signs in the bus station building, as signs indicating the toll booths and numbers of different travel companies. The signage systems of the bus companies are located on the upper part of the office spaces planned in the building, and the toll booth numbers that define these offices are located on the ceiling plane of the ground floor circulation areas. When these signage systems are evaluated within the scope of design elements-principles determined in the context of the existing literature and user opinions on the existing signboards (Table 6).

Table 6. Examination of Ticket Sales / Office signboards in the context of design components

Ticket Sales / Office Signs		
	TYPE 1	**TYPE 2**
		
Design Elements	**Explanation**	
Font-Typography	Type 1 signs are a group of signs that repeat regularly and indicate toll booth numbers and have a specific font. Type 2 signage, on the other hand, is the signboard of each travel company that is unique to itself, so a specific font cannot be mentioned in them either.	
Color	There is no color integrity in ticket sales and office signs.	
Forming Usage	Ticket sales and office signs are designed in standard sizes. Signs are generally rectangular in shape, in harmony with the area they are in. The signs showing the box office numbers are in the form of cubes, with writing on all four sides.	
Material Usage	There is no standard material usage. Type 1 group signs are made of a semi-transparent material to allow the use of light. Type 2 group signs, on the other hand, are made of white, matte-colored plastic material.	
Relevance to space	These signs are suitable for the place physically and functionally in terms of their location, size, and color.	

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Positioning	Type 1 and type 2 group signs are located behind the box office in a position that can be easily detected and read.

Design Principles	Explanation
Order-Hierarchy	Type 1 and type 2 signs have a regular and repeating pattern.
Balance	Although each sign type has a balance in terms of form, color, and size, a general unity has not been achieved.
Contrast	The principle of color contrast is seen in Type 2 signs, whereas in other signs, a general contrast principle in terms of color and form is not seen.
Ratio-Proportion	Signs of each type have easily detectable proportions in the space.
Weighing (Rythm)	Type1 and type 2 group signs are placed in a certain rhytm following the box office rows.
Integrity-Unity	Although type 1 and type 2 group signboards show integrity in terms of form and size, there is no integrity and unity in terms of color and texture in general, and there is no integrity between different signage types.
Emphasis-Focus	The location of ticket sales and office signs constitute the focal points.
Continuity	Type 1 and Type 2 signs are continuous along the rows of toll booths.

Although the use of different signboards by travel companies prevents the establishment of language unity, the standard sizes, positioning styles, proportions in the space, and rhythmic repetitions on the signs are design elements that strengthen the perception of the user. Within the scope of design components, it is seen that the use of blue color within the framework of company signboards in terms of visual aesthetics provides integrity and emphasis in terms of suitability for the space. It has been determined that the use of characters and their position in terms of typography in the signage system, which defines the box office numbers classified as Type 2, are difficult to understand for the passengers and their perceptibility is low. Although the signage positions are in the right places in terms of location selection, which is an important element, it has been determined that their design qualities are low within the scope of design principles.

In the verbal interviews with business employees, managers, and passengers, users stated that; the box office signs which have different colors and graphics, which are unique for each company, increases the distinguishability of the signboards and they find this signage group appropriate in this respect. Among the users, 8 departing passengers, 6 company employees, and 3 business managers found the illuminated systems, materials, dimensions, and sign positions used in the signs appropriate (Figure 7).

Figure 7. Placement and layout of travel companies' signs in the space (Original, 2022)

However, 12 users stated that they wanted to see the information board and office signs together so that it would be easier for them to decide where to buy tickets and head there. This view of the passengers from among the users shows the importance of the information conveyed to the user and the importance of the visual integration between the spaces to guide the user. In the verbal interviews, it was stated that 18 outgoing passengers had difficulty in finding the travel company they were looking for, but it was concluded that, rather than the inadequacy of the signboards, this situation was because the box office is in a fragmented structure and its location in the building does not provide visual contact with the main entrance of the building, rather than the inadequacy of the signboards. In this context, passenger usage experience shows that architectural design decisions in signage systems constitute an important factor in the user's perception and orientation of the space.

Evaluation of Information and Warning Signs

9 types of signage systems have been identified that are placed inside and outside the Antalya bus station structure to inform the user of the rules and prohibitions, to convey information such as price tariffs and bus departure times to the user, and to convey the necessary warnings for the safety of the passengers. When these signage systems are evaluated within the scope of user experiences and design elements-principles determined in the context of the existing literature and user views on the existing signage (Table 7).

The information and warning signs used in the Antalya Bus Terminal building are basically placed to regulate vehicle traffic and to inform the users about the rules valid in and around the building, as well as the timetables and service tariffs. The forms and fonts of the signs do not constitute linguistic integrity. However, the chosen red text color and the predominantly used white background create contrast and strengthen the visibility of the signs and strengthen the perception that the red texts in and around the building are important warning and information signs for the user (Figure 8).

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Table 7. Examination of Information and Warning signs in the context of design components

Information and Warning Signs				
TYPE 1	**TYPE 2**	**TYPE 3**	**TYPE 4**	**TYPE 5**
				
TYPE 6	**TYPE 7**	**TYPE 8**	**TYPE 9**	
				

Design Elements	**Explanation**
Font-Typography	Due to the variety of information and warning signs used, it is not possible to talk about a general font typology. Although a standard font style and size have not been determined on the signs placed by the bus station management, the red text on a white background partially provides unity.
Color	It is seen that the color red is predominantly used in the warning and information signs used. While a white background is used in static signs to increase the visibility of the text, a black background is used in the illuminated information sign (Type 7) to highlight the text. The colors are used to strengthen the user perception by creating contrast both with the space and within the sign itself.
Forming Usage	The signs are designed in rectangular forms by the area in which they are generally used.
Material Usage	Information and warning signs are generally made of metal or plastic and painted with matte paint. Type 7 signage, on the other hand, is produced from the glass, plastic, and metal materials required by digital signage.
Relevance to space	Information and warning signs are suitable for the space with the generally used color, font, and form components.
Positioning	Information and warning signs are positioned where necessary and can be easily seen by the user.
Design Principles	**Explanation**
Order-Hierarchy	Generally, the signs at one or two points in certain parts of the structure are positioned in the best way to be seen, but there is no specific order.
Balance	When the warning signs and information signs are considered as groups separately, it can be said that they have a balance in terms of form, color, and size, but no language unity was provided in the warning and information signs.
Contrast	The red text and white background colors of the information signs provide the principle of contradiction both in the place where they are used and in their designs. The same contrast principle is also for the blue-weighted colors of warning signs.
Ratio-Proportion	Each type of sign has easily perceived rates in the space.
Weighing (Rythm)	There is no specific rhythm in the signs in this group.
Integrity-Unity	Warning and information signs are designed using certain colors

	and in rectangular forms. However, in general, there is no unity and integrity in terms of color, size, and texture.
Emphasis-Focus	Warning and information signs are positioned in the main entrance and gathering places, which are used most frequently by users, and are designed using colors that will strengthen their perception. In this sense, it can be said that the focal point of the signs in this group is visibility.
Continuity	These signs, which are mostly single at certain points, are not continuous.

Figure 8. Examples of Warning and Information Signage Elements (Original, 2022)

However, during the interview with 6 company employees, it was learned that the board (Type 6) that provided information about the departure times was quite inadequate and that the passengers generally learned the departure times by asking the company workers. The general opinion of the users is that the information and warning signs are sufficient to fulfill their functions, but the signs do not create a united language and they are not suitable for the bus station of a metropolis like Antalya, do not have aesthetic value and are far behind the contemporary technologies.

RESULTS

In today's conditions, with the increase in the need for information and being informed, the concept of information and guidance design has emerged, and the importance of information systems has increased. Especially with the needs of modern life, the design of information elements in the discipline of architecture emerges as an important design component. In this respect, in cases where information and guidance elements are missing and insufficient, the public spaces planned by the designers as intensive-use areas may become visually negative and functionally inadequate because they do not involve information reflecting urban identity. The fact that information and orientation designs of the public buildings built in the past were also designed within the technological possibilities of the past period, results in the inability of the existing information and guidance systems for responding to contemporary requirements therefore, examining the design of the past from today's perspectives becomes important during the identification of the above-mentioned inadequacy.

When studies on information and guidance design in our country and different cities of the world are examined, it is seen that there are insufficient studies for bus station structures in public space use, although there are studies on the design of these elements. In this

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context, it is seen that there should be design systems in bus station structures that are suitable for the urban identity and design elements and principles as design components, for being able to inform and direct users easily. Information and guidance element designs in bus station structures; It is concluded that besides their role as informational elements that indicate where users are located and where they want to reach, informing and directing elements in the bus stations become important design elements that contribute to the space in terms of functional, formal, and aesthetic value.

While designing information and guidance signs, it has been determined that elements such as color, material, font typography, and suitability for the space, including all design principles, are important in terms of visual aesthetics and these elements should be considered in the design, considering the characteristics of the spaces used in the bus station and the users. In this direction, it has been determined that the information and guidance element designs in Antalya Bus Station are not sufficient in terms of both visual and functional aspects within the scope of design components. It is thought that most of the signboards in the bus station structure are designed without considering different types and design components, and they do not give an identity to the bus station space and to the city.

When the user opinions on the design components of the information and guidance elements in the Antalya bus station building are examined, the opinion that the signage systems are insufficient in terms of perceptibility and readability comes to the fore. It is possible to state that the use of different colors and forms in terms of visual aesthetics in existing signage systems; does not allow the user to access information easily, causing a shift in perception levels and not being memorable.

It has been determined that the user evaluations made in terms of visual aesthetic quality are only about the use of color and material, and most evaluations are made for functional solutions. In this context, it is seen that in the design of signage systems, functional solution proposals are kept in the foreground in terms of the designer's view and user profile, while aesthetic elements as design components are secondary.

It is seen that the result of the descriptive analysis made within the scope of the determined design elements and principles of the existing signage systems are parallel with the user impressions. The signs used are suitable for their functions with their positioning, sizes, font sizes, and forms. However, it can be said that design elements such as font and size, color, size, and the material do not show integrity, and design principles are completely ignored. In this sense, it is possible to say that these signboards were made without aesthetic concerns, only to respond to the function.

Information and guidance elements, which the users come across in places such as bus terminals, airports, and stations where there is a lively usage environment, inform and guide people who encounter them while making a significant contribution to their aesthetic appreciation

levels. For this reason, researchers and designers must conduct examinations and evaluations in these areas; It is thought that it will both provide functional conveniences to the transportation spaces in public use and contribute to the development of the aesthetic appreciation levels of the users.

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