



## Semiotics Approach to Landscape Architecture

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### Abstract

The human being, who makes sense of the environment human lives in and expresses it in a factual and conceptual dimension, uses many methods while performing this meaning production. Semiology, which tries to read the semantic basis of the environment, which includes living and non-living beings as a whole and creates a dense network of relations, is one of these methods. The changing and developing structure of people's creations and uses on nature affects both the environment and the universe of meaning of designers and users. Semiology, which makes it possible to read natural and cultural structures as a text through signs, constitutes an important perspective for landscape architecture, which is one of the basic disciplines working on these structures. In this context, the study aims to produce perspectives on the use of semiotics in landscape planning and design. Thus, it will contribute to the development of a sustainable, creative and ecological attitude in both existing and new space. In the study, first of all, the theoretical foundations of semiotics were emphasized, different interpretations of semiotics were discussed, and then an opinion was developed on how these perspectives could be used in landscape planning and design.

## 1. INTRODUCTION

The world is an objective and conceptual whole, with every part that endows it and every element that surrounds it. This whole has a particular dynamics within itself, with everything animate and inanimate. This dynamic, driven by most perceptual mechanisms, keeps the whole system in both intense communication and strong relationship. This web of communication and relationship is an effective means of coping with great diversity. Every sensory and perceptual phenomenon has a meaning and a correspondence to the meaning it expresses. The system protects itself and ensures its continuity.

The place of the process of meaning production itself and its results in human life is as important today as it was in the past. Semiotics attempts to analyze the mechanisms of meaning production and to determine how the systems formed by habitats function in different contexts. Semiotics offers perspectives for many disciplines.

In order to grasp and convey the structures of meaning found in all areas of life, certain representations are needed. Signs are representations that stand for something else, although they are not themselves. Signs exist as a defining dynamic in any domain where meaning is involved, especially in communication.

According to Nöth (1995) [1]; For Saussure, turning to the linguistic dimension of the sign, the sign consists of a concept and its expression form. The abstract concept in our minds corresponds to the signified and the concrete form of expression to the signifier. According to him, these two dimensions form an inseparable and interrelated structure like two sides of a paper. Peirce, who by classifying signs paved the way for their adaptation to domains other than language, defines the sign as something that represents something else in some respects for a person due to a certain quality it has. According to him,

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this thing that takes its place is its object. However, the sign refers to the concept rather than representing in every aspect what it stands for [2].

When we look at the definitions made in line with the place of the concept of indicator in daily life, most of these definitions explain the indicator on the basis of its feature of "replacing something". The definitions that emerge as a result of considering the sign with a theoretical content define the concept of sign through the unity formed by the planes of "signifier" and "signified".

Stating that signs produce a value around themselves, Barthes claims that this production is something more than the combination of the signifier and the signified. This process, expressed as meaning, is possible when the signifier and the signified produce the sign. Indicator production, on the other hand, emerges with the value created by the environment surrounding it [3].

The founders of semiotics define semiotics as a branch of science that studies how signs are formed and work. It is seen that semiotic studies, which were initially carried out within the scope of communication, text and logic studies, have been transformed into a format that can be used in all disciplines that produce meaning through new representatives involved in the process. The rapid spread of the semiotic method to many disciplines can be considered as a result of the dominance of signs in living spaces. At this point, the field of study of semiotics has an extremely large scope.

Every day, new fields are added in which the semiotic method is applied. Landscape planning and design are among these new fields. Nowadays, studies that incorporate the semiotic perspective in landscape planning and design are quite new. Although they are not very old, there are various studies on this topic all over the world. Considering the increasing pressure on natural resources, the need for of a more rational planning and design process is inevitable. In this direction, it is necessary to analyze the process well and maintain the continuity of the ecosystem's ability to satisfy the needs of the ecosystem while meeting human needs. At this point, semiotics is the most fundamental approach of the modern era, because its analytical capabilities allow a much more accurate reading of the natural and cultural structures.

Fields such as ecosemiotics, biosemiotics and zoosemiotics, which have recently come to the fore, contribute to landscape planning process. In addition, semiotic perspectives on socio-cultural and urban structures also contribute significantly to the design-production process in landscape design. Semiotic theories are important to evaluate the process from different perspectives and deepen the meaning of landscape. This is because they are a concise expression of creating a new perspective on the landscape and understanding the unique nature of the designer's design language.

This study aims to develop views on how to use the semiotic perspective in landscape planning and design. Study; aims to contribute to the creation of innovative, sustainable and ecological spaces by supporting the production of different and new perspectives in the field of planning and design. The specific purpose of the study is to bring the semiotic perspective, which provides creative and analytical contributions, to the profession of landscape architecture. In addition, some suggestions have been developed on how to create this perspective. In the study, first of all, the theoretical foundations of semiotics are highlighted. In addition, various semiotic interpretations were discussed and an opinion was developed on how these perspectives could be used in landscape planning and design.

## **2. METHOD**

The study was carried out to determine and reveal the scope and perspective of the phenomenon of semiotics in the field of landscape architecture. The lack of much research in the field of landscape architecture in a national perspective has made it necessary to study the subject.

In the first stage, the relationship of the phenomenon of semiotics with landscape design and planning was evaluated. For this purpose, the equivalents of the signifier and the signified in the landscape were evaluated and a relationship was established between them. While doing this, philosophical approaches

contributed. This section is designed to create a framework for indicators and displayed phenomena in landscape spaces with theoretical approaches, to draw attention and raise awareness.

In the second stage; Facts that can be evaluated on the basis of semiotics in the field of landscape architecture are included. It consists of 38 cases under 3 main headings: "elements of the landscape", "functions of the landscape" and "values of the landscape". These facts; It is designed to be evaluated in terms of natural and cultural reasons for the landscape and the relationship between the signifier and the signified.

In the last stage, suggestions were made for the use of semiotics in landscape design and planning.

### 3. THEORETICAL FRAMEWORK

#### 3.1. Sign and Semiotics

Many of the definitions that are in line with the place of the sign concept in daily life explain the sign on the basis of its property of "substituting replacing something". According to Rifat (2018) [4], sign is "any kind of form, object, phenomenon, etc., that represents something outside itself and can replace what it represents." [2] explains the sign as "which replaces that thing even though it is not that thing" and "the connection established between a concept and a form". According to Kalelioğlu (2020) [5], "the main function of any sign is to indicate precisely the object for which it is used communication. It is also to enable communication between man and man or between man and nature". While Peirce deals with the sign in its logical dimension, Saussure emphasizes its function in the social field. Peirce explains the sign with the trio of interpreter, object and sign, and Saussure explains it with the duo of signifier and signified [6].

Human beings convey their feelings and thoughts through their language. In addition to the socio-cultural structure of the society in which one lives, the awareness of this structure by the person also affects the activity of the process. The values of this structure, which the society has agreed on with a contract, serve some common purposes. In order to maintain the structure determined by the traditions and customs that will guide the lives of individuals, it is seen as a necessity for the individual to have awareness of this system. This awareness is possible with the correct use of the indicators that provide transfer as well as the dynamics that ensure the survival of this structure [5].

Signs and the systems that create them are accepted as entities that have meaning and create structures that enable the formation of a whole. Each sign symbolizes something, such as the happiness of a smile, the wedding ring that makes one think of an engagement or marriage, the red light at the traffic light that indicates that one must stop [7]. Notes that signs find their meaning in conventions and sees conventions as the social extensions of signs. These extensions have different meanings in each society. Therefore, to properly understand the meaning of a sign, one must understand the cultural structure in which it is found. This can be explained by the fact that the meaning of colors or visual signs used in public spaces changes according to geography and culture [8].

The indicator ensures that the cultural structure that societies collectively produce is passed on to both existing and future members of the society. The basic unit that shapes the semantic and functional system of this transmission is signs. In this respect, there are signs in every structure that is transmitted from human to human, nature and other living beings.

Hippocrates, who introduced the concept of "sign" in the field of medicine in ancient Greece, and Aristotle, who worked on semiotics, are the thinkers who took the first steps in semiotics. 17th-18th. In the century, as in the ancient period, studies were carried out by both medical scientists and philosophers to form the basis of semiotics. Henry Stubbes, John Locke and Jean Henri Lambert are among these names. In the late 19th and early 20th centuries, Saussure, the founder of modern linguistics, and Peirce, with the theory of signs he developed simultaneously, enabled semiotics to become a branch of science. Jan Mukarovsky, who based on Saussure's ideas, Charles William Morris, who developed Peirce's views,

and Louis Hjelmslev, who discussed non-linguistic sign systems, also contributed to the development of semiotics in this period. The field of study of semiotics, which started to become an autonomous science after the second half of the 20th century, gradually expanded. Claude Levi-Strauss, who tried to apply semiotics on social and cultural practices, Roland Barthes, who studied the functioning system of sign systems, and Michel Foucault, who researched the historical importance of semiotics, are the names that developed the applicability of semiotics to different fields. Umberto Eco, one of the recent thinkers, diversified the influence of semiotics through the relationship between thought and language and sign, and Jacques Derrida diversified the field of influence of semiotics through the deconstructionist criticism he developed [9].

The definitions that arise from theoretical treatment of the sign are not far from their everyday meanings. However, the concept of the sign has also acquired some new structures as a result. The concept of sign is theoretically defined by the unity of "signifier" and "signified".

Gottdiener works on the postmodern interpretation of signs and interpreting postmodern lifestyles and elements of material culture through Pierce's semiotic understanding. According to Gottdiener, semiotics is a system of relations whose basic unit is the sign, and this system appears as a way of understanding the world [10]. Semiotics attempts to determine how the structure expressed as representation, functions and is interpreted.

According to Saussure, who attempts to explain semiotics within the framework of linguistic studies, semiotics is a way to study all cultural forms because they are structured like a language [6]. In this case, semiotics proves to be a fundamental view that can be used in many fields.

Eco offers a contemporary interpretation of semiotics. According to him, the main concern of semiotics is not to analyze systems that are obviously signs, but to consider all cultural codes as sign systems. According to him, every cultural phenomenon is in fact a sign system. At this point semiotics comes into confrontation with reality. This is because the main concern of semiotics is to grasp reality [11]. For this reason, it will no longer be sufficient to consider semiotics within its own boundaries. The main objective should be to consider each domain where meaning production takes place as a cultural phenomenon and in this direction to develop different semiotic models for different domains [12].

Semiology differs from other disciplines in that it has its own method and technical framework. Moreover, the method that can be applied to an event, situation, phenomenon or concept from all walks of life is semiotics itself. Although semiotics is a science that deals with signs, it is also a method that all branches of science can apply.

Semiotics aims to uncover the working dynamics of many other fields such as astronomy, architecture or design, as well as artistic activities such as behavior patterns, lifestyles, body language, fashion, cinema, advertising, theatre and music. In this direction, it tries to read every aspect of communication as a text and to correctly establish the connections between structures synthesizing the resulting structure with different perspectives. Semiotics tries to analyze how the formed meaning is constructed and what is the meaning of this form that forms a holistic structure with the content [13].

### **3.2.Landscape and Signs Relationship**

The landscape contains many values due to its structure. These values are basically divided into natural and cultural dynamics. Each dynamic has a meaning in itself and in this direction, it establishes a relationship with other dynamics in its environment. This network of relationships, which can be natural or artificial, shapes the meaning of the landscape as a whole. The European Landscape Convention [14] defines the landscape as "perceived by humans; It emphasized exactly this by defining it as "the area whose features are formed as a result of the interaction and activity of human and/or natural factors."

Le Corbusier [15] holds that the fields of urbanism and architecture are disciplines that serve the individuals and that the main purpose of these disciplines is to satisfy the material and spiritual needs of

people. The basic architectural element that satisfies the material and semantic needs of people is place. Place, which is created by combining natural or cultural dynamics, has different meanings and definitions depending on its purpose. According to Newton, who defines place by abstracting it from the objects in it, place is a piece of space; according to Leibniz [16], it is the set of relations formed by objects. The concept of place is defined on the basis of two different approaches: 'the structure that refers to volumetric dimensions' and 'the structure that refers to environmental perception that makes experiences meaningful' [17]. When these approaches, shaped on the basis of semantic and experimental place, are considered together, they yield a multi-layered view of the structure of articulation between form and social value that which transforms into place and patterns of use.

The concept of space reveals a complex process that links intellectual and cultural as well as social and historical structures. This process functions as the discovery of an unknown place, its production through its society-specific organization, and the creation of landscapes, monuments or structures. Although each space has a unique process of creation, it is subject to a certain logic. This logic is the general form of simultaneity because every spatial production or arrangement is based on the accumulation of intelligence and the material compression of the dynamics that generate simultaneity. Given these views of Lefebvre, who focuses on the fundamental dynamics of spatial production, it can be questioned whether there is a direct and immediately comprehensible relationship between the modes of production of societies and the spaces they use. Lefebvre argues that this relationship is not transparent and that the fundamental structure that disrupts this process is ideologies [18].

Kevin Lynch and Norberg-Schultz are two important names that attempt to explain the concept of space through the perception of space. Lynch attempts to examine the visual perceptual qualities of American cities through the imagined images of the people who live in the cities. According to Lynch, an urban planner and designer, cities, where the natural and artificial elements of the landscape meet, form a certain structure through recognizable symbols. To make this structure readable as a text, one must determine how cities form a whole with dynamics such as regions, boundaries and streets. However, although the understandable and readable features of the city are important features given circumstances such as the habitability, complexity, and size of the city, to understand a city, one must look at that city through the eyes of its inhabitants [19]. How the people who live in the city read the structures that make up the city, the way they are used, and the patterns of behavior that are developed through allegorical elements form a very rich field of study for semiotics. For landscape design, it is important to be able to read the land use of citizens, their preferences for buildings, roads, bridges or many other elements that contain cultural values. At this point, landscape design is an indispensable part of the texture that makes up the city.

Norberg-Schulz defines the constitutive elements of spatial perception as "center or place (approach), directions and paths (continuity) and areas/interests (boundary)". By emphasizing the importance of the fundamental elements that make up space to spatial experience, he attempts to explain the balance created by the static and dynamic forces in urban spaces through these elements [20]. Schulz grounded his theories of architectural place by being influenced by Heidegger's views and Gestalt psychology. By creating the concept of "genius loci (spirit of place)", Schulz shows the factors that create the "sense of place" in transforming space into place. According to Schulz [21], the relationships that enable space to transform into place are nourished by the contrast they create with their contexts. The tension created by this contrast is an important factor in the process that transforms space into place. In this direction, Schulz introduces the concept of space as a set of relationships shaped by the existential perception created by the structural and psychological effect of place on human beings [17].

If we define landscape as the natural and cultural unity of sensory and semantic elements in a field of vision, the concept of space forms the roof of this structure. When we act at the human level, the semantic process of space should be considered not only with the data from experience, but also with the symbolic structures that emerge in this process. At this point, the structure of space that turns into a sign, reveals a multidimensional system that includes the meaning of the landscape.

Social semiotics assumes that the sign is formed through the articulation of the objective experience of the world and the universe of meaning. Accordingly, everyday life and the context of the social are the fundamental mechanisms of meaning production. These meaning systems are multi-layered structures of authentic cultural codes that contain both social values and designations. The production and understanding of objective meaning derive from social structures and coded ideologies that are aspects of these structures [10].

The landscape, with its components, offers an unlimited number of signs. The transformation of natural or artificial structures, spaces and processes into signs is a result of human culture. When we look at the needs and forms of spatial design from the past to the present, we find that there are many variables that influence this process. As needs change, purposes and forms of use change, and signs transform.

The landscape has a structure in which the perception of space functions in many ways. Looking at the ways in which spaces are formed or produced also reveals the formation and production forms of meaning in the landscape. In this context, it means discovering the meaning that nature contains and being able to accurately determine the effect of all kinds of structures that humans have created as producers of meaning on this process and to correctly read the relationship between space and sign.

Roland Barthes emphasizes the effect of ideologies and cultural values on sign systems in the production of space. According to Roland Barthes, the connotative codes created by these structures feed the articulation forms and contents of the systems. Thus, rich structures of meaning emerge and the word or image, which is a much finer form of an entire ideology or cultural structure, emerges as sub-institutions [10].

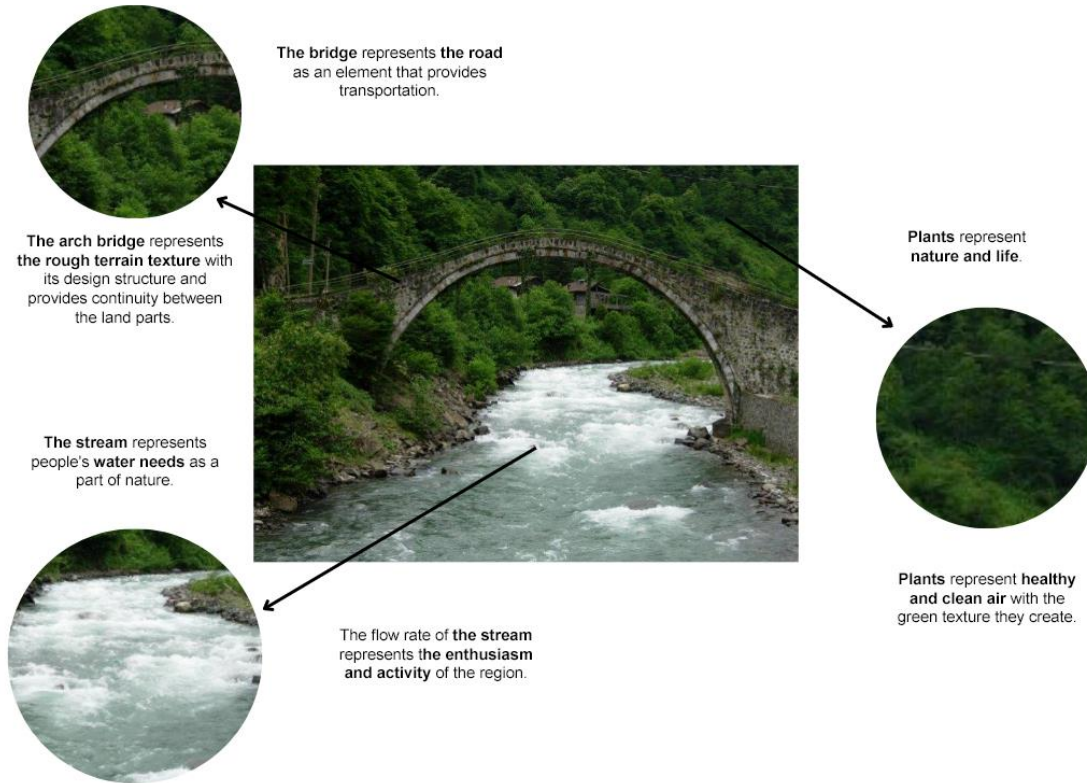
Social perception of the physical environment is an undeniable fact. The collective memory and symbols carried by the culture feed on the material provided by this perception. If we look at the legends that occupy an important place in the cultural structure, we see that a physical environment is associated with them. This physical environment, such as a breathtaking landscape, forms the basic framework of this structure. The imaginary structure of the environment is the product of a two-dimensional process. While the environment represents a space with its own dynamics, the observer who perceives it also benefits from this space according to their needs, adaptive abilities or goals. The perceiver's image of the material and spiritual is influenced by all these dynamics. And the images of the environment differ among different observers [19]. However, these differences between observers do not prevent a consistent image from emerging. This is because the users of the same environment share some common patterns in terms of needs, goals and ways of meeting them. While the inhabitants of a country, region or city create a collective ground at this point, this ground is fed by the cultural and ideological codes of the society. It is one of the duties of the profession of landscape architects, as well as building architects, urban planners and designers, to properly analyze the collective texture formed.

The natural and artificial values that make up the landscape and create fictions of space at various scales have the property of being a system both in themselves and with the structures they collectively create (Figure-1). While each system is in itself divided into subsystems, it also deepens the relationships and levels of meaning of the structure it creates.

All the types of relationships that allow each system formed in the landscape to make sense constitute context. Context is, in a sense, the integrity that each sign in the system creates with the system. On the other hand, it refers to the social and cultural codes that determine the conditions for the production and interpretation of the system. In Figure-1, the stream, the vegetation surrounding it and the bridge illustrate an interacting system. Each unit within this structure has the potential to form subsystems within itself. These units influence and are influenced by each other. Thus, they meet in a higher sense and become a new system. These systems together form the sense. The structure that determines in which direction, depth, framework and effect the meaning emerges is the context.

While the unity formed by the river, the plants and the bridge represents many things, such as being natural, being historical, being enthusiastic, being mischievous, being healthy, it has the potential to

transform into different signs in different contexts. In this context, the artificial and natural elements are both a value that creates meaning in the landscape and a sign that represents what it replaces.



**Figure 1.** System formation in landscape [22]

The natural dynamics that make up the landscape are characters with their color, odour, texture, shape and size. Artificial dynamics, on the other hand, are different signs with their material, design, cost, size and color. The coexistence of plants with different characteristics for different purposes creates natural or cultural systems. The coexistence of devices with different properties for different purposes creates cultural systems. These systems, in turn, contribute to the perception of the place in which they are located in the context of scale, function, need, culture, aesthetics, etc. The content of the context created is shaped both by the objective perception of the design elements and by the cultural and social codes that weigh on these elements.

When the dynamics in the landscape are considered as signs, they reveal the denotation with their non-subjective and unchanging meanings. They also reveal connotation with their forms of articulation and derived meanings. Each element inserts into the space with many different meanings. This universe of meaning is the signifier of the sign. The object's universe of meaning also reveals its landscape value. This value is fed by the cultural and ideological codes of society as well as by the objective experience of the world.

The landscape creates a spatial structure in which many components interact to form a meaningful whole. However, it can also be seen as a structure in which visual materials and visual perception come to the fore. With this aspect, the landscape has a guiding function in planning and design. Proper reading of visual materials allows analyzing both the stimulus-response process in ecosystems and the needs of users. In this direction, the study of the visual components of the landscape as a unit and the determination of their interaction makes an important contribution to design and planning studies. For this reason, landscape semiotics studies are also important.

According to Kull et al. [23], landscape representations and preferences have generated a wealth of internal and semiotic research on topics such as the manifestations of power relations, the embodiment of

social structures and memory in landscapes. However, since semiotic terms are rarely used in landscape research makes it is very difficult to identify the beginning of landscape semiotics.

Visual aesthetics in landscape is very important for people's mental and physical health in high quality living spaces. At this point, visual quality is a component in the use of land for urban and rural landscapes. However, the visual components of the landscape do not only provide aesthetic value. They also show the relationship between cultural, economic and biological phenomena [24]. How the visual components are perceived manifests itself in the individual and society, but the perspective of the individual and society plays an important role in shaping this perception. At this point, the determination of the use of space and the creation of space make it necessary to recognize the sequences formed by the landscape signs and to determine in which context they are meaningful.

Systems allow the signs to work together and form a pattern of meaning. By revealing the holistic perception of the landscape, they allow this whole to be read through the relationship of the meaningful parts. Understanding the impact of cultural structures and ideologies on the process of creating systems and their guiding function requires a multidimensional assessment.

To examine, recognize, plan or design the landscape, one must first analyze the meaning in the landscape well. To reveal the meaning, it is necessary to analyze how the context is shaped and functions. At this point, semiotics is one of the methods that can be used to determine how the dynamics that create meaning in the landscape work and to closely observe how meaning changes.

### **3.3.Semiotics in Landscape Planning and Design**

Landscape planning is a process of determining how land should be used, taking into account ecological factors. It is also extremely important of ensuring the sustainable coexistence of natural and cultural structures and in making predictions about this process. Landscape design, on the other hand, refers to the process of designing according to the pattern of meaning that the designer wants to create in the area. Landscape design is important because it is the phase in which both the planning process is put into practice and the spatial productions are carried out.

Ecosystems, which are the main structures of landscape design and planning, are a system in which different characters come together. From the point of view of ecology, these systems consist of matrices, patches, and corridors. Each strand has its own subsystem. And the signs in this system provide information about how patches, corridors and matrices function and change. Matrices, patches and corridors create a context that goes hand in hand with both the unity of the dynamics within them, the landscape mosaic they form together, and the social and cultural perspectives on them all. One of the most productive and best ways to understand this context is to analyze the signs that make up the process. At this point, the perspectives of fields concerned with the relationship between environment and people, communication between living things and the signs of biological processes will make an important contribution.

Fields such as ecosemiotics, biosemiotics (living semiotics), zoosemiotics (animal semiotics), which have emerged with the semiotic approach, make it possible to read and plan landscapes correctly. Thus, it contributes to landscape planning by creating important perspectives. Ecosemiotics emphasizes the semiotic nature of ecosystems by examining the semiotic relationships between organisms and the environment, the communicative relationships between species, and the role of indicators in ecosystems. In demonstrating the semiotic nature of ecosystems, one can first recognize that there is a broad semiotic field that can be related to the daily activities and cultural processes of human culture. Furthermore, a semiotic approach to ecology also allows us to understand that issues that are often defined as ecological problems often have semiotic causes [25].

Considering the setting of producing ecological planning approaches from a semiotic perspective, the first step of the semiotic view is to recognize what kind of meaning this approach produces within the framework of material and cultural values. The answers to questions such as how nature is perceived and



on what basis the use of space is shaped provide data both about the objective realities of the planning process and about how cultural and ideological codes operate in the geographies in question.

Design is a multidimensional composition of components with different functions and qualities. This composition is guided by the meaning that the designer wishes to give to the landscape. For this reason, the designer must read the landscape properly, analyze well the subdynamics that make up the landscape and its functional systems. The analysis to be made includes both the ecosystems and the socio-cultural and economic values of the users. Landscape design, as a discipline in which natural and cultural values interact, can only achieve successful spatial designs in this way.

The semiotic perspective is based on viewing landscape design from a semantic perspective and brings a hermeneutic approach to understanding the landscape. This approach supports the view that the meaning of landscape is not only found in the landscape itself or in the viewer, but is created between the viewer and the landscape. The concept of "dualistic landscape" can be used to support this view. In addition to landscape as "a setting for everyday life," landscape also comes to the fore as a "visual ideology" or "a way of seeing the world" also in this structure of meaning [26]. Landscape feeds on a set of meanings that emerge from the unity of experience and the universe of meaning based on that experience.

While signs in landscape design transform into ideas or fictions, they express a style, culture, belief or mystical meaning that defines landscape design as a concept. In addition, signs are more prominent in the design of objects and elements (sculptures, monuments, etc.) on a smaller scale. However, the symbolic content of these elements also reveals a story or idea [27]. Allegorical elements, with the meaning they carry, form a ring in the landscape system, and the articulation of these rings provides for the emergence of meaning in the landscape.

The aim in landscape design is to create spaces that meet the needs of users. By looking at the landscape as a text and noting how the parts that make up the text construct meaning in the singular and universal dimensions, one can see how needs change and what kind of change they impose on the landscape. These spatial creations must be compatible with the principles of ecological and sustainable development on the one hand, and with the culture and ideologies of the users on the other. The semiotic approach makes it possible to understand the signs in this dual structure, the systems formed by the signs, and the context that determines the functions of the systems.

Cities, one of the important components of the landscape, and the texture they create create a context through urban identity. Every individual who uses the city has an image of the city. The image of the city is the memories and meanings formed as a result of the interaction of the individual with the city components [28]. This cognitive, perceptual and experiential counterpart of the landscape creates the image with the concrete values of the city. The common construction of images in the mind of the society reveals the urban identity [29].

City identity is shaped through the system of indicators surrounding it. Productions such as streets, squares, parks or buildings create an experience intertwined with the cultural integrity created by design and planning. For this reason, city-related indicators focus on connotation as systems formed by cultural structures. These indicators, besides philosophical discourse or scientific theories; It can also be nourished by values and ideologies. The formal structure of urban space is a tool that reflects cultural identity, and these tools consist of many components [30]. These components both form a system in themselves and nourish the context of the city by establishing new systems together.

Semiotic theories are a concise expression of creating a new perspective on the landscape and understanding the designer nature of design language. For this reason, semiotic theories evaluate the process from different perspectives and are effective in deepening meaning in the landscape. It is an important contribution of semiotic theory to landscape architecture that the designer understands, on the one hand, the need to start from this meaning and, on the other hand, recognizes that designer is also an architect of this meaning.

#### 4. CONCLUSION

The application of the semiotic method in landscape planning and design does not aim at arriving at factual data, as is the case in the natural or formal sciences. The dynamic and living nature of the landscape and the fact that man, who influences and gives meaning to the landscape, is a dynamic entity, makes these approaches obsolete. However, it is not possible to create an objective language in design, as this leads to the destruction of creativity in the essence of design and it is difficult to make general judgments. The fundamental question that arises in connection with all these features is: "What is the contribution of the semiotic approach for landscape architects?"

Landscape architecture is a profession that shapes nature according to the human needs and plans the use of space in this direction, creating space while protecting both nature and culture. The main objective is to recognize the changes that landscape architecture works with due to both natural causes and human factors, and to ensure that these changes meet the current needs in the design of the space. For this reason, landscape architects must be able to read and understand their material well.

When considering the landscape as a universe in which spatial fictions exist at different scales, it becomes clear that spatial perception and the dynamics of this universe form landscape systems by articulating each other. In order to uncover the interrelationships of these systems, it is important to determine the individual, social, cultural, or ideological codes of signs that make up landscape systems. However, the semiotic approach that makes it possible to analyze the systems creates rich data for the discipline of landscape architecture.

The use of semiotics as a method in landscape planning and design studies is a fundamental necessity given the needs and demands of our time. The most fundamental approach needed on a global scale is to satisfy the needs with a sustainable understanding and to minimize the pressures on ecosystems. This direction, the priority of planning studies should be to understand ecosystems correctly and to precisely analyze changes occurred. Similarly in rural and urban area planning, the way to create successful designs is to analyze the signs produced by the changes in both nature and human life. Thus the analytical skills of semiotic analysis will contribute distinctly to research in the field.

The evaluation of the patterns of use and the design of the rural and urban areas that make up the landscape, as well as other functional areas that are open to demand-based use, is directly related to the correct analysis and understanding of the dynamics in the structure, function and change of the landscape. In this regard, semiotic analysis of the basic components that reveal the holistic structure of the landscape provides an understanding of both the whole and its parts and the relationships between them. In this regard, semiotic analysis of the criteria that can be used in landscape planning and design will provide very important data to understand the nature and future of the landscape.

Landscape components for landscape semiotics analysis;

- 1.Elements of the landscape: Line, texture, measurement, colour, light, shape, point, typography.
- 2.Functions of landscape: Emphasis, movement, repetition, ratio, spacing, simplicity, balance, contrast, rapport, suitability, integrity, wholeness, difference, domination, structure, volume, composition, unity, hierarchy, area, space.
- 3.Values of the landscape: Topography, flora, fauna, geology, soil, water, atmosphere and climate, architectural elements, time.

The grouping, function and value of the elements of the landscape reveal the landscape as a whole. This grouping allows both the indicator elements in the landscape and the potential of the dynamics that form the landscape to be transformed into signs. In this direction, it is possible to improve the readability of natural and cultural landscape signs through the analysis of sign components (signifier and signified, meaning and connotation or content and expression). These data, which provide information about the quality of life, improvement or sustainability of landscape areas, form the basis for development studies. The semiotic approach will contribute to the functioning, needs and changes of ecosystems in landscape planning, and to the rational regulation of land use. In the field of design, it will contribute to the

architect's creation of a unique planning and design language by expanding the universe of meaning of the landscape architect. This will enable the landscape architect to understand nature, society and cultural structure, and to understand the meaning and value of the products he creates as an output of this. Planning and design approaches that read and understand nature, society and cultural codes correctly will bring both character and sustainability to spaces.

**REFERENCES**

- [1] Nöth, W., 1995. (Handbuch der Semiotic, 1985) Handbook of Semiotics, Bloomington, Indiana University Press.
- [2] Akerson, E. F. (2016). Göstergebilime giriş. *Bilge Kültür Sanat Yayınları*, İstanbul.
- [3] Altun, O., İstanbul'un Turistik Yapılarının Göstergebilimsel Açından Çözümlemesi: Ayasofya-i Kebir ve Sultan Ahmet Cami Örnekleri, Yüksek Lisans Tezi, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul, 2021.
- [4] Rifat, M. (2018). Açıklamalı göstergebilim sözlüğü. *Alfa Basım Yayım*, İstanbul.
- [5] Kalelioğlu, M. (2020). Yazınsal göstergebilim. *Seçkin Yayıncılık*, Ankara.
- [6] Güneş, A., 2013. Göstergebilim Tarihi, e-Journal of New World Sciences Academy, 8, 4 (2013) 332-348.
- [7] Fiske, J. (2003). İletişim çalışmalarına giriş. Bilim ve Sanat Yayınları, Ankara.
- [8] Hafızoğlu, N. (2020). Çağdaş Türk resim sanatında kent imgesinin göstergebilim açısından incelenmesi. [Unpublished master's thesis]. Akdeniz Üniversitesi Güzel Sanatlar Enstitüsü, Antalya.
- [9] Ataş, S., İç Mimarlık ve Çevre Tasarımında Geleneksel Mimarının Çağdaş Yansımaları Bodrum Konutları Üzerine Göstergebilimsel Bir İnceleme, Yüksek Lisans Tezi, İstanbul Aydın Üniversitesi Fen Bilimleri Enstitüsü, İstanbul, 2018.
- [10] Gottdiener, M. (2005). Postmodern göstergeler. *İmge Kitabevi*, Ankara.
- [11] Eco, U. (2019). Mimarlık göstergebilimi. *Daimon Yayınları*, İstanbul.
- [12] Eser, B. (2021). Semiotics in spatial design and its potentials in the design studio. [Unpublished master's thesis], Istanbul Technical University Graduate Education Institute, İstanbul.
- [13] Civelek, M. Türkay, O. (2020). A research on theoretical analysis of semiotics. *Alanya Academic Review Journal*, 4, 3, 771-787.
- [14] Avrupa Peyzaj Sözleşmesi, 2000. <https://mevzuattakip.com.tr/mevzuat/avrupa-peyzaj-sozlesmesi>
- [15] Le Corbusier (2011), Mimarlık Öğrencileriyle Söyleşi, çev. S. Rifat, Yapı Kredi Yayınları 216, İstanbul
- [16] Leinbiz, G.W.(1961),Grand Larousse Encyclopedique, Librairie Laroussa,,vol 4,Paris,s.678
- [17] Usta, G. (2020). Examining of the concepts of space and place in terms of their meaning. *Turkish Online Journal of Design, Art and Communication*, 10, 1, 25-30.
- [18] Lefebvre, H. (2019). Mekanın üretimi. *Sel Yayıncılık*, İstanbul.
- [19] Lynch, K. (2022). Kent imgesi. *Türkiye İş Bankası Kültür Yayınları*, İstanbul.
- [20] Solak, G. S. (2017). Space-identity interaction: a conceptual and theoretical overview. *Manas Journal of Social Studies*, 6, 1, 13-37.
- [21] Norberg- Schulz, C.(1971), Existence Space & Architecture, Studio Vista,London.

- [22] URL 1. *Fırtına River*.  
<https://d25tea7qfcsjw.cloudfront.net/1202/kicerik/92103/66894.jpeg> Last Accessed: 13.06.2023.
- [23] Kull, K. Lindström, K. Palang H. (2014). Landscape semiotics: contribution to culture theory. *University of Tartu Press*, Tartu.
- [24] Özhancı E. Yılmaz, H. (2017). Görsel peyzaj kalite değerlendirmelerinde kalite göstergelerinin mekansal yansımaları. *Erciyes University Journal of Social Sciences Institute*, 43,2 157-173.
- [25] Maran, T. (2020). Ecosemiotics: the study of signs in changing ecologies elements in environmental humanities. *Cambridge University Press*, Cambridge.
- [26] Jorgensen, K. (1998). Semiotics in landscape design. *Landscape Review*, 4, 1, 39-47.
- [27] Eskandani, O. H. (2020). The effects of the signs related to landscape architecture on landscape design in eastern and western cultures. [Unpublished master's thesis]. *Atatürk University Graduate School of Natural and Applied Sciences*, Erzurum.
- [28] Ögçe, H., Kent İmgesi: İstanbul Tarihi Yarımada Örneği, Yüksek Lisans Tezi, Düzce Üniversitesi Fen Bilimleri Enstitüsü, Düzce, 2020.
- [29] Aşur, F., Perihan, M., Tarihi Kentsel Peyzaj ve Kent Kimliği İlişkisi, Kent Kültürü ve Yönetimi Dergisi, 13, 1 (2020) 163-175.
- [30] Vargün, Ö. 2021. Kentsel Göstergebilim Kültürel Yansımalar ve Sanat Üretimlerinde Kentsel Göstergeleri Yeniden Okumak, Akdeniz Sanat, 16, 51-76.