THE CONCEPTUALIZATION OF A NEW SEMIOLOGICAL/SEMIOTIC MODEL FOR THE UNDERSTANDING OF THE MATTERS OF THE CAUSALITY AND THE MEANINGFULNESS IN/OF THE BUILT ENVIRONMENT

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ABSTRACT

THE CONCEPTUALIZATION OF A NEW SEMIOLOGICAL/SEMIOTIC MODEL FOR THE UNDERSTANDING OF THE MATTERS OF THE CAUSALITY AND THE MEANINGFULNESS IN/OF THE BUILT ENVIRONMENT

Eren, Ebru Doctor of Philosophy, City and Regional Planning Supervisor: Prof. Dr. M. Adnan Barlas

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Built environment, consisting of urban spaces and architectures, manifests behaviors, thoughts and feelings, and experiences of all the social-individuals of a society living in itself, through all kinds of its urban and architectural things, that is, its objects, spaces, and components, which bear very significant meanings, that is, denotative, connotative, and also deep meanings, in terms of the daily lives of these people in the environment. Therefore, each of them could be considered as a sign associated with symbols, and correspondingly with the arche(i)types and arche(i)typal contents; in other words, any could be handled as both a sign structure and a deep structure. That is to say, a built environment, in this respect, could be examined through the sign studies, especially Semiology of Ferdinand de Saussure and Semiotics of Charles Sanders Peirce, as both are two main ones of these studies, and through the studies in the field of depth psychology, for example, Analytical Psychology of Carl Gustav Jung. In this way, it could be possible to discuss not only any built environment together with its physical, spatial, social, cultural, and historical aspects but also the societies. However, recent semiological and semiotic approaches seem insufficient in

this context; because, none of them carry out their sign studies together with depth psychology. This points to the lack of a deep (/depth) psychological ground in urban and architectural semiology and semiotics by addressing not only the matter of the causality in terms of human behaviors and experiences, but also the matter of the meaningfulness in/of a built environment in terms of the individual and social lives there. By defining this lack/deficiency as a problem and by taking these matters into account, this thesis focuses on a solution which is based on a method, that is, a way to develop a conceptual model aiming to provide the contribution or the integration of the arche(i)types into the sign studies for urban and architectural perspectives in the context of built environment by assuming that all these arche(i)types render a deep (/depth) psychological ground in this regard. As a result, the thesis presents, in the end, a new approach, which has a deep (/depth) psychological ground, to the sign studies in order to be used for the urban and architectural theories concerning the built environments.

Keywords: Built Environment, Semiology and Semiotics, Depth Psychology, Human Behaviors and Experiences

YAPILI ÇEVREDE VE YAPILI ÇEVRENİN NEDENSELLİK VE ANLAMLILIK KONULARININ ANLAŞILMASI İÇİN YENİ BİR GÖSTERGEBİLİMSEL MODELİN KAVRAMSALLAŞTIRILMASI

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Kentsel mekanlardan ve mimarilerden oluşan yapılı çevre, bu çevrede yaşayan bütün sosyal bireylerin davranışlarını, duygularını ve düşüncelerini, ve deneyimlerini, bu bireylerin günlük yaşamları açısından oldukça önemli olan ifade edici, çağrışımsal, ve hatta derin psikolojik anlamları barındıran her türlü kentsel ve mimari şeyleriyle, yani, nesnesiyle, mekanıyla ve bileşenleriyle ortaya koyar. Bu nedenle, her biri sembollerle, dolayısıyla arke(i)tiplerlerle ve arke(i)tipsel içeriklerle, ilişkili birer işaret olarak düşünülebilir. Başka bir deyişle, herhangi biri, hem bir gösterge yapısı hem de derin bir yapı olarak ele alınabilir. Bu bakımdan yapılı bir çevre, hem işaret calısmaları, özellikle iki baslıcası, Ferdinand de Saussure'un Semioyoloji'si ve Charles Sanders Peirce'nin Semiyotik'i, hem de derinlik psikolojisi alanındaki çalışmalar, örneğin, Carl Gustav Jung'un Analitik Psikoloji'si, yoluyla incelenebilir. Böylece, sadece herhangi bir kentsel ve mimari yapılı çevreyi fiziksel, mekansal, sosyal, kültürel ve tarihi yönleriyle değil, toplumları da tartışmak mümkün olabilir. Ancak, günümüzdeki göstergebilimsel yaklaşımların bu bağlamda yetersiz oldukları görülmektedir çünkü hiç biri kendi çalışmalarını derinlik psikolojisi ile birlikte yürütmemektedir. Bu, hem insan davranışlarının ve deneyimlerinin nedenselliği

meselesini hem de yapılı bir çevrenin bu çevredeki bireysel ve toplumsal yaşamların anlamlılığı meselesini ele alan kentsel ve mimari göstergebiliminin derin (/derinlik) psikolojik zemininin eksikliğini belirtir. Bu eksikliği bir problem olarak tanımlayarak ve bu meseleleri göz önünde bulundurarak, bu tez, bir metoda, yani, kentsel ve mimari bakış açıları için, arke(i)tiplerin, bu konuda böyle bir zemin oluşturacağını varsayarak, göstergebilime katkılarını ve entegrasyonlarını sağlamayı hedefleyen kavramsal bir model geliştirme yoluna, dayanan bir çözüme, odaklanır. Sonuç olarak tez, nihayetinde, yapılı çevre ile ilgli konulara dayanan kentsel ve mimari teoriler için kullanılabilinecek derin (/derinlik) psikolojik bir zemine sahip yeni bir yaklaşımı işaret çalışmalarına sunar.

Anahtar Kelimeler: Yapılı Çevre, Göstergebilim (Semioyoloji ve Semiyotik), (Analitik) Psikoloji (Derinlik Psikolojisi), İnsan Davranışları ve Deneyimleri

to my Family, and to Ayten

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PREFACE

For as long as I can remember, signs and symbols have intrigued me. I thought that they were the practical ways of expressing things having deep and hidden meanings because they had visual languages of their own unlike the everyday language used by people from all around the world. As I got older, that interest began to move into the field of psychology, and it got me thinking about human characters and personalities by interpreting anything personal such as handwriting or artistic products. During my architectural and subsequent urban design education, I found myself doing researches and reading on mind and its functions, which made later me realize that everything, for example, feelings and thoughts resulted in architectonic designs, is made up of signs and symbols, for example, visually, carrying meanings and narrating anything about us. In short, all this appeared to me as a thesis topic.

After that, the topic gained a direction as a result of the discussions that I had with my supervisor, and then it was based on a keyword, **'shelter'**, uttered by an architect, a friend of mine. As I concentrated on it, as an architect and urban designer who sees that any architectonic space and built environment is, and needs to be, related to the lifestyles, namely how people lead their lives, we wanted to touch on this point in the thesis by addressing the causality and the meaningfulness in/of these environments. Finally, this thesis became a study focusing on all by proposing a new approach to the sign studies through a concept that Jung handled, but in a way differentiating this concept and re-evaluating its potency for this context like breaking the knitting of any sweater and knitting another garment with a different pattern from its yarn.

This is the anecdote behind the theme of this thesis, which coincided with difficult times and on which a lot of time and effort was spent, was written with an intense internalization by myself, and completed as it is.

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CHAPTER 1

INTRODUCTION

"Buildings aim to protect human beings against the elements. This is their primary and fundamental function. ... building will never fail to testify, through its structure, its primary function of protection." (Martinet, 1965, cited as in Garroni, 1980, p.405)

"Let us imagine the point of view of the man who started the history of architecture. Still 'all wonder and ferocity' (to use Vico's phrase), driven by cold and rain and following the example of some animal or obeying an impulse in which instinct and reasoning are mixed in a confused way, this hypothetical Stone Age man takes shelter in a recess, in some hole on the side of a mountain, in a cave. Sheltered from the wind and rain, he examines the cave that shelters him, by daylight or by the light of a fire (we will assume he has already discovered fire). He notes the amplitude of the vault, and understands this as the limit of an outside space, which is (with its wind and rain) cut off, and as the beginning of an inside space, which is likely to evoke in him some unclear nostalgia for the womb, imbue him with feelings of protection, and appear still imprecise, and ambiguous to him, seen under a play of shadow and light. Once the storm is over, he might leave the cave and reconsider it from the outside; there he would note the entry ways 'hole that permits passage to the inside', and the entrance would recall to his mind the image of the inside: entrance hole, covering vault, walls (or continuous wall of rock) surrounding a space within. Thus an 'idea of the cave' takes shape, which is useful at least as a mnemonic device, enabling him to think of the cave later on as a possible objective in case of rain; but it also enables him to recognize in another cave the same possibility of shelter found in the first one. At the second cave he tries, the idea of that cave is soon replaced by the idea of cave tout court—a model, a type, something that does not exist concretely but on the basis of which he can recognize a certain context of phenomena as 'cave'." (Eco, 1980b, pp.12-13)

Human being is not just a mass body; it is a complex entity with its physical, mental, and psychological structures. This interconnected triple of the human complex is quite interesting that they together operate the body like a machine to render its survival possible. In this respect, this machine makes interactive relations with its physical, spatial, and social environment where it lives and survives. That is to say, it forms various communications in such a built environment. Through the functioning of the physical, mental, and psychological structures, these communications allow any information regarding anything to be received and transferred correspondingly between the humans and their built environments; all of them are related to 'human behaviors and experiences' which express how they live in the environment because these behaviors and experiences are based on the existence of an environment where anyone can assure his/her life and survival physically, spatially, and socially.

In this context, it could be said that, for example, in Heideggerian philosophy, one of the main behaviors or experiences of the humans is spatial, in terms of the survival of the self, which reminds of 'environment' and refers to 'shelter(ing)' (Heidegger, 1971, cited as in Ersoy, 2003, p.125). In that case, a range of spatial designs or a set of architectonic activities through which any formation regarding any information -in brief, (in)formation- is made for each and every physical, spatial, and social relation with/in an environment has always become a requisite for the humans throughout history. Thus, many architectonic spaces have always appeared in diversity. Idealized through the fictionalization of better life stories and styles, and also handled through some physical, spatial, and social (in)formations for these idealized fictions, these architectonic spaces build an environment that offers multifarious behavioral patterns of life-experiences so that all persons and the peoples can live and survive through. This endeavor of architectonic space-making, referring to the interactive relationship between the humans and their built environment, which, in turn, defines the physical, spatial, and social dimensions of this environment, is a way that ends up ultimately with 'urban and architectural designs', by making sense of the relationship with its (in)formation. In that, these designs are human-oriented as well as environmental, in a sense (Ersoy, 2003, pp.124-128). In other words, they are related to the humans, on one hand, in the context of all their behavioral patterns which are desired and needed for a life-time to have all kinds of life-experiences, literally all their individual and social experiences, in a day, in an environment where they live by interacting with it physically, spatially, individually and socially (as each person is actually a socialindividual). On the other, they are also related to the built environment having some physical, spatial, and social dimensions all of which serve any of these experiences, whether naturally or in an architectonic way. That is to say, the effort and attempt for the architectonic activities that encompass all the processes, mainly design processes,

from idealization to construction, make any of these designs a physical, spatial, and social (in)formation, that is, surely the built environment. This (cor)responds to all behavioral patterns in a daily life, in other words, all behavioral patterns for all, both individual and social, experiences desired and needed in an environment which is built as a consequence. In brief, it is "not merely equivalent to the sum of artifactual or made formations, but will normally, include formations appropriated from a given landscape, as well as formations made solely by the relative deployment of bodies in space" (Preziosi, 1979, p.3). It is like the formation with full of information -in brief, (in)formation. It is like a physical, spatial, and individual and social arrangement in nature, which is organized to live alone or as a group with the others, as anyone can find a similarity with this in the example of 'a worm or ant nest' which physically emerges through a spatial deployment of an individual body or through some social encounters of many social-individual bodies. In short, being human-oriented and environmental, an urban and architectural design with its architectonic spaces builds an environment which bears the desired and needed interactive relations through its physical, spatial, and social (in)formation as a kind of a settlement where all persons and the peoples spend their life-times. As a result, all the things mentioned here imply that there are multidimensional interactions between the humans and their architectonic-based built environment, which points to an interactive communication that both sides have mutually.

To denote, within this interactive communication, any physical, spatial, and social relation becomes possible through an ability that the humans have. This ability is the 'use of a special language', which renders any environment to be embodied with visualities and articulations through the architectonic activities having many design processes. In this context, this language is mostly known as 'design language' or 'architectural language', which deals with the visual aspects of any (in)formation and works indispensably and cor-relatively with the corresponding 'lexis' including the linguistic terms and narrations pertaining to these visual aspects. To explicate, the language provides mainly two things by means of the visualities and the articulations all of which are maintained by itself. One of them is to idealize, design, and build an environment for daily experiences; and the other one is to organize it to be perceived

and comprehended through these experiences, by considering always all the physical, spatial, and social and individual relations of the humans there. That is to say, it visualizes and articulates each of these relations as a(n) (in)formation of an urban and architectural environment which prepares itself for all kinds of experiences: it defines any visual and articulate (in)formation of this environment to be experienced visually and articulately, by mediating the environment for these relations. Thus, being a way of communication, a design/architectural language guides the visual aspects together with their corresponding lexis for both visualities and articulations of an urban and architectural environment which is accordingly designed, built, and experienced as a physical, spatial, and social formation being full of information regarding these wide variety of relations in line with the idea(l)s, behaviors, and experiences. In short, as a mediator, it assists the architectonic activities having many, mainly design, processes and it makes a design become effective in making sense of a built environment.

For a repeat, making sense of a built environment depends on architectonic activities and design processes with the mediation of a design/architectural language, and on the physical, spatial, and social formations concerning and covering all individual and social experiences enabled there for the humans. In that, all of them are based on the interrelated performances of the functioning of the physical, mental, and also psychological structures that the humans have. As the outcome of this functioning, there arise fundamental steps in making sense of a built environment which has full of information. Firstly, any architectonic (in)formation is visually and articulately conceptualized in mind (mental realm), as an idea, as ideal life stories and styles, together with their accordingly desired and needed experiences for individual and social lives to be had. Secondly, it is visually and articulately materialized in reality (physical world) as an urban and architectural (in)formation which (re)presents these idea(1)s to be experienced throughout a lifetime through the corresponding behaviors. Thirdly, it is visually and articulately experienced (by body, with psyche) as a designoriginated feedback of itself in terms of the interpretation of the (re)presentation of the idea(1)s which have become informative/formal visualities and articulations in/of the built environment after the conceptualization (in mind) and the materialization (in reality). In short, by the agency of a design/architectural language mediated in these

processes, every urban and architectural environment becomes a visual and articulate formation with full of information which visually and articulately (re)presents the idea(l)s together with the desired and needed experiences for the individual and social lives through the corresponding behaviors: it is meaningfully formed and informed as a built environment (becoming a thing having full of visualities and articulations) where all persons and the peoples can live and survive.

In this way, an urban and architectural environment paves a way for all persons and the peoples in order that they sustain their daily lives and have the desired and needed experiences, with their behaviors, against any possible difficulty in their environment. For example, the experience of **'having or making a shelter'**, as one of the physical, spatial, and social interactions of the humans in an environment, must be an essential behavior in order to cope with any threatening factor faced in the environment such as compelling weather conditions and wild animals. This points to 'the matter of protection in order to live and to survive', and thus, points to 'the need of safety and security'. No doubt, this need is one of the fundamental needs of the humans, and this matter makes **'(having) a shelter or making a shelter'** substantially and reasonably important in terms of 'the survival and all kinds of life-experiences' (for a supportive opinion, remember the 'Hierarchy of Needs'¹ of A. H. Maslow). Therefore, **'the need of a shelter, that is to say, having or making a shelter'** always requires 'to be met and to be brought satisfaction throughout a life-time', which is 'the main task of a built (urban-architectural) environment'.

At this point, one can say that the compensation of this need and consequently bringing satisfaction can be possible through a set of architectonic activities in a relationship with its design/architectural language, which makes the formation of an

¹ It is a pyramidal schema which shows the psychological importance of the human needs in a way that their importance decreases from bottom to top and that they are connected sequentially to each other in this direction. At the first step, physiological needs (eat, sleep) are located, and followed, in sequence, by safety and security needs, love and belongingness (socializing), esteem needs (a sense of competence), cognitive needs (knowledge), aesthetic needs (beauty), and self-actualization.

To evaluate, according to the pyramid, an urban and architectural environment, referring to *to/the shelter*, could be considered as an example of all these needs in an extent because of the fact that it is the place where the needs are met through the experiences that a life requires and expects.

environment be experienced physically, spatially, and socially by all persons and the peoples throughout their lives. In this sense, this environment has a satisfactory role in meeting their never-ending needs for their all kinds of experiences which refer to their various relations. In other words, architectonic activities build an environment having physical, spatial, and social dimensions through the mediation of a specific language in a way that it meaningfully molds this environment into the visualities and articulations which bring the idea(l)s to mind so that the built environment (re)presents, indeed, signifies, these idea(1)s interpreted through the desired and needed experiences. Hereby, a built environment provides a place for the humans to sustain their daily lives and have their experiences in a safe and satisfactory way so that the lives of all (social)individuals or the societies would be safe, satisfactory, and thus sustainable. That is to say, meeting the needs and bringing a satisfaction from this compensation is ensured constantly through the behaviors and experiences in a built environment which is designed with a mediation of a design or architectural language as a result of the architectonic activities. In a manner, thus, 'the human and environment interactive relationship' continues as long as the existences of both last.

Hence, the humans and their built environments reach significance in terms of their each and every existence any of which appears at any time, or in an epoch, in a way of not only depending on each other through physical, spatial, and social relations but also regarding all the situations that the times of their epoch pose. In other words, they could be considered as mutually existing to one another. To explicate, a built environment exists as the manifestation of how people live and have experiences: this is based on how they experience a space or a place with what kind of behaviors. The similarities between what happens to a social-individual or to a society and how their environments exist and change are the evidences of the outcome of their coexistence. It means that, at any time or in an epoch, what people have physically, mentally, and psychologically (by means of the functioning of their physical, mental, and psychological structures) conceptualized (ideals), materialized (design-ing or information of an environment), and experienced (life stories and styles as a feedback of the ideals) affects, and also is affected by, the physically, spatially, and socially built environment which they interact with. That is to say, their ever-interacting and ever-diversifying coexistence has carried on throughout history, quite intellectually. Not only it results in the multidimensional changes in the sense of trans-formations of the environment (namely, the changes in the in-formation) but also it explains how and why the things have undergone acute changes over the course of time. In fact, the changes indicate their coexistence which diversifies interactively and intellectually with time. Therefore, the period in which any change appears reveals distinctly what has changed and how the things have changed or faced these changes in the environment and in its multiple dimensions. It shows meaningfully the distinctions, in the informative visualities and articulations, peculiar to the different idea(1)s and to differently desired and needed experiences with the behaviors related to them, through the trans-formations in the design of this environment, which have changes in its particularities such as physical and spatial features or socio-cultural values and beliefs compatibly with its distinctive life stories and styles that all persons and the peoples experience. It signifies all of them through some distinctive (in)formation defining similar but distinctive relations with the help of some different visualizations and articulations of differently idealized individual and social lives. For example, any personal rearrangement in the home decoration of a house after an unpleasant event that the owner of this house faces, or any inevitable alteration in a city after a shift in science and technology or after a drastic change in the societal, cultural, and political situations of the society living in this city. In brief, it seems that there is a resemblance, or a common fate, between any personal resume or the history of any society and the history of 'an urban and architectural or a built environment having physical, spatial, and social-cultural dimensions'.

It is due to the fact that this common fate refers to intellectual circumstances of any period of time in history, which could be a reasonable hint of their mutual existence: it refers to the potency of having many specific aspects in an epoch, in the context of sustainment, that is, the survival of the daily lives of all (social)individuals and the societies in safety. This potency not only lets people to change their idea(1)s, so their behaviors and experiences, day by day, but also makes their built environment not to remain as the same all the time: it physically, mentally, and psychologically affects the physical, spatial, and social relations of the human and environment interactions.

Hence, it brings continuously some differences out over time both in the humans in terms of the functioning of their physical, mental, and psychological structures such as thoughts and feelings, idea(1)s, architectonic activities, and etc, and also in their urban and architectural environment having physical, spatial, and social dimensions: changes always intellectually occur over time, and both always undergo intellectual changes progressively in accord with each other. In other words, a built environment changes in the same way that people who live there have changes together in their life stories and styles, literally their individual and social lives: it is just because of the processes which result in changes by manipulating physically, mentally, and psychologically their all kinds of relations with/in their environment. In short, the changes prompted by this intellectualism could be the consequences of the dreams and desires of these people(s) for the new life stories and styles pertaining to a new, correspondingly newly idealized, environment; for example, due to the banality of the existing standards, to explicate, routine or sameness become boring to people(s) at times, or for example, due to the difficulties posed by the existing constructions, to explicate, materials used in a built environment age and wear out by causing discomfort which takes efforts to overcome. It is because both a life story or style and a built environment, presented as a representative (in)formation of this life story or style, has a limited lifespan in terms of adequateness, usability, and durability. Although these facilities are constantly needed to have the idea(l)s be realized and experienced throughout their lifetime, unfortunately, they wear off after a while. This makes the satisfaction brought after meeting the needs, which is the task of an urban and architectural environment, consequently inadequate in terms of sustainability of all the relations in the environment. That is to say, the satisfaction with the individual and social lives gained through the everyday experiences is lost, and the relations become out-of-date; eventually, there occur vicissitudes.

It is the moment when people become depressed in their decrepit world which has become chaotic. By the time they realize what has been happening to their lives and their environment, long disregarded due to the loss of satisfaction, and that they need some changes in their lives and their environment, they make attempts to remedy the depression with new idea(l)s by dreaming or desiring a new environment. They think of the things they once had, in a way of imagining much more preferable ones rather, and of idealizing a better life and a better environment where their desires will come true at any time. That is to say, they force themselves to take action for a future that will embrace this new life in which they will one day regain their comforts. Hence, new things, renewals, and changes are inevitably needed in line with these new idea(l)s, these dreams and desires, for the better future: all are not only physically, mentally, and psychologically for themselves but also physically, spatially, and socially for their built environments where they have striven to live in safety and to sustain their individual and social lives and experiences with satisfaction. It means that there is a need of a set of architectonic activities to alter the existing environment by trans-forming it into a new (in)formation, which becomes then full of related images of the new idea(l)s, through a new way for the visualizations and articulations mediated with a new design or architectural language so that the new environment (re)presents the new idea(l)s together with the newly desired and needed experiences with new behaviors all of which are compatible with the new life stories and styles. It is the moment, just at this point, for people, to keep up with the new environment having new physical, spatial, and social dimensions and offering a new world where they live and survive by sustaining the new style of individual and social lives with satisfaction safely.

By the way, the differentiation associated with these changes had in individual and social lives, and in built environment, is mainly manifested by some common aspects that come forward in a certain period of time in a certain way and differently from the other periods of time. These common aspects featured in an epoch signify the typical formation of a built environment, which comes out in the era that adopts and adapts all the differences being peculiar to itself. In other words, each and every era makes sense of its own environment through the meaningful (re)presentations of its own images, being full of its own visualities and articulations, and idea(l)s, everyday experiences, and their corresponding behaviors, and the lives of (social)individuals and societies: all of them are distinctive and quite pertaining to the era. Thus, some theoretical explanations have accordingly been proposed for these commonalities to indicate particularly the differences between the epochs. That is to say, the theories

proposed in accord with the commonalities that differ each and every epoch from the others address some rules, codes, trends, types, styles, etc., each of which refers to 'any feature of an urban and architectural built environment having certain physical, spatial, and social dimensions' by covering all its characteristics that describe the certain idea(l)s, desired and needed experiences, and corresponding behaviors. These rules, codes, types, or the characteristics of a built environment, are called, in the context of the common aspects of an era/epoch, as 'urban/architectural styles' which identify the epoch as 'a particular urban/architectural era'. Through the architectural styles of an era, the theories try to explain what kind of a built environment it is/was in that era and what kind of an individual life and a social life is/was experienced there. For example, the Classical Theory of the Orders in Antiquity imposes "a set of rules for the combination and distribution of architectural parts into the equivalent of syntax" (Crossley & Clarke, 2000, p.5), which informs about the image of the idea of having commodity, firmness, and delight in a built environment to experience the harmony and hierarchy sustainably in daily lives of the antique age. Similarly, what is seen in the urban and architectural environment and in the social life of Classical era is explained differently when it is compared to that of Gothic, Renaissance, and Modernism. Namely, Classicism focuses on beauty and perfection while Gothic tries to rise to be dominant or Renaissance attempts to make symmetry or Modernism sets transparency for freedom. Furthermore, each of any style or any characteristic is a consecutive (in)formation and a co-existence both of which are based on the human and environment relationship generated throughout an intellectual history of a built, urban and architectural, environment having multiple dimensions consecutively: for instance, the efficient use of order in the urban and architectural spaces of Greeks; or the practicability of the physical and spatial constructions of Romans; the structural faculty of the architectures of Gothic; the implement of the perspective in the built environments of Renaissance; and the functionality in pure spaces of the urban and architectural designs of Modernity. In brief, the things that make a society as it is in any era are like the things that make up the built environment of the era, both of which can be characterized in the same way: an urban and architectural environment emerges in an era as the image of the current mentality and psychological ground of the (social)individuals and societies of the era; in other words, a built environment

emerges with an intellectual touch to all the interactive relations of the people there. It is due to the fact that an architectural style, as a tool of the communication in a sense, takes the advantages of a design or architectural language which is compatible with the style, by concerning the visualization and the articulation of design(ing) and (in)forming of a built environment, in order both to (re)present the idea(l)s of the era and the behaviors and experiences corresponded to them and to interpret the human and environment relationship which bridges the realm of the idea(l)s and the material world, in other words, between the humans and their environments. Throughout the visualizations and the articulations, an architectural style, by leading its architectural language, manages the visuality with the related lexis through building a holistic realization of ideal lives and daily experiences with (ideal) designs and formations exemplified by the era and through bearing the physical, spatial, and social meanings of the built environment as the intellectual, the physical, mental, and psychological atmosphere, of the era. That is to say, this visually and articulately made meaningful communication rendered with the help of an architectural style and an architectural language is an essential asset in a built environment for its many-sided differentiation within their co-existences. In this way, new things, renewals, and changes could be achieved; new life stories and styles of the idealized future which is imaged for an ideal environment could be realized.

Therefore, one can say that 'an urban and architectural environment' of an era is designed, materialized or built, and experienced according to its own styles which designate the idea(l)s and the life styles sustained and leaded in the era meaningfully as an entire set of (in)formation that the intellectualism of the era expresses, by being manifested in all individual and social lives. In addition to this, it is perceived and comprehended through its own characteristics which signify meaningfully the lives of the (social)individuals and societies, referring to their all kinds of relations that the era stands for. That is why it is notably important, for an understanding of these lives and all the experiences pertaining to these lives, to focus not only on the intellectual history of the physical, spatial, and social-cultural changes which refer to a different built environment of a different era, where the differences emerge in the lives of the individuals and the societies, but also on how and the reason as to why an urban and

architectural environment with its many, physical, spatial and social, dimensions has existed and remained throughout history.

This intellectualism and its related matter of how and the reason as to why a built environment has existed and also remained are eventuated through the functioning of the physical, spatial, and psychological structures that the humans have, and thus, through their interactive relations with the built environment, indeed. However, there lies a complex system behind this functioning which underpins a possible association with this matter as well as the intellectualism. This complex system having a quite self-regulating faculty points to 'the structure of the psyche' as "The psyche is the starting-point of all human experience" (Jung, 1960/1969, para.261). That is to say, this system, of the structure of the psyche, probably triggers the functioning of the physical, spatial, and psychological structures to regulate all the possible behavioral patterns to be used for any experience in order to provide all kinds of individual and social lives in a built environment; it probably triggers this functioning meaningfully through 'the activities of its life/survival-oriented creativity', which are diversified consciously and unconsciously as in many processes regarding the designing and building of an environment. For example, in the case of the architectonic activities, these processes could be listed, referring to design processes, as idea generation, dreaming or desiring, definition of a problem, brain storming, problem solving, designing, image making, (re)presentation, language competence, visualization and articulation, construction, perception, interpretation, etc. When this case is considered according to the Jungian approach, the totality of all these listed processes that are run consciously and unconsciously is animated by psyche during the interactive relations of each and every person with his/her environment so that this person as a social-individual can lead his/her own individual life and thus his/her own social life; furthermore, during the interactive relations of any people with their environment so that, by being/becoming a society, they can have a social life enriched with their own cultural and historical aspects. In brief, the processes, the self-regulating system or the structure of the psyche, guides any (social)individual and any society towards sustainable, satisfactory, and safe lives in a built environment, in a (re)presenting way of their idea(1)s that desire to live in, survive at, and to adapt to this environment

through their behaviors and experiences. Hereby, it provides a holistic harmony in a psychic way between the realm of the idea(l)s and the material world, between the humans and their built environments, in order that people can 'live, survive, and be protected in a built environment'.

To be able to do all, the psyche utilizes various fundamental pieces of its complex system that has a self-regulating faculty, which are assumed as the deep and hidden things of a psychic structure and as the priori determinants of any personality: it means that each and every person (hypothetically) has all of them to have all kinds of experiences through all their behaviors, and that a person develops a personality and becomes a social-individual to meet the needs, to lead both the individual and the social life, and to be the survival in an environment by himself/herself. In short, they are potentially related to and correspond to behavioral patterns that have tendencies to form behaviors in order to have experiences meaningfully in an environment. These things are known as 'archetypes' and these tendencies are called as 'archetypal contents', which implies that archetypes are the potential carriers of 'deep meanings' because they are like a cast managing deep psychological associations of the humans, and like a cast making sense of their behaviors, experiences, individual and social lives, and their built environments.

In this context, 'archetypes' mean the original models of anything providing for all the activities of the life/survival-oriented creativity through which each and every kind of an ability (behaviors; thoughts, intuitions, feelings, and sensations, etc.) to be able to live and to survive can be used by people. Moreover, they are based on a conception that they all work collaboratively for a balance to develop a personality and thus to ensure sustainability, satisfaction, and safety for the life and the survival because these three conditions are fulfilled through a situation in which some of the archetypes are active while the others are latent in their work. That is to say, they drive the psyche, and so the functioning of the physical, mental, and psychological structures (for example, any process run for the generation of ideas, ideal thoughts and feelings, ideal behaviors desired and needed), through its self-regulating system which sets the balance for the development of personality, and they appear, through a thematic signification, with/in idea(1)s, behaviors, and experiences, as the physical, spatial, and social (re)presentatives of themselves (for example, any fundamental or complementary component that a built environment contains). In other words, any of these archetypes is an unrecognizable thing in the psychic structure until it becomes obvious for the life-experiences. It is because they have the ability of turning the unconscious pre-forms into the conscious formations such as ideas, behaviors, thoughts and feelings, images, characters, and any component of an architectonicbased built environment, in a way that these things which emerge from unconscious into consciousness as (re)presentations have certain -deep- meanings peculiar to each and every experience, to any individual and social life, and to the certain built environment of each and every era. That is to say, each archetype has a potency to display its meanings, associated psychologically with the mental expressions and the physical manifestations, with all the behaviors which people have experiences in an environment throughout their life times through. In this way, all the physical, spatial, and social experiences had in the environment through the human and environment interactive relationships can be interpreted physically, mentally, and psychologically in accord with the functioning of the physical, mental, and psychological structures, which is triggered and run presumably by archetypes with the psychic complex and its self-regulating system. In brief, each and every archetype has universal meanings specialized with an archetypal content, referring to the human behaviors enabling all kinds of experiences, and these meanings are conveyed by the special expressions and manifestations peculiar to the archetypes and the archetypal contents. They are conceptually assumed as the necessary things of each and every (social)individual for the life/survival of any person and any society. That is why they are found out together with their expressions and manifestations in any kind of context related to the behaviors and experiences in terms of individual and social lives such as myths, legends, dreams, fantasies, texts, etc. which were put into images (as visual items) and words (as linguistic narrations) at anytime in history and anywhere in the world. In short, all archetypes appear in a signification by conveying their -deep- meanings through their abstract expressions and concrete manifestations: any appears visually and articulately with the certain -deep- meanings peculiar to itself and any carries these meanings in its informative/formal visuality and articulation.

"But how do we assign meaning? From what source, ..., do we assign meaning?", just as Jung queried (Jung, 1959/1968a, para.67), is a good question to understand the concept of archetype. According to him (1959/1968a), "the forms we use for assigning meaning are historical categories² ... [whose] interpretations make use of certain linguistic matrices that are themselves derived from 'primordial images'³" [archetypes] (para.67). That is to say, 'assigning meaning' is, then, probably not only moderated through a language whose linguistic matrices are originated probably from archetypes but also intertwined with the expressions and manifestations of these archetypes which possibly have their places, in this regard, at the roots of a language which has undergone countless and endless changes throughout history. In other words, 'assigning meaning' is related to the psyche together with the human physical, mental, and psychological structures, and with the thoughts and feelings, all of which actually assist the development of a personality to correlate itself (the self; a person) with the outer environment. In short, it connects the realm of the idea(1)s with the material world by means of 'signification'. Therefore, not only with their capability of assigning and thus conveying meanings in diversity in line with the linguistic matrices having changes day by day but also with their facility of being the priori determinants of a personality that makes a person be a social-individual for his/her individual and social experiences throughout his/her lifetime, the archetypes become important in the context of architectonic activities resulting in designing and building of an ideal urban and architectural environment for the lives and the experiences.

It is due to the fact that, firstly, an architectonic activity, for example, a way to design an environment as a (in)formation by making the idea(l)s real as to have experiences by means of the behaviors, is enabled through the functioning of the physical, mental, and psychological structures and is mediated through a design/architectural language that organizes the visual aspects in a relationship with their corresponding linguistic terms to form the related visualizations and the articulations, in line with an

² They refer possibly to the changes both of a language that the peoples have used and of anything related to not only a language but also the peoples who have used this language.

³ Archetypes are defined as "primordial images" (Jung, 1959/1968a, para.118) (by C. G. Jung) in Analytical Psychology (which is the branch of psychology based on the own perspectives of Jung).

architectural style referring to the characteristics of an era such as the intellectualism and the lives of the (social)individuals and the societies all of which are represented by the era. It is because, on one hand, this functioning which provides the correlative interactions with an environment is handled, as assumed, by archetypes, in other words, by the fundamental pieces of the self-regulating system of psyche, which are responsible for all human behaviors corresponding to all their experiences. On the other hand, this architectural language which has a presumed relationship with the archetypes in terms of forming visualizations and articulations and in terms of the expressions and manifestations -since it organizes the images together with their terms- is generated through the intellectualism which is grounded on the functioning of the structures in a similar and correlated way as a result of which the changes in the language and in the physical, spatial, social (in)formation of the built environment are faced. Lastly, it is due to the fact that archetypes which are, by assuming, engaged with all behavioral patterns and also with a language through its linguistic matrices define a forming-informing (signifying) way for the interactive communications within an environment. It is because, they are assigned with the certain -deep- meanings conveyed through the expressions and manifestations within the images and words all of which signify (re-present) the idea(l)s, behaviors and experiences, and through the (in)formation of the built environment, in other words, through the visualizations and articulations, as a result of this architectonic activity. In brief, not only designing and building an environment but also assigning and conveying meaning revolve probably around the archetypes having associations with the images and the linguistic matrices together, which trigger the functioning of the physical, mental, and psychological structures for the architectonic activities with all the involved -design- processes, and for the physical, spatial, and social relations to sustain the survival of a safe life satisfactorily. In this context, it reminds anyone of 'signification'; the act of signifying or the act relating to signs and symbols, etc.

Indeed, 'signification' is the process of assigning and conveying meaning in order to make any communication be meaningfully possible through signs and the things like signs or related to signs. This makes 'signification' the keyword of sign systems that are founded accordingly on the sign-relations in which a sign consists of basically its complementary elements to manage a 'signification' together. To focus on the sign systems and to examine the notion of the sign relations, there needs a study of signs which "provides a basis for understanding the main forms of human activity and their relationship, since all these activities and relations are reflected in the signs which mediate the activities" (Morris, 1938, p.58). Fortunately, it could be inferred from this statement supporting the aforementioned things in the context of 'signification' that the archetypes -the models of all human behaviors and experiences- are the parts or the pawns of the sign relations. Hence, they are needed to be considered in sign systems, for -remember that- they are engaged with meanings through the behavioral patterns, and with the help of the self-regulating system of the psyche, they prompt the functioning of the physical, spatial, and social structures which are the operator of idea(l)s, behaviors and experiences, thoughts and feelings, and architectonic activities, language acquisition, linguistic competence, intellectualism, and physical, spatial, and social changes in an environment. In short, the study of sings becomes essential for any discussion on the human-environment relationship.

Through a review of this study of signs, it can be said that there are a variety of approaches which have been theoretically formulated and developed for many years. However, two leading scholars' perspectives are highly important because both are very fundamental since they differ from each other in terms of addressing the issue and since all of the rest of these approaches follow the perspective of either one or the other, or both: one is the perspective of Ferdinand de Saussure, and the other is the perspective of Charles Sanders Peirce. On one hand, Saussure's studies are on linguistics, and he thinks that signs are "resulted from an imagination or an activity of human minds that is expressed through language codes and understood by the individuals who are involved in the communication process" (Yakin & Totu, 2014, p.7); this makes him a structuralist. Moreover, Saussure's concept is binary/dyadic and his dichotomy defines 'sign' with its two elements, 'signifier' and 'signified', in a close complementary relationship, which means that these two elements can not be separated. His perspective is called as Semiology. On the other hand, Peirce's studies are on logic, and he wants to know "the way ... how people use their common senses or rationality" (Leeds & Hurwitz, 1993, cited as in Yakin & Totu, 2014, p.7) as they

think, according to him, through the signs which "enable them to communicate with each other" by giving meanings to anything which exists in their environment (Zoest, 1991, cited as in Yakin & Totu, 2014, p.8). Thus, he searches for the methods of classifying and operating sign-system, that is, the categorization of signs; this makes him a pragmatist. Moreover, Peirce's concept is ternary/triadic and his trichotomy defines 'sign' with its three elements, 'representamen' or 'sign vehicle', 'object', and 'interpretant'. His perspective is called as Semiotics. Although their differences, Saussure's 'signifier' resembles to Peirce's 'representamen' in a sense as Saussure's 'signified' seems somehow divided into two elements by Peirce, which are 'object' and 'interpretant' (Yakin & Totu, 2014, p.7). That is to say, these two focus mainly on a 'sign' by considering either its unity which contains its conceptual meaning, its representative form or its faculty of representing its meaning through the sense made of, and maybe its referential thing. In short, Semiology and Semiotics work on signs in a way containing these elements by defining a sign-system having some signrelations. Therefore, in a sign-system, a sign-relation can basically be described with the form that the sign takes, with the conceptual meaning and with the perceptual interpretation of this meaning, and with or without a concrete or abstract thing which the sign refers to. In other words, 'signification' depends, with the presence of a language, on '(re)presentation' and 'interpretation', which are the performances of the functioning of the physical, mental, and psychological structures triggered by and worked with the psyche in order to communicate for the assurance of the life and the survival. This, in turn, brings the architectonic activities to mind.

In the context of architectonic activities, their Semiology and Semiotics could cover any related matter in a limited extent: to explicate, the conceptually and perceptually significant or meaningful relationship between a signifier and a signified, with or without an object which can be anything architectonic or be anything related to urban and architecture, could be reviewed and examined, only. Other than this, the effects of intellectualism on the physical, spatial, and social changes in a built environment, namely, the changes in the forms which a sign takes, in its conceptual meaning and in its perceptual interpretation, with or without a concrete or abstract thing that can be anything pertinent to this architectonic-based built environment, could accordingly be discussed, at best, through the approaches of Semiology and Semiotics. Hence, it is not easy to find any certain trace, in these approaches, about the functioning of the physical, mental, and psychological structures though it is a fact that all the processes of the architectonic activities are driven by this functioning and all the intellectual circumstances are derived through it. For this reason, it can be convenient, rather, to take the advantages of the viewpoints concerning this functioning. Fortunately, there is a branch in the study of signs to explore the sign-relations in the context of built environment having the multiple dimensions in order for making discourses about it. It is known as 'architectural semiology or semiotics'. It assesses principally a sign with a relationship between its two basic elements, that is, signifier and signified, together with its another element which is an urban and architectural object with its own specific properties, by considering both form and function and denotation and connotation relationships in line with the properties. It can be understood accordingly from the perspective of this branch that this object is a pivotal element between a signifier and a signified, in a sense of producing a (an urban and architectural) sign. In other words, this object expresses and manifests the certain meanings about life stories and styles, life experiences, and individual and social lives, through a visually (in)form-ed signifier and an articulately made function-al denotative and connotative signified, owing to the fact that it has a form embodied to carry out some particular functions which associate the object with both denotation and connotation pertaining to the sign of itself. It is because, an urban and architectural environment is a formalfunctional organization of the things fundamental and complementary, that is, a built environment, and thus it acquires and bears denotative and connotative meanings like "in linguistics the combination of individual words to convey meaning" (Crossley & Clarke, 2000, p.5). That is to say, such a sign standing for such an object signifies a physical, spatial, and social life leaded in a built environment, and it gives some certain meanings peculiar to this life to this environment by referring to itself.

However, there is a slight deficiency in the viewpoints of this branch, too, though it completely revolves around the related matters about 'the architectonic activities' and 'the urban and architectural, or built, environment'. In other words, there are some unaddressed-unforeseen points regarding the matters of the causality of the activities,

and the meaningfulness in/of the built environment: this refers to a deeper cause of the functioning of the physical, spatial, and psychological structures by which all the -mainly design- processes involved in architectonic activities are handled. This cause is about the putative underlying fact of this functioning through which all kinds of relations are acquired for the (in)formation of an environment. This fact is about the psyche and its self-regulating system by which this functioning is moderated for all kinds of behaviors and experiences that are desired and needed in this environment to ensure that the environment provides sustainability, satisfaction, and safety. These points are the archetypes, that is, the fundamental elements of this system, in that, they work collaboratively to make sense of a physically, spatially, and socially built environment for the assurance of the life/survivable, by guiding for the activities of life/survival-oriented creativity of the humans and by giving the environment -deepmeanings pertaining to their behaviors and experiences, to their daily lives. That is to say, none of the approaches in Semiology and Semiotics talks apparently about this causality which lies under the functioning of the physical, mental, and psychological structures in terms of the architectonic activities -especially of design processes- for designing and building an idealized environment: there is no certain statement about the concept of archetype, about their associations not only with the languages (lexis, lexical terms and narrations, linguistic matrices) in terms of assigning and conveying meanings but also with the behavioral patterns in terms of the individual and social experiences, moreover, about their facility in the development of a personality that is maintained through the interactions with a built environment in a way. If there were, it could have given an opportunity, in terms of the individual and social lives, in order to touch on and to debate the matters of the causality of the behaviors and experiences and the meaningfulness in/of a built environment which (re)presents the idea(l)s, ideal life stories and styles, through its visual and articulate design being full of information. It is owing to the fact that this causality concerns any meaning not only expressed and manifested visually and articulately (as a re-presentation) but also experienced physically, socially, and psychologically (as an interpretation, through the perception and comprehension of these expressions and manifestations) through the sign-relations embedded in (a signification of) the idea(l)s, design(ing)s, and built environments (formed and made functional with the guidance of the functioning of the physical, mental, and psychological structures, of the psychic and self-regulating system, and of the archetypes). In addition to this, if there were, there would have been a chance to research the intellectualism in the context of urban and architectural styles and in the context of its related matter of how and the reason as to why a built environment exists and remains. In that, the humans are the dominant users of signs because of their physical, mental, and psychological structures including a language competence, and these structures of them, functioning any architectonic activity, are intertwined with sign-systems (signification, expression, visualization, articulation, re-presentation, manifestation, interpretation, etc.) to design, build, and experience an urban and architectural environment physically, spatially, and socially; thus, "Human civilization is dependent upon signs, and system of signs" (Morris, 1938, p.1).

To summarize, there, in the semiological and semiotic studies regarding the urban and architectural theories, in the context of signification and sign-relations pertaining to the human and environment relationship, is a lack of a consideration of something meaningful that guides for the life/survival-orientation of the humans, explicitly for all kinds of their behaviors, and individual and social experiences to render their life/ survival in a built environment sustainably, satisfactorily, and safely. It means that the lack is about the causality of their behaviors and experiences in the context of architectonic activities and design processes in terms of the meaningfulness in/of a built environment, and about this meaningfulness referring to anything related to the built environment such as its concept, design, components, and to anything regarding the urban life or the lives of social-individuals and societies, that is, the individual and social lives, in urban and architectural environments.

Hence, there needs a better way to explicate and to evaluate the human-environment relationship, to examine the architectonic activities and design processes (such as dreaming and desiring ideals, idea generating, visualization, designing, articulation, building, undergoing changes, and experiencing, etc.) in terms of the matters of the causality and the meaningfulness pertaining to this relationship, by considering the individual and social lives, and so, the behaviors and experiences. It needs to regard the study of signs, that is, the approaches in semiology and semiotics, on one hand,

and on the other, the functioning of the human physical, mental, and psychological structures, the self-regulating system, and the archetypes, all of which run for the architectonic activities. It needs to bring together the study of signs and the concept of archetype with its complementary approach to the personality development which is based on individua(liza)tion and socialization processes. That is to say, it needs to combine Semiology/Semiotics and Analytical Psychology.

In this regard, this thesis handles the causality of the behaviors and experiences in the context of architectonic activities with all the -design- processes, and the meaningfulness in and of the built environment in terms of the individual and social lives, namely, in terms of the urban lives or the lives of social-individuals and societies, in line with these behaviors and experiences. In addition to this, it accordingly considers the concept of archetype with its complementary approaches, by focusing on not only the meanings and the behavioral patterns associated with the archetypes -referring to all kinds of experiences lived in a built environment- but also their corresponding expressions and manifestations made in forms and functions as their deep, denotative, connotative (re)presentations -referring to anything pertaining to this environment. In fact, the thesis highlights the phenomenon of '(to) shelter', which stands for an archetype with an associated meaning of a 'shelter', in other words, for an archetype pointing to a behavior of 'making a shelter' and to an experience of 'being sheltered' to live and survive, because 'to shelter' is surely one of the main behaviors of all persons and the peoples, by resulting in one of the main experiences of them, in an environment, and it is the main aspect of designing and building an urban and architectural environment that appears as the manifestation of this archetype and as the expression of the meaning of the experience of 'being sheltered' and of the behavior of 'making a shelter'; that is why it is decided as the main statement of the thesis. And accordingly, the main argument of the thesis is that there is a significant interactive information-based mutual relationship between the humans and their built environments, which could be explained with intellectual terms, since this relationship depends on their coexistence to assure the life/survival, that is, the individual and social lives, in a built environment becoming in turn a visual-articulate (in)formation.

Therefore, the thesis holds two basic chapters other than this introduction as the first chapter of the thesis and the conclusion as its last chapter: sequentially, a chapter for the theoretical framework to explain the aforementioned concepts and approaches and to provide a preface for the other chapter; and a chapter for the study to suggest a new formulation for urban and architectural semiology and semiotics and to explicate its formula. In the former, the thesis presents a theoretical framework through the reviews of not only Semiology and Semiotics by including their concepts but also Analytical Psychology by including the concept of archetype with its related theory, that is, personality development, which is depended on a thematic and schematic template to understand to the psychodynamic affairs. Then, it collates these fields through an intellectual discussion on built environment and its fundamental urban and architectural components each of which is considered as a sign and associated with symbols, archetypes, and archetypal contents in terms of embedded meanings, of corresponding behaviors and experiences, of potential expressions and apparent manifestations. In the latter, the thesis tries to find an appropriate way to deal with the deficiency/lack of a -depth- psychological ground in semiology and semiotics for urban and architectural perspectives by considering the aforementioned matters of the causality and the meaningfulness. To serve this purpose, it gives room not only for an explicit criticism about the approaches in semiology and semiotics and about the concept in analytical psychology in terms of their potentials to be able to suggest a formulation and to propose a new concept for urban and architectural semiology and semiotics but also for this formulation and the proposal of this concept, both of which point to these matters through the newly formulated model. It thinks about a contention in a way concerning the matters in a relationship with the architectonic activities and design processes and with the particular visual and articulate -design/ architectural- language; as a result of this contention, it presents a concept having a content which not only revolves around the human and environment relationship and around the urban life or the lives of social-individuals and societies but also depends on the integration of the concept of archetype into semiology and semiotics to give a meaningful (depth) psychological ground for the urban and architectural perspectives to the approaches of both. Hereby, it re-interprets all these concepts and approaches through a possible solution to the problem of this deficiency/lack which covers the

understanding of the matters of the causality and the meaningfulness, that is, through a hypothetical study put forth *by the author*.

In consequence, there is a deficiency/lack in semiology and semiotics, seen in the urban and architectural perspective regarding the sign-relations peculiar to the human environment relationship which requires a -deep/depth- psychological ground for the understanding of the matters of the causality and the meaningfulness in this context: it is defined as the problem of the thesis because this deficiency/lack is based on an underlying cause in the functioning of the human physical, mental, and psychological structures, which moderates the design processes and the architectonic activities to design and build a physical, spatial, and social environment to make the idea(l)s be realized and makes sense of the built environment in terms of the urban lives or the lives of social-individuals and societies. In short, the problem of the thesis is the lack of a depth-psychological ground in urban and architectural semiology and semiotics, that is, a lack of a consideration about something meaningful which guides for the life/survival-orientation of the humans for the sustainment of their both individual and social lives satisfactorily in a safe environment. This can remind anyone of the concept of archetype; thus, it is considered and preferred as one appropriate answer to the problem caused by this deficiency which covers the understanding of the matters of the causality and the meaningfulness because it is related to a deeper cause which makes sense of the built environment indeed, and the secret of the meaningfulness is hidden in this cause: it is designated as the subject of the thesis. In short, the subject of the thesis is the deeper and the hidden things which cause assigning and bearing of meanings in the context of not only the causality of all human behaviors and all their daily experiences but also the meaningfulness in/of the built environment in terms of the individual and social lives of them. To eliminate the problem, the contribution/integration of the concept of archetype (referring to the psychic system or the self-regulating system which triggers this functioning) to the approaches of semiology and semiotics is needed to provide a depth-psychological ground for the urban and architectural perspectives: it is determined as the objective of the thesis. In short, the objective of the thesis is to reinforce and reinterpret the approaches in semiology and semiotics for the use

of urban and architectural theories with the incorporation of the concept of archetype, to gain them a depth-psychological ground. It is quite worthy to set this objective to deal with this problem and to handle this subject; hereby, it could be possible to comprehend the matters of the causality and the meaningfulness in line with any design(ing) on, any change in, and any image of the physical, spatial, and social (in)formation referring to the idea(l)s, that is, the urban lives or the lives of social-individuals and societies, all of which are occurred intellectually -as a result of this causality by giving a way to this meaningfulness in a sense- through particular significations, expressions and manifestations, visualizations and articulations, and (re)presentations and interpretations, in any epoch. To accomplish the objective, the thesis wants to study on suggesting a new formulation for urban and architectural semiology and semiotics, both including the concept of archetype and considering the matters of the causality and the meaningfulness: it is described as the method of the thesis. In short, the method of the thesis is a plan through which a new formulation for urban and architectural semiology and semiotics is suggested in order to develop a hypothetical concept in conjunction with a convenient model proposed to present and explain the idea behind its conceptualization, which is to emphasize the depth-psychological ground and the matters of the causality and the meaningfulness in the context of built environment. Through the plan, an appropriate concept having/with a model is devised through the suggestion of this formulation in accordance with the criticism of the aforementioned approaches and concepts, and then, its model is presented both in diagrams and with a matrix/table by clarifying the model, in line with this concept, through some fundamental urban and architectural components -all of them are enriched with 'archetypal contents' and favored as the fundamental among many others appeared throughout history. In this way, the thesis offers, through this study of itself, a new concept having a model as an advanced version or as a further edition of urban and architectural semiology and semiotics, namely a new opinion for the urban and architectural discourses about the built environment especially in the context of 'the life/survival-oriented relationship between the humans and their environment', by achieving a realization of the impact of the deep and hidden things in their physical, mental, and psychological structures on the physical, spatial, and social relations with/in a built environment, and on the

underlying meanings of 'an urban and architectural environment having multiple dimensions': it considers the individual and social lives, all kinds of behaviors and experiences of the humans, their idea(l)s, ideal life stories and styles, in this context.

All in all, the thesis expects to be a hope for the disciplines to focus on the human and environment relationship through a consciousness about the physical, mental, and psychological structures of the humans, the functioning of these structures, the self-regulating system of this functioning, and the fundamental pieces of this system, in terms of the architectonic activities and the design processes because a physical, spatial, and social environment is probably designed, built, and experienced visually and articulately through these pieces, this system, this functioning, these structures: it is an intellectual way of the signification of the idea(l)s of the humans for the idea(l) lives providing for all the individual and social experiences through corresponding behaviors that are associated with meanings. Furthermore, the thesis also expects to be a help for the researchers to find out the importance of the deeper and hidden causes of these activities in terms of pattern-forming (not only all kinds of behaviors and life-experiences but also formal and functional organizations in an environment) and meaning-giving (through the design processes such as signification, expression and manifestation, visualization and articulation, representation and interpretation) in terms of urban and architectural design for building a quite meaningful environment with full of information about all persons and the peoples and also about anything related: it is a compendium work of the representative/presenting expressions and manifestations of the idea(1)s as their meaningfully (in)form-ed and made function-al designs maintained by means of the mediation of a language peculiar to a specific style for the deep, denotative, and connotative visualizations and articulations, and a work of the (re)presentations of the desired and needed experiences for an idealized environment that ensures the survival of lives sustainably, with satisfaction, in safety. Finally, the thesis expects to please from the quest of 'what is the nature of the urban and architectural signs' and 'what is the relationship of these signs with urban and architectural languages', when a built environment with its urban and architectural things are considered as a system of information-based communication having both deep (referring to depth psychology) and sign (-based) structures meaningfully.

CHAPTER 2

THEORETICAL FRAMEWORK

"So you are too a sign. Not only are you a sign to others, but first and foremost, you are nothing but a sign to yourself." (Waal, 2001, p.71)

In the previous chapter, an 'introduction' was given to comprehend the content of the thesis and its outline. It covered its theme by denoting its main statement and main argument. It mentioned about a problem and a way to deal with it, which is based on a method, by considering an objective and by hoping some expectations to be met after a proper study. In short, all of them introduced the thesis.

In this chapter, a 'theoretical framework' will be handled by concerning the theme of the thesis. To do that, on one hand, not only 'sign studies', that is, Semiology and Semiotics, but also a study in 'depth psychology' that refers to Analytical Psychology in which 'the concept of archetype' is included with its related and complementary theory, that is, 'personality development' namely 'individuation', will be reviewed by considering the human and environment relationship. On the other, an intellectual discussion about 'built environment' will be held by focusing on some of its urban and architectural components each of which is considered as a 'sign' and associated with 'symbols' and with 'archetypes' and 'archetypal contents'. In this way, the association among these fields will be accentuated in the context of urban and architectural environment. At the end of the chapter, a summary will be made to address briefly what the chapter will have talked about. Hereby, a preface for the following chapter of the thesis, that is, the chapter titled as 'the study', which is the crux of the thesis, will be provided.

2.1. Sign Structure and Sign Studies

In this part of the chapter, the 'sign structure' will be handled in a relationship with two 'sign-studies', Semiology and Semiotics, by focusing on their 'psychological grounds' and by considering the human-environment relationship in the context of 'built environment' being one of the main subjects of urban and architectural theories.

Sign is a thing having a certain 'meaning', which is used to indicate or to designate something else in accord with this 'meaning' with a mediation of a 'language': it is a mark, a token, a display, a character, a unit, or a gesture by which a 'thought' or a 'feeling' is expressed or made known. In short, it is a kind of '(re)presentation' generated for the 'interpretation' of 'meaning'. To reveal the 'meaning' hidden by a 'sign', a study was emerged very early in history: it has been termed, in connection with its Greek root, as 'semiotics' which stands for 'observant of sign'. Thus, this term, 'semiotics', has been encountered several times in history, from the ancient eras to the modern times, to be used in this sense. For example, it was advocated for the sufficient communications by Prodicus; and, it was used for the comprehension of the relationship with the world by Plato; it was mentioned in a branch of medicine by Hippocrates; it was proposed as a tripartite model which focused on the images of mental experiences by Aristotle; it was systematized for a general conception of signification or representation of meaning in the context of relation by R. Bacon; it was applied for a system of symptom interpretation by H. Stubbe; it was used for the designations of thoughts and objects by J. H. Lambert; and, it was proposed as a tool to comprehend the representation and the knowledge relations by J. Locke. However, all were long before it became its most advanced in late 19th and early 20th centuries by two scholars. That is to say, it was conceptualized as a philosophical theory for naming 'sign study' on one hand by Swiss linguist Ferdinand de Saussure, and on the other, American logician Charles Sanders Peirce; both studied independently from each other by taking very different approaches to the subject of 'sign' and the issues related to it. As a result, 'sign study' turned into two different, but, very basic, and thus, quite well-known, studies, which are called as Semiology and as Semiotics. In short, there are two fundamental 'sign studies' appeared separately to study all kinds

of issues pertaining to 'sign' such as 'sign-activities', 'sign-systems', 'sign-relations', 'sign-processes', 'sign-using behaviors', and so on. With these two studies, how a 'meaning' is assigned through a 'sign' and how it is conveyed for its 'interpretation' are examined, by considering (re)presentative relations of bearing 'meaning'. Thus, everything related to 'meaning', that is, the topics such as signification, analogy, allegory, metaphor, communication, representation, symbolism, and iconography, falls within their research areas. This makes each of these studies an interdisciplinary science which provides diverse approaches to many fields such as linguistics, sociology, anthropology, psychology, art and architecture, and so on.

Due to the fact that both were put forward by two different scholars who handled 'sign' from different points of view, Semiology and Semiotics are different from each other in all extent. To explicate, Saussure defined a 'dyadic' concept for 'linguistic sign'-since he was a linguist; he studied on 'linguistics' and treated 'language' as a 'sign system'- with the methods of 'structuralism' while Peirce defined a 'triadic' concept for 'any kind of sign' by proposing a detailed 'logical categorization' to form some of its possible 'combinations' through the methods of 'pragmatism'. On one hand, Saussure's concept was formed with a 'sign'⁴ having two inseparable elements: a 'signifier', which is a set of speech (sounds) or marks (texts) in language (for example, the pronunciation or the writing of the word 'tree'); and a 'signified', which is the concept or the idea behind the sign (for example, the concept of the thing 'tree' as a plant). Moreover, regarding this sign concept, he contributed, to linguistics, also two other related concepts which are based on two distinctions: the first is the distinction of 'parole', that is, actual individual utterances, from 'langue', that is, the underlying system of conventions making such utterances understandable; and the second is the distinction of 'synchronic', that is, a language at any particular time, from 'diachronic', that is, the changes of a language over time. All were covered under Semiology followed later for many other fields by lots of semioticians. On the

⁴ Signifier: Signified:

' he concept of house that is constructed as an architecture to live inside

ev, house, haus, ராíтı, domus, איי, मकान, பீ்பி, байшин, 집, 家, etc.

⁽a triangle on a square, in an abstract sense; an enclosed space produced through at least three walls which are attached to each other edge to edge by framing the area between themselves, and a ceiling on top of these walls to cover this area, in the sense of a construction; a cave or a hut, in the sense of a *shelter*)

other, almost at the same times, Peirce's theory was formed with a 'sign'⁵ having three elements: a 'representamen' or a 'sign vehicle', which seems like Saussure's 'signifier'; an 'interpretant', which seems like Saussure's 'signified', (being the effect of the 'sign', which is occurred in the mind on somebody about its represented thing or referent); and an 'object' (referent), which seems like Saussure's 'signified' (being the thing that the 'sign' determines). Moreover, using this theory being a trichotomy, he also conceptualized a triple categorization that divides 'signs' into many classes three of which are worked on much: an 'icon', which resembles to its 'object' (like a traffic sign); an 'index', which is associated with its 'object' (like smoke being a sign of fire); and a 'symbol', which is related to its 'object' only by convention (like alphabets or numbers). In this way, he made a list of categorizations of signs through the division as a result of which there obtained some combinations constructed according to his own phenomenological views. All were covered under Semiotics followed later by many other semioticians for lots of fields. In short, becoming two fundamental, but different, studies about the nature of 'sign' or 'sign (based) structures', the concepts of these two approaches have been applied to many fields such as aesthetics, social sciences, anthropology, psychology, and linguistics; for example, to cultural myths and practices by C. Lévi-Strauss, to social behaviors by R. Barthes, to Freudian psychoanalysis by J. Lacan, and to Saussurean linguistics as a deconstruction by J. Derrida.

As mentioned, there are several differences between Semiology and Semiotics. First and foremost, Semiology is, dyadic or bipartite, and it is based on the methods of structuralism⁶ while Semiotics is, triadic or tripartite, and it is based on the methods

⁵ Representamen (S	Signifier):	ev, house, haus, σπίτι, domus, איי, मकान, ຫ້າມ, байшин, 집, 家, etc.
5	Signified): Signified):	 * a '; house itself as an architectural thing * 2 '; the concept of house (an image; a construction; a <i>shelter</i>)

⁶ Structuralism is a method, (a way preferred by F. de Saussure), to study or to analyze the structures having the recurring patterns composed by parts. It emphasizes the importance of these structures and the relationships between their parts, focusing on the contrasting ideas or elements in these conceptual systems. It attempts to show how these parts relate to the whole structure. It employs the doctrine that structure is more important than function. It thus concerns the aspects of not only human cognition, behavior, culture, and experience, and so on but also language, literature, anthropology, and society. Its approach to linguistics includes the descriptions of self-contained relational structure of language, whose elements derive their existences and values from their distributions and oppositions in texts or discourses.

of pragmatism⁷. In addition, the former searches what can be signified by what, or what is opposed to something else whereas the latter searches what stands for what, or how meaning builds itself. The former "limits itself to the intralinguistic and mental sphere, cut off from the experiential world by an idealized world of concepts" however the latter exists as "a system of thought which explicitly seeks to mediate between the natural environment and its perception in consciousness" (Daylight, 2014, p.38). Moreover, Semiology was stated by Saussure as a field of science theorized for the functions and the articulations of linguistic signs over socialpsychology and time discourse but Semiotics was conceptualized by Peirce as a theoretical tool used for the generations and the reconstructions of all natural signs by a logical dealing: the former was constructed linguistically by paying attention to social psychology and by caring meaning and values, which makes it conventional; the latter was designated logically by taking making categorization and combination into account, which makes it natural. Therefore, it could be said that Semiology is "a limited subset of Semiotics" (Daylight, 2014, p.37). Furthermore, in Saussurean Semiology, the element 'signified' is quite important because it includes connotative meanings and universal concepts together (unlike the different speeches or texts belonging to different languages); on the contrary, in Peircean Semiotics, the element 'representamen' ('sign vehicle') is the important one because it is the actual sign to which all categorizations are applied. What is more, "While Saussurean Semiology concerned itself only with intentional communication acts, such as speaking and writing, or other related forms such as gesture and Morse code, Peircean Semiotics included all sensory stimuli that could create another idea in the receiver's mind" (Daylight, 2014, p.37). That is to say, there is no overlap in their functions, however, instead, both Semiology and Semiotics present "independent but complementary domains of explanation", and they render "at different levels in the communicative

⁷ Pragmatism is a philosophical movement, (a way preferred by C. S. Peirce), having an empirical basis and approaching to problems and affairs in a practical and sensible way rather than by having fixed ideas, theories, rules or any abstract principle. It is a system having various forms of stressing on the practical consequences for these problems and affairs that suit the conditions in which they really exist as constituting the essential criterion in determining meaning, truth, or value. It thus emphasizes practicality, and evaluates theories or beliefs in terms of the success of their practical application, by trying to make a balance between principles and pragmatism. It is marked by the doctrine that the meanings are sought in their practical bearings and appeared in real life through this way, and that the function of thought about logical propositions is to guide to find the accuracy that these meanings come by gaining values from this truth which is to be tested by these practical consequences.

process": the former was characterized by 'articulation' and the latter was characterized by 'representation' (Daylight, 2014, p.38). In other words, "The semiotic acts of representation and interpretation are incompatible with Saussure's view of the arbitrariness of the sign and its manifestation in language as articulation" (Daylight, 2014, p.49). Then, this difference between Semiology and Semiotics could be explained as follows:

Peircean Semiotics describes the process by which one symbol is substituted for another, as a stimulus-object for a referential-object, and so on to infinity, on the same level. The representamen 'spot' stands for the object 'measles', when perceived through the interpretant of 'diagnostics'. Saussurean Semiology, on the other hand, is supposedly constrained by a bipartite relationship between signifier and signified. However, it would be very simple to restore triadicity to the Saussurean sign, if one wished. The Saussurean sign would merely take for granted the interpretant of 'social agreement'. The verbal representamen 'tree' would stand for the object 'tree' through the interpretant of 'social agreement'. In this sense, Saussurean Semiology does include physical or natural signs in the sense that 'spots' or 'smoke' can be apprehended in consciousness. The Saussurean theory of value describes the process by which our experiences of the natural world become articulated as concepts through the medium of language. When we see a large body of water running to the sea, we think of 'river' in contrast with 'lake' or 'rivulet', but that conceptuality is wholly arbitrary in relation to the natural world, and governed purely by social agreement. (Daylight, 2014, p.48)

All in all, Semiology and Semiotics approach to the subject of 'sign' from different perspectives, and thus, they have different concepts about 'sign (-based) structure': they differ from each other in terms of their methods (structuralism/pragmatism), their research areas (language; structure / logic; categorization and combination), their matters (linguistic sign / all kinds of sign), their elements (dyadic/triadic), their descriptions of the communicative process (articulation/representation), etc. This makes them two main branches of 'sign studies', followed by many semioticians. In conclusion, it could be inferred that there is no certainty if these dissertations are right or wrong, possible or impossible, scientific or unscientific; however, Semiology and Semiotics have different explanatory powers and facilities with their concepts for the further of many fields (Daylight, 2014, p.49); because, by defining two basic concepts about 'sign structure', these two approaches to 'sign' are two potential tools to comprehend how a 'meaning' is constructed in a 'sign' and communicated through this 'sign'. Therefore, it is worthy to review how they look into social patterns, past experiences, psychological aspects, thinking habits, and so on; this will be held now.

2.1.1. Ferdinand de Saussure; Semiology

Saussure (1857-1913), a Swiss language scholar⁸, is acknowledged as one pioneer figure of modern linguistics. He studied the structure of language, which laid the groundwork for 'structuralism', and he formalized a basic approach to the study of language and proposed some principles for this approach. It was based on the communications happened through the senses (sound-speech or written-text) and the mental images (concepts) occurred by these senses since he believed that there were sign-systems in these communications. Thus, he developed a semiotic concept about these sign-systems with two inseparable elements, that is, 'signifier' and 'signified', -let's name it as 'sign-dyad'- and defined two other contributions, that is, 'langue' (a unified and shared social system) and 'parole' (individual and idiosyncratic speech) on one hand, and also 'synchronic linguistics' (as a system at a particular time) and 'diachronic linguistics' (as changing through time) on the other. That is to say, he is known as the founder of his own sign theory, called as 'Semiology'. All about this sign theory of him were mentioned in the reconstruction of the notes of his three-year lectures, and were published in 1916⁹ as the Course in General Linguistics later than the times of these courses that became a sufficient foundation for the researches to study on the texts of any ancient or medieval language.

⁸ He was the originator of the concept of structuralism and the founder of the linguistic sign theory. He was an instructor at École des Hautes Études (School of Advanced Studies) in Paris (1881-1891) and as a professor of Indo-European linguistics (1901-1911) and also of general linguistics (1907-1911) at the University of Geneva. His most important work was the Course in General Linguistics (1916) which is a compilation of his lecture notes prepared by his junior colleagues Charles Bally and Albert Séchehaye. This publication including his thoughts as a work was considered as the pioneer of 20th century structural linguistics. His early work in student years was Mémoire sur le système primitif des voyelles dans les langues indo-européennes (1878; Memoir on the Original System of Vowels in the Indo-European Languages) on the Indo-European language family -its system of vowel alternations, provided a brilliant contribution to comparative linguistics. (see, Britannica, n.d.)

In his sign theory, Semiology, he asserted two concepts, other than the concept concerning (linguistic) sign that is structured as dyadic and having two elements: the first, he distinguished 'synchronic' linguistics (studying language at any particular time) from 'diachronic' linguistics (studying the changes of a language over time); and the second, he opposed what he named 'langue' (the system underlying speech activity or the state of a language at a certain time) to 'parole' (the speech of an individual person). All this provided productive linguistic research, by presenting a method or a way known as structuralism. (see, Britannica, n.d.)

⁹ Derived mainly from his lecture notes by his junior colleagues C. Bally and A. Séchehaye. Over the course of the next years, this book became the basis for the structuralist approach, at first within linguistics, and later applied by other fields as realms of intellectual endeavor. (see, Britannica, n.d.)

2.1.1.1. Sign Dyad: Signifier and Signified

As studying on linguistics, Saussure found out that 'language' is made up of 'signs' and 'sign-systems' in which it is not just a vehicle for 'meaning' and 'thought' but it is the 'meaning' and 'thought' because it is possible through 'language' for 'thought' to have 'meaning' or to be associated with 'meaning': to explicate,

our thought -apart from its expression in word- is only a shapeless and indistinct mass. ... without the help of signs we would be unable to make a clear-cut, consistent distinction between two ideas. Without language, thought is a vague ... nothing is distinct before the appearance of language. (Saussure, 1966, pp.111-112)

Believing that "language ... is a system of signs" (Saussure, 1966, p.15), he decided to focus on a science needed in order to research on 'linguistic signs' in this regard, and he correspondingly proposed a theory which defines a 'sign-concept' by giving a particular importance to 'the processes of meaning(fulness)' in a communication ('semiosis') appeared through sensation, perception, imagination, representation, and signification, etc. In that, this theory, introduced as 'Semiology' by Saussure, deals with 'signs', indeed 'linguistic signs', any of which is structured by the coexistence of an 'idea' ('concept'/'thing'), named as 'signified', and a 'sound or a visual pattern' ('image'/'name'), named as 'signifier', both of which are separated from each other and from the whole defined as 'sign' of which these two are the parts (Saussure, 1966, p.67). That is to say, a 'linguistic sign' is "a two-sided ... entity ... [in which] the two elements are intimately united, and each recalls the other" (Saussure, 1966, p.66), and it, thus, exists "only through the associating of the signifier with the signified" (Saussure, 1966, p.102): it means that when they, performing their own facilities when retained, are separated from each other, this entity disappears. It could be likened to a chemical compound: "like water, a combination of hydrogen and oxygen; taken separately, neither element has any of the properties of water" (Saussure, 1966, p.103). In short, 'sign', which is the entity of these two elements, has a pure and characteristically different quality by itself when compared with both (Saussure, 1966, p.120). In other words, "Although both the signified and the signifier are purely differential and negative when considered separately, their combination is a positive fact" (Saussure, 1966, p.120), that is, the togetherness of a 'concept' and a 'sound-image', namely the 'sign' itself. In short, a 'linguistic sign' is inseparable from the existences of a 'signifier' and a 'signified' when it comes to the presentation of itself: it has two elements both of which are, psychological and mental, connected by an associative link in the brain (Saussure, 1966, pp.65-66). It means that any concrete or real object is not included in this 'sign-system' and that 'sign' takes the place of an 'object' by itself through the coexistence of sensationimagination processes of the 'semiosis'. Even if there sometimes include perceptual objects, 'sign' does not refer them except their concepts in the mind.

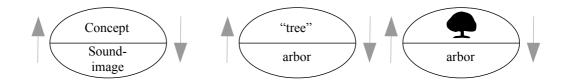


Figure 2.1: Saussurean/Semiological sign (source: Saussure, 1966, pp.66-67) (redrawn by the author as the same as the source)
(left) sign with signifier and signified
(right) signifier (sound-image) (left) and signified (concept) (right)

Moreover, 'sign', conceptualized as a holistic structure, has essentially a denotative and connotative relationship between a 'sound-image', or the 'signifier' (the name of the 'sign'), and its 'concept', or the 'signified' (the 'meaning' hidden by the 'sign'; namely, the referred 'idea' in the mind). Therefore, the theory goals to examine this relationship in any context of 'language', which is a 'sign-system', by accepting the included 'signs' as the 'linguistic signs'. In this system, in fact, there are series of different 'signifiers' combined with a series of differences of 'signifieds'; however, any 'signifier' or 'signified' has a value generated by their own differences from all the other 'signifiers' or 'signifieds' (Saussure, 1966, p.120). For example, it could be said that, by considering the universally excepted denotative and individually based connotative qualifications of (semiotic) 'meaning', "a rose might be interpreted as a plant with red colored flower and sharp prickles protecting its stem" while it might be recognized "as a symbol of love, beauty, and delight" (Trisno et al., 2019, p.659). In such a 'semiosis' terming 'the process of meaningfulness', that is, 'signification', 'meaning' carried by 'sign' is easily determined through a questioning of all possible relationships of this 'sign' in its many different 'sign-systems' in which the 'sign' with the 'meaning' is distinguished from other possibilities.

Furthermore, being the association of 'signifier' with 'signified' by the link between these parts of the whole, that is, 'sign', indeed 'linguistic sign', is quite 'arbitrary' (Saussure, 1966, pp.67-68); this arbitrariness is one of the primordial characteristics of this 'sign-system'. It is "unmotivated", which means that a 'signifier' "has no natural connection with" a 'signified' (Saussure, 1966, pp.68-69). In fact, 'signifier' seems like a tool between 'sign' and 'signified' where the 'sign' is the image that is perceived and the 'signified' is the mental concept that the 'sign' refers to; therefore, 'signifier' possibly differentiates unlike 'signified' which relatively stays universal as it is the concept of what the 'signifier' is agreed by all. If the 'signifier' is retained, there remain only abstractions (Saussure, 1966, p.103). As a result, a 'signifier' becomes meaningless when taken without its 'signified'. That is why 'signified' is quite important in Saussure's Semiology. However, there is a very critical point that needs to be mentioned here, as a brief detail: it could be denoted as another concept or another type of sign, which seems incompatible to this primordial character; that is, "a system of symbols, for the symbol has a rational relationship with the thing signified" (Saussure, 1966, p.73); that is to say, any sign which is not 'arbitrary' is determined as 'symbol' according to his Semiology.

In addition, 'the linear nature of the signifier' is the other primordial characteristics. It means that "the signifier is unfolded solely in time" (Saussure, 1966, p.70) as

language always appears as a heritage of the preceding period. ... at a given moment, names were assigned to things and a contract was formed between concepts and sound-image ... The notion that things might have happened like that was prompted by our acute awareness of the arbitrary nature of the sign. (Saussure, 1966, p.71)

That is to say, 'language' is an evolutionary occurrence in the sphere of human speech that, throughout time, all speeches turn into 'language' constructed by social drives: it evolves under any social impact standing for the collectivity, which is linked with 'time'. Even if 'time' ensures the continuity of 'language', the more or the less changes, affecting the 'language', could be happened by time and by the

social forces: "whether in isolation or in combination", its signs result in "a shift in the relationship between the signified and the signifier" (Saussure, 1966, pp.74-75) -just because of 'the linear nature of the signifier' as well as 'the arbitrary nature of linguistic sign'. In short, characterized by these principles, 'linguistic sign' emerges with the presence of two dimensions, that is, 'individuals' and 'the community', by referring two distinct moments of this evolution: the first, "when it sprang up in individual usage"; and the second, "when it became a fact of language, outwardly identical but adopted by the community" (Saussure, 1966, p.98). It means that the individuals play an indisputable role in this evolutionary process of 'language' and its 'sign-system', and that 'language' and its 'signs' need to be considered as individual and social phenomena which literally relate to 'time'. In brief, "The concrete object of linguistic science is the social product deposited in the brain of each individual, i.e. language" (Saussure, 1966, p.23). Thus, "language is a social fact" (Saussure, 1966, p.6) and "linguistics provides social psychology" (Saussure, 1966, pp.6-7):

language is a social institution ... a system of signs that express ideas ... A science that studies the life of signs within society is conceivable... I shall call it Semiology. Semiology would show what constitutes signs, what laws govern them. (Saussure, 1966, pp.15-16)

Having a conception which can be applied to all communication-related phenomena and to other disciplines having social and psychological, as well as anthropological, views, it was theorized as a science, to study the structures and rules underlying the 'sign-systems' (instead of actions and practices) by giving a way for all natural signs:

> when semiology becomes organized as a science, the question will arise whether or not it properly includes modes of expression based on completely natural signs, such as pantomime. Supposing that the new science welcomes them, its main concern will still be the whole group of systems grounded on the arbitrariness of the sign. In fact, every means of expression used in society is based, in principle, on collective behavior or -what amounts to the same thing- on convention. (Saussure, 1966, p.68)

That is why, in Semiology, "Rules ... are the constant principles" (Saussure, 1966, p.88), which could be explained by giving the game of chess as an example:

First, a state of the set of chessmen corresponds closely to a state of language. The respective value of the pieces depends on their position on the chessboard just as each linguistic term derives its value from its opposition to all the other terms. In second place, the system is always momentary; it varies from one position to the next. It is also true that values depend above all else on an

unchangeable convention, the set of rules that exists before a game begins and persists after each move. Rules that are agreed upon once and for all exist in language too ... Finally, to pass from one state of equilibrium to the next, or -according to our terminology- from one synchrony to the next, only one chess-piece has to be moved; there is no general rummage. Here we have the counterpart of the diachronic phenomenon with all its peculiarities. ... [Thus] In a game of chess any particular position has the unique characteristic of being freed from all antecedent positions; the route used in arriving there makes absolutely no difference; one who has followed the entire match has no advantage over the curious party who comes up at a critical moment to inspect the state of the game; to describe this arrangement, it is perfectly useless to recall what had just happened ten seconds previously. All this is equally applicable to language and sharpens the radical distinctions between diachrony and synchrony. (Saussure, 1966, pp.88-89)

As a summary, each move during the game is in succession so that the final situation of the game changes consequently and each situation after any move is independent from the previous one in the sense of their effects to the end of the game. Chess, in this way, was resembled by Saussure to 'language' since these two have their own rules in the context of their progresses¹⁰ (Saussure, 1966, p.81).

All in all, on Saussure's side, 'linguistic sign' is governed by some rules peculiar to 'language', and constituted as an inseparable whole with its two psychological and mental elements, 'signifier' and 'signified', both of which have a denotative and connotative relationship evolving over 'time'. The relation of 'signifier' to 'signified' is based on a social, rather than physical, causality, which makes it 'arbitrary', that is, "the centerpiece of his proposal for Semiology" (Deely, 2006, p.3). Although, his stressing on "the arbitrariness or conventionality of signs" with little or no attention to natural sign-system makes Semiology be limited in the scope of 'signification' (Waal, 2001, p.68), and "to the sphere of cultural creations" (Deely, 2006, pp.1-2), however, 'Saussurean Semiology' could assist the studies on 'built environment' that allows all the behaviors of the humans any of whom is a social-individual: it could provide an overview of 'the urban and architectural context' with its physical, spatial, and social-cultural dimensions which change over time as a 'language' does.

¹⁰ 'synchronic', that is, 'static linguistic' (logical and psychological relations of a system at a given moment), and 'diachronic', that is, 'evolutionary linguistic' (relations, substituted without a system but changing over time); and 'langue', that is, 'a unified and shared social system of language' (the underlying system of conventions at a certain time; a bounded set of all possible expressions), and 'parole', that is, 'utterances by individual speakers and hearers' (the speech of an individual or idiosyncratic speech; a linear selection of possible expressions).

2.1.2. Charles Sanders Peirce; Semiotics

Peirce (1839-1914), an American scholar¹¹, a philosopher-scientist, is acknowledged as one pioneer figure of the science of logic. He regarded logic as the beginning of all philosophical studies. He thought that the 'meaning' of an 'idea' could be found through a questioning of the consequences (the 'interpretant', or the effect of 'sign') that the idea would lead to; this constructs the principle of 'pragmatism'. His work on logic (forming a 'sign-concept'), thus, led him to study on 'signs' and to classify them according to their relations to 'sign', 'object', and 'interpretant', three of which are known as 'sign-triad' and the elements of a 'sign'. This is developed by him as a theory, called as 'Semiotics', emphasis of which was on the 'natural sign-systems' (unlike Saussure who focused on only 'linguistic signs'). His belief that the material reality in human environment cannot be fully reached only by human experiences forced him to conceive that all thinking activities of the humans are the works of 'signs' in order to access this reality. In other words, 'signs' provide a completed reality through the relations between the mind and these experiences when they drive a change in habits of the person (interpreter) who quite effectively has the ability to produce new signs or new usages for them. That is to say, 'signs' have 'meanings' (of such realities) only in relation to a mind and this person's habits. That is why Peirce's Semiotics "emerges from the interplay of mind and world" (Amen & Nia, 2018, p.206). Therefore, he desired to understand, through his 'Semiotics', not only how 'signs' happen to behave but also the rules governing how they must behave.

¹¹ He was the originator of the modern semiotics and the founder of pragmatism/pragmaticism. He spent much of his life in government service as an astronomer and physicist. After that, he became a lecturer in logic at Johns Hopkins University (1879-1884). He gave two series of Harvard University lectures and one of Lowell Institute lecture, in logic. His book, Photometric Researches (1878) which includes his astronomical works concerning a more precise determination of the shape of the Milky Way Galaxy, done in the Harvard Observatory, was the only book published during his lifetime. He also wrote on the logic of scientific inquiry. There is one more, but not published, as his major work, that is, A System of Logic, Considered as Semiotic. (see, Britannica, n.d.; Encyclopedia, n.d.)

He was recognized as one of the intellects, for he was a thinker who made significant contributions to many fields such as chemistry, physics, metaphysics, astronomy, geodesy, psychology, mathematics, phenomenology, history and philosophy of science, and logic, and so on. However, his one of the most important contribution was to semiotics, being a general theory of signs: it has a concept about sign-systems, according to which sign is structured as a triadic and having three elements, and it has a new list, that is, the division of signs as logic of relatives, based on categorization and combination, being analogous to Kant's system of categories, which was reduced from twelve to three: Quality, Relation, and Representation (as Firstness, Secondness, and Thirdness) by Peirce. (see, Encyclopedia, n.d.)

2.1.2.1. Sign Triad: Representamen, Object, and Interpretant

Peirce, who noticed that an 'idea' is a 'sign' which has 'meanings' pertaining to its 'sign-user' about something, began to study on 'signs' with a theory produced by himself to define a 'sign-concept', so that, through the theory, it would be possible to understand these 'meanings'. According to this theory of him, known as 'Semiotics', 'sign' is something which stands for anything in any way for someone who interprets the thing and creates some equal or similar mental representations (Peirce, CP¹²). Here, the thing is 'object', and the representations are 'representamen'¹³ named by Peirce to be used as a term taking usually the place of 'sign', namely acting as 'sign vehicle' when the 'object' is signified (CP). Other than 'representamen' and 'object', there is, essentially, 'interpretant'; being a bond between the first two to comprehend the 'meaning' of 'sign' because "Peirce speaks of the interpretants of a sign as the meaning" (Fitzgerald, 1966, p.165). To explain,

A sign, by its nature, requires that there be an interpretant. This ... is the effect produced in the interpreter as a result of the action of the sign. The presence of an interpreter is what makes a sign vehicle actually a sign. It is one of the features which distinguishes a semiotic process from a cause-effect relationship. The fact that such an effect is necessary for a fully constituted sign is the basis for looking to the consequences of the sign in order to comprehend its meaning. (Fitzgerald, 1966, p.162)

It is inferred that the 'meaning' of a 'sign' is comprehended through the process of 'signification' ('semiosis') by considering an 'object' and its 'interpretant' which is the mental impacts about the relationship between the 'sign' ('representamen'/'sign vehicle') and this 'object'. That is to say,

A sign stands *for* something *to* the idea which it produces, or modifies. Or, it is a vehicle conveying into the mind something from without. That for which it stands is called its *Object*; that which it conveys, its *Meaning*; and the idea to which it gives rise, its *Interpretant*. (CP1.339)

In other words,

A sign, or *representamen*, is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates

¹² It is the in-text-citation of 'the Collected Papers of Charles Sanders Peirce (1994; 8 Volumes.)', in which CP is its abbreviation and the first number refers to volume number and the part after dot refers to paragraph number.

¹³ It means 'a thing serving as a representation of something for an interpreting mind' or 'the product as a thing being distinguished from the act of this representation'.

in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the *interpretant* of the first sign. The sign stands for something, its object. It stands for that *object*, not in all respects, but in reference to a sort of idea, which I have sometimes called the *ground* of the representamen. (CP2.228)

In this respect, "the interpretant stands in the same relation to the object as the sign stands to the object" (Fitzgerald, 1966, p.74): it is the 'interpretant' which makes the 'sign' take a 'representamen' for the 'object' by affecting a person, in other words, the interpreter, who interprets or comprehends it through the 'sign'. However, there are three conditions to call something as 'interpretant':

First, it must be an effect in an interpreter. Second, it must have been produced triadically, that is, purposively, by a sign. Third, it must be related to the object, at least when we have a sign in the narrow sense. (Fitzgerald, 1966, p.75)

In short, 'Peircean sign', indeed, 'natural (all kinds of) signs', is structured with three basic elements, that is, 'representamen', 'object', and 'interpretant', through triple relational connections of 'sign' as "sign" ('the sign vehicle'), as "thing signified", and as "cognition produced in the mind" (CP1.372). This makes it 'triadic'; because, here, "A sign relates an object to an interpretant though some medium that acts as the sign vehicle" (Waal, 2001, p.71), unlike the 'Saussurean sign', being 'dyadic' and 'linguistic sign'; because, there, "A sign relates a signifier (that which that does the signifying) to something signified" (Waal, 2001, p.70), without including the object. According to this, the 'sign-concepts' of both are quite different from each other. Nonetheless, Peirce had a similar view to Saussure in terms of 'sign' which allows codes for 'semiosis'¹⁴. However, these codes get accesses to a material 'object' in Peirce's Semiotics; it is the missing element in Saussure's Semiology to which 'sign' refers: the former stressed on the relationships of 'objects' that is what Saussure did not do. As a result, Peircean 'sign' acquires such a feature that it can be embodied in materials, as a physical thing, besides being psychological and mental state.

This necessity of triadic process comes, in fact, from the critiques about a dyadic process of 'signification' as Peirce thought that two elements in a dyadic process

¹⁴ By 'semiosis', Peirce meant "an action, or influence, which is, or involves, a cooperation of three subjects, such as a sign, its object, and its interpretant, this tri-relative influence not being in any way resolvable into actions between pairs" (CP5.484).

have just one relationship between each other, and that when any of them establishes a new relationship in another dyadic process which is the subsequent of the first dyadic process in the sense of their relations and the meanings behind the sign, the left element of the first dyadic process becomes unrelated and irrelevant (Fitzgerald, 1966, pp.73-74). In other words, "Although there is an ordered sequence ..., there is no mediation" (Fitzgerald, 1966, pp.73-74), in these dyadic processes. That is why he proposed a triadic one in which a mediation would potentially appear in a subsequent relationship; thus, in this continuous and unlimited semiosis, 'sign' becomes open, and dynamic, and 'meaning' is never final. However, there arrives a critical question about what would be for the other processes including more than three relations; his respond to this, by explaining with an example, is that "all plural facts can be reduced to triple facts" (CP1.371):

A road with a fork in it is the analogue of a triple fact, because it brings three termini into relation with one another. A dual fact is like a road without a fork; it only connects two termini. Now, no combination of roads without forks can have more than two termini; but any number of termini can be connected by roads which nowhere have a knot of more than three ways. See the figure, where I have drawn the termini as self-returning roads, in order to introduce nothing beyond the road itself. Thus, the three essential elements of a network of roads are road about a terminus, roadway-connection, and branching; and in like manner, the three fundamental categories of fact are, fact about an object, fact about two objects (relation), fact about several objects. (CP1.371)



Figure 2.2: the figure in CP1.371 (redrawn by the author as the same as the source)

This explains the conception of the 'triad' which is the main character of his own 'Semiotics', and used by him as a philosophical approach to many other fields such as psychology, physics, physiology, metaphysics, and reasoning. It is formed, with the elements, 'representamen', 'object', and 'interpretant', through the cooperation of these three in three ways, that is, the triple relational connection of 'sign to all: differentiation of 'representamen' in relation of 'sign vehicles' embodying 'sign'; the relation of 'sign' to its 'object;' and the relation of 'sign' to its 'interpretant'; because, "A *sign* is anything [First thing] which is related to a Second thing, its *Object,...* in such a way as to bring a Third thing, its *Interpretant*, into relation to the same Object" (CP2.92). This is the basis of his division of 'sign' in categories.

2.1.2.2. Division of Signs (by Sign-Triad) in Categories

Peirce tried to categorize 'signs' as to make 'a typology of signs'. In this regard, he inspired from Kant's list¹⁵ which has twelve classes, and for its own, he reduced it to three categories as 'Firstness', 'Secondness', and 'Thirdness'. These three are the basic things which make up his concept of 'sign division'; therefore, three elements of his 'triadic sign', namely, 'representamen', 'object', and 'interpretant', are divided in three by 'Firstness', 'Secondness', and 'Thirdness'. They respectively refer to the (material) quality, to the (existential) fact, and to law (convention) (Peirce & Hoopes, 1991, pp.141-143). In this triple division of Peirce, Firstness means those which exist without any reference to something else; Secondness means those which have a relationship with something else but exist without a relationship with another thing; and Thirdness means those which are in a relationship with Secondness and in relation to Firstness as much as possible in relation to each other (Fitzgerald, 1966, pp.28-32). In a concord with each other, Firstness sets the first class; the second one is related to the first including a new meaning created in the mind; and the third one includes all the interpretation about them (Fitzgerald, 1966, pp.28-32). Finally, three different classes are obtained through such a division which provides later a list of categorized signs, that is, 'the typology of signs'¹⁶, by a combination:

The first classification is with respect to the different representamen in which a sign can be embodied. The sign vehicle can be a quality, an individual object, or a general type. ... The second classification concerns the different ways in which a sign can signify an object (based on the relation between the representamen and its object). This classification contains Peirce's distinction between icons, indices and symbols. The third and final classification concerns the different ways in which a sign can affect an interpreter. (Waal, 2001, pp.72-73)

¹⁵ It is a list of twelve categories corresponding to 'the forms of the understanding' for conceptual knowledge: unity, plurality, and totality for concept of quantity; reality, negation, and limitation for the concept of quality; inherence and subsistence, cause and effect, and community for the concept of relation; and possibility and impossibility, existence and nonexistence, and necessity and contingency for the concept of modality. Before Kant, Aristotle had proposed a list of ten; however, Kant did not modify it, instead of this, he proposed a new one. After Kant, Peirce made a modification over Kant's list by reducing it to three: firstly, as Quality, Relation, and Representation; but later, as Quality, Reaction, and Mediation; and finally, Firstness, Secondness, and Thirdness.

16	Firstness	Secondness	Thirdness_
Division as to the sign vehicle embodying the sign:	Qualisign,	Sinsign,	Legisign
Division as to the relation of the sign its object:	Icon,	Index,	Symbol
Division as to the relation of the sign to its interpretant:	Rheme,	Dicent,	Delome

Importantly needed to denote, there are some rules regarding the division in order to get the permissible types.

First, each element that a 'sign' has is classified, under the name of 'Firstness', 'Secondness', and 'Thirdness', by a quality, or by an existential fact, or by a law or convention: they are, for the first class, the kinds of 'sign vehicle' ('representamen') and they are called, in sequence, as 'Qualisign', 'Sinsign', and 'Legisign', "based on the mode of existence of the sign vehicle, not on any relationship within the triad" (Fitzgerald, 1966, p.65); they are, for the second class, the kinds of the relations between 'sign' and its 'object' and they are called, in sequence, as 'Icon', 'Index', and 'Symbol'; they are, for the third class, the kinds of the relations between 'sign' and they are called, in sequence, as 'Rheme', 'Dicent', and 'Delome'. As a result, there derived three types from qualities, 'qualisign', 'icon', and 'rheme'; three from existential facts, 'sinsign', 'index', and 'dicent'; and three from conventions, 'legisign', 'symbol', and 'delome' (Atkin, 2013). Second, "the classification of the interpretant depends upon the classification of the object, which in turn depends upon the classification of the sign-vehicle" (Atkin, 2013). Third,

if an element is classified as a quality, then its dependent element may only be a classified as a quality; if an element is classified as an existential fact, then its dependent element may be classified as either an existential fact, or a quality; and if an element is classified as a convention, then its dependent element may be classified as either a convention, an existential fact, or a quality. (Atkin, 2013)

All this produces many permissible combinations to able to get the possible types of 'signs': it seems that there are twenty-seven types; however, some are eliminated, by Peirce, with respect to the second and third rules mentioned above, regarding his own restrictions in phenomenological theories; therefore, only 'ten possible kinds of sign triads'¹⁷ is preferred as a category by him (it is the only one of his categories; there are also the ones including twenty-eight and sixty-six). In short, the division is done through the Firstness-Secondness-Thirdness concept, and it is based on the kind of 'sign vehicle'/'representamen', and on its relations to 'object' and to 'interpretant'

¹⁷ Qualisign Icon Rheme, Sinsign Icon Rheme, Sinsign Index Rheme, Sinsign Index Dicent, Legisign Icon Rheme, Legisign Index Rheme, Legisign Index Dicent, Legisign Symbol Rheme, Legisign Symbol Dicent, Legisign Symbol Delome.

(through this concept, three operations are obtained (see, for example: Morris, 1938): syntactic one, from the relation of signs to signs; semantic one, from the relation of signs to objects; and pragmatic one, from the relation of signs to interpretants).

In fact, the most well-known and the most encountered class is the one having the types acquired by 'the division as the relation of the sign to its object'. According to Peirce's view, there are three ways of how the 'sign' is related to its 'object': the one that concerns the 'similarity' between them; the one that concerns the 'existence' of 'object'; and the one that concerns the 'arbitrariness' between them. In that, the first defines 'icon', which resembles to its referent (a road sign for wild animals); the second defines 'index', which is associated with its referent (smoke as a sign of fire); and the third defines 'symbol', which is related to its referent only by convention (math sign that stands for a mathematical operation). To explain with an example, "a lead-pencil streak" becomes an 'icon' when it represents "a geometrical line"; or "a piece of mould with a bullet-hole in it", which reminds any one of "a shot", is an 'index' because "without the shot there would have been no hole; but there is a hole there, whether anybody has the sense to attribute it to a shot or not"; or "any utterance of speech" acts as a 'symbol' only if it signifies "what it does only by virtue of its being understood to have that signification" (Peirce & Hoopes, 1991, pp.239-240). In fact, according to Peirce's perspective, these three essentially form "a complete and workable language"; because, "icons involve qualities; indices involve individuals; and symbols involve habits or law" (Fitzgerald, 1966, p.62). That is to say, they make together sense all in the context of 'meaningfulness' in a way that 'index' and 'symbol' come together firstly and 'icon' then as a complementary.

In addition to this, Peirce implies that 'icon' which can exist only as an image in the mind has a being belonging to past experiences while 'index' has the being of present ones; however, this is quite different for 'symbol' which "consists ... in a regularity ... [that happens] in the future conditional occurrence of the facts" (CP4.464): "the being of a symbol consists in the real fact that something surely will be experienced if certain conditions be satisfied [that is to say] it will influence the thought and conduct of its interpreter" (CP4.447). To explicate,

The fact that a symbol is concerned with future conditional action will become clearer from a more concrete consideration of the manner in which the symbol operates. The law, which is the primary meaning of symbol, operates in such a way that upon the hearing or seeing of a token of the symbol, the interpreter will associate a mental icon with the objects which are denoted by the context in which the symbol is used. (Fitzgerald, 1966, p.63)

Therefore, Peirce's 'symbol' conveys 'meaning' when it provides a mediation with the mind through the relationship it contacts with what the 'sign' represents. It means that 'symbol' makes sense only if there is an 'interpreter' who would communicate with it to its 'object' through a relation constructed by mind. It could be said that 'symbol' is assigned completely as arbitrary and related to its 'object' "by means of an association of ideas or habitual connection" (CP1.369), in virtue of the societal conventions and in accordance with rules or laws, in contrast to 'icon' and 'index' (Fitzgerald, 1966, p.62), unlike Saussure's 'symbol' which becomes "never wholly arbitrary; it is not empty, for there is the rudiment of a natural bond between the signifier and the signified" (Saussure, 1966, p.68).

In conclusion, 'icon', defined through "a relation of reason between the sign and the thing signified" (CP1.372), can be summarized as follows:

1) A sign which stands for its object because of some similarity to that object is an icon. 2) Icons are useful for displaying the structure or relations of their objects. 3) Everything is iconic in the sense that it is capable of serving as a sign of whatever has the same qualities or structure. 4) There are no pure icons, that is, disembodied qualities, but the closest analogue is an idea or image in an interpreter. This fact causes a shift in emphasis from a static consideration of an icon to a consideration of how a sign is used. A sign will be called an icon irrespective of its mode of existence, so long as it functions by means of similarity. (Fitzgerald, 1966, p.55)

And, 'index', defined through the presence of "a direct physical connection" (CP1.372), can be summarized as follows:

1) An index may be defined as a sign vehicle which is fit to be a sign of its object because of some existential connection to that object. 2) This connection makes it an appropriate sign for calling attention to the existence of the object. 3) In language we have various kinds of degenerate indices, such as, pronouns, quantifiers, grammatical subjects and sets of directions for locating an object. These are indices because the direct the reader's or hearer's attention to the object; they are degenerate because they depend in part on convention. (Fitzgerald, 1966, p.61)

And, 'symbol', defined through "a relation which consists in the fact that the mind associates the sign with its object" (CP1.372), can be summarized as follows:

1) A symbol is a sign vehicle whose fitness to represent its object depends on a habit of minds, not on some quality found in the sign vehicle. 2) The symbol is general since it is applicable to many individual instances of its possible object and it governs the use of many instances of its tokens. 3) In order for a symbol to be meaningful for a mind, the mind must associate the proper icon on the occasion of seeing or hearing the token of that symbol. (Fitzgerald, 1966, p.65)

As the last words:

Peirce's icon is a physical thing, possessing certain characters which it shares with its object. There are likeness between them and it is these likenesses which enable the one to act as a sign for the other. His symbol on the other hand relates to its object only by an association of ideas, a social contact or law which causes that symbol to be interpreted as referring to that object by the members of a particular society. There is no identifiable likeness between in the case of his index. His indexial relationship is one of the physical, perhaps spatial connection, given the many continua therefore among which it is possible to plot Peirce's signs. (Broadbent, 1980a, p. 317) [For illustration;]

Likeness		Association	
	Physical	Arbitrary	
ICON	INDEX	SYMBOL	
(Broadbent, 1980a, p. 317)			

All in all, Peirce's approach to 'sign-system' has philosophical perspectives. It has a a triple character preferred among the phenomenological categorizations of monad, dyad, and triad by regarding his logic laws. It is developed through a pragmatic view. It is confined by triad, which "exists in the universe of representations" and includes, in the sense of these representations, 'object', 'interpretant', and 'representamen' that mediates between 'object' and 'interpretant' (CP1.480). In the division of these three, which categories signs as types, the first category comprises of 'qualities'; the second one contains 'actual facts'; and the third one consists of 'laws' (CP1.418-420). The most familiar types are those classified according to the relation of sign to its object, that is, respectively, the one, that is 'icon', defined through the likeness quality; the one, that is 'index', defined through the correspondence with facts; and the one, that is 'symbol', having imputed character (CP1.558). In short, "the Peircean model is global" in which all ordinary elements become signs referring to something without arbitrary relations (Amen & Nia, 2018, p.213); for this reason, 'Peircean Semiotics' could assist the studies on 'built environment' designed in qualities, concerning timerelated (existential) facts, through some rules as a kind of (re)presentation: it could provide an overview of 'the urban and architectural context' with its physical, spatial, and social dimensions, which consists categorically of types.

2.1.3. Semiological/Semiotic Perspective to Built Environment

So far, it has been talked about two main 'sign-studies', Semiology and Semiotics. Now, it would be appropriate to discuss their relations with urban and architectural theories by considering them in the framework of 'built environment'.

Let's think about the humans who are engaged with an environment from their births to the end of their lives by regarding their relationships with this environment that is designed and built on nature through their architectonic activities. These activities are the attempts to survive and to sustain the lives in an environment, or the endeavors to make an environment a habitable place in this sense. In this way, their all needs are compensated with their togetherness in the environment that becomes social beyond being physical and spatial. The more the needs persist, the more these attempts and endeavors continue over and over time to form the environment according to their desires in order to meet their needs. Therefore, their built environment always faces changes in terms of its physical, spatial, and social dimensions so that it can get a concord with the conditions of any time, namely, with their desires and needs which correspondingly arise in the period of time they live. This happens through a way of their communication. It is a way of expression and manifestation processes which together mean a (re)presentation, including information pertaining to their idea(l)s in order for an environment to offer various behavioral patterns of life-experiences to deal with the desires and the needs because it manages an interactive informationbased mutual relationship between them and the environment. It infers that "There is no human society which does not communicate ... represent itself architectonically" (Preziosi, 1979, p.6). The main point behind this communication and interaction is that 'sign-systems', being verbal but much more visual, are surely included. It means that all built environments appear through some 'semiological/semiotic relations' that have certain 'meanings' regarding not only human behaviors, thoughts and feelings, and experiences but also the assistance of all for their survivals and the sustainability of their lives. Emerged through the design principles and planning guidelines of a certain time, a built environment exists as "a form of [semiologic and]semiotic management that involves the dimensions of interpretation of urban space and

practices within it" (Timm, 2016, p.35). That is to say, it contains and reveals 'meanings' born through 'information' about the urban lives of the societies by concerning all their (social)individuals, and about the architectural backdrops of itself where these societies live: it becomes the evidence of any of the societies at any certain time. For example, as B. Disraeli mentioned, Rome pictures the conquest or the faith while Athens demonstrates the ancient world and art (Metro-Roland, 2011, cited as in Amen & Nia, 2018, p.204). Furthermore, a house, the most essential space or place for an individual, represents its users by presenting the 'meaning' of itself. As a result, all the architectonic activities could be considered as a 'signification', that is, 'the process of meaning production and convey'. That is why any urban and architectural thing could be, or even should be, considered as a 'sign'.

In the matter of 'what is being signified', 'how the thing is signifying', and 'how the borne meaning is interpreted', 'Semiology' and 'Semiotics', being two fundamental studies of 'sign', can provide important insights into the field of 'built environment', with their different approaches to the questing of 'meaning' and 'signification'. Thus, this field could be handled as either twofold or threefold entity, in the scope of these studies. To explicate, for an 'urban and architectural sign', regarded as a two-folded entity, it means that it is structured with a 'signifier' and a 'signified': if this entity is based on the statements of C. Jencks with the Saussurean view, its 'signifier' refers to forms, spaces, surfaces, volumes with some properties such as rhythm, color, texture, kinesthetic quality, tactility, and its 'signified' refers to representative or conceptual ideas including ikon, land value, anthropological data, aesthetic meanings, socialreligious beliefs, and commercial goals (Jencks, 1980, pp.73-75). In addition to this, for Fusco and Scalvini, if the 'signifier' is the exterior of a building, its interior is, then, the 'signified' (Fusco, 1934, cited as in Broadbent, 1980c, p.126), and for Eco, if the 'signifier' is a staircase, the act of walking up and down is, then, the 'signified' (Eco, cited as in Broadbent, 1980c, p.126). In short, an 'urban and architectural sign' attaches importance to 'the function' on one hand, and 'the form' on the other, for a particular 'urban and architectural thing', by establishing a bond between both of them and by supporting each other through this bond. In short, there is an inseparable relationship between 'form' as a 'thing' and its 'function'; in other words, between 'signifier' and 'signified', as Saussurean approach gives a point to this. For example, with the expression of Eco about a door that is considered as an 'architectural sign', "the use of a door as a movable barrier to open or close a passage [which is its 'function' that is appeared by virtue of its 'form'] both allows this function and promotes it" (Eco, 1968, cited as in Gandelsonas & Morton, 1980, p.247). In consequence, all remind of 'denotation' and 'connotation' (see: Eco, 1980a; 1980b), about the 'semiological meaning' of this two-folded entity. Indeed, 'semiological meaning' is defined by Saussure as 'denotative' and 'connotative', already (Trisno et al., 2019, p.659). Thus, any 'urban and architectural thing' adopts a differentiated 'function' peculiar to itself, bearing 'denotative meaning' through its (re)presentative 'form' that bears 'connotative meaning'. However, the latter arises as a respond to the individual commentary, or much more to the social aspects of any given time and to the idea(1)s that the society dreams at that time, which becomes the movement of the time. About the individual commentary, for instance, the pilotis of Villa Savoye are said to function as a structural support in a 'denotative' sense; however, in a 'connotative' sense, as Le Corbusier expresses, it functions as "a boundary separating human and the worldly chaos of the natural realm", or, as F. L. Wright expresses, it functions as "an arrogance toward the surrounding context" (Trisno et al., 2019, p.659). When it comes to the movements, as another example, it could be said, about, for example, a window, that "the windows of Roman cathedrals have round arches, Gothic cathedrals have pointed ones... [and, Modern ones have] with fewer types of elements with their tokens in a more homogeneous distribution" (Krampen, 1989, p.134); this expresses that they were differently idealized in their times.

Although all seem to be on the Saussurean side by taking the inseparable elements 'signifier' and 'signified' into account, the presence of a 'thing' pertaining to a 'built -urban and architectural- environment' is accepted for 'urban and architectural sign', unlike Saussure who stressed on only linguistic sings being not related to objects, but like Peirce who did: this means that it seems to be switching to the Peircean side. That is to say, by the inclusion of 'thing', which is an 'urban and architectural thing' constituted with a 'form' and a 'function' through the 'signifier' and the 'signified' in

this 'sign-system', an 'urban and architectural sign' becomes a three-fold entity: the new element is the 'thing' which has the Peircean view and is termed, in this sense, as 'object' (see: Eco, 1980b; Jencks, 1980) by acquiring properties peculiar to itself (redefined as "actual functions and object's properties" when applied to architecture (Jencks, 1980, p.80): it is the 'referent', which is placed in the proposal of Ogden and Richards who similarly incorporate Saussurean Semiology with this extra element reminding of Peircean Semiotics (see: Ogden & Richards, 1923)). In that, this entity establishes, as in the Peircean sign, a relation between these three elements, and this relation importantly takes part in determining the type of this 'sign', "whether it is mostly indexical, iconic, or symbolic" (Jencks, 1980, p.80). To explicate, it could be 'indexical', task of which is to indicate; for example, "a glass door indicates itself and what is behind" and "a window indicates view" (Jencks, 1980, p.103); it could be 'iconic' which bears usually the functions and establishes a universal language such as trans-cultural Purism (Jencks, 1980, pp.104-105); and it could be 'symbolic' "where conventional usage sets the arbitrary relation between signifier and signified [for example] the conventional use of three orders of Classical Architecture, the appropriate use of revival styles, the emblems" (Jencks, 1980, p.105).

As a result, the incorporation of these three; in other words, the couple of 'signifier' ("signifying, according to where, when and how it was built" (Broadbent, 1980b, p.2)) and 'signified' ("a set of architectural concepts or ideas, signified by words, drawings, photographs, models and so on" (Broadbent, 1980b, p.2)) with the addition of 'object' that has a 'form', 'functions', and 'material qualities', defines a kind of 'semiological/semiotic template' for the understanding of 'the urban and architectural signs' and of the 'meanings' hidden by themselves. For example, stone, as being such a sign, could be interpreted that it bears the meanings such as longevity, ancientness, naturalness, and softness when given it a smooth and rounded shape (Abousnnouga and Machin, 2013, cited as in Bellentani & Nanni, 2018, p.382) and it could also be interpreted that it bears any other meaning when used in a monument (Bellentani & Nanni, 2018, p.382) such as power and commemoration. In short, this kind of sign literally turns into a hybrid variation of both Saussurean Semiology and Peircean Semiotics, and it deals, as 'an urban and architectural sign', with both its 'urban and

architectural things' and their 'meanings'. To denote, like all the others, this sign, in general sense, has codes which are a set of rules regarding the organization not only of the design of an urban and architectural environment, that is, its formal, functional and material quality, but also of its concept pertaining to the idea(l)s, that is, the expectations concerning how it would be designed and built. These codes, known commonly as architectural or architectonic codes, are differently emerged in different periods due to the idea(l)s made by the societies living in any of these different time periods; therefore, they (re)present both the periods that they are belong to and the societies with the urban lives of the (social)individuals of these periods. For instance, the Classical era posed opposite to the nature with its architectural codes which assimilated the underlying laws of nature unlike the codes constituted in Renaissance which regarded the notion of nature; although some of them were abandoned and the others were maintained in the Modern Movement (Gandelsonas & Morton, 1980, p.255). In addition to this, these codes could be divided, according to Eco (1980b), as "technical codes" (engineering such as structural system and insulation, and so on), "syntactic codes" (typology of thing being a spatial matter), and "semantic codes" which concern the relations between their signs and their denotative and connotative meanings (denotative primary function such as stair, window, flat, and connotative secondary function such as arch, tympanum, connotative ideologies of inhabitation, and functional and sociological types of construction) (pp.38-39). Or, they could be classified, according to Jencks (1980), as "codes of content" (a way of life, building activity, function, traditional ideas and beliefs, socio-anthropological meaning, economy, and psychological motivation), and as "codes of expression" (spatial manipulation, surface coverings, and formal articulation) (pp.107-110). In brief, there are some architectural/architectonic codes including the rules which have emerged and developed socially over time and hereby are effective in the (re/de)(in)formation of a built environment in terms of its 'meaningfulness', and in the 'sign-system' of 'urban and architectural sign'. In short, this system, with its codes, is based on the social aspects which determine cultures throughout its thousands of years of history: it becomes a cultural phenomenon with the presence of a society having certain cultural facts. This could be resembled to 'language' in which the culture of a society is embedded; given that it is embodied through the architectonic activities ending up

with an (idealized) urban and architectural environment, this means that any built environment has a 'language' in the 'semiologic/semiotic' sense. Namely, this system and a 'language' which refers to both 'spoken/linguistic' and 'architectural' ones are substantially interrelated to each other. However, compared to spoken language, "the architectural language is more motivated and less arbitrary" (Jencks, 1980, p.80) because of the fact that an urban and architectural environment is built in line with a design which is conceptualized according to the idea(1)s that identify and indicate not only its physical and spatial but also its sociocultural aspects with the characteristics of the movement of the time. Besides them, another thing about this 'sign-system' of 'urban and architectural sign' could be added: its property of "spatiotemporality", which infers that "significative organization of a built environment is as temporal as it is spatial: settlements are designed to be construed spatially over time" (Preziosi, 1979, pp.16-17). Thus, this explains that is why it exists as "a complex sociocultural phenomenon where space and time are simultaneously parts of itself" (Remm, 2011, p.124) and are the parts of its design processes, in a 'semiological/semiotic sense'.

All in all, it could be summarized that an urban and architectural environment, expectantly idealized, conceptually designed, correspondingly constructed through the architectonic activities as a physical, spatial, and social(cultural) (in)formation configured with functions and embodied in material qualities, is (considered as) a 'sign' having spatio-temporal sign-systems and its own socio-cultural codes; it bears 'meanings' as a 'signification' of 'the denotative and connotative meanings' through its urban spaces and architectures, and with the assistance of its particular, both lexical and visual, 'language', by communicating, expressing and manifesting, or (re)presenting individual commentaries and societies, the lives of (social)individuals, and the characteristics of the time. That is to say, a built environment is (considered as) an example of a 'semiologic/semiotic entity' that is accordingly formed as one of the combinations of two basic approaches to 'sign'; 'Semiology' and 'Semiotics'. However, while so much can be talked about these sign-studies by considering them in the framework of 'built environment' in terms of its relations with the humans, it is a need to mention also about their psychological grounds in this context. Hence, this will be discussed in the following pages in a conformity with this discussion.

2.1.4. Psychological Grounds of the Field of Semiological/Semiotic Concepts in the Context of Built Environment

So far, being one basic matter of urban and architectural theories, 'built environment' with its physical, spatial, and social dimensions has been talked by taking the humanenvironment relationship into account in a relationship with both Semiology and Semiotics, being two basic but different approaches to 'sign-study'. However, due to putting 'the humans' at the center of the discussion which covers the 'sign-relations' involved in this mutual relationship, it becomes necessary to mention also about the 'psychological grounds' of the concepts of these two to understand the relationship better and to access its essence. This is what will be covered now.

Let's start with remembering the main idea of the previous discussion: it pointed that 'built environment' is quite important in terms of the daily lives of the societies and all their (social)individuals since it has, for them, existential-experiential 'meanings' concerning their survivals and the sustainability of their lives, and it implied that it is, therefore, a 'semiological/semiotic phenomenon' based on the communications of the humans who keep 'physical, mental, and psychological structures' in a correlation to form a built environment where they live, both individually and socially. That is to say, a 'built environment', being the outcome of the architectonic activities each of which is a performance of the functioning of these structures used as a way to (re)present the individual or social expressions including ideals, desires and needs, offers spaces and places for everyday experiences by ensuring the assurance of this survivability and this sustainability. This, in turn, makes the 'built environment' 'meaningful' for the humans due to the fact that it contains many things regarding themselves. In brief, by means of the functioning of these three, it exists as the 'manifestation' of the 'expressions' of the lives of individuals and societies, and it meaningfully signifies 'the self' of any by becoming a 'sign' and by being included in a 'sign-system'. Taking a part in such a 'signification', it becomes a 'meaningful' '(re)presentation' of the selves, of their idea(l)s, their thoughts and feelings, of their inner realms; because, 'the self' is (re)presented and externalized with the internal or (re)presentative 'meanings' through these 'architectonic/architectural signs', namely

through any 'built environment' (re)presenting the outer world. It bears particular 'meanings' and stands for 'the self', that is, the (social)individuals and the societies, by carrying many traces pertaining to them, in order to keep the past and the present moments safe and be protected for the present and the future ones.

Therefore, this 'self-presentation' that is signified through designing and building an environment should be considered as one of the most important urges of the humans; because, it is "the embodiment of humanity's creative and constructive nature" (Gamsakhurdi, 2019, p.242). It makes many 'meaningful' interrelations between the inner realm and the outer world to ensure its own individual and social adaptation to an environment now and in the future. In that, through the 'self-(re)presentation', the inner realm which differentiates any 'self' from the rest begins to be shared with by all the others in the outer world as a societal task. As a result, 'the self' and 'the built environment' mutually exist with respect to their 'meaningful' interrelations. Being very psychological, "The self should be understood as a dynamic entity that operates through negotiations between the past and future on one side and between internal and external semiotic fields on the other" (Gamsakhurdi, 2019, p.253) because it is "processual" and "develops through spatial and temporal dimensions" (Gamsakhurdi, 2019, p.241). That is to say, 'the self' is 'spatio-temporal', like a built environment as it was mentioned previously since both are in a mutual relationship in terms of their developments. Hence, it concerns not only the development of personality, that is, individual and social growth of a person, occurred through the experiences had in an environment individually and socially, but also the physical, spatial, and social development of this environment, happened intellectually; because, it signifies its own developmental impacts on the 'built environment' it interacts with through their interactive information-based mutual relationship, especially through the functioning of its physical, mental, and psychological structures. In consequence, any period of time, in the sense of the stages of their developments, has particular 'meanings' peculiar to these impacts which refer to both the selves and the built environment of that time. Here, the present time acts as a binding mediator which interrelates the 'meanings' in accordance with the past and the future through this environment, namely, through 'the urban and architectural sign' having meanings like traces. That is why no 'architectonic/architectural sign' could ever exist meaningfully without any individual and social aspect of the humans, interrelated psychologically to their built environment which develops spatially over time with 'the self'. Therefore, 'the self' needs to be conceptualized in conformity with 'semiological/semiotic systems' in the context of 'built environment' and any of these systems needs be handled through the individual and social aspects of both 'the self and the environment', by considering the affects of the functioning of the human physical, mental, and psychological structures on the physical, spatial, and social dimensions of the built environment. It depends on a course of the human's nature which enables this functioning between the internal and the external, the psychical and the physical, the body and the object, the unconscious and the consciousness, the individual and the social. In this regard, it could be said that a 'sign-system' pertaining to any 'urban and architectural thing' in the built environment surely works psychologically and every 'semiological/semiotic concept' needs to be based on the psychological grounds. For this reason, Semiology is seemed as a part of social psychology for Saussure working on language which is a social facet and socially constructed and Semiotics of Peirce is seemed as a part of experimental psychology for his interest having bases on pragmatic logic. Moreover, the latter depends on three operations, called as syntactic, semantic, and pragmatic, three of them could be associated with designing, building, and experiencing an environment when 'the self' is construed with the environment. In that, the first constructs the organization in the design made through the rules, methods, techniques in line with the interrelation between its physical and spatial features (for example, "ancient Greek order is put together out of certain elements -base, body, chapiter- in a certain order, [so] colonnades and arcades have their own rules of construction" (Remizova, 2015, p.84)); the second constructs the sense of act of building through a design/architectural language which deals with the visualities and the articulations within the framework of a style to assign and to convey meanings about the design (for example, "the combination of elements of the Corinthian order into the shape of portal allows to give the facade of the building the effect of solemnity, respectability, pomposity" (Remizova, 2015, p.84)); and the third constructs the behavioral affairs of the self or the society in order for their experiencing the environment at daily times. In short, the stances of Semiology and Semiotics have many 'psychological

grounds' referring accordingly to the 'individual and social aspects of the humans' and related to their daily experiences. Besides, Saussure's Semiology and Peirce's Semiotics match with two characteristics of these social-individuals. The first one is being "a community-living creature" and the second one is being "a creature capable of reason" (Petocz, 2011, p.100). However, a new one that seems also relevant to this context has recently been added as the third: it is being 'a creature who produces and uses signs and symbols'¹⁸ or 'a sign and symbol maker-user creature' (Petocz, 2011, p.100). Hereby, the humans are now accepted as the creatures who have the ability to concern about 'meaning(fulness)', too. Through this ability, the 'meaning(fulness)' in/of the urban lives of them, their idea(1)s, desires and needs, thoughts and feelings, and their behaviors and experiences in a 'built environment' could be understood, in the hope of finding favorite ways to design and to build, and also to have 'safe' and more significantly 'meaningful' environments, consequently, as a '*shelter*'.

Therefore, 'psychology' and 'Semiology/Semiotics' need to work in a collaboration with each other because there is "not just a close relationship between the two, but a kind of symbiosis, where each contributes to the support of the other and neither can flourish alone" (Petocz, 2011, p.100). In this manner, the integration of both "allows psychology to negotiate a way through the difficult terrain of meanings, arriving at a fundamental aspect of semiotic phenomena" (Petocz, 2011, p.119) on one hand, and allows Semiology/Semiotics to use the ways for discovering the essence of the 'sign-relations' by regarding 'the self' on the other, for, 'the self' is the "central concept in psychology" and it "provides the theoretical basis for the conceptualization of the whole semiotic system" (Gamsakhurdi, 2019, p.238). In short, they can make very efficient contributions together in the context of 'built environment', especially of its relationship with the humans in terms of their behaviors and experiences.

¹⁸ Sign and symbol are used in very different meanings by semioticians. Saussure defined symbol as a different sign from all linguistic signs, as being neither conventional nor arbitrary. On the contrary, Peirce defined symbol as a sign classified through his Thirdness based on the relation of the sign to its object, as being conventional and arbitrary. However, Jung, as a psychiatrist, divided both from each other, by refusing to reduce symbol, which is produced deeply, to sign which shows itself semiotically. Nonetheless, it is possible indeed to establish a relationship between two by means of archetypes that take part in their association, which forms the basis of the study of the thesis. To explicate, archetypes produce expressions (including sensation, feeling, thought, intuition) at any appropriate time in which these expressions become symbols what makes which livable is the signs; as a result, symbol could be considered as expression, and sign correspondingly as its manifestation. This will be mentioned later.

In fact, 'psychoanalysis', being a branch of 'psychology', can be appropriate, and be applied to urban and architectural theories in this context; because, it deals with the things having 'meanings' which are hidden in the deep sides of the inner realms but appear in a(ny) way in the outer world. These things are quite 'symbolic', by its very nature. In that, 'symbolic'¹⁹ regards the complex multiple abstract layers of mind, by recalling the inner realms, such as idea(l)s, thoughts and feelings, and behaviors and experiences, all of which require the deep interpretations of their appearing, and by recalling the outer world when considering them as 'signs'; for example, as an 'urban and architectural sign' that refers to a 'built environment'. On account of becoming a 'meaningful' whole embodied with the properties such as 'forms', 'functions', and 'material qualities' one by one, it can be defined "as poetic or artistic expression, as the manifestation of the psyche" (Hendrix, 2012, p.208), and it is "achieved through the use of linguistic models, .. and models from psychoanalysis, such as the structure of the psyche" (Hendrix, 2012, p.208) since the psyche is (re)presented by 'the self' which is (re)presented by a 'built environment'. To denote, such an expressive and manifesting, or (re)presentative, communication reveal the personal and collective minds intellectually and psychologically by means of the processes of designing and building, and experiencing an 'urban and architectural environment'. In other words, it "depends on the sequential development from schematic representation, as in signification in language, ..., and then to the symbolic" (Hendrix, 2012, p.209). As a result, it could be said that 'sign' and 'symbol' can be associated with any 'urban and architectural thing', such as design, space, component, as a kind of mental concept, because they occur through the 'semiosis' in the mind as idea(1)s, etc. That is why sense-making of the urban lives and experiences revolves around a 'semiological/ semiotic core', 'symbolic dimension' of which defines a frame of the intercourse of the human with their 'built environment', with a 'sign', through 'sign-relations'.

There is one more thing: the integration of 'Semiology/Semiotics' and 'psychology', mainly formed in the matter of the neglect of 'semiological/semiotic concepts' within

¹⁹ Symbolic phenomena happen "in dreams, art, literature, ... and so on ... generally characterized as motivated, intuitive, involuntary and unconscious ... discussed and disputed at length, notably within philosophy, aesthetics, humanistic psychology and psychoanalysis" (Petocz, 2011, pp.126-127).

'psychology', has critical points explained as firstly, "the science/meaning divide"; and secondly, "scientific practicalism and metatheoretical confusion" (the side of psychology); and thirdly, "ideologies opposed to scientific realism" (the side of semiotics); and lastly, "little concern with the sign user" (since psychology needs the person in the center of its domain) (Petocz, 2011, p.102). To explicate, the first, there is a general case of "the marginalization and neglect of meaning in general during the development of psychology as a science"; because, signs (have to) bear meanings, which require "hermeneutic inquiry or qualitative methods rather than the causal explanation and quantitative methods that are held to be the hallmarks of scientific psychology" (Petocz, 2011, p.103). The second, "psychology's combination of scientific practicalism and metatheoretical confusion" detaches psychology from any "theoretical discussion and logical analysis of meaning that would reveal ... the possibility of an objective scientific investigation of semiotic phenomena" (Petocz, 2011, p.105). The third, the negative attitude of psychology about this contribution depends on "psychology's perception of semiotics as being inextricably wedded to ideologies and philosophical positions that are opposed to the empirical realism of the scientific approach" (Petocz, 2011, p.105). The last, the literature regarding the semiotics shows that "semiotics has little to say about the person -the sign user [which] becomes merely the point of intersection in a network of signifiers"; the antirealist metatheoretical groundings within semiotics of relativism, idealism and constructivism seem irrelevant to the concerns of psychology (Petocz, 2011, pp.106-107). Luckily, psychological approaches have begun to change in its character that it has increasingly expanded as large scale attempts, and became an integration of the hitherto fragments of sub-domains, and they thus grasped the related disciplines; for example, linguistics, anthropology, neuroscience, computer science, developmental neuropsychoanalysis (Petocz, 2011, pp.107-108). Such combinations have provided a favor of 'meaning' which embraces the meaning-related disciplines including the studies of Semiology and Semiotics, and meaning-related topics such as metaphor, allegory, music, dance, creativity, non-verbal communication, art and architecture (Petocz, 2011, p.108). This new movement doubtfully wonders which dialogue needs to be set up between 'psychology' and 'sign-studies' (Petocz, 2011, p.111) since "the 'age of meaning' is picking up", according to Shank, when 'meaning' is compared to

science (Shank, 1998, cited as in Petocz, 2011, p.111). In that, discussions about the importance and the role of 'signs' -semiotic mediators²⁰- in human psychology and psychological processes have been written much in the 20th century (Valsiner, 2001, pp.84-85). For instance, "the focus on the sign-mediated nature of the human psyche reached the epistemological pool of ideas", mainly by Saussure whose Semiology was operated on the linguistic signs -language is the competence of the human mind-by alerting psychologists about their relevance, and also by Peirce whose Semiotics expanded through the attempts to enable a logic for the human mind (Valsiner, 2001, p.85). In this respect, the view of the importance and the role of 'signs' -semiotic mediators- in human psychological realms, referring to the nature of the human individual psyche and 'the self', "Signs are part and parcel of human psychological functioning" (Valsiner, 2001, p.86) which makes the humans be connected with the 'built environment' that they lived in, by means of 'symbol(ic)'.

All in all, a brief trial of the compilation of 'Semiology/Semiotics' and 'psychology' was discussed in the context of 'built environment' by putting 'the self', being a kind of 'intra-inter' assembly of 'existential-experiential' and 'spatial-temporal' processes through which it relates to its environment (Komatsu, 2019, pp.117-118), reasonably at its center. It means that 'the psychological grounds of the semiological/semiotic concepts' can provide very important insights into the 'signification' of experiences, behaviors, and idea(1)s, by leading a way to understand the 'meaning(fulness)' of an 'urban and architectural environment' and 'the causality' not only of the functioning of the human structures in terms of their architectonic activities but also of their behaviors, thoughts and feelings, and experiences in terms of the individual and social lives, in the matter of the essence of 'urban and architectural things'. However, these grounds then need to be considered as the parts of 'depth psychology', when 'the self', 'the psyche', and 'the individual and social aspects' are taken into account in this context. Thus, it becomes a need to mention about 'deep (/depth) structures', too; this will be discussed separately under a new heading right after this discussion.

²⁰ Semiotic mediation is the appropriation of a sign as an aspect of psychological development and the process which treats the use of the sign as the center of the human activity; in short, the developmental facet of the semiotic processes in a psychological context.

2.2. Deep Structure and Depth Psychology

Up to this part of the chapter, by focusing on the human-environment relationship, two fields of 'sign-study', Semiology and Semiotics, were discussed in the context of 'built environment' which is one of the main subjects of urban and architectural theories. Due to the fact that 'the humans' have an important place as a matter of the 'sign-relations', 'the psychological grounds' of 'the semiological/semiotic concepts' were involved in the discussion. However, to understand this discussion better and in detail, it would be appropriate and good to mention also about 'the deep structure' in a relationship with 'depth psychology'. From now on, this will be handled.

Let's firstly note that there is an idea that 'semiosis' has contribution to life (Barbieri, 2009, p.20), and that life depends on 'semiosis' quite "deeply and extensively" due to the fact that it is about "manufacturing objects, ... organizing objects into functioning systems, and ... interpreting the world", in essence (Barbieri, 2009, p.20). Indeed, life presupposes 'semiosis' in order to be and sustain its existence (Deely, 2016, pp.159-160). Accordingly, an urban life which brings the everyday experiences of the socialindividuals into existence includes many 'semiosis' because 'urban and architectural environments' are conceptually designed and materially built as the (re)presentative things of the idea(l)s organized in a (in)form(ation) with functions and properties, and they bear 'meanings' whose interpretation happens through the experiencing of this environment. In other words, an 'urban and architectural space' is organized with respect to the humans and to all the activities they are capable of (Mukarovsky, 1978, cited as in Preziosi, 1979, p.48), through the functioning of their physical, mental, and psychological structures. Hereby, it offers any desired and needed experience of their day times. That is to say, subjecting to the human-environment relationship, it signifies the inner realms, that is, 'the selves' or 'the social-individuals and the societies', as the outer world, that is, 'the built environment' or 'the urban (life) and architectures', by calling attention to an aptitude of these people, which correlates 'semiosis' to understand all this. Therefore, anything related to this subject could be reasonably considered as a 'semiological/semiotic process'.

As it was explained briefly before in the first chapter, that is, the 'introduction' part of the thesis, this aptitude refers to the 'psyche's complex system', being behind their functioning of these three structures, and that this 'complex system' has a quite 'selfregulating faculty'. In short, it probably triggers this functioning to form all possible behavioral patterns to be used for any experience to be required for the individual and social lives in a 'built environment', 'meaningfully', through 'the activities of its life/survival-oriented creativity' which are diversified and maintained consciously and unconsciously. In addition, it is related to its own things assumed as 'the deep and hidden fundamental pieces' or as 'the priori determinants of personality'; all are assumed to be possessed by each and every person to be used for their all kinds of behaviors that provide every individual and social experience through which a person develops his/her own personality and becomes a social-individual to sustain his/her individual and social life. Called as 'archetypes', acting like a cast managing 'deep psychological associations' of the humans, they are the potential carriers of 'deep meanings' pertaining to the individual and social lives in an environment, and they have tendencies, called as 'archetypal contents', forming meaningfully all behaviors to have experiences in the environment. In short, this 'complex system' with these 'fundamental pieces' is described as 'deep (/depth) structure' in the thesis.

Therefore, any of the urban and architectural environments, as a matter of 'semiosis', reveals the things pertaining to this 'deep structure' of the humans. This can give a different perspective to the human and environment relationship, by (re)presenting a broad explanation of the social lives and societies with/in the urban and architectural environments that existed in any time period from ancient times to the present. For example, to review this meaningful relationship through the natural or architectonic settlements, to begin with a rudimentary level is satisfactory; that is, "moving into a cave, painting its walls with symbols and lighting a fire for warmth" (Broadbent, 1980c, p.133). It was the human's first decision to use the natural environment to be protected from all of its threats which were quite dangerous for them (Broadbent, 1980c, p.133). Compared to the others, cave became a commonly preferred '*shelter as the home*'. Later, it turned into a representational entity of them, which presented their inner realms, especially through their conscious and unconscious contents, and

their deep structures. To explicate, a spatial analysis of such a cave, made by R. D. Whitehouse, amazingly showed that there were quite representational motifs just close to the entrance of the cave while the highly schematized ones were found only its deeper zones, and thus, it meant that the secret knowledge of themselves was penetrated through the deepest parts of the cave (Whitehouse, 1992, cited as in Robb, 2020, p.464). Reminding of or implying both consciousness and unconscious mind, this could likely render, consciously or unconsciously, the semiological/semiotic way of (re)presenting themselves with their deep structures, namely, their ways of living, experiencing, behaving, and thinking and feeling. After the caves, what man took as a next decision was to choose to transform that natural environment: it was to build 'safe' dwellings in sophisticated ways from the pile of stones to the huts (Broadbent, 1980c, pp.133-134), to 'an other shelter being the another home'. In other words, through an architectonic act, whether by using nature in a simple way or through some architectonic activities, man achieved 'safety' which provided a way to meet the needs, to get a satisfaction from this compensation, and to sustain the life. These architectural implications could be handled in three categories according to the list of R. Fletcher (for example, see: Table 2.1): "provision of a comfortable environment in which temperature, humidity, lighting and other conditions can be controlled as necessary"; "protection of particular activities from a hostile external environment"; and "provision of symbols to stimulate the emotional, imaginative, fantastic or religious aspects of life" (Fletcher, 1957, cited as in Broadbent, 1980c, pp.131-133). In that, even if they could be simply elaborated in respect of human behaviors and experiences (for example, see: Table 2.2), all of them refer to sustainability, safety, and satisfaction in a general sense and these three are the critical facts of 'the deep structure' which regulates the human and environment relationship.

As a result, a 'built environment' needs to be interpreted through the semiological/ semiotic approaches on one hand, and the psychological concepts on the other. Here, the latter points to 'the concept of archetype' involved in Analytical Psychology, a branch of 'depth psychology' pioneered by Carl Gustav Jung in the early 1900s in a way departing from psychoanalysis of S. Freud and was updated later by cognitive and behavioral psychology, which shows its importance in this context. **Table 2.1:** an extract from Fletcher's 'Table of Instincts with Their Architectural Implication' (source: Broadbent, 1980c, pp.132-133) (redrawn *by the author* as the same as the source)

1. THE INSTINCTS	
PROPER (PRIMARY	
IMPULSES)	
Physiological	Instinct
Respiration	BREATHING
Contraction of stomach walls	HUNGER
Parching various membranes	THIRST
Homeostatic mechanism	MAINTANING COMFORTABLE TEMPERATURE
	Keeping warm
	Keeping cool
Fatigue	SLEEPING
Arousal	WAKING
Skin receptors	CARING FOR THE COMFORT OF THE BODY
	SURFACE
Adrenalin flow etc.	FEARING
Digestive processes	EXCRETION
	GENERAL STIMULUS SEEKING
	Play, curiosity
	Hunting
Hormone flow etc.	SEXUAL ACTIVITY
	Eroticism and 'courtship'
	Sexual fighting
	Parental activity
	Home-making
2. GENERAL	
INSTINCTIVE	
TENDENCSIES (EGO-	
TENDENCIES)	
Physiological	Instinct
Overall functioning	PLEASURE -PAIN
	ATTACHMENT - AVOIDANCE
	POSITIVE-NEGATIVE
	EGO-TENDENCIES
	•

Behaviors that Correspond to Everyday Experiences (in relation to archetypal contents)	Urban and Architectural Implications
to live, to survive, to be protected, to shelter	cave, shelter, tent, room, house, roof, pediment, castle, vault, dome
to lead a life, to go, to travel, to surrender	road, street, path, walkway, promenade
to pass, to enter, to go	door, window, gate, entrance, passage, corridor, bridge
to stop, to wait, to have a rest	inn, hotel, shelter, station, doorstep, guesthouse, column, dungeon, graveyard
to be remembered, to be permanent or eternal, to show the existence	monument, statue, graveyard, landmark
to want, to dream, to expect, to idealize	architectural movement, style, manifesto
to change, to develop, to expand, to reproduce	urban transformation, renewal, restoration, reconstruction
to migrate, to replace, to move	transportation, stair, graveyard, path
to watch, to look, to wander, to observe	window, tower, castle, citadel, balcony, fort
to control, to design, to organize, to equalize, to make hierarchy, to lead, to govern	tower, fort, territory, property, border, personal space, private or public area
to like, to be beautiful, to display	aesthetics, landscape, cityscape
to restrict, to limit, to surround, to protect	wall, door, rampart, fortification, border, colonnade, territory
to believe	place of worship
to own	property, land, territory, castle
to live together, to meet, to socialize, to share, to cooperate, to communicate, to interchange, to exchange, to shop, to enjoy	square, center, garden, park, bazaar, forum, recreation area, node, greenery, amphitheater
to belong, to resemble, to group	association, house/home, neighborhood, settlement
to reach, to rise or go up, to go down	stair, level, ramp, platform, underground, elevation, attic, cellar, base, tower, storey, floor

Table 2.2: human behaviors that correspond to everyday experiences and their urban and architectural implications (proposed and prepared *by the author*)

As the beginning of the studies on the behaviors and experiences as a treatment by bringing the contents of unconscious mind to the consciousness, psychoanalysis was founded by S. Freud and followed by C. G. Jung and by A. Adler afterwards. Being the cardinals of 'depth psychology'; the first two had a close relationship and their viewpoints about the psychological analysis were quite similar but different from the last one' views which were ascribed as individual psychology.

However, there was a big difference between the opinions of Freud and Jung about their theoretical and methodological approaches to psychology and the unconscious mind; as a result, this made a break in their handling of psychoanalysis by getting Jung coin the name 'Analytical Psychology' to his own study (Hopkins, 2010, p.95). Jung's reaction to the thoughts of Freud was because of the latter's depiction of the contents about the structure of unconscious which he deemed as limited, though their view, which was that the contents of unconscious were once a part of consciousness, overlapped (Hopkins, 2010, p.95). For Jung, in fact, it included much more, such as "contents not yet capable of becoming conscious ... and contents incapable of ever becoming fully conscious" (the latter refers to the manifestation of archetypes which are, specified by himself, the things in the collective unconscious) (Hopkins, 2010, p.95). Hence, Jung's study was based on the 'archetypes' which were assumed as the things that all people have in common for their personality developments, termed as 'individuation', by means of their behaviors and experiences and were hypothetically used in a thematic schema formed with archetypes in order to understand the psychic structures by means of human behaviors, thoughts and feeling, and experiences, or the ways of sustaining a life (it was mentioned briefly in the first chapter).

For this reason, that is to say, due to the fact that 'archetypes' play important roles in the course of the lives of any (social)individual, it seems quite appropriate for the examination of the relationship between the humans and their built environments. Therefore, it is worthy to review his 'concept of archetype' with the theories about 'individuation' concerning 'the individua(liza)tion and socialization processes' in the sense of 'personality development', by considering the mind and the psychodynamic affairs, in a relationship with behaviors, thoughts and feeling, and experiences.

2.2.1. Carl Gustav Jung; Analytical Psychology

Jung (1875-1961), a Swiss psychiatrist²¹, is known as the founder of Analytical Psychology that is the name of his own empirical approach to 'psyche', 'personality' and 'individuation'. Here, 'individuation' is used by Jung as a term in this approach of him and it means to strike a 'psychic'/'mental' balance between the opposing qualities in the 'psychic'/'mental' operations throughout the uninterrupted 'personal growth'. In other words, it involves non-stop transformations that the humans go through from their birth to death, and assists their 'personality development' through the corresponding psychic operations which regard the conscious and unconscious functions of mind. With 'individuation', every person reaches the harmony of the conscious and unconscious, and constitutes his/her 'self' as a whole identity. Thus, the emphasis in Jung's idea of 'individuation' is on developing any one into a holistic personality by acquiring a higher level of consciousness of himself/herself. That is why the aim of Jungian analysis is to understand and to interpret 'individuation' by thinking over not only the functions of mind, which point to the levels of the psyche,

²¹ He was the originator of the concept of 'collective unconscious' and the founder of the theory of 'individuation' ('personality development', based on the -concept of- 'personality types' determined by him); and he used his 'concept of archetypes' in them. He began as an assistant at the Burghölzli Psychiatric Clinic in Zürich, and worked to 1909 there, and he used word-association texts for his experiments. When the International Psychoanalytic Association was founded in 1910 with him, he was appointed as the president. In those years, he met Freud and became his close collaborator. Their collaboration lasted from 1907 to 1912, 1913 which was the date of their disagreement about sexuality in causing psychological problems appeared (Jung explained his views through his publication of 'Wandlungen und Symbole der Libido'/'A Study of the Transformations and Symbols of the Libido', 1912). In this matter, while Freud emphasized only on infantile sexuality, Jung thought that there were other aspects and he asserted his idea through his concept, 'collective unconscious', consisted of many 'archetypes'. Jung saw the unconscious as a realm of spirits and a source of spiritual insight, which made him to focus on symbolism, thus, he accordingly studied on myth, religion, alchemy, and so on. Therefore, he resigned from the association in 1914 and he continued his practices on his own in Zürich by forming the Association for Analytical Psychology. He further developed his conception of 'personality types' as either introverts or extraverts with four basic functions of mind, that is, thinking, feeling, sensation, and intuition, and he explained it in the publication of 'Psychologische Typen'/ 'Psychological Types', 1921. He also introduced the theory of synchronicity which postulates the relativization of time and space and emphasizes the coincidence of causally unrelated events which has identical or similar meaning. His achievements were appreciated not only at home but also abroad, earning Jung official positions, honors, and awards. (see for more: Encyclopedia, n.d.)

His many woks were compiled in 'Collected Works of C.G.Jung' with the editorship of H. Read, M. Fordham, and G. Adler. His illustrations (Liber Novus) (1914-1930) were published as a translated edition in 'The Red Book' by the editor S. Shamdasani in 2009. His other famous works were 'The Secret of the Golden Flower: A Chinese Book of Life' (1929), 'Modern Man in Search of a Soul' (1933), and as an autobiography, 'Memories, Dreams, Reflections' (1961).

but also the psyche which is structured with the priori elements of personality, that is, 'archetypes'. In that, this psychoanalysis guides any person to become an individual by showing him/her the way how to eliminate or to deal with the crisis that he/she encounters at any time of his/her life sustained in a built environment where he/she lives. In short, Analytical Psychology was developed as a theory of 'mind'/'psyche', in relation to the psychodynamic affairs such as behaviors, thoughts and feeling, and experiences, to apply a psychotherapy through the therapeutic talk to the unconscious mind to make a person be aware of his/her own self in wholeness and harmony.

To explicate, the functions of 'mind' or the levels of 'psyche' are mainly described as 'consciousness' and 'unconscious'. 'Consciousness' addresses the awareness of the existences of anything pertaining to the outer or external world and the inner or internal realm; it covers and contains less things on the contrary to what is generally known. However, 'unconscious' refers to the repository of the things being not been aware of but affecting the awareness without any realizing; it has many contents despite 'consciousness'. For example, personal experiences go to the unconscious mind through 'regression' (a Jungian term) while these things stored in this level depart towards consciousness through 'progression' (a Jungian term) as dreams, words, or behaviors, as if they were deeply distorted and transmuted into some kinds of imaginary patterns bearing the 'meanings' of themselves; because, "an indirect, obscure language" (Jeffrey, n.d.) performs for these 'meanings' to be reflected to consciousness in a (re)presentative way which is generated through the inner realm 'meaningfully' and in conformity with its own 'semiological/semiotic concepts'; also because, it mediates for the personal histories or the current circumstances of any person to be revealed through these images.

These images are, in fact, very 'symbolic'; they exist as 'symbols' used constantly for the 'representations' of such things (Jung, 1964b, p.21) and communicate through a 'symbolic dictionary' (Jung, 1997, p.163). The fact that "man is primarily an image maker and all psychic substance consists of images" (D'Heurle & Feimer, 1975, p.290); and that the humans have full of enrichment of imaginations, especially by means of their dreams, was found out and observed by Jung, and this urged him to

focus on not only finding the hidden grounds behind the dreams, but also giving any free expression to their irrational natures, through a detailed analysis. According to Jung (1954), this dream symbolism needs first of all to be handled and characterized as the personal aspects that can be explicated with the associations and collaboration of a person to find the exact 'meaning' (para.197). In other words, he believed that these 'symbols' could not be arbitrary or random (Jung, 1964b, p.96). Therefore, one could never be sure that they do not always mean exactly same for any other dream of the same person, and even for any different dream of any other person (Jung, 1954, para.197). However, "a relative constancy of meaning" only happens in one prospect, which refers to 'a common facet', being exhibited through the images (Jung, 1954, para.197) which stand for not only the type of behavior to be carried out but also the typical situation which causes the behavior (Jung, 2003, p.20).

This matter was, therefore, associated with the 'archetypes' by Jung who described a concept with them. That is to say, his empirical approach was based on this 'concept of archetype' which was preferred as an analytical method to interpret these symbolic images, to reveal their meanings, and to help a person in the therapy. Therefore, he divided the unconscious mind into two different levels, by naming one as 'personal unconscious' and naming the other as 'collective unconscious'. The former includes the personal repressed or forgotten contents of early life experiences of any unique man while the latter has something hidden or intuitive possessed commonly by all the humans (recalling 'archetypes'). Moreover, he proposed a 'schema' (see: Figure 2.4) of/for the structure of the 'psyche', which included the functions of 'mind' or the levels of 'psyche', that is, 'consciousness', 'personal unconscious', and 'collective unconscious', by considering 'archetypes', to facilitate and to understand the psychic operations. In this way, it became easy to examine any story of a person with an insight into his/her 'personality', and thus to apply a corresponding therapy.

Therefore, it could be possible to say that this concept which concerns all the levels of 'psyche' and all the functions of 'mind' deals with anything related to the humans, human behaviors, thoughts and feelings, experiences, and to their built environments. In other words, it is an architectonic case, for example, in the context of 'safety'.

2.2.1.1. The Concept of Archetype

Having an important role in Analytical Psychology, the 'concept of archetype' could be considered as the key to learn more about human 'mind'/'psyche' and 'behaviors'/ 'experiences' because 'archetypes' are assumed as the primary factors of all of them. In that, they are filled up with "a number of capacities and abilities" (Şirin, 2019, p.33) so that the humans can sustain their lives, survive, and be safe.

By the way, the word 'archetype' is a compound of 'arche' and 'typos' and both origin in Greek having the meanings of 'first and original', and also 'form' (Wang, 2011, p.1175). In addition, for R. J. Maduro and J. B. Wheelwright (Archetype and Archetypal Image, 1992), there is another etymological description according to which it is derived from the Greek word "archery pops" having the meaning of "a model or template that was used as a reference to build different things" (Maduro & Wheelwright, 1992, cited as in Barati & Kakavand, 2016, p.7) (it could be possible to resemble it to the architectonic works constituted through the urban and architectural things). In line with this, in the context of psychology, (let's say, according to the Jungian approach), the word 'archetype' thus gains a meaning of 'being the original models of anything which provides all the activities of man (behaviors; thoughts, intuitions, feelings, sensations; experiences)' or a meaning of 'being the fundamental pieces in the psychic structure, all of which together ensure that people become able to use their abilities to live for a lifetime'.

In substance, Jung's archetype concept is similar to the idea concept of Plato, based on the essence of a thing being prior to its existence. For Plato, people live in a world that is full of ideal blueprints and the particular characteristics of these things coming from the non-physical realm they exist (Jeffrey, n.d.). It seems that this concept of Plato was a reference for Jung's archetype concept. In this sense, Jung conceived the 'archetypes' undoubtedly as essentialist since they are, by its definition, 'pre-existing psychic images' (Colman, 2018, p.339). Therefore, for the Jungian perspective, these 'archetypes' are the fundamental units of the human 'psyche' and the imaginary formations appearing in 'mind', and they are expressed and manifested in the built environments since they drive emotions, set patterns of behaviors, and constitute the characters of the humans; all of them influence their all 'individual, societal and environmental relationships' (Jeffrey, n.d.). They are several, and all are within the psyche, which makes them universal, human-thing, complex having mutual conflicts opposing to each other, obscure, and either apparent or latent (Jeffrey, n.d.). In brief, 'archetypes' are the forms of the significant demonstrations that each individual owns within himself/herself as a legacy of many universal formulations, which are common to all human beings, left to the innate structure of psyche (Taylor, 2009, p.108). Thus, using the 'concept of archetype' as the basis for a psychoanalytic method plays an important role to explain "unexpected events whose understanding is difficult with the everyday mind" (Şirin, 2019, p.35). In addition, it takes parts in interpreting the processes such as becoming aware of the power of the 'unconscious' levels of psyche, bringing the forces of psychic energy in balance, maintaining the psychic order, and integrating all of them for the psychic wholeness with the help of 'consciousness' as well.

Through this concept, a therapy can offer a way for the familiarization of himself/ herself by providing changes in the behaviors when any troublesome force is faced; in a broader sense, a way for the interconnections of man with an environment being a meaningful whole with its physical, spatial, and social dimensions. In this regard, it could be said that in the long-term history of the development of a built environment, there lie the human interactions because of the fact that an environment is idealized, designed, built, and experienced, and even is changed, through the functioning of the human physical, mental, and psychological structures, and through the impacts of the human psyche having presumably these 'archetypes'. Indeed, Jung's words confirm this; that is to say, any city, in a general sense, any 'sheltered settlement', exists and develops "as a synonym for the self, for psychic totality, [being] an old and wellknown image" (Jung, 1979, para.269); in that, this image (re)presents itself totally by bearing the meanings. Marcus's implications (1997) do, too: a house, in a general sense, a 'shelter', appears as the symbolic manifestation of the self, indeed, as its mirror which expresses itself; in that, to comprehend the meanings depend on the interpretation of these manifestations, or of the image in the mirror (p.18). It could be inferred that these images are equivalent to the self by means of the signification of or signifying the psyche with 'archetypes'; thus, it could be said that all become the parts of the semiological/semiotic relations as things-thoughts or signifier-signified.

However, in Analytical Psychology, it does not matter whether an 'archetype' could be either a concrete thing or an abstract thought because it is a psychological pattern somehow (Wang, 2011, p.1175), even if it gets into such relations. They become active, or apparent, through the experiences such as births, deaths, puberty, and the times of overcoming obstacles and coping with dangers (Fordham, 2001, p. 28). Such experiences affect the psyche, then hassle the psychic fragments²² -because "the psyche is not an indivisible unity but a divisible and divided whole" that can be fragmented in the fragments (Jung, 1960/1969, para.582) to ensure its functioningand finally motivate the psychic energy to act, think, feel, in response to themselves. Here, in order to focus on this subject better, a detailed explanation could be needed because there are some key conceptualizations in the 'concept of archetype'.

Let's begin with the basic unit which is the name of referring to the totality of the humans' psychological structures: it is 'psyche', a kind of definition for rendering of a person and of his/her non-physical spatial area where any psychic occurrence happens by its own operations. It is full of energy which works within the dynamic tensions in search of a condition of equilibrium that can be measured through the individual's comparative intensities of manifestation. In the context of the flow of energy and energy movements in various directions, this psychic condition depends on the 'principle of opposites', which is a way of thinking about the things in the psyche. Thus, rendering the responses according to the opposites is the main feature of psyche. This is the starting point of Jung's studies on 'personality'. In any case, the dynamic tensions between the opposites that are generated by psychic energy cause the conflicts to balance each other; that is to say, many new complexes develop

²² In Jungian definition, they are the autonomous complexes that refer to the working system of the archetypes in conflicts; for example, Ego and Shadow or Anima and Animus. It is called by Jung as 'feeling-toned' since it is "a collection of images and ideas, feeling-toned groups of representations that have a common emotional tone thematically organized with clusters of memories associated to those themes" (Stiles, 2017). In short, it is the 'personification of archetypes' (Stiles, 2017).

gradually in the psychic processes. In that, each and every individual has countless variations of them, which affect their everyday experiences and are affected by them in turn. These psychic processes are designated by Jung as two fundamental events: 'progression' and 'regression': in the former, the energy is quite well and it is poured out creatively, which ensures a psychological adjustment and harmony throughout life; however, in the latter, the pleasantness becomes disappear and a disruption of harmony begins to occur in the psyche. In that, 'regression' is the movement from 'consciousness' to the deeper levels of 'unconscious', into the inner realm, while 'progression' is the reverse movement from 'unconscious' to 'consciousness', to the outer world or the living environment (this is usually considered as negative). The combination of both is the entire area of the psyche and the psyche is dominant and leader in this area. This area has three levels: 'consciousness'; 'personal or subjective unconscious' where the conscious contents, that is, the contents of the individual's or the personal life-experiences, are repressed through; and 'collective or objective unconscious' whose contents are greater than these experiences and are the common universal qualities that lead individuals to behave in a way specific to their own species as a man, that is, the 'archetypes' which exist at the present from the beginning. About the archetypes, it is not easily possible to say to what they refer; therefore, any interpretation remains inevitably as an 'as-if' because there include 'archetypal contents' any of which reveals many 'symbolic formations'. Due to the fact that 'archetypes', being the fundamental parts of the psyche, are assumed as the things universal in the nature of the humans, it could be possible to say that they are encountered in any social circumstance anywhere in the world, in any period of time in history. That is to say, they take the stages again and again in history differently form each other because any 'conscious expression' is the 'historical manifestation' of any of 'archetypes'. (Progoff, 1953, pp.57-77)

In other words, these 'expressions and manifestations' indicate general characteristics of not only an individual but also groups of individuals in a particular period of time in history: the manifestations seem to have arisen in many different ways in parallel with the changes in the way of life of these social-individuals and of the development of their built environments. For example, 'house', expressing the sense of 'home' and standing for a '*shelter*', is manifested as a skyscraper today while it was previously manifested as a tent; in fact, both (re)present different ways of urban lives. That is to say, as a manifestation, just as a tent can express something about the societies that used it, a skyscraper can do the same for those that use it now; because, the human psyche which contains 'archetypes with their contents' is closely interrelated to the built environments of those, no matter which period of time in history it belongs to. Despite these differences, either a tent or a skyscraper is conceptualized, designed, and built as a 'house' having the meaning of '*home-shelter*', in essence. It is because 'archetypes' provide "a common background for the human condition" (Andreica, 2015, p.12), namely for their behaviors, thoughts and feelings, and experiences. This is the importance that lies in what they (re)present or signify: it is in their 'universal meanings' (Progoff, 1953, p.73). Thus, this gives a way to reveal the underlying truth that ensures the necessary harmony between the humans and their built environments through the urban and architectural things which could be accordingly associated with any 'archetype with the archetypal contents' related to this archetype.

On the other hand, if the harmony (between 'unconscious' and 'consciousness', or 'expression' and 'manifestation') collapses in a way, neurosis, even psychosis, could begin in an individual or in many social-individuals, and consequently, in the lives of the societies. Actually, this must have been experienced throughout history because several changes in the urban lives and in the built environments have occurred. Thus, a reciprocal balance and the harmony are needed again after any conflict between the opposites, in which all psychic operations run by means of the tension among these oppositions. This tension is autonomous which means that it is exerted beyond the conscious control and that it provides a 'complex' of various psychic contents. Each of these contents in the complex acts on its own and functions as a part of the 'total personality' (that is, the fragments of the autonomous complex, making frequent and disturbing influences on the Ego the most), like a personified form which represents any 'characteristic side' of the 'personality'. To able to describe the main types of these parts, Jung developed some original concepts such as 'Persona', 'Shadow', and 'Syzygy' ('Anima' and 'Animus'). However, according to him, any person can not present his/her 'total personality' which is the combination of 'consciousness' and 'the unconscious' -as there is not an ability to control all parts of them in a certain time- rather, this person develops a specific part of his/her own 'personality', that is, his/her 'character', regarding the situation with which he or she is in contact. In other words, an individual has many sides to his/her life, in proportion to the number of different life situations in which he or she finds himself/herself; for example, he/she is a child to his/her parents, a student to his/her teacher, a lover to his wife or her husband, an employee to his/her employer, and a boss to those who work under him/her. It indicates the roles that are played by the individual in his/her social life, in which any of the roles refers to the relevant parts/characters of his/her 'personality', which respect the whole 'personality' in the sense of integration and unification. Among them, he/she prepares a satisfactory classification for himself/herself, which makes him/her quite safe to have the experiences. This renders a 'personality' in an identifiable relation to the small part of consciousness, that is, the 'Ego', with which the 'Persona' is identified; in that, the latter is a cover which hides or masks the former. However, the 'Ego' is in a tendency as to develop the strong sides of the 'personality' and integrate them into the 'Persona'; hereby, these qualities become intensified in 'consciousness', by forcing the weaker or discordant sides of the 'Persona' to enter the 'unconscious' level. There, they become as the opposites to 'consciousness' by applying the 'principle of opposites' and by forming a complex composed of the weak, unwanted, negative or dark side of the 'personality': this complex endangers the 'conscious personality' without any warning or by some sudden moods. In this instance, the 'Persona' should rest on the 'conscious', or else it may become vulnerable to the conflicts of the opposites, which means the collapse of the 'Persona', that is, the crisis in the life of an individual. Therefore, it is important to become aware of both 'Ego' and 'Persona', and to distinguish them in everyday experiences so that the life could be adaptable. (Progoff, 1953, pp.79-87)

By the way, this weak, unwanted, and negative or dark side is named by Jung as 'Shadow'. Depending on the contents of the 'personal unconscious' (except for the repressed positive qualities of the 'personality' because the 'Ego' begins to play an unfavorable negative role in this circumstances), the 'Shadow' is the most accessible and the easiest to experience; therefore, it challenges the 'Ego' (Jung, 1959, paras.13-

14). These dark characteristics have an emotional nature, meaning that something happens to the individual; to explicate, when adaptation is weakest, their affects come out with uncontrolled emotions and incapable of moral judgment (Jung, 1959, para.15). That is to say, the 'Shadow' can penetrate into the 'conscious personality' as a projection of 'unconscious thing' with resistances to the morality, in a way of being hard for the 'Ego' (Jung, 1959, paras.16-17); for, these projections that belong to the realm of the 'Shadow' refer to the dark or negative side of the 'personality' (Jung, 1959, para.19). At that moment, it could be said that this subsequently starts a conflict. It runs intrinsically its own operation on the level of 'personal unconscious'; however, it is affected by a tendency or by the energy of the things being more than personal contents, for example, by the 'archetypal materials', and consequently, any transformation in the complex begins (Progoff, 1953, p.92). Although the nature of the 'Shadow' is personal, it somehow appears by becoming in a relationship with an 'archetype' after an untenable point: it begins to appear in the figure of any of two corresponding 'archetypes', that is, the 'Anima' for a male and the 'Animus' for a female (Jung, 1959, para.19). This is the 'Syzygy', one of the main 'autonomous complexes of the 'psyche', other than the 'Persona' and the 'Shadow', having strong relationships with the 'Ego'. In fact, it is the 'Shadow' as a complex, but as the one which is brought into the deep levels, into 'collective unconscious', and is changed into 'Anima' or 'Animus' (Progoff, 1953, p.92-93). In that, the 'Syzygy', namely the 'Anima' and the 'Animus', represents the balance of the complementary elements. For man, it is an unconsciously personified feminine side, or the 'Anima', which produces moods; and for woman, it is an unconsciously personified masculine side, or the Animus', which produces opinions (Progoff, 1953, pp.90-91). In short, the 'Anima' is personified with the feminine characteristics whereas the 'Animus' is personified with the masculine characteristics (Jung, 1959, paras.20-27).

It needs to note that "the integration of the Shadow, or the realization of the personal unconscious, marks the first stage in the analytic process ... without it a recognition of Anima and Animus is impossible" (Jung, 1959, para.42). They become apparent to the 'Shadow' through the reflections or the incitements of 'consciousness' that their encounter provides a link between 'consciousness' and 'unconscious' (Sazyek, 2013,

p.1109). Indeed, they show themselves in a 'symbolic' way in which it could be impossible to be sure about their 'meanings'. To add, they become noticeable in the 'symbols' but it does not mean that 'symbols' randomly exist; they are not arbitrary at all, actually. They always need to be uncovered thus "the interpretation necessarily involves a process of conversion or reduction of unconscious manifestations to the terms of consciousness"; that is to say, for these interpretations, "the conversion of unconscious symbolism" is considered as favor (Progoff, 1953, p.136).

That is why Jung focused on 'symbols'. This makes him contemplate the 'symbol formation' that takes place "either in the psyche of the individual or in the groups as a whole"; in the former, "the unconscious may express itself in the art, dreams of all sorts" while, in the latter, "unconscious products emerge in the form of myths, saga, fairy tale" (Progoff, 1953, p.135). For this reason, Jung studied on the interpretation of serial dreams having some messages or 'meanings' in their contexts peculiar to the individual or even groups of individuals such as societies. Like all the crucial periods of a life time, as mentioned before, it assists the development of personality and the individuation process, too (the nature of the dream series has a tendency to change throughout the time in which a person is having different experiences (Progoff, 1953, p.139)). Like in these dream series, this is applied to all 'symbols' which seem to have no certain 'meanings' at first, but rather to gain some 'meanings' in particular contexts. Remember the previous example about 'house' which has been existing in different ways throughout history according to the changes in the architectural styles and in the planning paradigms: in this case, 'house', manifested as a tent or as a skyscraper, is indeed the 'symbol' of 'home' or 'shelter' by bearing the 'meanings' of warmth or safety, or privacy, or luxury, or anything else in any other context.

Let's end the subject here by adding one more thing that needs to be mentioned: it is the whole of the parts or the characters or the 'totality of personality'. To explain it, it would be good to return to the point where the conflicts occurred in the complexes by leading to the changes were talked and to continue from there. At the time any conflict between the opposites is resolved, the harmony is established in the psyche: it is the formation and the development of the 'Self' (Progoff, 1953, p.153) called as

"total personality" (Jung, 1959, paras.1,9). It has operations regarding the 'principle of opposites'; however, the opposites balance each other now (Progoff, 1953, p.153). Furthermore, the 'Ego' becomes the center of 'consciousness' now, by revolving around the 'Self' which is located in the center of the psyche and maintains its tenor as the midpoint (Progoff, 1953, p.153). That is the say, the 'Ego' forms "the center of the field of consciousness" with its complex entity now (Jung, 1959, para.1). It is "never more and never less than consciousness as a whole" (Jung, 1959, para.6). It stands "subordinate to the Self ... like a part to the whole" (Jung, 1959, para.9); in other words, the 'Ego' can not do anything against the 'Self' (Jung, 1959, para.10). Described "as an inner guiding factor", the 'Self' becomes the regulator that "brings about a constant extension and maturating of the personality" (Jung, 1964b, p.162) with the 'Ego' which is its high degree continuity in 'consciousness' because the 'Ego', even if not the whole, it is a part of 'personality' (Jung, 1959, para.11). Thus, it can sometimes be "assimilated by the unconscious components of the personality that are in the process of development and is greatly altered by them" (Jung, 1959, para.10). This aspect of the psyche comes forth first as solely "an inborn possibility", but it may appear a little, or develop relatively wholly throughout the lifetime of anyone: "How far it develops depends on whether or not the Ego is willing to listen to the messages of the Self" (Jung, 1964b, p.162) (Figure 2.3).

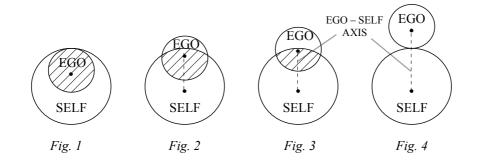


Figure 2.3: the ego-self axis which shows the ego-self separation appearing in the course of a psychological development²³ (source: Edinger, 1960, p.4) (redrawn *by the author* as the same as the source)

²³ It illustrates the 'individuation' process which starts at birth and lasts throughout life in which the 'Ego' becomes 'conscious' through the awareness of the separation from the 'Self'. The rightmost one in the figure (named as Fig. 4) shows the theoretical limit of this process, which means that there is no communication between the Ego and the Self. (see: Edinger, 1960)

As a result, all refer to 'individuation' or the course of 'personal development', which means that both the conflicts between the opposites and their achievements for the balance situations and harmony are important, and that there is a cycle which is executed with all the operations repeated over and over again through the different life experiences. Thus, it could be said that all draw a 'schema' illustrating the own conceptions of Jung and illustrated by him to be used as a way for approaching to 'personality', to the psychology of an individual, and to all psychic processes, with 'the concept of archetype' (Figure 2.4).

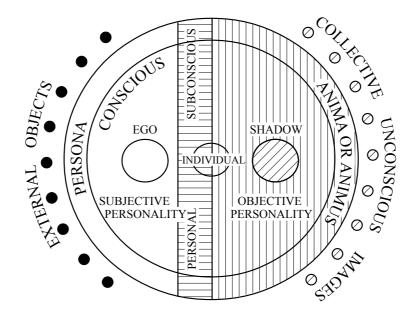


Figure 2.4: a schema showing the levels of psyche of an 'individual'²⁴ (source: Jung, 2012, p.138) (redrawn *by the author* as the same as the source)

²⁴ "... the world of external objects, is the persona, developed by the forces from within and the forces without in interaction with one another. We may think of the persona as the bark of a conscious personality. ... it is not wholly our choice what the persona shall be, for we can never control entirely the forces that are to play on our conscious personalities. The center of this conscious personality is the ego. If wee take the layer back of this ego, we come to the personal subconscious. This contains our incompatible wishes or fantasies, our childhood influences ..., in a word all those things we refuse to hold in consciousness for one reason or another, or which we lose out of it. In the center is the virtual nucleus or central government, representing the totality of the conscious and the unconscious self. Then we come to the collective unconscious as it is present in us -that is, the part of the racial experience which we carry within us. It is the home of ... [the things ceasing] to serve us. In this region another virtual center often turns up in dreams. It is a minor figure of oneself usually projected on a friend ... I have called it the shadow self. ... We can speak of the conscious ego as the subjective personality, and of the shadow self as the objective personality. This latter, made up of what is part of the collective unconscious in us, carries the things that appear in us as effects. For we do have effects on people which we can neither predict nor adequately explain." (Jung, 2012, pp.138-139)

To sum up, as Jung assumes, the human psyche could be regarded as having full of psychic energy emerging from the tensions between the various opposites which stand for the 'archetypes-archetypal contents' and form the 'autonomous complexes', and these complexes could be considered as being composed of the things in either 'conscious' or 'unconscious'. In Jungian psychology, they have major influences on 'individuation', that is, 'personality development' of an individual, by facilitating its description and comprehension (this refers to the 'personality types'²⁵ proposed by him). For this reason, Jung used them in his works. What is more, they have also effects on both the groups, that is, the social-individuals or the societies, and their built environments. In line with this, it becomes possible to use them in any study related to the human settlements as any exists and develops by coming out into the outer world as a 'manifestation' of any 'expression' which (re)presents the self or the inner realm of psyche, through the interactive relations of the humans, and as it acquires social dimensions beyond its physical and spatial ones in this way.

All in all, up to this part of the chapter, 'sign structure' was handled on one hand by reviewing Saussurean Semiology and Peircean Semiotics, and 'deep structure' with its terms was handled on the other by reviewing Jungian/Analytical Psychology in which 'the concept of archetype' was included with its related and complementary theory, that is, 'the personality development' or 'individuation'. All were discussed by considering the human and environment relationship; however, there needs an intellectual discussion which can provide a holistic view of this relationship. Hence, in the following part of the chapter, this will be covered in detail by focusing on some of the urban and architectural components each of which will be considered as a 'sign', associated with 'symbols', and with 'archetypes and archetypal contents'. Hereby, it would be possible to criticize the theories, put forward for the urban and architectural environment, in a relationship with Semiology/Semiotics and Analytical Psychology; in other words, with 'sign and deep structures'. At the end, this chapter, that is, the 'theoretical framework' of the thesis, will be completed.

²⁵ As a complementary continuation of this concept, he accordingly developed a theory of 'personality types', which helps him in his works. There are eight types formed through the associations of four functions, that is, 'thinking', 'feeling', 'sensation', 'intuition', with one of two main psychological/ characteristic structures, that is, Introvert' and 'Extravert'.

2.3. Deep Structures of a Built Environment throughout History within a Semiological/Semiotic Framework

Up to the this part of the chapter, 'sign structure' and 'deep structure' were handled in a relationship with not only the approaches of Saussurean Semiology and Peircean Semiotics but also 'the concept of archetype' of Jungian/Analytical Psychology, by focusing on the human-environment relationship which is one of the main matters of urban and architectural theories. From now on, a discussion on 'built environment' will be covered by considering some urban and architectural components as 'signs' and by associating them with 'symbols', and 'archetypes and archetypal contents'.

By the way, 'built environment' is mostly used to designate a settlement constructed physically, spatially, and socially as a place where the humans can live and sustain their lives together, since they relate to each other to meet their needs, for example, 'to be safe', and as a place which offers them to have the desired and needed life experiences within individual and social relations through its many miscellaneous components such as buildings, interior and exterior spaces, paths, and greenery, etc. Based on these relations, namely, according to the quality and quantity of human associations, a 'built environment' diversifies hierarchically into different types such as temporary settlements, villages, towns, suburbs, neighborhoods, and cities. For example, cities have had progressions from household to community by supplanting the family or tribe structure (Schenk, 2017, p.54). Without any doubt, as a settlement, with the most population, cities, having several components, are widely experienced and highly preferred places in all the times. Accordingly, the word 'city'

comes from the Latin *civitas*, which has its roots in the Greek word *polis*, referring to a 'ring-wall' ... [as it is believed] that the city grew inward from the wall to the center, the circumference as something of the center of the community. The word *polis* has its etymological roots in Sanskrit cognates, signifying 'runny, to pour, flow, fill, flood, overflow', as well as associations to 'many, poly, throng, and crowd'. *City*, archetypally speaking, would be a flow of multiplicity within a ring wall. (Schenk, 2017, pp.53-54)

In addition to the idealizability of a city as a 'ring wall', it is likened, in a similar way, by Jung, to a 'temenos' which is an enclosed land, or a sacred circle, where everyone can be themselves without fear (Jung, 1953/1968b, para.105). It is a place

of survival and safety, making sense of a '*shelter*', like a mother's womb where the vulnerable little body is kept off from danger and its safety is ensured. As a sign of a '*shelter*', it is the manifestation of the Anima that stands as the caregiver like mother archetype; or it is the manifestation of the Animus which stands as the protector like father archetype. In parallel with 'temenos', city is, then, in the sense of a '*shelter*', a caregiver and protector, too, with its walls or its borders that function as walls. It is a complex with its Anima and its Animus, both of which manifest many expressions related to itself such as its center and surroundings, its citadel and gardens, and its architectural objects and urban areas; the integration of all maintains the city.

For this integration, indeed, many architectonic activities are needed. These activities masterfully conceptualize the enclosed units of space within boundaries, like in the 'ring wall'. All these urban and architectural spaces are designed in forms embodied functionally with materials through some components by ending up with urban and architectural things, and they are built with the organization of these components and things by generating any urban and architectural environment. These environments, acquiring physical, spatial, and also social dimensions hereby, become places where lives are sustained and experiences are lived by the humans, both individually and more socially. These components, fundamentally involved in the organization of a built environment, have great roles in its conceptualization, designing, planning, construction, experiencing, and even its change.

However, there have been different thoughts on which of the urban and architectural components are actually the fundamental ones of a settlement. From the beginning of the theoretical discourses on the architectonic spaces, each has been propounded differently with the certain standpoints of some architects, urban designers, and city planners, each of whom made their decisions in accordance with the dominant and accepted urban and architectural styles, designing and planning paradigms, and the intellectuality in their eras. At this point, it would be good to mention briefly about some of them chronologically, so that it would be helpful to gain an insight about the 'deep structure' of a 'built environment' through the components assumed as 'signs' (semiological/semiotic), or the manifestations of 'symbolic archetypal contents'.

2.3.1. Urban and Architectural Components throughout History

Let's try to explain starting from ancient times; for example, any temporary cave-like constructions, in that, they could be considered as the first components of the built environments of those times. At many sites of the prehistoric times, there were some common components which could be categorized in four: the first, 'stone or timber constructions' that form usually circular layouts such as menhir, dolmen, cromlech, corbels, and 'monuments', predominantly religious, such as sanctuary, temple, and tomb; the second, 'earthworks' such as hillfort, temenos, tumulus, and mounds; the third, 'houses' filled with many works of art and ornaments, containing some of the architectural components such as room(s), roof, fireplace, and openings used both for entry-exit and for smoke removal; and the fourth, 'open areas' that perform important sociocultural activities such as rituals, and that provide transportation or shopping. For the ancient Greek period, afterwards, it could be said that, with an inference from Vitruvius's descriptive writings of on architecture (De Architectura Libri Decem/The Ten Books on Architecture), a city, in the context of its formation, exits mainly through (firstly, the construction of) 'fortification', (then, the apportionment of) 'lots with laid out alleys and determined streets', (after that, the selection of sites for) 'public places' (such as temples, forum, and all others), and (finally, the constructions of) 'houses'; hereby, healthfulness and sustainability would be ensured for the city (Vitruvius, 1914, pp.16-190). In fact, in the antique cities of that period, there was one main component that seemed to have inspired ancient architecture, which was widely favored and used in architectures and urban areas. It was the 'column', being quite remarkable and characteristic urban and architectural thing with its three parts, that is, 'base', 'shaft', and 'capital', and with three other things that complemented it, that is, 'crepidoma', 'entablature', and 'pediment'. However, in the Medieval age, marking the period from Greek to Romanesque and Gothic, 'column' turned into 'wall'. In addition to this, many new components began to emerge, which formed a different silhouette in the city. For example, 'castles', and 'cathedrals' with 'stained glass windows', 'flying-buttresses', 'rib vaults', and 'rounded/pointed arches' were built, instead of the temples which were the buildings of antiquity. Moreover, freestanding houses of the previous period were replaced by 'compact building blocks' with 'multi-storey' and 'irregular roof lines' (Gutjahr, 1999, p.29). Regarding its architectural features, it could be said that the medieval city (more precisely, town) was generally formed in 'compactness' and 'verticality' with 'religious spirit' (Gutjahr, 1999, p.27). It was dominated with three components: 'secular ones' that were castles or fortresses (palaces, courts) with towers; 'church ones' that were mainly monasteries and cathedrals (chapels, cloisters, and churches) where religious lives were sustained; 'civic ones' such as fortifications (walls, gates, moats), town halls and squares (public gathering places), market places (streets and centrals), and 'houses' with individual walls, functionalized floors, gable and turrets, backyards/ gardens; and 'streets' (Gutjahr, 1999, pp.28-32). After the long Medieval period, it was the time of Renaissance, and one can notice that the architectures in the period seemed to be the renewal of those of the ancient Greek, and that the points of Vitruvius were reviewed and reconsidered, by L. B. Alberti on his books (De re Aedificatoria / On the Art of the Building in Ten Books / Ten books on Architecture). It could be inferred from the books that the fundamental components of Renaissance architecture could be categorized as 'region' (location), 'seat or platform' (site); 'coverings' (wall, column, and roof); 'apertures' (openings like window and door); and 'stairs' (Alberti, 1955, Book I; Book III; Book IV), and that the fundamental components of Renaissance city could be listed as 'city walls', 'columns' (arcades and porticoes) in the context of entrance; 'the temples and public places' (or generally all kinds of buildings); and 'ways' (Alberti, 1955, Book VII; Book VIII). Three centuries later, on another hand, the fundamental components of architecture were designated by M. A. Laugier (Essai sur l'architecture/An Essay on Architecture) through his own conceptualization, that is, 'primitive hut', which is based on his thought meaning that "All the splendors of architecture ever conceived have been modeled on the little rustic hut" (Laugier, 1977, p.12). For him, "The pieces of wood set upright have given us the idea of the column, the pieces placed horizontally on top of them the idea of entablature, the inclining pieces forming the roof the idea of the pediment ... which are essential to the composition of an architectural order" (Laugier, 1977, p.12). This made him to come to a conclusion: "in an architectural order only the column, the entablature and the pediment may form an essential part of its composition ... suitably placed and suitably formed, nothing else need be added

to make the work perfect" (Laugier, 1977, pp.12-13). It could be said that the fundamental components of an architecture are (vertical) 'columns', (horizontal) 'entablature', and 'pediment' (like a triangular pitched roof). In addition, he also touched on the fundamental components of a city which, for him, needs to be designed and planned by considering the 'entrance' (to city and the way to its grand plaza), (the dispositions of) 'streets' (outlining the districts according to the plaza and greenery), (the decoration of) 'buildings' (in a relationship with the streets), and (the embellishing of) 'gardens' (showing a way for the street patterns) (Laugier, 1977, pp.237-273). However, a criticism was made against him by G. Semper who thought that the primitive hut extends to the first basic shelters and even caves. Therefore, he refused the classical architectural theory which allows the changes from the wooden hut model to the Greek stone temple model, and he noted his thoughts on his book (Die vier Elemente der Baukunst/The Four Elements of Architecture). For him, there are four fundamental architectural components: 'hearth' (metallurgy), the one being "the first and most important, the moral"; 'roof' (carpentry); 'enclosure' (textile, weaving); and 'mound' (earthwork) (Semper, 1989, p.102). Indeed, a lot has changed by Modern times. At those times, a manifesto on modern architecture was presented by Le Corbusier (Vers une Architecture/Towards an Architecture). This architecture, according to him, could essentially depend on five components which manipulate the architectural space through 'plan', 'surface', and 'mass' by abstracting it under the controls of the regulating lines: 'pilotis'; 'roof garden'; 'free design of ground plan'; 'horizontal ribbon window'; and 'free design of facade' (see: Le Corbusier, 2007). In addition, he also had ideas for urban scale (La Ville Radieuse/The Radiant City). A city, according to him, could be divided into sectors in terms of its functional zoning that results in horizontal streets and vertical buildings, and they could be listed as the components of a modern city: 'transportation', 'commercial'; 'business' (industrial); 'entertainment' (leisure); and 'residential' (Le Corbusier, 1967). On the other hand, a city could also be categorized, rather than being divided in terms of a functional zoning, according to a spatial hierarchy in terms of a territorializing, as O. Newman thought with his concept of Defensible Space (Creating Defensible Space). He proposed some criteria for the physical layouts of a built environment to ensure that people and their residential areas, their dwelling units, and their homes become safe

and under control; in short, to provide security not only for the exterior of the buildings, such as 'grounds' and 'streets', but also for the interior, such as 'lobbies' and 'corridors' (Newman, 1996, p.9). It could be inferred that this should be considered in the context of 'territoriality' (the others are surveillance, image, and environment), especially, in point of the definition of 'individual or personal space' which is an invisible covering of a human body for its privacy and safety. In accord with this space, all the other spaces are hierarchically defined as either 'private', 'semiprivate', 'semipublic', or 'public' (Newman, 1996, p.15). This matter of 'individual/personal space' and 'territoriality' had actually been mentioned by J. D. Porteous (Environment and Behavior: Planning and Everyday Urban Life) who identified this space with reference to 'home' by considering it as one zone of spatial leveling. For him, this leveling actually includes three types of zone, connected and intertwined very well: 'personal space as micro-space'; 'home-base as meso-space', that is, the residential spaces or the neighborhood areas defended actively; and 'home-range as macro-space' referring to the behavior(al) settings through which the personal lives are formed (Porteous, 1977, pp.28-30). In other words, the first is the comfort zone of an individual; the second is the environment in which one lives; and the third is the area where anyone compensates the needs (Steadman, 2016, p.53). In a sense, all produce the images of a built environment, just as K. Lynch (The Image of the City) believed that a city is a composition of many overlapped images. In that, it has five fundamental components constructing together its spatial form: 'paths' that provide customary, occasional or potential moves, and intermediate connections between the other environmental components maintained along them; 'edges' that break the continuity, and organize the areas with the generalized features; 'districts', being the sections of the city, each of which has common and identifiable characters; 'nodes', being the strategic spots which have functions such as shifts, transitions, crosses, concentrations, condensations, and reversion; and 'landmarks' that stand as remarkable, defined and reference object, and symbolize any content particular to the city (Lynch, 1960, pp.46-48). In an extent, they could be abstracted according to the coordinate system or to some geometric entries such as not only verticality and horizontality but also 'point', 'line', 'shape', and 'volume'. All are the fundamental components of an architecture, for F. Ching (2007) (Architecture; Form, Space, and

Order). Or, they could also be conceptualized as the visionary segments of a city, perceived and interpreted while experiencing this city, which form together the whole city. It seems that this was elaborated, in a way, with the concept of Serial Vision, by G. Cullen (The Concise Townscape). It implies the engagement of these 'segments' in the sense of uni/formation; in other words, the 'sudden jerks' which bring them together, because human imagination has the ability to turn the city into a coherent drama consistent with the life experiences provided by itself (Cullen, 1961, pp.9-16). When the notion of time is considered, it could be handled, accordingly, in line with the Concept of Permanence, which was conceptualized by A. Rossi (The Architecture of the City). It covers the continuation of the primary components of the city by considering its formation and the changes faced throughout history, and by focusing on the 'individual' and 'collective' artifacts, or 'housing' and 'monuments' (Rossi, 1982, p.6). The former is 'residential district' having conventional functions related to usage, and the latter is 'monument' having symbolic function related to time dialectic growth: both would be persistent and primary in the city (Rossi, 1982, p.6), and enable to understand the city as a whole or in isolation (Rossi, 1982, p.59). They connect 'forms', that is, the architecture of the city (Rossi, 1982, p.92), with the intermediary components such as 'streets' and 'plans' by which their meaningfulness requires to be provided (Rossi, 1982, p.59). This is the characteristics of the skeleton of the city, analogically designated by him (Rossi, 1982, p.6). It refers to the history and links the city to its history (Rossi, 1982, p.5). It could be used for the description of the general structure in the city; throughout this structure, many architectural and urban spaces are distributed hierarchically from 'personal spaces' to 'public spaces' in order to offer the humans everyday experiences. In contrast to Porteous's emphasis on 'personal spaces', J. Gehl (Life Between Buildings: Using Public Space) had emphasis on 'public spaces'. For him, throughout history, the major and fundamental components of the human settlements are the 'streets' and the 'squares' (the outdoors with their 'adjacent facades', several 'levels', and 'landscape'), around which the whole city together with all its functions are organized (Gehl, 2011, pp.85-162). Streets signify the linear patterns of the human movement in a built environment and squares signify variable patterns of the human perception (Gehl, 2011, p.89). This is almost the same as the views of R. Krier; that is to say, 'streets' and 'squares' (with the elevations placed along them) are, fundamentally, typological and morphological components of the urban spaces (Krier, 1979, pp.15-25). In addition, 'interiors', that is, the typology of interior space, the art of composing space, ceilings and floors, columns and piers, door, window, and staircases; 'facades', that is, entrances and portals, arcades, ground floors, bay windows, balconies, loggias, roof and attic storey; and 'ground plan and building form', such as square buildings, rectangular buildings, t shaped ground plans, l type, u type, building corners, interior courtyards, outside staircases, prospect, towers and monuments, were designated by him as the components of architecture (Krier, 1992, pp.25-95).

In fact, many components other than all of them, such as 'building', 'underground', 'greenery', 'yard', 'center', 'neighborhood', 'bridge', 'mosque', 'külliye', 'madrasa', 'temple', 'shrine', 'monastery', 'castle', 'palace', 'dome', 'roof', 'balcony', 'tower', 'storey', 'shikhara', 'stupa', 'door', 'gate', 'iwan', etc. could also be added to those mentioned here, by concerning any paradigm, any intellectual approach, or any urban and architectural movement and style. In consequence, they could be regarded as differentiated groups; for example, as mentioned before, in the context of history of Western Architecture and Urbanism whose styles are commonly preferred and discussed in the theoretical framework of history of architecture and city; or, in the context of religions, dynasty, emperorship and empire canon, and region with its vernacular facilities, such as Byzantine or Arabesque influences in the Ottoman cities with Islamic way of life, Feng Shui in Far Eastern architecture, Japanese architecture of the Heian and the Edo periods, Vastu Purush of Hindu and Zen principles of Buddi on Indian cities and architecture, and Seljuk and Persian architecture, etc. In brief, all of them, as urban and architectural components of a built environment, considered as fundamental, could be listed as in the following tables (Table 2.3 and Table 2.4).

However, the important thing is the essence of these components making sense of the human behaviors and their life experiences because it signifies their causality and meaningfulness. Hence, this needs to be discussed deeply, and in a 'semiological/ semiotic' way with 'archetypes', and through the assumed 'deep structure' of a 'built environment' in a relationship with 'sign structure', which will be covered now.

 Table 2.3: some of the fundamental components of architecture and city

 in the context of coordinate system and some geometric figures (prepared by the author)

Graphic Communication (coordinate system and geometric figures)	Fundamental Components of Architecture Fundamental Components of City
Verticality	column, wall, buttress, roofing, level, storey, door, window, stair, pilotis, facade, landmark, statue, gate, attic, cellar, floor, underground, greenery including trees, monument, all buildings such as housing, tower, castle, palace
Horizontality	base, pediment, atrium, roof, arcade, wall, door, window, arch, vault, yard, garden, room, land, site, ground, entrance, facade, ceiling, floor, terrace, fortification, fortress, street, promenade, lot, block, private and public spaces, gate, square, hall, landscape, border, territory, graveyard, center, underground, greenery, path, edge, district, node, corridor, lobby, way, colonnade, forum, portico, harbors, court, neighborhood, suburb, cityscape, topography, buildings such as housing, castle, cathedral, palace, monastery, theater
Point	column, hearth, arch, vault, level, entrance, pilotis, tower, center, node, gate, door, monument, landmark, statue
Line	wall, floor, stair, entrance, territory, fortification, fortress, street, promenade, gate, border, path, edge, way, corridor, colonnade
Shape	roof, vault, arch, dome, wall, door, window, yard, garden, land, site, entrance, ground, facade, ceiling, floor, platform, terrace, lot, block, fortification, square, hall, topography, landscape, district, forum, graveyard, park, greenery, neighborhood, harbor, suburb, enclave, cityscape
Volume	room, dome, storey, yard, garden, staircase, balcony, public and private spaces, square, hall, underground, landmark, corridor, lobby, forum, court, attic, cellar, central area, monument, buildings such as housing, temple, tower, castle, cathedral, palace, fort, monastery, theater

Table 2.4: some of the fundamental components of architecture and city
that have been emerged throughout history (prepared by the author)

Throughout History	Fundamental Components of Architecture
Antique	building, column with base-shaft-capital, crepidoma, entablature, pediment, atrium, fresco, stucco, hearth, roof, enclosure, mound
Medieval (Romanesque and Gothic)	column, wall, arch, stained glass window, flying-buttress, vault, multi-storey, irregular roof, house-wall, gable, turret, backyard, garden, room
Renaissance-Baroque	region/location, seat/platform/site, coverings like wall- column-roof, aperture like window-door, stair, entrance
Modern	pilotis, roof garden, free design of ground plan, horizontal window, free design of facade, plan, surface, volume
	interior, ceiling, floor, column, pier, door, window, staircase, facade, entrance, portal, arcade, ground, balcony, loggia, roof, attic, plan, corner, courtyard, garden, cellar
Throughout History	Fundamental Components of City
Antique	fortification, lot, street, promenade, temple, forum, public space, house, entrance to city, gate-wall-tower, building, garden, theater, bath, harbor, colonnade
Medieval (Romanesque and Gothic)	cathedral, castle, compact building block, house, fortress, palace, court, tower, monastery, fortification, city-wall, gate, moat, town hall, square, market place, street, topography, landscape with hills and river-bank
Renaissance-Baroque	city-wall, column, arcade, portico, temple, public place, building, path
Modern	commercial, business/industrial, entertainment/leisure, residential, street, building, ground, territory, landscape, individual/personal space or micro space, home-base as meso-space or living environment, private, semiprivate, semipublic, public spaces, home-range as macro-space, path, edge, district, node, landmark, segments of city, cityscape, monument, housing, square, facade, level
	enclave, block, super-block, neighborhood, lot, island, fabric, district, street, building, center, suburb, greenery, underground, graveyard, border, territory

2.3.2. Meanings of the Urban and Architectural Components

Previously, urban and architectural components of a built environment were handled according to some standpoints as an entry to the discussion. Here, to focus on their essence, some of these components, considered as fundamental in a general sense and preferred in order for talking easily about their deep meanings in 'a semiological/ semiotic way', as listed below, will be deeply explained through their assumed 'deep structure' in a relationship with 'sign structure' (see: Table 2.5):

- 'territory'
- 'street'
- 'stair'
- 'column'
- 'wall'
- 'roof'
- 'door'
- 'window'
- 'house'
- 'city'

However, there needs a brief introduction, first of all. The essence of all urban and architectural components which make sense of the human behaviors, thoughts and feelings, and life experiences -especially in terms of the desire for safety and of the act of doing anything to survive- signifies their 'causality' and 'meaningfulness'. All of the components are produced through the architectonic activities by being inspired from not only human physiology such as the appearances or bio-functions but also the nature itself which gives an idea about the shapes and forms, and also about the properties of the components for designing and building an urban and architectural environment. For example, the first thing imagined in nature is the uneven land such as hills and mountains, then, the mainland as its comparison (Frutiger, 1989, p.24). It emphasizes that the field of human vision is extensive in the horizontal dimension much more than in the vertical one because human movement is almost horizontal whereas verticality comparably refers to being active (Frutiger, 1989, p.25); in other words, the horizontal is the given one while the vertical needs to be made (Frutiger, 1989, p.26). This forms the basis of the architectonic activities, indeed. In addition,

many other examples can also be given: being under the hat-like branches of a tree recalls a tent-like cover or cloth over head like a roof, or its trunk reminds of a body like a column that carries the roof in the way a tree holds its branches, or mountains ranges and oceans around the continents seem like the walls that limit the area and prevent the access, or a cave which provides an escape from the nature and a return to it through its openings stands like a private *shelter* with a door-opening (Yavuz, 2001, pp.2-3). All explain how all these components are inspired by their sources, in 'denotative', 'connotative', and 'deep psychological' ways.

This gave rise to the symbolism which underpins social conventions and cultural mechanisms. For example, archaeologists have recovered some affirmations about color symbolism outside the Southeast, especially in the Old World (Rodning, 2010, p.63). For M. A. Owoc (Munselling the Mound: The Use of Soil Colour as Metaphor in British Bronze Age Funerary Ritual), "yellow clay mound caps in Bronze Age burial mounds in the British Isles were associated with solar alignments and solar symbolism" (Owoc, 2002, cited as in Rodning, 2010, p.63). In Jungian psychology, solar symbolically means transformation (Jung, 1959/1968a, para.240) that possibly refers to the consecutive movements of sun and moon through which one appears while the other becomes invisible, or refers to the cycle of two opposite things whose state of being active or latent changes mutually. Thus, it represents totality and the passage of time and life, and even, life and death, or strength and lack, or clearness and blurriness. It could be interpreted that these burial mounds, considered as a kind of manifestation expressing death and dark, seem to be trying to find the balance through this clay as its color points to the sun associated with some psych-ic/ological (archetypal contents) such as continuation of life and light. For T. Darvill (White on Blonde: Quartz Pebbles and the Use of Quartz at Neolithic Monuments in the Isle of Man and Beyond), "the widespread presence of white quartz cobbles and boulders in passage graves and causewayed enclosures in the Neolithic British Isles" could possibly symbolizes "purity or ritual space in some cases" since it connects "these Neolithic ritual spaces to places in surrounding landscapes that were sources of quartz and that had symbolic power as permanent places in the regional cultural landscape" (Darvill, 2002, cited as in Rodning, 2010, p.63). It could be said that such

an attempt to make a connection with the landscape gives the feeling of being at mom's home. For G. MacGregor (Making Monuments out of Mountains: The Role of Colour and Texture in the Constitution of Meaning and Identity at Recumbent Stone Circles), "raw materials were chosen for recumbent stone circles based on colors and textures that enabled people to create replicas of nearby mountainous landscapes" (MacGregor, 2002, cited as in Rodning, 2010, pp.63-64). It could be inferred that the circles with their properties which resemble to the feature of nearby mountains evoke the feeling of a homeland borders of which are determined by the mountains. Other than these affirmations, there are oral traditions and documentary evidences: they imply that townhouses at Coweeta Creek in Appalachians have a symbolic connection with the Mississippian earthen platforms, by "relating symbolic points in the cultural landscape (mounds and townhouses) to permanently visible landmarks (mountains) in the natural landscape", which manifests the built, burnt down, and renewal of the town itself (Rodning, 2010, p.62). In detail, the series of these townhouses form a mound "composed of the burnt and buried remnants of successive stages of this public structure" (Rodning, 2010, p.67), and any of them represents "a form of mound building and an effort to connect each stage of this public structure to its predecessors and successors, thereby creating a sense of stability within a rapidly changing cultural landscape" (Rodning, 2010, p.70). In short, the similarity in their physical shapes and spatial forms gains importance in terms of social and cultural relations based on the life experiences. It is enriched with a set of color symbolism, embedded within the sequence of these townhouses, whose meanings are associated with red and white and also with black: all connote the fire whose blink, "starting out with red ... flames and, eventually, giving way to white embers and ashes, and, then, smoke and blackened", refers to "cyclical practices of building, burning, burying, and rebuilding ceremonial structures" (Rodning, 2010, pp.62-70). That is to say, manifesting the life-cycle, the Coweeta Creek townhouse mound presents the meaning of "cycles of building, tending the fire in the townhouse hearth (red), burning the structure down (black), burying and rebuilding it, and spreading white clay and sand across surfaces in and around the townhouse itself" (Rodning, 2010, p.70). In short, anything pertaining to a built environment has many meanings touching on the human lives physically, spatially, and socially.

Now, let's turn back to some of the fundamental urban and architectural components preferred for this session and then mention about their 'meanings' associated with the 'archetypal contents' through a discussion that is based on the interpretation of these components which are the 'signs' of the 'symbols', that is, the 'manifestations' of the related 'archetypes' of these contents. At this point, it would be helpful to consider all of them as one of the abstract figures such as point, line, triangle, square, and circle, in that, their interpretations depend, in some extent, on the perception which uses a 'language' turning all into these figures as this language mediates in the designing and building of an urban and architectural environment. For this reason, keep them in mind briefly. To explicate, a point indicates certainty, intersection, mean, and locality (Frutiger, 1989, p.23). From one point to another, there forms a line; accordingly, the arrangement of three forms a triangle, and of four forms a square or a rectangle, or the formation of many forms a circle (Frutiger, 1989, p.24). A line goes forwards or backwards and continues to an end or to a beginning directly, curly, or spirally. A triangle manifests structural stability by standing strong, as if stuck to the earth. A square provides balance dramatically; it waits unlike the line which elongates way far. A circle is inevitably egocentric; thus, it distributes and collects equally. It means that all are the references meaningfully guiding the humans in the environment.

Territory

A 'territory' defines an area held to establish a settlement on a piece of a land, where this settlement has developed throughout history because to inhabit in a territory is a way of maintaining security, which is a psychological state of being. It fabricates the division of space by presenting a layout in line with some important references such as natural topography. For example, the times after the conquest of Constantinople, the Ottoman planned and consequently implemented a particular project for the city, in which "the former nodal points of Byzantine Constantinople ... were almost all preserved; the main thoroughfares kept to their ancient courses as a topographical necessity" (Kuban, 2011, p.265). In fact, that shadowy layout was used for the new city, that is, Istanbul, where Islamic hierarchy superimposed on the Constantinian urban fabric, just as how Pagan, Hellenistic, and Christian cultures were previously penetrated the peninsula (Honour & Fleming, 2005, p.309). In addition to this, that territorial land-use strategy was further applied at the sites of the previous churches and forums (Kuban, 2011, pp.253-250). Thus, Ottoman complexes were located in the holy places of Constantinople. All seemed to give the impression of continuation of the past, a bit. For example, the Fatih complex, built in honor of Mehmet II, was designed in a rigid geometry with the hierarchic inner and outer spaces on an introverted layout as if it were a reinterpretation of the library Alexandria with Italian Renaissance ecclesiastical activity (Kafescioğlu, 2009, pp.72-73). Its both inner and outer spaces, organized through the defined territories, were based on the idea of providing hierarchic privacy. There included gardens, which recall the 'paradise'. It means that the complex became a representation (Kafescioğlu, 2009, pp.35-184) as well. Moreover, it was the Fatih Complex, symbolizing not only the conquest but also the new urban life with its new social structure, by changing the cityscape. That is why the courtyard belonging to the Fatih Mosque functioned as a 'square', in a sense of an old 'forum', where the intense social life was experienced (Kuban, 2011 pp.247-248). In short, in a territory, the historical layers of a settlement "appear as a primordial and eternal fabric of life, an immutable pattern" and "the changes ... in the land on which ... [everything] leave their imprint become signs of this daily life" (Rossi, 1982, p.22). That is to say, a territory implies a 'border' describing a specific area where the social lives are sustained by giving the feeling of belonging, hereby, it distinguishes itself from the others. It points to the individual and social lives of the inhabitants, by protecting them from strangers or hostiles.

It promises for the ownership and provides to dwell, or urges to abandon. It compels the self to stay in these safe homelands or, conversely, to migrate to a new and safer one by abandoning the homelands after any change or unforeseen and undesirable circumstance. Leaving means exploring, adopting a new area, thus entering a new territory, which gives an opportunity to get to know a variety of new things; for example, encountering with a new society or a landscape. This is a kind of journey to the unknown, to a place desired and needed or to a place to belong to ('a change is as good as a rest'/'tebdili mekan'), and it revives the ideals through mental imaginations and allows many new experiences by enriching social relations. As a result, it enables individuation. It contains social and psychological meanings related to reminiscence, regression, exclusion, or acceptance. That is to say, a landscape has impressions on the psyche in the way that the humans have relationships with it. The earthy and green landscape is just a garden where something blossoms as a new sprout from underground and comes alive by servicing foods and offering *shelters*. It is like a mother, as Jung states, "The mother who gives warmth, protection, and nourishment is also the hearth, the *sheltering* cave or hut, and the surrounding vegetation" (Jung, 1964a, para.67). Thus, "both psyche and land are ... molded, and transformed by the experience" (DeArmond, 2017, p.48) interactively by resulting in a psychological growth and personal development. It symbolizes not only *a shelter to live* but also an adaptation to belong. It provides places not only on the surface of earth but also under its ground so that it could offer to form several spaces through its physical and spatial features which have high or low and curvilinear or straight levels. It gives a way to know the earth, the world, the land, and the self in a mutual relationship.

Street

A 'street', or in a general sense a 'path', functionally provides walking, moving, and wandering around in an environment by showing the way to a destination. It has a target, an idea or a dream. It is like going on a mythical or legendary journey through the labyrinthine streets of a city or the labyrinthine paths of a settlement, to reach a destination like coming out of a 'maze', by exploring the surroundings. It assists to encounter many essential things which make sense of this exploration by allowing to look into the inner realms and to discover the self. Indeed, it aids both individuation and socialization by affecting the psychic structures and by healing the self. That is to say, it is a way of finding self-consciousness and learning social-identity through their relationships with their built environments; thus, it leads to the changes in these urban and architectural environments. For example, the journey mentioned in the epic of Odysseus, which tells stories about several compelling experiences on the way home from the Trojan War. As if it were a maze, it requires a challenge to keep

going from one part to the next, then to the final, without being lost. Remember, "Dante's journey through the circles of Hell", which "recreates the feeling of getting" hopelessly lost within the labyrinth and the tiring efforts the soul has to make in order to be saved" (Andreica, 2015, p.17). Similarly, the goal of the journey was to overcome these compelling tasks, to be able to be a survivor to shelter himself, and to be able to arrive home, which means the return to his heart(h). In the end, the victory, that is, the way to home, achieved through the efforts made by him during the journey, made him a hero because his courage and his innate behaviors helped him. Actually, the victory and becoming a hero are the manifestations of his courage and his innate behaviors, appeared in the danger of insecurity: being finally at home corresponds to being fully a new of himself (his ego) which faced those compelling experiences (the shadow) by manifesting (sign) his heroic (archetype) trait (symbol). This awoke the self-realization and the society-identification. That is to say, all his experiences refer to a journey towards his own self or his own ego-personality, to have a more developed personality to ensure the continuation of life, and to have a shelter desired and needed for a safer life. It points to the motivation to survive, to shelter, to go home, and just to live. In short, a way (of life), as in the Odysseus's journey, needs a hero to overcome the difficulties that is encountered. In this way, it teaches how to deal with these tasks by supporting personal development. In other words, it prepares each individual for a very special journey to think of the problems they have experienced lately, together with their past experiences and expectations for their future lives. Each of these ways, experienced alone or in a society, is a sign standing for a different schema having different meanings. In this context, it proposes "a kind of orientation between its two ends" which envisages "how life should be" (Barlas, 2006, pp.161-162), sustains "a meaning produced and relearned by the self" (Barlas, 2006, p.101), contributes all the needs what the life suggests, and affords "a wide range of behavior towards the satisfaction of needs" (Barlas, 2006, p.81). In brief, it is the symbolic representation of the transitional passage from one section of life to the next, connecting any individual with his/her society (Barlas, 2006, p.55). Its meaningfulness becomes only possible when its physical and spatial features are in accord with its archetypal notion (Barlas, 2006, p.79) which includes the meaning of a path entered through one door (birth) and exited through another (death) (Barlas,

2006, p.53). Through it, one tries "to rationalize our existence in the material world, but somehow we also feel that our salvation lies behind the door through which we exit this path" (Barlas, 2006, p.53). This brings to mind many circumcision bands, wedding bands, and even funeral bands, all of which start from the beginning point (generally a home) to the end (generally a mosque or even a cemetery -which refers to the last journey for the mortal remains, that is, the final destination ('pay the finallast respects'/'son yolculuğa uğurlamak')) (Barlas, 2006, p.55). Examples for such streets could be listed as, the Bora grounds in Western Australia, the Apulla grounds in Central Australia; Kungwerf in South Africa; Bal Aga Village, Bali, Indonesia; Tenganan Village, Bali, Indonesia; Todo Village, Manggarai, Flores, Indonesia; Bawamataluö Village, South Nias, Indonesia; Batoufam Village, Cameroon, Africa; Ceremonial Center in Teotihuacan, Mexico; Antioch, Eastern Mediterranean; and Causeway Circuit of Tikal, Guatemala (Barlas, 2006, pp.54-64). All these examples unconsciously display similarities regarding the notional aspects of this component, except for the cultural differences which consciously come out through the rational acts. In addition to this, there set some identifiable artifacts or (urban) architectures (megalith, temple, gate, chief's house, and tree, and so on) at their both ends, which rules the layouts of the settlement plans (Barlas, 2006, p.59). Moreover, along these paths, some others are also placed by producing a (functional) diversity that orients the settlement plans and enriches the urban and architectural entities, monumentality, physically and spatially. Throughout history, these ceremonial paths have turned into the main axis of the built environments by collecting the major and the monumental architectures along and have begun to be bifurcated hierarchically (like the different periods of life) with the variations in the degree of privacy throughout the whole of the built environments. For example, the Mese in Byzantine Constantinople or the Divanyolu in Ottoman Istanbul: it was the main thoroughfare of the city elongated as a route from Porta Charsia or Edirne Kapı on the city wall to Hagia Sofia and Hippodrome or Ayasofya and Sultanahmet Square (At Meydanı) and to Acropolis or Topkapı Palace. It was a well-defined channel for the imperial processions, military parades, and triumphal passages; for instance, one segment of this route, the part from the mansions to Divan, was used by the Ottoman pashas as a self-representation and for public-representation because its bifurcations went around the whole city and they were in the sight of the society (Cerasi, 2005, pp.189-196). Along this route, there were significant architectures combining the urban public or private functions such as Holy Apostles or Fatih Complex, Forum Taurii or Beyazid Square, market places or bazaars, Million and the Forum of Constantine or Cemberlitas, and the houses or mansions, and many others. That is to say, a street collects and connects everything that is placed along its way. It brings many of them together, such as the other ways, buildings, territories, more importantly people who roam and gather on the streets to meet needs. It becomes a 'place' where any social activity is provided. It defines public spaces such as 'agora', 'forum', 'plaza', and 'square', etc. It creates "the feeling of ... identifying the self with the society" and "the feeling of belonging to society" (Barlas, 2006, p.53). In other words, it feeds "the notion of one's onward progress in life from one point to another" which is "shared by every individual member of the group" and, in this sense, it grounds for "rituals of initiation" or "the ceremonial track" (Barlas, 2006, pp.54-55) on which progressive movements take place and the essence of life is manifested. In brief, it symbolically represents any ceremony that defines the community identity and forms social structures through individual and social relationships by which publicness and privacy are organized. It functionally arranges all urban and architectural spaces by forming a network in the built environment. In this network, not only individua(liza)tion and socialization are progressed with respect to the comprehension of the meaning of life but also all the components of a city are amalgamated concerning a meaningful wholeness (Barlas, 2006, pp.65-66).

As opposed to this, a street distributes and disconnects, as well. In other words, it supports separation other than participation, regarding the relations. It makes sense of privacy by separating hierarchically it from publicness. Its linearity that is laid from a beginning to an end defines an 'area' through which both participation and separation are enhanced in a controllable way of the access to public and private spaces (Barlas, 2006, p.86). It refers to a lifelong path; it manifests a path as the sign of life journey, that is, a way of life, with a beginning going to the end from this beginning. Thus, it ensures experiences and revives memories because it follows the past and merges it with the present, and elapses to the future by passing the spaces.

To add, a street harmonizes with nature in different forms by connecting the things, for instance, with the cosmic order. In this sense, for example, a path in a spiral form symbolizes "the understanding of space and time" by allowing a cosmic movement (Erzen, 2011, p.129). It offers such a body experience that the energy in the body could be harmonized with cosmic, or the revolutions of the planets, or the alignment of the leaves of some plants, or the bodily growth of some animals; in other words, "As one turns in circles in space, similar to ... the whirling dervishes ... one has a very different sense of space, and the body becomes in tune, with the environment" (Erzen, 2011, p.130), just like the 'platforms' of the stepped Mesopotamian ziggurats having seven-terraces each of which was dedicated to a particular planet encircling the center (Cirlot, 1971, p.333). What is more, it also makes sense of a respectful approach by circling around instead of a direct movement while moving to the center as in the case of Great Mosque of Süleymaniye in the complex in Istanbul, where "access to the entrance of the mosque becomes possible only after spiraling toward it" due to the fact that the approach is guided with the spiraling formation of the paths surrounding the centered mosque (Erzen, 2011, pp.129-130). All of them point to an unconscious connection of the body with nature at the level of consciousness.

Stair

A 'stair', or a 'step', usually allows one to reach above the ground as the humans can only walk on the surface of the earth as far as itself allows. This encourages them to reach the sky like birds to be free or to feel a rest in peace. Going underground from this surface means the dark side of death for them, and going up means the bright side of death, on the contrary. Moving away from the surface is, in fact, like moving from the mundane into another realm. It is a kind of way, but quite 'sloppy', so that it allows access to the different 'levels' of the physical and so psychic realms. Thus, it refers to gaining mental and inner awareness, just like a path ensures. For example, a fairly elongated one, which widens from a center to up to no-end by drawing circles like a tornado where it coils, captivates, gets stronger as it rises and becomes wider, that is, a spiral manifesting the cosmic order. It not only spreads horizontally over a piece of land, but also continues vertically upwards. These movements could be considered "as figures intended to induce a state of ecstasy and to enable man to escape from the material world and to enter the beyond, through the hole symbolized by the mystic Centre" as in the examples such as Gravinias (Morbihan), New Grange (Leinster), Carnwath (Scotland), and Castle Archdall (Ulster) (Cirlot, 1971, p.306). Thus, it is consciously preferred for mediation, that is, looking inside to meet the self and to find out the essence, for it is made with the efforts against gravity, as D. Frey (Grundlegung zu einer Vergleichenden Kunstwissenschaft) points that the step-wise rising of the Indian Sikhara spires accommodates with the mystic meditation stages of a yoghi who "ascends step by step on the via purgativa towards full redemption in the Nirvana" (Frey, 1970, cited as in Arnheim, 1977, p.73). In that, these steps adopt some basic ideas such as ascension, gradation, and communication among different vertical levels (Cirlot, 1971, p.312). It means moving up against gravity and climbing heights triumphantly since constantly moving upwards for a very long period of time is quite a tiring experience, and this experience results in changes in the human body not only physically but also psychologically and mentally. It leads to from bottom to top to achieve success gradually. After all endeavors, there appears finally a gift for such a talented devotion, which is a personal enlightenment that happens gradually. It allows to look at the world, or anything else, from different perspectives. It offers different views of the world and approaches to it, or anything else, differently. That is to say, it teaches how to overcome crisis and how to discover to ensure a healthy growth. It symbolizes the life journey and it provides making sense of its essence through the efforts during the way. It is a representation of life in the world, which possibly stands for a way enabling a reach up to the heaven after many endeavors.

Column

A 'column' shows off its appearance, in the most basic sense, by standing on one thing and carrying or holding anything else; in this way, it orders. It embodies a system of representation within which the relationship between body and world, man and woman, life and death are articulated (Dorrian, 1999, p.98). It diversifies as "gendered columns, ... heroic columns, virginal columns" (Eisner, 1996, p.92) since it indicates characteristic differences and particular proportions between the bodies of

man and woman, which led to the arisen of the column types and of the buildings constructed with those columns in a diversity (Dorrian, 1999, p.99). The male body is represented by the Doric column, and it seems very strong like a guardian or a hero man. In contradiction to the Doric which is the figure of well-formed man, the Ionic was developed as its counterpart which is of the woman, as Vitruvius comments, and its characteristic capital could possibly be originated from plant-like (or horn-like) form its precedents in the East, Cyprus, Egypt and Mesopotamia, as Rykwert argues (Vitruvius; Rykwert, cited as in Dorrian, 1999, pp.99-100). This leafy capital was owned indeed by the Corinthian, which "lies behind the figure of the girl" who died and buried in a place where the acanthus root sprouted as a plant (Dorrian, 1999, pp.99-101). Though it seems as if it represented a tree standing freely and beautifully by reaching to the sky and carrying its branches, leaves, fruits and nuts, according to Vitruvian account, the Corinthian is "the solitary daughter-column being enfolded in turn by the mother-(Ionic) and father-(Doric) orders" (Dorrian, 1999, p.98). All these three column types enrich the buildings, especially the temples, with the meanings such as birth, blossom, bravery, survival, protection, endeavor, vegetation, harvest, change, and continuity. In other words, all of them become meaningfully building blocks arranged through a different collection; in this way, the body imitates the world, just as they represent the body (Eisner, 1996, p.92), alone or in a society.

Therefore, a column connotes order, alignment, continuation, boundary, enclosure, partition, separation, transition and connection. It aligns orderly by maintaining a continuity. It limits, encloses, and divides or separates. It restricts the views or makes a focus on one direction. It allows transition. It provides leading to somewhere and makes connections in any direction because it becomes a reference or pivot point; as a result, it links its above and below and its front and back (Yavuz, 2001, p.15). It arises not only through its verticality as one whole but also through the relationships with the other columns by forming a united horizontality (Eco, 1980a, p.221-232). All could be resembled to the individuals in a society and to their individual and social relations in a built environment by manifesting many characteristics of the humans with their masks in the society. In other words, their togetherness symbolizes the ways that an individual relates to his/her society.

Wall

A 'wall', being a continuous opaque mass when compared to a column, divides a space in two and blocks the passages from both separated sides, unlike the columns. It conveys "the idea of rising above the common level ... of impotence, delay, resistance, or a limiting situation", which has the predominant sense of height, and symbolizes "the sensation of the world as a cavern" (Cirlot, 1971, p.362). Through different modifications and arrangements, it implements some biophysical functions such as bearing, standing, bending, folding, reflecting, and deporting (Yavuz, 2001, p.14). Hereby, it defines several spaces; at the most fundamental level, both interior and exterior and public and private spaces are configured hierarchically. In short, it is the plane where these spaces are replaced, in the context of change, transformation, and process (Yavuz, 2001, p.15). That is to say, it borders spaces like hedges by making sense of impassibility (boundaries such as city walls, citadels, fortifications); it divides spaces into many partitions that offer several differentiated functions with various facilities (areas such as rooms in a house or sections in a temple); it envelops and covers spaces by generating an interior in a way removing it from the extracted one, that is, exterior (masses such as buildings in a city); and additionally, it reflects the things on itself (the surfaces such as artificial construction or installation) (Yavuz, 2001, p.5). It even supports a punishment (such as towers, dungeon, castles that are enveloped fully by walls) (Yavuz, 2001, p.10). Thus, it manifests territory, property, ownership, (in)dependency, sovereignty, separation, division, possession, protection, hideousness, attack, punishment, captivity, and especially shelter (Yavuz, 2001, p.9).

In fact, a wall was previously the surface of stones, rocks, caves, or mountains. The architectural understanding of these surfaces developed the antique dolmens which were possibly the first experiencing of structural and spatial parallel walls (Yavuz, 2001, p.19). U. Kökden (İnsanın kendine Çizdiği Yargı: Duvar) thinks that megalith, being parallel walls, could be the first or the prior example of the wall component of an architectural construction because the constructions of the temples in Greek hills and even the houses in antique Troy were inspired from them (Kökden, 1998, cited as in Yavuz, 2001, p.19). On one hand, the horizontal one becomes heavier through

the ground by orienting the focus ahead, and on the other, the vertical one lightens up to the sky, because it is victorious, sculptural, and free, by directing any focus to its center (Yavuz, 2001, pp.19-20). In this way, both types observe and control (both the inhabitants and the settlement) for defense, freedom, and victory. Moreover, a wall blocks its front and closes its behind by dividing the spaces as front and back or one side and other side, until there appears the possibility of a transition, a movement, or an observation through any gap, hole, or opening such as doors and windows which provide the permissions only in the directions they allow. In short, even if it stretches across the ground or towards the sky, it always sets 'boundaries' by defining thus two separated spaces and it becomes an intersectional cover that tries a balance between its both sides. This balance is maintained by interior and exterior spaces or private and public spaces. To denote, interior is the one being enclosed, and confined so it is controlled in accordance with property and privacy whereas exterior is the other one being free, and unbounded so it is uncertain and uncontrollable in terms of privacy: the former refers to calmness, stability, safety, sincerity, and belonging while the latter refers to sociability, diversity, danger, and hostility (Yavuz, 2001, pp.23-25). In addition, the interior is the image of 'closeness' which manifests both 'being shut in' ('dört duvar arasında kalmak') and 'storing or collecting the memories of the past, the dreams of the future, and a lot of thoughts' (Yavuz, 2001, p.24). It is timeless metaphysically (Cappelletti, 2012, p.18) and this makes its image be associated with individual intimacy. In this closeness, any dream, any memory and thought resides, which foremost reminds of being in a house -as the chief benefit of a house is to allow peacefully daydreaming by itself (Bachelard, 1994, p.6). Only within the walls, each becomes a meaningful whole. For this reason, interior defined by the walls and experienced during the lifetimes revives the imaginations (Yavuz, 2001, p.24); just because of "enclosed areas awaken memories of objects" (Frutiger, 1989, p.34). In other words, being inside makes the space more familiar but blur; which is just like jumping deeper through the unconscious mind and then animating the things related to these interior spaces in the consciousness. Being stuck behind the walls could consequently impel unconscious to vomit, which makes this space, in turn, a place where fear emerges (Troutman, 1997, pp.145-147), for example. Or, interior turns into a place where the rules of a community or a family are displayed (Yavuz, 2001,

p.24). It becomes a nest in the sense of a home which is *sheltered* by the walls. However, the exterior which is excluded and separated from the interior by the walls could take on some similar characters and acquire the meanings that the interior has only when it is blocked by the other walls which surround itself by turning into a kind of interior. According to the anthropological point of view of P. Marcuse (Walls of Fear and Walls of Support), these walls which separate and surround are used to define a social identity (Marcuse, 1997, cited as in Yavuz, 2001, p.33); in this way, they make a territory, define a sovereignty, warn and stop the others (Yavuz, 2001, pp.34-35). In other words, this space turns into a place -as if it became relatively an interior- where groups of people are gathered with special bonds, their communal privacy is regarded, and a special way of living is adopted and sustained. This is the place in which the expression of body presence is generated through "other objectsbodies gathered in the same space" (Cappelletti, 2012, p.18). This place is free, but there is dependency (Yavuz, 2001, p.40). At this point, due to the boundary defined by the walls, all these places form a hierarchy in social relationships between interior and exterior. It means that both the interior and the exteriors have their own special facilities and both complement each other. In a sense, the concept of interior and exterior is implemented collaboratively, mutually, and within a counter-partnership. That is to say, it is the exterior that is sometimes called as the interior when it is reconsidered according to the other walls, just as in the example of the walls of the citadel, which frame the city by separating it from rural, from the paths and the other parts of the city. Behind these walls there is a power to which the doors open (Yavuz, 2001, p.74). In short, not only interior-exterior but also privacy-public relationships generated by the walls have been continued hierarchically and maintained broadly for a long time in history; hereby, many individual and social relations have been consequently allowed within the spaces defined by the walls.

Roof

A 'roof' covers over heads. In this way, it cares and protects its beneath against any undesirable circumstance of above. It defines an upward boundary by becoming a 'platform' or a 'floor' that represents the limit of verticality, which means that, from

then on, there is no further move. It symbolizes an architectural home space, that is, a shelter. It becomes the highest end point like the peak of a mountain, by reminding of toleration ('hit the roof'/'tavan yapmak', 'tavana vurmak', 'tepesi atmak'). In this mountain symbolism, the most profound central segment of mountain is the 'cave' that "implies a displacement of the symbolic center, that is, the mountain peak of the world outside is transferred to the inside": to explicate, the external forms of them, menhir, omphalos or pillar, are replaced by this new center, such as "the Babylonian ziggurat, Egyptian pyramid, American teocalli or stepped pyramid, Buddhist stupa" (Cirlot, 1971, p.16). That is to say, it provides a central interior. In addition to this, due to its triangular feature that symbolically forms a gradual way from the ground to up, it makes a communication between earth, that is, the material world, and heaven, that is, the spiritual world (Cirlot, 1971, p.16). This could be identified as the worldegg symbol -its sign is a 'dome'- and thus heaven begun to be manifested later with a 'dome' which signifies the 'vault' of heaven or sky through the sphere form instead of this triangular shape (Cirlot, 1971, p.16). In this way, it defines an intimate space below and provides a safe place to shelter. It hides the things on and above its own level as it remains out of sight and physically inaccessible. It maintains and shelters the self, happiness, peace, comfort, and security, so it gives the sense of being a family and the essence of home ('under the same roof'/'aynı çatının altında').

Door

A 'door', as a movable barrier or a manageable boundary, allows a transition between two different spatial realms. It enables to pass from one side to another. It provides an entrance and an exit. It communicates through its described territory. It defends against the external dangers in a controllable way. It cares about the inner/interior security; it controls intimacy. It regulates any access to the personal lives and protects their privacy from the others (Kaup, 2011, p.26). Hence, it separates privacy from publicness. That is to say, "open or closed or part-way open [door] may symbolize key relationships ... [for example] closed doors may represent rejection, deprivation, or missing out while open doors the opposite" (Crenshaw & Green, 2009, p.7); in this way, it outlines the social relations of an individual. According to this 'relation of openness of door and social state', a closed and locked door means "absolute privacy, disturb only in emergency"; a door closed not locked means "privacy, knock on door, if necessary"; a door with a little open means "visual privacy, auditive community (wants to be part of outside)"; a nearly half open door means "semi-private state, open for communication"; a fully open door means "open wish for communication" (Vogler & Jorgensen, 2005, p.395). In short, it locks the things inside as hidden, unknown, mysterious, unwanted, stopped, unseen, impossible, secret, refused, or restricted, etc. On the other hand, it lets them go out by opening for freedom, hope, opportunity, adventure, idealization, and moving forward. In other words, it shuts and prisons and releases and welcomes at the same time (Aslan Karakul, 2014, p.7).

Furthermore, with its own body, it warns the one standing at its front about the things its behind. The appearance, design, and decoration of a door tell sometimes much more things; all its components such as board, frame, window, bar, and doorstep represent the things about the realm behind itself (Aslan Karakul, 2014, p.12). For example, the doors in some parts of Anatolia have hand-shaped doorknockers that differ from each other: some have bracelets and rings while the others do not, all of which speak out privacy, wealth, and marital status of the households accordingly (Aslan Karakul, 2014, pp.12-13). What is more, "doors that are placed in the house high up without steps can symbolize how inaccessible the house", or "doors with bars or multiple locks suggest a heavy emphasis on security and a degree of fear and vulnerability" while those that have any window suggest "more comfort with the intersection of inside/outside" (Crenshaw & Green, 2009, p.8).

However, beyond making boundary, it also tries to eliminate the barriers which the wall it belongs to makes. Hence, it assists transition, translation, transposition, and transportation. That is to say, it has two faces which refer to duality. This makes a door a sign of dualism. It is also a symbolic manifestation of space and time because it intervenes and re-connects the different spaces in time. In fact, it is a gate standing for the key-point of a portal which allows a passage between different spatial or time-based realms by enabling an entryway into an unknown, into a mystery or a great significance. It is a "threshold of transition between different stages of evolution and

spiritual progress or regression"; at this threshold, the tension gathered is symbolized by the guardians which deny the comers for a challenge to overcome (Cirlot, 1971, p.134). Representing a physical and socio-psychological borderline, it forces these challengers to master a higher level of power and maturity so that they may qualify for entry or for exit. It compels to be defeated or defended. In addition, becoming an identity mark, a territorial board, and an achievement task, it indicates many things such as success, prestige, triumph, and sovereignty. Remember a triumphal arch: it manifests a military victory, a successful return from an expedition or a war, and the statement of its power. In short, it is a sign which symbolizes the entrance or the exit from a place or the beginning and the end of a passage, as a result of an undertaking.

Window

A 'window', being another opening which produces another manageable boundary, provides a transparent connection with the outer world by pushing the limits which the wall it belongs to makes. It lets light in and allows sounds, odors, and sights through its transparency and openness. Hereby, it gives a broader perspective about the outer world by enabling to watch and to explore the outside from the inner space; but, it frames the views for the inner space. However, it removes the feeling of being trapped and stuck in, or being alone, because of the view it allows for the inside. It symbolizes health and growth, refreshment and relaxation. It represents possibility, assumption, understanding, perception, perspective, opinion, dream, imagination, idea, and hope. In fact, it becomes the surface of reflection and projection (Vogler & Jorgensen, 2005, p.397), and even the plain of hideousness and exit. It also becomes the face of healing because, of the light, it clears "the darkness in the inner recesses" (Crenshaw & Green, 2009, p.6). It renders an insight, and an awareness of the self, of the inner realm and the outer world, by encouraging for ideals, dreams and hopes.

House

A 'house' is a kind of 'cave' having domestic environment that the humans own to dwell at first. It is primitively a hut, it literally *shelters*. It cares. It provides spaces

for the most basic daily activities. It is a building in a general sense; however, it could be a 'castle', a 'palace', a 'tower', or a 'dwelling'. In fact, the act of designing and constructing such a building is a way to discover a personal myth (Huskinson, 2013, p.67). For example, the Villa Malaparte on Capri built as a seclusion by the Italian surrealist writer Curzio Malaparte stands as the contemporary construction of the Bollingen Tower of Jung; which reflected the Einstein's tower at Potsdam (Hart, 1994, pp.49-50). Thus, this act turns into a way of self-realization or individuation, as in the example of Jung's experience which was an attempt to construct his own domestic environment as a tower. His tower has an importance "in its status as a built experiment" and this was an effort of himself to reach his self (Hart, 1994, p.37); because, throughout its construction Jung tried to make a relationship between his inner self and his living environment by integrating the past and the present. A circular tower, or the maternal hearth, was the first attempt in the construction developed physically and spatially through the additions of a central structure, then an annex, or a tower, after that a courtyard and a loggia facing the lake, and finally a central upper room: all were defined by Jung as his ego-personality and subsequent increased awareness of the (his) self (Hart, 1994, p.37). Indeed, this tower could be considered as an architectonic activity through which it was designed and built physically and spatially in a way that his psychological needs surfaced throughout years were compensated, more importantly, in a representational way which refers to his own psychological growth. In the end, it became "an alchemical representation of his inner self" (Hart, 1994, p.43). As a house, it became a sign of the self, having symbolic meanings in the sense of home. For this reason, a house is assumed as the most architectonic space for the need of safety, for a safe self. In addition, a house is a manifested place where anyone can express himself/herself. Thus, it acquires many distinctive layers in terms of expressions and manifestations. For example, think of Jung's dream in 1909 (see the quote at the first page of the chapter4), there is a house with several storeys any of which presents an architectural style of a particular period and was chronologically ordered from attic to cellar with a sense of "a continuum of time" (ARAS, 2010, p.556). This represents a way from consciousness down into the different layers of the unconscious mind since dreams speak out unconsciously by meaning a lot in the consciousness. Hence, it could be possible to consider that the

design and construction of a house corresponds to the structure of psyche, and that the experiences had and lived there correspond to the dynamic processes of the psyche (Huskinson, 2013, p.64). That is why, according to Jung, the intimately inhabited upper storeys stand for the consciousness as "we live on the upper storey" (Jung, 1964a, para.54) while the rarely visited lower storeys symbolize conversely the unconscious mind because "As to what lies beneath the earth's surface, of that we remain totally unconscious" (Jung, 1964a, para.54). The movement from attic to cellar assisted Jung to realize the dynamism that forms the basis of the room-like divisions/fragments of the psyche (Huskinson, 2013, p.68), in that, familiarity and obscurity of these rooms reveal "multivalenced potentialities" of "the structural soundness of the personality" (ARAS, 2010, p.556). As a result of this movement ending with arriving at the archaic cave is a meaningful journey through the chthonic and tectonic manifestations of a *shelter*, which expresses the sense of home. In fact, a house as an architecture is reminiscent of the chthonic cave which keeps the space inward through the border that itself defines. By meaning primitiveness, darkness, narrowness, siege, and closeness, a cave functions as a place of both protection and shelter to escape from chaos or danger; it gives sincerity and peace (Eliuz & Öksüz Güneş, 2016, p.235). Entering the cave is like knocking on the doors of unconscious to descend into its realm and to face the unknown aspects or sides of the self. As a result, a person who retreats into the cave comes then out disparately or in a way of becoming aware of himself/herself by reaching the essences (Eliuz & Öksüz Güneş, 2016, p.235). That is to say, a cave is a sign of a transformation and psychological growth, in which one becomes aware of his/her own reality (Eliuz & Öksüz Güneş, 2016, p.235). This reminds of a larva waiting for its transformation or a fetus in the womb experiencing its development behind the abdominal walls, both of which try to disconnect and intervene their relationships with nature by standing in a safe place. To add, "The maternal womb" is physically and spatially the earliest safe home and the first homes of man are "intimate, encompassing womb-like structures" like those of animals instinctively nesting their homes (ARAS, 2010, p.556). For this reason, anything constructed by containing all thoughts and feelings pertaining to home becomes a house defining the expression of a shelter. It has always been idealized with a desire to return the first home, that is, 'paradise' (ARAS, 2010, p.556).

A 'city', as a 'settlement' with defined boundaries, corresponds to "the idea of the temenos, or a sacred and circumscribed space which is guarded and defended" (Cirlot, 1971, p.263). In this regard, it reminds of a house, but for a greater number of people. *Sheltering* the inhabitants inside, it therefore represents not only the individuals but much more the societies and everything pertaining to each of these societies. For this reason, it includes both individual and social relations that are its indispensable fact, and it either welcomes the guests or excludes them for its safety and comfort by abiding by the social values of its inhabitants. That is why its development depends on their history. Hence, everything in a city remains as the parts of itself. Consisted of these parts, like the fragments of the psyche, it becomes a whole, like the totality of the psyche. Each of the parts with its highly differentiated features enriches the city through its potency by which it makes relationships with the other parts to form and to develop the city by hosting themselves together. That is to say, it symbolizes the psychic structure.

Thus, a city has many layers that have accumulated from the past to the present by "incorporating the visible landmarks and invisible spirits of other time" (ARAS, 2010, p.614). Converging the present with the past and giving an "impression of something timeless, hallowed and cosmic", it poises "between the earthy and the ideal" (ARAS, 2010, p.614). In addition, it always tells its own story and wants "to be recognized and remembered through fantasy and imagination, not just through ascending growth and rationalistic planning ... [and] wants to be continuously revealed, rediscovered, and reimagined" (Schenk, 2017, p.58). It catches us, as its inhabitants or guests or hosts or hostiles, "between tears and laughter, wealth and want, through our oscillating love and hate for it" (Schenk, 2017, p.59). In this manner, a city turns into "a dreamscape, a source of memory and imagination", and the sense of itself emerges "as one of psychic play" (Schenk, 2017, p.59).

Indeed, a city defines a 'mandala' symbolism (Jung, 1959/1968a, para.646), which is a kind of psychic representation in Jungian view (in his psychoanalysis, individual

dreams could be interpreted through their simulations into mandalas, especially by trying to complete it symmetrically or orderly to get a balance so that they give an idea about what the problem is and how this problem is solved). This symbolism similarly describes the pattern of an environment with its all physical, spatial, and social dimensions by forming and transforming it into a safe, desired and needed condition. That is to say, a mandala with its pattern thematically modifies a united motif of the daily lives of individuals and societies, through which the whole city is realized (Jung, 1953/1968b, para.330). For example, the structure of the Borobudur temple in the form of a mandala has "a monumental image of life" (Cirlot, 1971, p.202). In addition to this, look at 'Jawahar Kala Kendra Culture Center', designed by C. Correa, which has an order which refers to the Vedic/Vastupurusha (cosmic/ astrological) Mandala with a resemblance of the plan of the city Jaipur (Wang, 2011, p.1177). Or, think about the tower of Jung, considered by him as a mandala, which was an experiment or an experience that assisted him as to order his daily life as a (balanced) whole, and as to re-order it through forming and transforming into a new (another balanced) whole in any period of his lifetime. Allowing integration and order, this mandala means "a synthesis of the dualistic aspects of differentiation and unification, of variety and unity, the external and the internal, the diffuse and the concentrated", and thus, "it excludes disorder ... by its very nature, it must surmount disorder" (Cirlot, 1971, p.201). Hereby, it aids to regroup everything that has fallen apart or dispersed (Cirlot, 1971, p.201) to get a balance in the whole. In line with this, a city desires and needs to be a whole where the lives are sustained with the compensation of the needs such as safety, and of all kinds of relationships.

All in all, some of the urban and architectural components of a built environment, determined as fundamental in a general sense and preferred to be handled in this regard, were explained here with their borne meanings about the urban lives of both individuals and societies, by considering them as 'signs' and associating them with 'symbols', 'archetypes', and 'archetypal contents'. However, they need to be covered all together historically as this is essential for the interpretation of both the formation and the transformation of a built environment. Hence, it will be needfully good to have a discussion about its development in this context. This will be addressed now.

Table 2.5: some idioms, proverbs, quotes, and expressions in languages, in a relationship with 'some of the fundamental urban and architectural components' (prepared *by the author*)

Fundamental Components of Architecture and City	Some Idioms, Old Saws, Expressions in Languages
Territory	• 'cross the line'/'sınırı aşmak'
	• 'draw the line at'/'sınır çizmek, çekmek, koymak'
Ground and Underground Landscape and Cityscape Garden	• 'tebdili mekan' (a change is as good as a rest)
	• 'have/keep your feet on the ground'/'ayakları yere basmak'/'脚踏实地'
	• 'yerin dibine girmek' (not wanting anyone to see oneself out of embarrassment)
	• 'yerin kulağı var' (nothing stays hidden)
	• 'yola gelmek' (see reason/sense)
Street	• 'Viele wege führen nach Rom'/'Many roads lead to Rome'/'omnes viae Romam ducunt'/'Bütün yollar Roma'ya çıkar' (Mille viae ducunt homines per saecula Romam)
	• '道 (road, path) → (derived word) → 道徳 (morality)'
	• 'Uzun ince bir yoldayım, Gidiyorum gündüz gece' (Aşık Veysel) (hayat yolu, seyri) / 'curriculum vitæ' (a couplet regarding the way of life or the course of life)
	• 'to keep to the straight and narrow (path)'
	• 'not to know which way to turn'
	• 'çıkmaz sokak' (dead end)
	• 'at the end of the road'/'tahtalıköyü boylamak' (to die)
Square	• 'piyasa yapmak'/'piazza' (walking around, meeting people, and socializing)
	• 'meydanı boş bulmak' (run riot; behave excessively; not be afraid of anything)
	• 'meydan dayağı' (beating in the crowd as an exemplary punishment, for people to see and be witness)
Stair	• 'merdiven dayamak' (be pushing ages; aging)
	• 'Crosses are ladders that lead to heaven' (Having to endure trouble, suffering and misfortune make one to be virtuous and bring out the best in his/her character.)
	• 'Ağır ağır çıkacaksın bu merdivenlerden Ve bir zaman bakacaksın semaya ağlayarak' (Ahmet Haşim) (a couplet about the way or course of life and aging to the end of life)
	• 'evin direği' (head of household)
Column	• 'dünyaya kazık çakmak' (live to a grand old age)
	• 'sütun gibi' (very beautiful, columnar)

Table 2.5 (co	ontinued)
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Fundamental Components of Architecture and City	Some Idioms, Old Saws, Expressions in Languages
Roof	• 'hit the roof'
	• 'tavan yapmak' (to reach the highest level; for example, nervous, excitement, and prices)
	 '屋 (house, roof) → (derived word) → 小屋 (hut) ' '屋 (house, roof) → (derived word) → 部屋 (room)'
	• 'under the same roof'/'aynı çatının altında'
	• '하늘을 지붕 삼다' (make the sky your roof: to live outdoor; to sleep anywhere; to wander from place to place without settling down)
	• 'къща без покрив Египет без пирамиди не може' (A house is not without a roof, like Egypt being not without its pyramids.)
	• 'dört duvar arasında kalmak' (being shut in)
	• 'kapı duvar' (no answer)
	• 'walls have ears'/'Οι τοίχοι έχουν αυτιά'/' 隔墙有耳'
	• 'etrafina duvar örmek' (withdrawing into oneself)
Wall	• '벽을 쌓다' (build a wall: to keep a distance from)
	• 'กำเพงมีทุประตูมีตา' (wall have ears, doors have eyes)
	• 'Yalnız taştan duvar olmaz.' (Humans need to socialize and to live together to meet the needs.)
	• 'hold (down) the fort'
	• 'kapı dinlemek/kulak misafiri olmak' (eavesdrop; overhear)
	• '耳 (ear) & 門 (gate) → 聞 (heard; hear, ask, listen)'
	• 'kapı duvar' (no answer)
	• 'kick out the door'/'kapı dışarı (edilmek)'
	• 'behind closed doors'/'kapalı kapılar ardında(n)'
Deer	• 'get a/your foot in the door'
Door	• 'şöhret/kısmet kapısı (açılmak/kapanmak)' (to become famous or to be forgotten, to increase or decrease income, to marry or not to marry; the change of life)
	• 'กำเพงมีทุกประตูมีตา'/'walls have ears, doors have eyes'
	• 'Kapıdan kovsan bacadan girer.' (exceeding the limits; cheeky unashamed)
	• torschlusspanik'/'yumurta kapıda, yumurta kapıya dayanmak' (little time left)

Table 2.5	(continued)
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Fundamental Components of Architecture and City	Some Idioms, Old Saws, Expressions in Languages
	• 'pencere açmak' (gain a perspective)
	• 'weg vom Fenster sein' (disappearing completely)
Window	• 'a window on the world'/'dünyaya açılan pencere'
	• 'window dressing'
	• 'a window of opportunity'
	• 'baba ocağı' (family-home)
	• 'ocağı tütmek/sönmek' (continuation/end of a lineage)
	 '家 (house) → (derived word) → 公家 (noble, nobility)' '家 (house) → (derived word) → 家族 (family)'
	• 'strike home'/'caneviden vurmak'
	• 'home sweet home'
House	 'home and hearth' (warmth and security) ('ປ້ຳນ')
	• 'Өөдлөх айл үүднээсээ гэдэг'/'The interior of the house is evident from the entrance.'
	• 'Биеэ засаад гэрээ зас'/'Fix your house after you fix your body.'
	• 'İnsanı insan yapan, evdir.'/'The best school of discipline is home.' (Samuel Smiles)
	• 'yer etmek' (settling down; leaving a mark; strike root)
	• 'yer yurt; yersiz yurtsuz' (homeless)
City	• 'a ghost town'
	• 'wo sich Fuchs und Hase gute Nacht sagen'/'kuş uçmaz kervan geçmez bir yer' (in the middle of nowhere)
others	• 'kaleyi içten fethetmek' (solving the problem with the help of someone from the opposite side)
	• 'pabucu dama atılmak' (to fall into disrepute; banned)
	• 'a tower of strength'
	• 'an ivory tower'
	• 'be climbing the walls'
	 'เข้าตามตรอกออกตามประตู' (enter by the street, exit by the door: to behave in accord with tradition when asking to marry)
	• 'bacası tütmek' (continuation of the family-life)
	• 'kale gibi' (hardy, sturdy, solid)
	• 'build castle in the air'

2.3.3. Development of Urban and Architectural Environment, throughout History, in a Relationship with Archetypes

As mentioned previously, a 'city as a settlement', is a compound of many urban and architectural components each of which could be considered as a 'sign' associated with 'symbolic archetypal contents' and could be related to the way of lives of the humans, and their behaviors, thoughts and feelings, and experiences. One important thing involved in this compound is the 'meaningful' 'signification' that is constructed through the processes of '(re)presentation' including imagining, 'symbol making and sign using', and 'expression and manifestation'; in other words, a built environment emerges meaningfully through a 'symbolic (re)presentation' based on a 'signifier and signified relationship'. To denote, any sign, as a 'semio-ological/tic manifestation' of 'symbolic expressions', signifies a '(re)presentation' of the previous, the original, or the ideal by pointing to the connection of past with present and future; hereby, the past of a city is driven forward, which is its development that will be addressed now.

Let's think about the fundamental meaning of a settlement that recalls 'the symbolic image of shelter' manifested as a sign over and over again throughout history. A very well-known, even said to have been encountered for the first time, 'shelter' was a domestic cave that the nature offered as a house where the humans sustain their lives in safety. Somehow later, they began to design some domestic spaces reminding of caves with the help of their innate creativity; eventually, they found a way to live and survive together with more people, more freely, by getting rid of the restricted feeling of the cave, but in a 'safety with satisfactions'. For this, they possibly inspired by the living creatures that nestle in the inaccessible dark underground or at the unreachable height. Or, they perhaps invented a cave-like construction, namely, a tent, practically but, much, in hurry. For any reason, however, they certainly had to be use their architectonic abilities, beyond their innate creativity backed by their intellectuality that has developed over time, to build and construct day by day more detailed, more improved, more competent or ideal, smart productions which satisfy them in 'the sense of shelter'. In short, they have come a long way indeed in terms of designing and building an environment to live and to survive there, as a reward for their hard

works and great efforts. In other words, they made 'shelters' with their hands, then they developed them as the better tents or huts by adding smart details, and finally, in line with their standards and their desires and needs, improved them as buildings in novelty (Vitruvius, 1914, p.39). Including many 'shelters' with several components having particular forms, functions, and properties from tents or huts to rooms, from rooms to houses, a built environment manifests 'the image or sense of shelter' in any scale by signifying the sensations of (expressing) being survival, living in safety, and sustaining life. Thus, it bears many meanings with denotations, connotations, and the notions in relation to the deep psychological associations, all of which stand for human behaviors, thoughts and feelings, experiences, and the manner leading a life.

In fact, the earliest human habitats could possibly have been transformed into these final settlements when the manageable openings such as doors and windows were fabricated because they control the physical, spatial, and even social organizations in a built environment so that a safe and sustainable settlement life could be provided. It is quite well-known that such a settlement had strong relationships with agriculture, which made an assurance for the collective food preparation, storage and their shares (Acar, 1994, p.32). For example, in Çatalhöyük, meeting on the common ground manifested itself as a social settlement having consequently its habitual housing units in a continuously attached arrangement that was originated in a vertical relationship from the quad gardens where sowing and harvesting were done to the quad roofs (of primitive units) where the foods and the products were laid over: this associated the underground with the overground (Acar, 1994, p.32). As a result, Çatalhöyük houses became concentrated for food preparation and for many productive activities, and in turn, they became the places that organizes such a life beyond socialization (Hodder, 2012, pp.305-306). Later, "the house unit grew at the expense of the community at large", which started some fragmentation in the rules of the community life (Hodder, 2012, p.306). Thus, that society cohesiveness were disappeared (Düring, 2001, cited as in Hodder, 2012, p.306). Over time, the collective sharing began to be distributed as private portions, which consequently made these units begun to be separated and dissociated by generating a new order and a new layout in the settlement where the vertical organization shifted into the horizontal relations on the ground due to the

increase in the service spaces such as courtyards and streets (Acar, 1994, p.33). In consequence, a new unit developed in a well-defined characteristic form, for instance in Hacılar; it was the megaron having its fundamental facilities as storage, porch, and living space, remained for a long time in history (Acar, 1994, p.33). Accordingly, the new layout came forth was based on a farm-like circular array of the megaroids constituted not only fortification walls their behind but also a common and central multi-facilitated courtyard at the front, by constructing finally an early citadel (being similar to those in Demircihöyük, Troy, Beycesultan) (Acar, 1994, p.33). In brief, a curvilinear or pyramidal hut, being the suggestive version of the cave, began to be transformed into a megaron which had precisely a rectangular form together with "retained the apsidal ending as a survival of an earlier evolution" (Smith, 1942, p.101). Furthermore, this process which started in the Chalcolitic period (primitive unit) developed through the Bronze Age (citadel) and gave a rise to the appearance of the classical Greek temples, of the Iron Age Phrygian palaces, or of the houses with courtyards, by gathering power and property in certain hands, by centralizing at the end, and by making patriarchal relations dominant instead of the matriarchal ones which were dominant before (Acar, 1994, pp.33-35). Indeed, the new unit, megaron, was a kind of home where a fire or a hearth was placed (Acar, 1994, p.34), (giving the sense of 'family-home'/'baba ocağı'), which was sacralized as an idol through a transformation into the temples because "early man was quite conservative, always attached social and ideological values to his types of dwellings, and from them, frequently developed his concepts of tombs and temples" (Smith, 1942, p.102). It could accordingly be said that the cave as "hypothetical model of the beginning of architecture came to denote a *shelter* function, but no doubt in time it would have begun to connote family, or group, security, familiar surroundings, etc." (Eco, 1980b, p.24). In short, day by day, all urban and architectural environments have become the signs of the human faculties such as thoughts and feelings by taking part also in their languages to express all this in a relationship with their ways of life (see: Table 2.5).

To explicate, a city exists, on one hand, as a means of maintaining lifestyles through the physical and spatial, and even social organizations of an environment, based mostly on the predominance of either its interior or exterior spaces both of which are the pattern formations simply generated and hierarchically varied according to some particular rules through many urban and architectural components. Thus, depending on everyday experiences, they are very specific to any society and to any settlement. The former refers to 'the chthonic archetype' whereas the latter refers to 'the tectonic archetype'. In essence, the 'chthonic' is related to 'cave' and it "generates a magnetic concentrated space that leads towards the center" while the 'tectonic' is associated with 'hut' and it "generates a space that seems to be originated from the rhythm of its abstract grid"; that is to say, the former is a void detached and concealed from nature and the latter is placed within it (Cappelletti, 2012, pp.17-28). In other words,

the chthonic archetype is a pure hollow space carved out from the '*khthon*', the solid surface of the earth: it is a unified void excavated from a solid mass without joints. On the contrary the tectonic archetype is the expression of the artificial construction process, it's produced by a '*tecton*' ... The result of this process is an assemblage of elements, which are still recognizable in the final grouping through their joints. (Cappelletti, 2012, p.19)

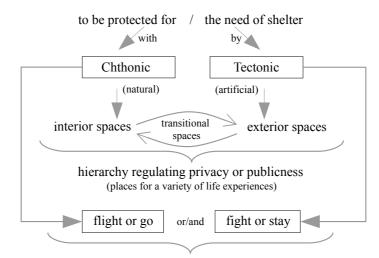
According to this, 'the Chthonic archetype' produces "artificial mound of earth", which means "hidden within the earth", "connected to the terrain", and "the absence of interferences from the outside world" (Cappelletti, 2012, pp.21-23). Megalithic chambers and temples are its primordial manifestations: examples for the 'chthonic' could be listed as the passage grave on Ile Longue, south Brittany, France, ca. 4100 BC; the treasure of Atreus near Mycenae, Greece, ca. 1250 BC; the temple complex in Ġgantija, Malta ca. 3500 BC; the temple complex in Tarxien, Malta ca. 2500 BC; the Sardinian nuraghes; the Mycenaean tholos; and the Etruscan tombs (Cappelletti, 2012, pp.21-24). On the other hand, 'the Tectonic archetype' is related to "human activity and intervention", which means to have a "direct relationship with the landscape", to aim "to place and to assemble in an open space freestanding objects", and to make "a rationally constructed frame" (Cappelletti, 2012, pp.25-26). Stone circles, coves (monoliths), dolmens (trilithons), post and lintel (beam) systems are its primordial manifestations: examples for the 'tectonic' could be listed as main circle in Callanish, Scotland 2900 BC; circle (cromlech) and alignments of standing stones in Carnac, France 2000 BC; cove stones Avebury henge, Wiltshire, U.K., 2600 BC; dolmen in Newport, Wales, U.K.; trilith in Stonehenge, U.K. 2300 BC; the Greek peripteral temple; and Le Corbusier's Maison-Domino and Mies van der Rohe's projects (Cappelletti, 2012, pp.25-28).

However, one of both cannot totally subvert the other because their pure conditions are too extreme to be reached: if it were, the role of architectonic activities would have been negated; however, these activities maintain the relations between these two as a mediator (Cappelletti, 2012, p.19). That is to say, both mediate the exterior and interior spaces in the organization of an environment. Hypothetically,

a pure internal space would be possible only if we exclude the external world with its space and time. It would be a pure void, a metaphysical timeless space: maybe something closed to the condition of being in the womb before birth or in burial chamber after death. On the other hand in the case of a pure external space there would be no internal space: architecture would be annihilated and reduced to the role of a sculpture in an open space, a solid form without function. In a pure external space architecture would be objectified and reduced to the condition of being a mere entity between entities. (Cappelletti, 2012, p.19)

For this reason, a built environment needs and has both. However, either exterior or interior space becomes predominant in the certain periods of history as there happens a shift or a change between them (Cappelletti, 2012, p.14). For example, the former was "predominant from the archaic Greek period until the Hellenistic period", then, the latter became "prevalent between the Roman and the Baroque period", while from the Neoclassical period to the Modern are in the 20th century the former seemed again to be "the main focus" (Cappelletti, 2012, p.35). The exterior emerged in ancient Greek with "the disposition of isolated objects or volumes in an open space", and in the Modern era with "the presence of isolated single volumes placed in an open space and in relation with the landscape" whereas the interior emerged in the Roman and even the Renaissance periods with their monumental buildings having centralized plans (Cappelletti, 2012, p.10). The architecture of the first two eras also had similar facilities that were generated by "the abstract and depthless perception" through "a diagonal or angular point of view" (Cappelletti, 2012, p.11). Thus, the exterior spaces were "generally defined in terms of a discrete system formed by isolated volumes" (Cappelletti, 2012, p.14). On the other hand, the sense of depth and geometrical perspective, providing subjective consciousness, was predominant characteristically in the others (Cappelletti, 2012, p.12). Hence, the interior spaces were defined as "characteristic of a continuous and dense urban fabric" (Cappelletti, 2012, p.14). This relationship between these two spaces is almost like walking on "the continuous surface of a Möbius strip" that makes an incremental move from the

external surface to the internal one, and to the external one, again and again, even if this walking is continuously maintained in the same direction (Cappelletti, 2012, p.40). In fact, it could be interpreted in line with 'intellectualism', that is, the way for the desired and needed changes in preferable materials and construction techniques concerning architecture, and in line with many philosophical thoughts and scientific developments. For example, interior space and 'the Chthonic archetype' came to the fore "with the new use of concrete and the development of long span vaulted spaces", or exterior and 'the Tectonic archetype' became dominant as a result of "the emergence of the Palazzo typology during the Renaissance and the progressive development of civic architecture" (Cappelletti, 2012, p.35). In addition, there bring out many other spaces determined as both exterior and interior, that is, the transitions between both spaces and mediated through the physical and spatial, and even social, organization of some urban and architectural components as a pattern formation that regulates hierarchically several degrees of privacy (so, several degrees of publicness correspondingly) (Cappelletti, 2012) to offer various spaces and places for the daily lives and for the life-experiences of the individuals and the societies. Hereby, all these spaces build together a settlement (Figure 2.5).



physical and spatial, and even social, organization of a settlement, formed as a circulation pattern

Figure 2.5: formation of the physical and spatial organization of a settlement through the chthonic and tectonic archetypes (drawn *by the author*)

On the other, a city also exits "as a means to ensure continuing survival" through 'the masculine myth of the Ideal City' (Akkerman, 2006, p.233) the very well-known manifestation of which is the urban environment. The Ideal City is "a mirror image of the human soul", and by Plato, the concept of the Ideal City, "presented as an imprint of the human psyche", is seen "as ingrained within the mind as something of a primordial paradigm" (Akkerman, 2006, p.236). This concept, "as if presaging Jung's archetypes", makes "a link in a powerful psychosocial chain in which the masculine myth of the Citadel [which symbolizes power, wealth, egoism, etc.] is perpetuated in urban thought, design and planning throughout history" (Akkerman, 2006, p.237). In terms of its development, a built environment has actually been continuously molded throughout history by two archetypal conceptualizations that one of two is "the masculine myth of the Citadel, or the Ideal City" being a "spatial deportment" which "dominate[s] city-form and ensuing aspects of contemplation"; and the other one is "the feminine myth of the Garden" being a "time-bound" matter (Akkerman, 2006, p.229). Both illustrate the dual of the Anima and the Animus identified by Jung in some manner; to explicate, in a sense, citadel with its protective walls manifest the Animus, the animus of the garden, and garden with the productive nature manifest the Anima, the anima of the citadel, both of which are the warriors of the society and the daily lives in the city by defensing not only anything pertaining to the city, for example, the physical and spatial, but also individual and social relations in the city. Hence, both seem as deeply, or meaningfully, intertwined with each other (Akkerman, 2006, p.230), becoming their complementary counterparts that provide a wholeness and a balance together; hereby, they complete the city.

At this point, it needs to be mentioned that "the first appearance of citadels and forts" became sequentially apparent by evolving from 'the myth of the Garden' (Akkerman, 2006, p.230) as its Animus. That is to say, the latter is, thus, "primeval while that of the Citadel is at the founding of early civilization" (Akkerman, 2006, p.230). It could be interpreted that 'the myth of the Garden' emanates from "the feminine archetype... symbolizing fertility" (Akkerman, 2006, p.230), which refers to a place to live and to survive, while the former spreads out from "*the need for shelter*" (Akkerman, 2006, p.232). Then, "the myth of the Garden has been intervoven within the myth of the

Ideal City only as a secondary feature" because the 'Citadel' has become primarily dominant in the design of cities (Akkerman, 2006, p.233); for example, in Medieval age. After a long time, 'the myth of the Garden' turned into the 'Ideal', as the image of 'paradise'; for example, in Enlightenment period or in early Modern era. In short, 'the myths of the Garden and the Citadel' have replaced their roles in the sense of the city development; therefore, their archetypal contents and conceptualizations have changed the roles through different manifestations. In a way, throughout the history of the city, "the Citadel is perceived as representing severance as well as stability, solitude, and solidity, whereas the Garden represents the respectively opposite traits of in gathering and change, multitude and softness" (Akkerman, 2006, p.233). In addition, "the Garden symbolizes concealment and surprise, while the Citadel is the epitome of surveillance and lucidity" (Akkerman, 2006, p.233).

As a matter of fact, these changes have impacts not only on physical and spatial but also on social environments. It could be said that such an environment with its urban and architectural spaces, not only designed and built as an idea(1) but also manifested as the (re)presentation of the archetypal contents, has always lost its character, that is, being an idea(l) conceptually intertwined with the archetypal contents, after a certain time. This is related to the urban decay. It is the antagonist of the 'Ideal City', which symbolizes 'homelessness' (Akkerman, 2006, pp.248-249). It, thus, refers to the lack of 'care' that can be provided by 'shelter'. This means that the need for 'security' as to survive becomes dominant over the other things. Thus, the emergence of "a new cycle", that is, the turn of 'the feminine myth of the Garden', becomes inevitable (Akkerman, 2006, p.251) in the following centuries through the rediscovery of the self in abandon and decay places within the city just after the reconstitution of 'the masculine myth of the Citadel' in the city of twentieth century (Akkerman, 2006, p.251). Consequently, it could be inferred that a city has constantly developed through such transformations together with the changes in the perception of the 'Ideal City', which always reminds of 'paradise' as the manifestation of its image; because, the changes resulting in the physical, spatial, and even social development of an urban and architectural environment are dictated by the efforts for idea(1)s and are caused by the decays. This takes place periodically throughout history.

Indeed, it depends on a mutual process which happens between the functioning of human physical, mental, psychic/psychological structures and the city designed and built through this functioning. By means of this progress, just as the humans manifest themselves through a city, the city itself directly imposes the psyche in an extant. In this way, "it activates existing complexes and creates new ones" (Stein, 2019, p.875) by changing the active and latent states of different archetypes through the conflicts occurred in these complexes. Literally:

in the collective unconscious of the individual, history prepares itself; and when the archetypes are activated in a number of individuals and come to the surface, we are in the midst of history, as we are at present. The archetypal image which the moment requires gets into life, and everybody is seized by it. (Jung, 1979, para.371)

By noting the midst of history, in the sense of present, Jung means the epochs in which the active archetypes have their turns or their dominant manifestations are (re)presented in accord with the certain urban and architectural styles and paradigms. Although it is a controversial issue, according to historians, whether there is a clearly defined epoch or not, Kiehl (2016) points out, with an agreement about the fuzziness of their temporal boundaries, that a sufficient evidence exits for the definitions of the epochs such as Antiquity, Middle Ages, Renaissance, Reformation, Enlightenment, Romantic movement, and also Modern and Postmodern periods (p.205). However, their transition takes place through a carryover blending the previous epochs into the those followed by themselves; for instance, the Middle Ages are still here in many ways, in terms of dressing style and even the judicial system (Kiehl, 2016, p.205). The certain character, which gives the epochs their unique definitions, is the cohesive or the harmonious collection of the dominant ideas belonging to their periods, such as philosophy, art, and science (Kiehl, 2016, p.205). In short, "There is something definite about a dominant world view (i.e., a Weltanschauung or Zeitgeist [zamanın ruhu])" (Kiehl, 2016, p.205) which has changed over time by allowing the changes in the lifestyles of the social-individuals and societies, and in their relationship with their built environments. In fact, "It is the dynamic tension between 'psyche and matter' that propels history" and it "gives civilizations the impetus to transform over time" (Kiehl, 2016, p.205). This can be observed through a research on the history of the development of city in which the manifestations appear repeatedly in distinctive

formats because either 'psyche' or 'matter' becomes dominant in an epoch with its manifestations by giving a specific definition to the epoch (Kiehl, 2016, pp.205-206) (Figure 2.6; see also Figure 2.7). Actually, this conceptualization of the epochs keeps an equilibrium concord for a while, or, for K. Clark (Civilisation: A Personal View), until the times that "'fear' ... then exhaustion, the feeling of hopelessness" is faced so that the state of dominance can be replaced by a new one (Clark, 1969, cited as in Kiehl, 2016, p.206). It means that, just before this replacement,

The archetypal image that has sustained the psychic field for the society is exhausted. (Kiehl, 2016, p.207) ... The cultural canon is depleted and no longer enlivens people ... no longer provides people with a sense of energy and meaning. (Kiehl, 2016, pp.206-207)

In other words,

the equilibrium in the tension of the psychic field has been lost. ... The archetypes forming the canon seem to be fading out. The symbols corresponding to them disintegrate. (Neumann, 1951, p.110)

This answers such questions: "what led to the decline of the Roman civilization and its eventual replacement by that of the Middle Ages?" or "why did the Renaissance appear after the waning of the Middle Ages?" (Kiehl, 2016, p.206). As inferred, the archetypal tension between 'psyche and matter' plays important roles in driving a dynamic process of transformations (Kiehl, 2016, p.202) form one era into another, by revealing the (new) archetype(s) defining the psychic atmosphere in any epoch.

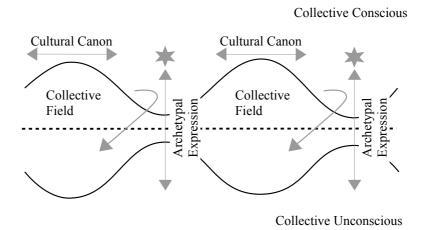


Figure 2.6: a timeline that shows the impact of the archetypal expressions (source: Kiehl, 2016, p.207) (redrawn *by the author* as the same as the source)

On the other hand, there arises another question: what will be the new archetype(s) and the new epoch coming out form the collective unconscious (Kiehl, 2016, p.207). The answer concerns again this tension; because, it is the source of the 'creative processes' that produce something regenerative for its epoch and those upcoming: this 'creativity' is the key step of the future. It could be explained as follows:

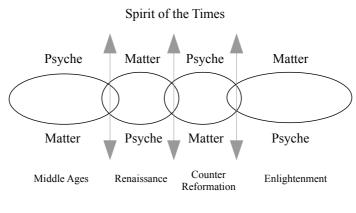
Social, political, and religious conditions affect the collective unconscious in the sense that all those factors which are suppressed by the prevailing views or attitudes in the life of a society gradually accumulate in the collective unconscious and activate its contents. Certain individuals gifted with particularly strong intuition then become aware of the changes going on in it and translate these changes into communicable ideas. The new ideas spread rapidly because parallel changes have been taking place in the unconscious of other people. (Jung, 1960/1969, para.594)

That is to say, there is a general readiness for their acceptances. In brief, thanks to the human creativity operated in a relationship with all layers of mind, that is, individual consciousness and unconscious, many certain expressive manifestations with their conveyed meanings become apparent in idea(1)s, literature, art and architecture. Not only individual but also communal things reveal in these creative works (Neumann, 1954, p.192). According to Jung, the role that arts (all creative works could be added here accordingly) played lies in this creative process which

consists in the unconscious activation of an archetypal image, and in elaborating and shaping this image into the finished work. By giving it shape, the artist translates it into the language of the present, and so makes it possible for us to find our way back to the deepest springs of life. Therein lies the social significance of art: it is constantly at work educating the spirit of the age, conjuring up the forms in which the age is most lacking. The unsatisfied yearning of the artist reaches back to the primordial image in the unconscious which is best fitted to compensate the inadequacy and one-sidedness of the present. The artist seizes on this image, and in raising it from deepest unconsciousness he brings it into relation with conscious values, thereby transforming it until it can be accepted by the minds of his contemporaries according to their powers. (Jung, 1966, para.130)

It refers to the relationship between the Ego and the Shadow, in a general sense, and to the dynamism between 'psyche and matter'; this explains the reason how a living environment is designed and built, developed, transformed or changed by means of archetypes with their contents, through the creativity that triggers the functioning of the human structures such as architectonic activities. To explicate, the Shadow, being a free and solitary individual, finds the opportunity in order to express the essence in a holistic manner unlike the times showing the negative qualities in the constraint of

a social life (Jung, 1997, p.234). At that time, the Shadow independently acts (Jung, 2003, p.13). When it rises through consciousness, a tension bursts out between the Ego and itself (Sazyek, 2013, p.1108). Man's goal should be to face the Shadow with the Ego in that he does not accept and to adapt to it (Jung, 1997, p.220). It is up to not only all the individuals being the parts of the whole society, with their creativity, but also the society having common experiences and aspects such as language (as there is a model relationship between a built environment and a language used by its inhabitants; see: Table 2.5), with their acceptances. Indeed, it directly relates to the archetypes which would appear and become active as a result of the tension. It is the time for the new ones awakened in the collective consciousness and arisen with the archetypal contents (Kiehl, 2016, p.208). Representing the human psyche, it appears in an ideal and satisfactory form through the 'intellectualism' of the individuals and the societies that this form fits into the lives of them by ensuring a built environment.



Spirit of the Depths

Figure 2.7: rebirth in Western Civilization (source: Kiehl, 2016, p.210) (redrawn *by the author* as the same as the source)

That is why, as Kiehl feels, "analytical psychology can be both a benefit to and also benefit from engagements with the arts, ... and history" (Kiehl, 2016, p.204) and, in this regard, "The study of history not only provides us with a static picture of events at a particular time, but also with the dynamic transformation of these events" (Kiehl, 2016, p.205). This is the key point for the definition of the epochs, because, the same is quite true for the fields of city and architecture. Thus, it could be possible to use

'deep analysis' in the context of built environment, but, it would be better to handle it in 'a semiological/semiotic way'; because, 'manifestations' or 'semiological/semiotic signs' of 'symbolic contents' are based on the 'expressive' '(re)presentations' being the main parts of 'signification'. In consequence, as a built environment having many urban spaces and architectures and many urban and architectural components, "Like the simplest thing, a city can evoke the unconscious, but unlike most other things, the city can also represent it with a complex of signs" (Kuberski, 1990, p.681).

All in all, as mentioned previously, each of the urban and architectural components bears many meanings on its own or through a relationship with the others. Hereby, they make the archetypal contents alive or revive them in any case, by signifying or by (re)presenting various conditions or circumstances pertaining to human behaviors, thoughts and feelings, and everyday experiences, and to many individual and social aspects in any place, at any time, and in any epoch. In brief, any of them withdraws by becoming latent and another actively appears instead; similar things are constantly processed, (re)presented and signified, in an architectonically built environment with different manifestations expressing similar contents throughout its history. In that, a built environment is like a text which means a lot to its audience through a speak of the language it has, and it links all social entities throughout this text (Ghafari et al., 2015, pp.642-643). The audience reads these messages which are actually visual or imagery substances, and they comprehend the meanings through the semiological/ semiotic codes which signify this environment in turn. By its very nature, a built environment becomes a 'representational system' of individual and social lives, and of its spatio-temporal constitution having both 'a deep and a semiological/semiotic structure' in which the functionalized and materialized forms are (re)presented in a way. The forms which feature spectacular 'symbols' being the parts of the imaginary structures serve as mnemonic functions imprinted in the human psyche (Agata & Maria, 2018, p.323). To explain with an example, the works of Louis Kahn who choose the forms with their symbolic dimensions masterly, avoiding not only empty formalism but also banal functionalism, "respond deeply to primary psychic ... needs, by virtue of their high degree of communicativeness" (Cornoldi & Cornoldi, 2018, p.277). In Kahn's architecture there is "a state of suspension between opposing

polarities" (Cornoldi & Cornoldi, 2018, p.278), which reminds of the psyche and its structure. Actually, all architectures have associations with the psychic affairs, in an extent, and they leave impressive, dramatic or gladsome traces on the behaviors, feelings and thoughts, and experiences of the humans by affecting themselves. In this context, some personal comments could be given as examples. To explicate, being a psychiatrist interested in art and architecture, L. Domash gained an insight after her visit to the Jewish Museum in Berlin designed by D. Libeskind that this insight about the architecture could be comprehended as a "transitional object or potential space, suspended between fantasy and reality" through which someone could be embraced possibly "to access a wide range of feelings, both positive and negative" (Sperber, 2014, p.123). In that, she went into the museum as a depressed and an unhappy patient; however, she felt as if she was mediated at the end since the effect of the building on her was similar to a powerful short-term dynamic therapy, which made her to think that it held a sense of *sheltering*, mediating, and containing presence (Sperber, 2014, p.127). In other words, this built environment reminded of traumatic memories, but at the same time, it handled in a way that a successful therapist could, "without overwhelming or flooding her with feelings she cannot tolerate" (Sperber, 2014, p.127). On the other hand, being an architectural historian, J. Rykwert thought that this architecture "evokes a masochistic self-punishment" (Rykwert, 2012, cited as in Sperber, 2014, p.128). In addition, being a psychoanalyst, S. Sonnenberg, experienced the same architecture with all his various senses in a very tragic and powerful way through both a passive and an active interactions with its space, he was confused about himself and his time perspective because he felt as if he was "in the here and now and the past simultaneously" within a merge of "inner mental space and outer physical space" (Sonnenberg, 2012, cited as in Sperber, 2014, p.128). That is to say, such thoughts and feelings could be evoked in 'a semiological/semiotic way' by the humans as a result of their spatial experiences in the 'built environment'.

Thus, urban and architectural theories should take on the task with the integration of Semiology/Semiotics and Analytical Psychology so that three together could be used to search and discover the multi-dimensional layers and hidden meanings of the city and architecture. For this reason, an urban and architectural environment needs to be

interpreted, especially, designed and built, with a dialog between 'the semiological/ semiotic concepts and 'the concept of archetype', even if the relations of a 'built environment' with 'the sign structures' are often based on 'the denotative-connotative meanings' and the relations of it with 'the deep structure' are generally held in the topics regarding emotional and mental experiences, perceptual backgrounds, formal and modal typologies, collective memories, and theoretical meanings, rather than the aforementioned things. In this way, a built environment could be designed to respond to many needs of the humans and ensure the sustainment of lives by defining a world of signification having psychological grounds. The archetype strategy of architectural design provides an approach to get an environment with high level qualities and a support to meet the needs through an achievement of humanized dwellings (Wang, 2011, pp.1175-1176). It thus promotes the sense of 'sustainability', 'satisfaction', and 'safety'. Thus, embodying any archetypal content, it can activate the most profound thoughts, feelings, and behaviors, and resonate life experiences. It could be said that such a built environment functions as a signification. It could be inferred that it offers "a sense of psychological grounding in something that was fundamentally 'there" (Colman, 2018, p.340). This could be the reason of why "humans feel alive when they face an archetype environment" (Barati & Kakavand, 2016, p.8) the symbols of which "provide a sense of security and even give the society guiding principles for future development" (Kiehl, 2016, p.205).

In conclusion, all of them cover the 'meaningfulness' of the human lives in a built environment by assisting the meaningful interconnection in-between the past and the present, and the future. This engagement has always mediated throughout history by 'manifestations of expressions'. To add, 'the semiological/semiotic assets' make the 'meanings' behind the 'archetypal realms' clear. In this sense, as explicated, urban and architectural components of a 'built environment' include 'signs' and 'symbols', both of which signify the human lives: this, in turn, constitutes cultural mechanism and social conventions. In short, the narratives so far are just that. The next thing necessarily to do will be to bring all this together in a study by considering the urban and architectural components and the built environment itself in line with these narratives by taking the theme of the thesis accordingly into account.

2.4. Summary of the 'Theoretical Framework'

All in all, what was done in this chapter was to make a 'theoretical framework' in accordance with the theme of the thesis. In this regard, not only two fundamental sign studies, that is, Semiology and Semiotics, but also one of the studies of depth psychology, that is, Analytical Psychology, reviewed terms of their relationships with one of the main matters of urban and architectural theories, that is, built environment having physical, spatial, and social dimensions. Thus, this framework was handled to focus on the human and environment relationship by taking the necessity and the importance of the (depth) psychological grounds in Semiology and Semiotics for an urban and architectural perspective into account. In other words, it was about the behaviors, thoughts, and feelings, which enable all experiences of the individuals and societies to sustain their urban lives in a built environment which is a 'sign' of each of them, being very 'symbolic' in an extent. This was, indeed, related to the matters of the 'causality' and the 'meaningfulness' in/of the 'built environment', which highlight the thesis's subject. For this reason, this 'theoretical framework' was covered through some convenient discussions mentioning about 'the sign and deep structures' of 'built environment' with its some of the fundamental components by considering these matters of the 'causality' and the 'meaningfulness'. Therefore, all discussions depended on giving an idea not only about the deficiency in Semiology and Semiotics for an urban and architectural perspective; in other words, the lack of a depth psychological ground in urban and architectural semiology and semiotics, that is, the problem defined in the thesis, but also about one appropriate answer to enable to eliminate this problem, which is to reinforce and reinterpret the approaches in semiology and semiotics for the use of any urban and architectural theory with the incorporation of 'the concept of archetype' to gain these approaches and theories a depth-psychological ground, that is, the objective of the thesis. Hence, throughout this 'theoretical framework', it was aimed to scrutinize not only the concepts in Semiology and Semiotics but also 'the concept of archetype' together with the theory of 'personality development', with regard to 'individuation', in line with the human-environment relationship; that is why some convenient discussions were made in this respect.

Therefore, this chapter consisted three main parts: 'sign structure and sign studies'; 'deep structure and depth psychology'; and 'deep structures of a built environment throughout history within a semiological/semiotic framework'.

In the first part titled as 'sign structure and sign studies', two fundamental sign studies were handled by considering the theme of the thesis. Thus, on one hand, the concept of Semiology, that is, the 'sign dyad' of Saussure, and on the other, the concept of Semiotics, that is, the 'sign triad' (with sign categorization) of Peirce, were reviewed. Through this part, in what ways these two differ from each other were held since these ways form the basis of their approaches to 'sign' and their concepts about 'sign structure'. Although the differences in their methods, research areas, subject matters, sign elements, and descriptions of the communicative process, as a result of all, each becomes one of the main branches of 'sign studies' followed by many semioticians: both approaches have concepts potential to comprehend how a 'meaning' is constructed in a 'sign' and communicated through this 'sign', which makes them worthy to review how they look into social patterns, past experiences, psychological aspects, and thinking habits in the context of built environment. At the end, therefore, these two with their particular 'semiological/semiotic perspectives', were discussed by covering the psychological grounds of them in this respect, in accordance with the human-environment relationship. Due to the fact that designing and building an urban and architectural environment is the outcome of architectonic activities of the humans, triggered by their physical, mental, and psychological structures -this points to these grounds in an extent- and that these activities are mediated with the assistance of a particular, both lexical and visual, 'language', by making a relationship with the forms, functions, and properties of this environment -this points to the 'semiological/semiotic concepts', as to focus on the association between either Semiology or Semiotics and the built environment, in terms of the psychological grounds, was inevitable. Furthermore, it was necessary, when it is considered that this subject provides an understanding by leading a way to the 'meaning(fulness)' of an 'urban and architectural environment' and a way to 'the causality' not only of the functioning of the human structures in terms of their architectonic (design) activities but also of their behaviors, thoughts and feelings, and experiences in terms of the individual and social lives, in the matter of the essence of all 'urban and architectural things'. In a sense, this part allowed to comprehend the 'sign structure', and to realize the deficiency/lack, that is, this psychological ground, as a result. That is to say, it was then the time, after this part, to explain the 'deep structure' together with its related study, in the following part of the chapter.

In the second part titled as 'deep structure and depth psychology', one of the main studies on depth psychology, that is, Analytical Psychology, founded by Jung, was handled by considering the theme of the thesis. Thus, its main concept, that is, 'the concept of archetype', and its related and complementary theory, that is, 'personality development', with regard to 'individuation', were reviewed. Through this part, what the 'archetypes' are was held with its related and complementary terms and topics. Although they are defined in different ways throughout history, the archetypes could be expressed, according to Jungian perspective, as 'the original models of anything providing all activities of the humans such as behaviors, thoughts and feelings, and experiences' or 'the fundamental pieces in the psychic structure, all of which together ensure that the humans maintain their capabilities to live for a lifetime'. However, in the most general sense, they are the characters, namely, the parts of the personality, in the meaning of a 'deep psychological cast': they are the things of any deep structure having 'archetypal contents' which make sense of the manifestations, that is, any behavior, experience, and even a built environment and anything pertaining to it, by expressing themselves; because, they trigger the physical, mental, and psychological structures of the humans, for example, design processes are manipulated through 'the archetypes with the archetypal contents'. They work on by applying the 'principle of opposites' through a tendency as to get a balance in their work, which leads to the formation of 'personality' and its development, that is, 'individuation'. This, in fact, depends on the 'human creativity' which is a tool for problem-solving consciously or unconsciously, on one hand. This results in the regulations of all the individual and social relations in a society, on the other. From two hands, they are important in the context of built environment. At this point, however, one should not think of all this in such a way as to accept all of Jung's ideas many of which seem quite speculative and were out of the topic in some extent because it is impossible to say something

about archetypes and anything related to them, for sure. For example, the emergence of them in many societies as their particular manifestations might be caused by the similarity of the human characters concerning thoughts and feelings and by the similarity of their lives or the way of lives in the sense of surviving and being in safe, or might be the consequences of living together and thus the consequences of being influenced by each other in a synchronous way. Furthermore, similarly, mythological fictions and epics might be originated from the events actually happened in history, and then be exaggerated to ensure the remembering these events, to learn the lessons, from generation to generation, and consequently have been changed through being transmitted from language to language among the tribes all over the world, like a game where a set of words is whispered in the ear of one who then whispers in the ear of another, but, a different set of words is acquired in the end. Of course, the first or the primitive seems important, but, perceiving it as a whole might possibly lead to an error as it would be quite difficult to have all kinds of information and knowledge about this matter; for example, did the man firstly live in the cave or build a hut? Indeed, this could be considered as an effort which has been always faced to return to the essence, to find what has been lost continuously, and it could be correspondingly said that perhaps the first thing actually is the real, and that the symbolic have been appearing by moving away from this reality or the essence, or, in an extent, from the meaningfulness, just like in the dreams that get simpler by becoming free of symbols when the problem is solved, when the truth or the reality or the essence is discovered, or when the maturity or the individuation is reached. In short, for this reason, in the part, these (Jungian) details (such as primitiveness, alchemy, astrology, religion, myth, and symbolic figures) were not included, but rather, the effectiveness in human behaviors, experiences, personality development, and individual and social lives and relations since the thesis focuses on the human-environment relationship and deals with the concept only to this extent. In a sense, this part allowed to understand the 'deep structure', in a relationship with 'the concept of archetype' considered as one appropriate answer to the problem in the thesis, and to realize the relevance of this compensation preferred for the deficiency/lack. That is to say, it was then the time, after this part, to discuss all of these mentioned up to that point, by providing a holistic perspective as the end of the theoretical framework, in the following part.

In the third part titled as 'deep structures of a built environment throughout history within a semiological/semiotic framework', an intellectual discussion was handled by considering the theme of the thesis. Thus, it complied both Semiology/Semiotics and Analytical Psychology; in other words, 'the sign and deep structures' with some of the theories put forward for the context of urban and architectural environment, in detail. This compilation covered a review, having a historical perspective, made by focusing on some of the basic urban and architectural components each of which was considered as a 'sign' and associated with 'archetypes' and 'archetypal contents' and consequently with 'symbols', and by rendering their 'denotative', 'connotative', and 'deep meanings' pertaining to the urban lives of the individuals and the societies in relationships with human behaviors, thoughts and feelings, and experiences in a built environment. At the end, there obtained some, quite significant, realizations about the matter of the 'causality' in term of human behaviors, their thoughts and feeling, and experiences, and the matter of the 'meaningfulness' in terms of their individual and social lives in an urban and architectural environment. In a sense, this part allowed to emphasize the deficiency/lack and also one of the possible ways to compensate it, and to look for a study to be conducted to accomplish the objective (of the thesis). That is to say, it was then the time, after this part, namely, after the chapter, to have a study in this regard, to deal with the deficiency/lack of a depth psychological ground in either Semiology or Semiotics for urban and architectural perspectives, which is, indeed, related to the human-environment relationship.

To sum up, the 'theoretical framework' of the thesis were handled in this chapter, in accord with the theme of the thesis by keeping in mind its main statement, referring to **the phenomenon of** '(to) shelter', which implies that 'to shelter' is one of the **main behaviors and experiences of the humans in an environment because** 'being sheltered' with a 'shelter' and '(to)/(the) shelter' is one of the main aspects of designing and building an urban and architectural environment as a result, and its main argument, referring to the human and environment relationship, which implies that there is a significant relationship between the humans and their built environments, and that this relationship depends on their coexistence to assure the life/survival, that is, the individual and social lives, in a built environment.

Therefore, it revolved around the subject of the thesis, that is, the matters of the 'causality' and the 'meaningfulness' in/of the 'built environment' in terms of the human behaviors, experiences, and individual and social lives. For example, the cultures of the societies, in the sense of religious, which could be considered as one of the most fundamental factors in the formation and the development of the built environments in which they live, when looked at the history of the settlements and the history of the individual and social lives in those settlements. To explicate, their doctrines, tenets, and principles state how to lead a life by guiding for the regulation of the individual and social relations, which tries to explain the 'causality' of both human behaviors and their works to make an urban and architectural environment be designed, built, and experienced, and very 'meaningful'. Consequently, the essence is expressed as many manifestations each of which characteristically becomes a sign of them through the architectonic activities: this has been going on throughout history, resulting in the paradigm shifts and causing the emergence of the styles, that firstly it sat in a balance, then it began to deteriorate, and after that the balance was restored again, but, over and over, by accentuating the essence. In brief, to interpret a built environment, this causality and meaningfulness, in terms of the behaviors and the experiences in the lives of the individuals and the societies, is quite important, and this needs surely to be handled through the cooperation of Depth Psychology with Semiology and Semiotics since they could facilitate this interpretation. Hence, this chapter tried to address all of them. In this way, finally, a preface for the following chapter of the thesis, that is, the chapter titled as 'the study', was prepared, to make sense of the 'depth-psychological ground' of the 'semiological/semiotic concepts' when the relationship of the humans with their built environments, as one of the main matters of urban and architectural theories, is considered; because, the 'semiological/ semiotic assets' reveal the 'meanings' behind these inner realms and the outer world.

That is to say, through this framework, the thesis has possibly arrived at a conclusion which points to the theoretic sufficiency of itself. As a conclusion, a new and further debate, being a study, will be provided for these fields, to ensure the meaningful designs and constructions of the built environments which enable experiences for life/survival in a sustainable, satisfactory, and safe way, meaningfully.

CHAPTER 3

THE STUDY

"It is peculiar task of architecture to reach meaning: the human habitat is pivoted around meanings, not objects." (Giurgola, 1965, p.111)

In the previous chapter, a 'theoretical framework' was handled by concerning the theme of the thesis. As a beginning, not only the studies of sign, that is, Semiology and Semiotics, but also Analytical Psychology in which 'the concept of archetype' is included together with its related and complementary theory, that is, 'personality development', were reviewed. After that, an intellectual discussion about the built environment was held in a way focusing on some of its urban and architectural components each of which was considered as a 'sign', associated with 'symbols', and with 'archetypes' and 'archetypal contents'; hereby, it accentuated that some of the theories which have been put forward for urban and architectural environment are in a relationship with not only the study of signs but also analytical psychology. Finally, a summary was made to address what was talked about in that chapter briefly. As a result, a preface for the following chapter of the thesis, that is, the current chapter titled as 'the study', were provided.

In this chapter, the problem which is defined in the thesis will be handled in line with the objective of the thesis by keeping always its main statement and main argument in mind. Therefore, a study will be conducted to suggest a new formula(tion) for the elimination of this problem, through a method, by revolving around the subject of the thesis. At this point, it is necessary to make a brief reminder. First of all, the main statement of the thesis, that is, the phenomenon of '(to) shelter', implies that 'to shelter' is one of the main behaviors and experiences of all persons and the peoples in an environment for 'being sheltered' with a 'shelter' and '(to)/(the) shelter' is the main aspect of designing and building an urban and architectural environment as a result of these behaviors and experiences. Accordingly determined, the main argument of the thesis expresses that there is a significant interactive informationbased mutual relationship between the humans and their built environments, and this relationship depends on their coexistence to assure the life/survival, that is, the individual and social lives, in a built environment. From these two, it could be inferred that a built environment is based on both a semiological/semiotic ground and a (depth) psychological ground. However, a problem is encountered in this regard. Consequently, the problem is defined as a deficiency in semiology and semiotics for an urban and architectural perspective; in other words, defined as the lack of a depth-psychological ground in urban and architectural semiology and semiotics. To eliminate this problem, one appropriate answer is considered: by taking not only the human and environment relationship but also human behaviors and experiences into account, 'the concept of archetype' is preferred as the answer. This explains the objective of the thesis, which is to reinforce and reinterpret the approaches in semiology and semiotics for the use of urban and architectural theories with the incorporation of 'the concept of archetype' to gain these approaches and theories a depth-psychological ground. As a result, a study is required to be carried out by using a method being proper in this sense. Thus, the method of this study is described as a plan through which this possible way of the incorporation of the concept of archetype into semiology and semiotics for the urban and architectural perspectives is formulated (for these fields) to develop a hypothetical concept in conjunction with a convenient model proposed as an advanced one to present and to explain the idea behind its conceptualization, which is based on emphasizing the depth-psychological ground by considering the matters of the causality of behaviors and experiences and the meaningfulness in and of the built environment in terms of the individual and social lives, that is, the subject of the thesis.

That is to say, this chapter will handle this study through this method to eliminate this problem in line with this objective, by abiding by this main statement and this main argument. Thus, it will bear three parts for the study which will be a shot to develop this envisaged concept for urban and architectural semiology and semiotics, by acquiring a model and by defining some particularities to it: these parts are, in sequence, 'the criticism', 'the formulation', and 'the conceptualization'.

In the first part of the chapter, which is titled as 'the criticism', a criticism will be made in a relationship with the theme of the thesis. On one hand, some approaches in Semiology and Semiotics will be examined in order to unfold some of the things, which will be suitable for the conceptualization of the model in line with the problem and the objective of the thesis, from their contents. That is to say, these things will be considered as the necessary constituents of the model and be preferred to be used in forming a basis for its concept. This will abide by the approaches. On the other, the concept of archetype will be examined along with its related theory, that is, the development of personality, too. That is to say, it will be considered as the main constituent of the conceptualization of the model, since it is accepted as the answer, and be preferred to be used in firming the basis. This will enhance the approaches. Hereby, all the constituents of the new model of urban and architectural semiology and semiotics will have been found out by being distinguished from those included in the contents of the approaches in Semiology and Semiotics on one hand and by not only uncovering the lack which is indeed expected to be in these contents but also incorporating the appropriate compensation for this lack, that is, the archetypes, into their contents in a way on the other. As a result, they will be put together, at the end of 'the criticism' part, in a list which describes what they will be and be able to do systematically in the conceptualization of the model. After that, it will be then the time to formulate the model with its conceptualization by means of this list, that is, the guideline for the formulation, by determining some particularities to the model, and then, be the time to present and explain the model and its concept so that it will be configured with the idea which emphasizes the matters of the causality and the meaningfulness in the context of built environment with reference to the human and environment relationships in terms of behaviors, experiences, and daily lives.

In the second part of the chapter, which is titled as 'the formulation', a formula will be systematically devised for the model by considering its conceptualization, in a relationship with the descriptive list, and be applied, therefore. Through this formula, some particularities will be determined for its concept by using the constituents in the list in such a way as to bring a new perspective to urban and architectural semiology and semiotics. For this reason, it will be desired presumably to accept some of them as the same to provide a common ground with the existing approaches in Semiology and Semiotics on one hand, and to adapt the others either to get an accord with this new perspective or to become as specific to it on the other. In this way, the model will have been formed together with the development of its own concept acquiring some peculiar particularities that could be proposed basically as the thematic schema of its conceptualization, and the concept will have been configured with the idea, which is to emphasize the matters of the causality and the meaningfulness in the context of built environment, by offering this new perspective through this model. As a result, both will be presented together, at the end of 'the formulation' part, through some diagrams and a matrix/table which is based on an exemplification prepared as a corresponding evaluation of some of the fundamental urban and architectural things. After that, it will be then the time to explain the concept through the model.

In the third part of the chapter, which is titled as 'the conceptualization', a concept will be explained by referring to the model and by touching on its particularities, therefore. This will show hypothetically its potency of having a role in assessing many discourses and discussions on anything pertaining to the built environment. As a result, the concept, in line with the model, will be developed, at the end of 'the conceptualization' part, as the envisaged and expected result of this study which will have been completed by accomplishing the objective of the thesis and by eliminating the problem. This will introduce the advanced version or further edition of urban and architectural semiology and semiotics having a depth-psychological ground.

After all, at the end of the chapter, there will be a summary including the main points of this study in terms of what will have done or achieved. Hereby, the chapter will be ended, for the following chapter, that is, the final chapter titled as 'the conclusion'.

3.1. The Criticism

In this part of the chapter, some of the approaches in Semiology/Semiotics will be examined on one hand to unfold some of the things from their contents, which seem quite suitable for the conceptualization of the model. They will be considered as its fundamental constituents which form a basis for its concept so that they will abide by these approaches. On the other, the concept of archetype will be examined together with its related theory, that is, personality development, too. It will be considered as its main constituent which firms the basis so that it will enhance these approaches. As a result, at the end of this part, the constituents of the envisaged model of urban and architectural semiology and semiotics will be found out and put together to be used for the development of its concept acquiring some particularities for itself, by considering what they will be and do in this conceptualization.

Therefore, this part, firstly, covers the criticism of Semiology/Semiotics.

To begin, it is necessary to remember that there is one important thing about the way that all (social)individuals live. It is a fact that each and every of them leads, by their nature, a collective life through which any of them comes together with the others to sustain the life/survival by meeting their needs, for example, providing security for themselves. In other words, they form groups, communities, and societies in an environment where they live and survive: this consequently renders all social. Thus, all (social)individuals need to have interactive mutual relationships with one another individually and with a greater part of themselves socially in their physical, spatial, and social environment: they ultimately have to communicate for all the matters they need. That is to say, communication is a kind of way meeting the needs of such groups, communities, and societies with an environment. It is the act of receiving and transferring communicative information correspondingly between themselves and it accordingly forms their environment that further acquires a social dimension beyond its physical and spatial dimensions. In this way, through communication or the act of receiving and transferring information, the needs are met both individually and socially, moreover, physically and spatially, in a built environment.

Gleaned through communication, 'information' becomes a fact which concerns a particular thing: it contains a yield produced as a result of the relations between the things. That is why, it embodies meanings. It means 'concept' which has Latin roots in the sense of 'to give form, to form an idea, and to mold the mind', with a general description of 'consisting of meanings and messages' and 'bearing the meanings and messages fully through'. Moreover, it is associated, in Greek, both with the word 'hypotyposis' which means 'model in a moral context' and with the word 'prolepsis' which means 'representation' (Capurro & Hjorland, 2005, p.352). In addition, it is derived from the ancient Greek word 'form' as not only 'morphe' which refers to 'morph' but also 'eidos' which refers to 'kind, typos, idea, shape, set, thought, and concept'. Accordingly it could be said that the word 'information' is in a relationship with the words 'concept', 'context', 'idea', 'representation', 'shape', 'form', 'type', and 'morph', etc. That is to say, any information could be considered to have a close relevance to a concept, a context, an idea, a representation, a shape, a form, a type, and a morph. At this point, it becomes a thing with "a property of material entities" (Capurro & Hjorland, 2005, p.362). This is quite intriguing in terms of reminding of design processes which make the environments be built as the representations of the idea(l)s in forms. Thus, it could be possible to infer that a built environment appears as a thing being full of 'information' and conveys meanings through 'information' as a result of the design processes maintained through the functioning of the physical, mental, and psychological structures (triggered by the psyche) of the humans. In a sense, an urban and architectural environment refers to 'information' which has many referential contexts pertaining to the human and environment relationship such as physical, spatial, psychological, social, and historical issues. To sum up, on account of its roots, 'information' becomes "a thing" and "a psychic construction" (Capurro & Hjorland, 2005, p.368), like an environment, built through architectonic activities, having physical, spatial, social, and historical dimensions within its (in)formation.

• In consequence, it will be good to consider 'information' with its material, psychic, physical, psychological, spatial, social, historical aspects as one of the necessary constituents of the model in order to use it for the development of its concept since it is the basic content of 'communication'. What is more, it will be also good to consider the terms, 'concept', 'context', 'idea', 'representation', 'shape', 'form',

'type', and *'morph'*, for the same reason, because all are <u>the relevant</u> terms of 'information' owing to the fact that they are its meanings acquired by its own roots and that they remind of the design processes.

However, what makes 'information' possible to be received and transferred through a communication is the sheer existence of some mediums one of which has utmost significance. It is certainly a 'language'. A 'language' provides a particular manner of expressions of thoughts and feelings as a kind of their manifestations by constructing a system in which all meanings are borne through 'information'. It contains a set of aural and visual 'notations' for this reason. That is to say, it mediates 'information' be exchanged with a particular sign-system peculiar to only itself.

In order for running of this performance of a 'language', there needs an integration of three fundamental components belonging to its construction: 'form' which refers to its mechanism, configuration, structure, and its grammatical rules; 'content' which refers to meaning, in other words, any concept and idea; and 'use' which refers to its purposes and functions (Bloom & Lahey, 1978, pp.69-97). In addition to this, this performance is also configured through three ways by making a relationship with these three components: 'form' renders its 'syntactic dimension'; 'content' states its 'semantic dimension'; and 'use' corresponds to its 'pragmatic dimension' (Bloom, 1980, pp.116-123). In short, it performs for receiving and transferring 'information' together with meanings through these three components and these three dimensions.

• In consequence, it will be good to consider 'language' that covers a set of sign-system having some particular 'notations' peculiar to itself as one of the necessary constituents of the model in order to use it for the development of its concept since it is the mediator of 'communication' to receive and transfer 'information'. What is more, it will be also good to consider not only 'form', 'content', and 'use', because they are three components of 'language', but also 'syntactic dimension', 'semantic dimension', and 'pragmatic dimension', because they are, for the same reason, three dimensions of 'language'.

Due to the fact that a 'language' embodies a set of sign-system in which there involve 'notations', these three dimensions are also associated with the study of sign-

systems, which searches the meaningful relationships in the sign-systems of any communication, in other words, 'notational relations of meanings'.

In a sign system where these dimensions exist, there are some elements with which the dimensions are correlated to each other for bearing the meanings: two elements of dyadic relations of the Saussurean perspective, or in Semiology that is the study of F. de Saussure; three elements of triadic relations of the Peircean perspective, or in Semiotics that is known as the study of C. S. Peirce (Figure 3.1) (see: the previous chapter). In the former perspective, related to linguistics and based on structuralism, there are a 'signifier', as the form of sign, and a 'signified', as the representational concept of sign, both of which compose the 'sign' with a meaning to bear it; in the latter one, related to logic and based on pragmatism, there are a 'representamen' (sign vehicle being something set as a sign), as the form of sign, an 'object', as the referential thing or designated thing, and an 'interpretant', as the sense or the thought made of sign, the last two of which define the 'sign' with a meaning to bear it.

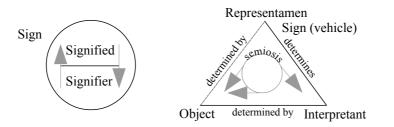


Figure 3.1: Saussure's dichotomy²⁶ (left) and Peirce's trichotomy²⁷ (right) (drawn *by the author* with respect to the aspects of Semiology and Semiotics)

²⁶ "I call the combination of a concept and a sound-images a sign ... I propose to retain the word Sign to designate the whole and to replace concept and sound-image respectively by Signified and Signifier; the last two terms have the advantage of indicating the opposition that separates them from each other and from the whole of which they are parts" (Saussure, 1966, p.67).

_Signifier: the form that the sign takes (marker, sound, text)

_Signified: the concept-meaning that the sign represents (outcome, interpretation, conception)

²⁷ "I define a Sign as anything which on the one hand is so determined by an Object and on the other hand so determines an idea in a person's mind, that this latter determination, which I term the Interpretant of the sign, is thereby mediately determined by that Object" (CP8.343).

_Representamen: the form that the sign takes to represent something for its interpretation; sign-vehicle Object: the thing to which the sign refers (any concrete or abstract thing in nature)

Interpretant: the sense made of sign (mental thought or effect on mind)

In consequence, by keeping in mind that 'Semiology' and 'Semiotics' are two basic studies of sign-systems in terms of 'notational relations of meanings' and 'bearing meanings', it will be good to consider not only signifier' and 'signified', because they are two elements of 'Semiology' (with reference to Saussure), but also 'representamen / sign vehicle', and 'interpretant', and 'object', because they are three elements of 'Semiotics' (with reference to Peirce), as some of the necessary constituents of the model in order to use them all for the development of its concept. What is more, it will be good to consider also 'dyadic relations', referring to Semiology, and 'triadic relations', referring to Semiology, and system.

In Semiology and Semiotics through which a 'sign' is defined together with some basic elements of a bearing-meaning process, that is, 'signification', semiological and semiotic relations, respectively dyadic and triadic relations, are emphasized within a sign-system. After these fundamental beginnings of studying on the signsystems, these relations have been handled again and again, differently, with some other, but similar, elements re-named differently in an extent for the sign-systems considered by the followers of the perspectives of either Semiology or Semiotics.

For example, on the side of C. K. Ogden and I. A. Richards, the sign-relations are handled, for a better understanding of how a language runs, with three differently renamed elements reminding of the ones of Saussure and Peirce. By depending on a semantic perspective, they are indicated in a triangular diagram through a proper graphical communication of lines and dots. In the triangle (Figure 3.2), lines are used in solid or with dots for the representation of the relations: the solid line between 'symbol' and 'thought or reference' refers to causal relation, which is correct, where the meaning is gained directly; the solid line between 'thought or reference' and 'referent' also refers to causal relation, which is however adequate, more or less direct, or even indirect, where an appropriate meaning is gained adequately; the others, refers to imputed relation (Steen, 2016, pp.104-105) (see also: Ogden & Richards, 1923, pp.9-12). Rendered as 'the triangle of reference', it is based on an idea to concern the logic relation of 'word' ('symbol') between 'thoughts'/'concepts' ('reference') and 'things'/'objects' ('referent') by addressing 'meaning', in other

words, based on a notion which implies that 'word' is 'symbol' that is embedded with 'meanings' by depending on mental images, for different 'things' ('referent') to different persons in different situations like a search for the connection of an idea, that is, 'thoughts' or 'concepts' ('reference'), with an 'object' ('referent').

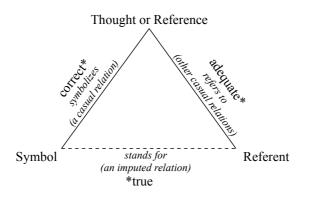


Figure 3.2: the semiotic (semantic) triangle of Ogden and Richards ('the triangle of reference'²⁸, known also as 'the triangle of meaning') (source: Ogden & Richards, 1923, p.11) (redrawn *by the author* as the same as the source)

That is to say, it has its own 'meaning' peculiar to a certain 'reference' and this meaning given by the 'reference' is 'the meaning of meaning' (Ogden & Richards, 1923).

• In consequence, it will be a great idea to propose 'graphical expression' as one of the necessary constituents of the model in order to use it for its presentation just as Ogden and Richards used in their 'triangle of reference' because it shows the way of representation of the relations between the elements in a sign-system.

However, the dyadic-relation of Saussure and the triadic-relation of Pierce, and also the one in the model of Ogden and Richards, are not qualified clearly in terms of showing three, that is, syntactic, semantic, pragmatic, dimensions of a sign-system. Fortunately, they have become the clearest by some of the other scholars over time.

²⁸ Thought/Reference: an experience, knowledge, or idea relating to the word to understand this word Referent: a thing or an object

_Symbol: a linguistic word which has its own meaning (a representation for semantic meaning)

For example, on the side of C. W. Morris, these three, syntactic, semantic, and pragmatic, dimensions are used in accord with the relations between the elements of his approach. In the approach, there are mainly three basic elements re-named by him as 'sign vehicle', 'designatum/designata or denotatum/denotata'²⁹, and 'interpretant'; however, with an addition of the forth, that is, 'interpreter' (agent) (Zeman, 1981, pp.7-11) (see also: Morris, 1938, pp.4-6; Morris, 1946) (Figure 3.3). In fact, his first three elements have similarities with those of Peirce, which means that he must have been inspired from Semiotics. Furthermore, there is an inspiration in his approach also from the perspective of G. H. Mead (Zeman, 1981, p.16) (see also: Bartles, 2021, p.58). To explicate, the approach of the former who studied on sign having a triadic relation which is established through his semiotic elements by concerning 'the process of production, interpretation, representation of meaning' is the one source of Morris on one hand; the approach of the latter who developed a theory³⁰ of social behaviorism which searches for the explanations of how social experiences help an individual for the development of personality by revolving around the matters of self-awareness and self-image that the self deals with is his other source on the other (see: Morris, 1937, p.115-119). That is to say, to form this approach of him, as a result of scrutinizing the partaking subjects of both, one thing that Morris did was to designate Peirce's relations with 'syntactic', 'semantic', and 'pragmatic' dimensions which direct the sign-system within a 'three dyadic-relation' (Morris, 1938, pp.13-30) (see also: Morris, 1946, p.219; Dewey, 1946, p.86; Zeman, 1981, pp.11-12), by accordingly awarding the semantic dimension to the empirical works, the syntactic dimension to logic, and the pragmatic dimension to the cognitive domains (Dewey, 1946, p.86). The other thing that he did was to follow Mead's behaviorist approach (see: Morris, 1946, pp.217-220), by considering the behaviors in an environment as an important part of the signification (Morris, 1946, pp.204-216) to propound how the interactions of (social)individuals with their environments are associated with the meanings (of events, of acts or actions), which is a matter of syntactic, semantic, and

²⁹ There is a difference between these two, depending on the difference between the words 'designate' and 'denote': 'denotatum/denotata' is preferred for actually existing object/s (See: Morris, 1938, p.5), referring to not only referent/object but also members and events.

³⁰ This theory can bring to mind 'the concept of archetype' in a way associating it with the human and environment relationship; but, both are different from each other: these two should not be confused.

pragmatic dimensions. That is why it could be said that "all psychological knowledge is a case of what Morris calls semantic" (Dewey, 1946, p.93) which has links with pragmatic dimension through the behaviors and experiences. In the dimension, the cognitive domains remain and involve all psychological, biological, and sociological phenomena occurring in the sign-functioning (Dewey, 1946, p.86) that refers to the logic of syntax.

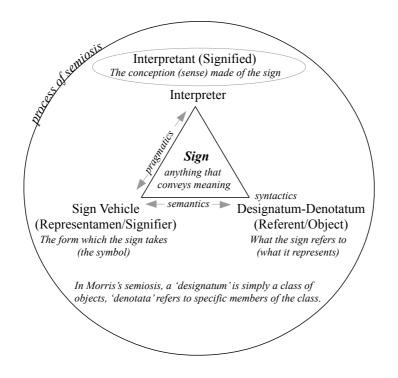


Figure 3.3: the triadic (three dyadic) system of semiotics of Morris³¹ (source: Bartles, 2021, p.58) (redrawn *by the author* as the same as the source)

In this way, he made these three dimensions be the clearest with his three elements by engaging them together through three dyadic relations: he formed the relations in the most understandable situation in a sign-system by emphasizing the sign-relations in a way referring to the human behaviors and their interactions with an environment. In short, he presented a semiotic model which contributes good points in this regard.

³¹ A question comes to mind about the diagram, which is that what if the places of words 'syntactic', 'semantics', and 'pragmatics' are changed? Then, it might be a different idea in terms of three dyadic relations, if the places were changed, that is to say, to place 'semantics' between 'sign vehicle' and 'interpretant', 'pragmatics' between 'designatum-denotatum' and 'interpretant', and also 'syntactic' between 'sign vehicle' and 'designatum-denotatum'.

In consequence, it will be good to consider 'syntactic dimension', 'semantic dimension', and 'pragmatic dimension' together as one of the necessary constituents of the model in order to use three of them together for the development of its concept because they are the main three dimensions of a sign-system, the main three dimensions referring to the relations between the elements of this sign-system. What is more, it will be necessary to handle them, thus, by considering 'three dyadic-relations', being the relations between the elements in a sign-system.

Indeed, these three dyadic-relations reveal any 'information' about anything in the sign-system as a matter of production, by connecting any dual of the elements with two each other. That is to say, becoming "a semiological institution" (Raber & Budd, 2003, p.515), 'information' is plainly the product of the relations between 'signifier' and 'signified'; 'reference' and 'referent'; 'content' and 'representation'; 'thing' and 'thought'; and 'informative object' ("available to be read and open to interpretation" (Raber & Budd, 2003, p.508) and 'meaning' (Raber & Budd, 2003, pp.507-519).

At this point, an important question comes to mind especially in the context of graphical information which refers to visual signs and symbols. When the fact that a built environment is full of information due to its formation having many visualities is considered, this question becomes related to the design processes in a sense. It is simply how any connection is set between 'signifier' and 'signified' (Huang, 2008, p.13) and it could be understood as the way how a 'meaning' that is borne through 'information' is connected with a 'representation' having 'information'. In that,

to understand how an interpretant (the user of information) constructs the relation between a signifier (the representation of information) and a signified (the meaning of information) is making a complementary model to understand how a user find an informative objects (physical interactions with the system) and obtain meaningful ideas from it (mental state of knowing) at the same time. (Huang, 2008, p.12)

However, it is a complex process to bridge an informative object (signifier) with a specific idea (signified), which makes information [the product of its relation] quite ambiguous (Raber & Budd, 2003, p.507; Huang, 2008, p.13). It is due to the fact that there are two difficulties: the first one is "an accurate and adequate representative description" (Raber & Budd, 2003, p.509) about an object (see also: Huang, 2008, p.13) (for example, 'parole' of Saussure); and the second one is "the relevance of

retrieved results" (Huang, 2008, p.14) (see also: Raber & Budd, 2003, p.509) (for example, 'langue' of Saussure).

When these are considered in the context of design processes ending up with a built environment, it could be said that both depend on the matters of '(re)presentation' as a 'creative production' and 'interpretation' as an 'experiential feedback'; the former is related to the first one and the latter is related to the second one (by the author). It is because, '(re)presentation' and 'interpretation' are the very fundamental matters of design(ing) that is mediated with a particular language having syntactic, semantic, and pragmatic dimensions. To explicate, let's use the relevant terms of 'information'. The former depends on a 'concept' which fits an 'idea', and then turns into a 'form' in both syntactic and semantic ways not only by including related 'contents' that are pragmatically set but also by carrying meanings that are borne through 'information'. That is why '(re)presentation' refers to 'creative production': it is the representation of a conceptual idea which is generated as its form including related contents and conveying meaning. The latter depends on this 'form' which represents this 'concept' with these included 'contents' and meanings borne through the same 'information' so that this 'idea' can be experienced in a consistent way (for a detail, see: Eren, 2013). That is why 'interpretation' refers to 'experiential feedback': it is the interpretation of form including contents and conveying meaning as the feedback of its conceptual idea that is perceived and comprehended through experiences. Importantly to denote, the common ground of both is the mediation of a (the same) particular language, in other words, a design/architectural language: it is for the bearing of meanings, and thus for the receiving and transferring of 'information' in relation to these meanings. As a result of this consideration that is held with the matters of '(re)presentation' and 'interpretation', it could be said that an 'informative object' (signifier), or a designed form including its related contents and concepts, could be bridged with a specific idea (signified), or the conceptual idea of this design, through the design processes mediated with a design language. It makes then 'information' become unambiguous with the borne meanings; thus, these difficulties could be eliminated in some extent. In this way, the user of information ('interpretant') interacts with the 'informative object' (signifier) -considered as a (re)presentation- by obtaining meaningful ideas

(signified) -considered as an interpretation- from this informative object; that is to say, the connections between a 'signifier' ('informative object'; 'representation', etc.) and a 'signified' (mental state of knowing; the 'meaning' of 'representation', etc.) could be set (by the 'interpretant'; the user of the 'information') and the dyadicrelations in a sign-system could be maintained between its elements when considered at least in the context of design(ing) of a built environment.

• In consequence, it will be good to keep in mind *(re)presentation' as a 'creative production'* and *'interpretation' as an 'experiential feedback'* as two constituents of the model for the development of its concept since both are two aspects of how the connection is set by an interpreter or a user between the elements (with reference to 'design processes' in relation to the terms 'idea', 'concept', 'contents', and 'form').

Actually, in such a connection that is simply set by 'interpretant' between 'signifier' and 'signified', 'dyadic relations' are mutually maintained between the elements, and as a result, a 'triadic relation' is established through these 'dyadic relations' in a general sense.

By the time 'information' is considered as its basic determinant in relation to 'sign', this 'triadic relation' could be explained or examined with a conceptual consideration which defines these 'dyadic relations' in a way associating them with 'information'. This consideration is based on the togetherness of three concepts: 'information as thing'; 'information as process'; and 'information as knowledge' (Buckland, 1991, cited as in Huang, 2008, p.12) (see: Capurro & Hjorland, 2005; Raber & Budd, 2003). It is illustrated with a model (Figure 3.4) which grounds on the approaches of Peirce and Morris and even the one of Ogden and Richards (see: Figure 3.2) in an extent, and it also demonstrates "the relations among the user of information, the representation of information, and the meaning of information" (Huang, 2008, p.12). According to the model, 'information' (vehicle; signifier); 'information as process' refers to the relationship between 'representation' (vehicle; signifier); designatum; signified); and 'information as knowledge' refers to the relationship between 'interpretant' (user) and 'meaning' (designatum; signified).

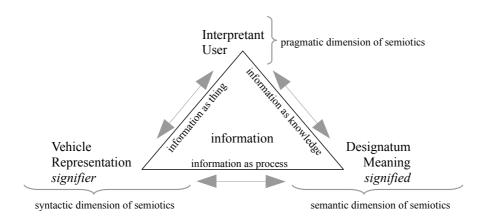


Figure 3.4: 'information as sign', based on Peirce-Morris semiotic triangle (the interactions between the user and the informative object³²)
 (source: Huang, 2008, p.13) (redrawn *by the author* as the same as the source)

In brief, this consideration points to the importance of this 'triadic relation' that is constructed through the togetherness of its 'three dyadic relations' by considering 'information' as the basic determinant of its sign-system in terms of enabling the meanings borne through this 'information' to set a connection in this sign-system. In other words, a connection that is set by an 'interpretant' between a 'signifier' and a 'signified' or any interaction of an 'interpretant' with a 'signifier'-'signified' pair could be generated within a sign-system, which has the construction of a 'triadic relation' established through 'three dyadic relations', through the basic determinant, that is, 'information' which bears the meanings in this system.

• In consequence, it will be good to consider *'information as thing'*, *'information as process'*, and *'information as knowledge'* together as one of the necessary constituents of the model in order to use three of them together for the development of its concept because they are <u>three</u> aspects of how the connection is set by an interpreter or a user between the elements with reference to 'information' being the basic determinant of a 'triadic relation' generated through 'three dyadic- relations'.

³² _Interpretant: the disposition of an interpreter as a consequence of the perception of the sign _User: the interpreter

_Vehicle: the thing which functions as a sign

_Representation: the vehicle to get the informative objects through physical interactions

_Designatum: the kind of things which the sign designates

_Meaning: the designatum to make meaningful ideas through the mental state of knowing

In fact, this means that there is a design-process-based relationship in such a system. Therefore, the aforementioned consideration could be re-interpreted with reference to the aforementioned matters of design processes, that is, (re)presentation (a creative production) and interpretation (an experiential feedback), both of which complement each other syntactically, semantically, and pragmatically in line with the same 'idea', the same 'concept', the same 'design', the same 'form', and the same 'contents'. According to this, by making the model (Figure 3.4) a base, the relation between 'interpretant' and 'signifier', referring to 'information as thing', could be associated with 'form' and its 'contents' by considering it as a matter of 'representation'; the relation between 'signifier' and 'signified', referring to 'information as process', could be associated with 'design' by considering it as a matter of 'bearing meanings through information'; and the relation between 'signified' and 'interpretant', referring to 'information as knowledge', could be associated with 'idea' and its 'concept' by considering it as a matter of 'interpretant', referring to 'information as knowledge', could be associated with 'idea' and its 'concept' by considering it as a matter of 'interpretant'.

• In consequence, it will be necessary to take into account *the association* between 'information' (through which the meanings are borne) and 'design processes' for the conceptualization of the model because it is the key which refers to the connection that is set in a sign-system.

However, only a proper inquiry into the causality of this association, which stands for the relations in the sign-system, could give details about how this connection is set. In other words, a deep understanding about the causality could meaningfully elucidate the mentioned question. Due to the fact that this system has a designprocess-based relationship, the inquiry becomes related to the matters of the causality and the meaningfulness of the architectonic activities for both designing and building an environment. Thus, it becomes also related to 'archetypes' in a sense since they are the fundamental pieces of the human psychic structure that triggers, as assumed, their physical, mental, and psychological structures for these activities including mostly design processes. These processes triggered by 'archetypes' are initiated and maintained through 'conscious and unconscious mind' by including many steps from an idea to design and to construction such as 'problem definition', 'background research', 'idea generation', 'brain storming', 'conceptualization', 'decision making',

'design optimization', 'image making', '(re)presentation', 'expression', 'designing', 'sketching', 'drawing', 'modeling', 'design evaluation', 'formation', 'manifestation', 'building', 'experiencing', 'perception', 'comprehension', and 'interpretation', any of which is a 'signification: that is to say, all define a sign-system. Therefore, during these processes, a language, that is, a visual and articulate or design/architectural language, is used for the connections of all ideas, concepts, forms, and contents to each other through the application of some rules, explained with Gestalt Theory³³, which make sense of these connections. Moreover, it mediates 'information' for bearing meanings together with the 'notations' being its building blocks and with its three constructional syntactic, semantic, and pragmatic dimensions through which these notations are wholly organized in units to bear all meanings. In respect of a design pertaining to an urban and architectural environment these dimensions have a great importance because they together allow this built environment to gain an attribute, that is, 'functionality', as well as, even beyond, its 'formation'. For an explanation, the words of Rapoport (1990) could be included here by considering a built environment as a 'sign' having some relations in its sign-system: according to him, 'syntactics' could be defined as "the relationship of sign to sign within a system of signs, that is, the study of structure of the system"; 'semantics' as "the relation of signs to things signified, that is, how signs carry meanings, the property of the elements"; and 'pragmatics' as "the relation of signs to the behavioral responses of people" (p.38). When they are adapted to this context of design(ing) for building an environment, according to his sayings, the first one refers to the organization, or how it is designed and built with an idea; and the second one refers to its design, or (in)formation with concepts and contents regarding the idea; and the third one refers to functions, or how it is experienced through behaviors. All mean together that be(com)ing a sign-system, a built environment offers a great deal of 'purposive functions' (its pragmatic dimension) within 'a design that is presented as a form

³³ It is proposed by M. Wertheimer, W. Köhler, and K. Koffka, in 1920s to understand how human mind makes sense of the world; therefore, it deals with the patterns and the perception of the visual things in these patterns which are unified as a whole through the principles of law of prägnanz, common fate, figure and background relationship, proximity, closure, similarity, and good-continuity. That is to say, it is a movement emerged in response to behaviorism and appeared as a cognitive approach. For this reason, it is generally used for any kind of design; moreover, it is indispensable for any urban and architectural design. (The reference (Eren, 2013) can be reviewed in this regard.)

having contents' (its syntactic dimension) by regarding 'a conceptual idea that defines the contents' (its semantic dimension) in order to bear meanings, for the users, through 'information'; because, it is organized with the 'notations', which are indeed its components, in 'a signifying-signified way' through 'the mediation and the operations of a visual and articulate language or design/architectural language'. In short, this is a kind of 'signification' through which the meanings are expressed and manifested within the designed and built 'representations' that are presented to be experienced as their 'interpretation'. In brief, it concerns all the semiological/semiotic relations, within a triadic entity as a whole that thoroughly associates 'forms' with 'functions' as well as 'concepts and contents' in line with an 'idea', by depending on the design processes mediated through its visual and articulate (design/architectural) language that runs with notations (and components) and with these dimensions.

In consequence, by keeping the relevant processes of 'design' (with reference to Gestalt Theory and with regard to the architectonic activities that are controlled through conscious and unconscious mind) such as 'problem definition', 'background research', 'dreamingdesiring idea(l)s', 'idea generation', 'brain storming for solution', 'decision making', 'design optimization', 'conceptualization', 'image making', '(re)presentation', 'expression', 'designing', 'sketching', 'drawing', 'modeling for prototypes', 'design evaluation', 'formation', 'manifestation', 'building with materials', 'perception', 'experiencing', 'comprehension', and 'interpretation' in mind, it will be good to consider not only 'syntactic dimension', 'semantic dimension', and 'pragmatic dimension', since they are three dimensions of 'design/ architectural language', but also 'form and function relationship' and 'concept and content relationship' in line with 'idea', since they are the aspects of 'design/architectural language', as some of the necessary constituents of the model in order to use them all for the development of its concept; because, 'design/architectural language' that maintains 'visuality' and 'articulation' is the mediator of 'design process'.

With regard to 'function', the approach of U. Eco comes to mind. In this approach which includes an urban and architectural perspective, 'function' is emphasized in a relationship with 'form', as either 'denotative' or 'connotative', in respect of a 'sign', which is surely an 'architectural sign' (Eco, 1980a, p.214). Here, 'denotation' is related to usages and acts while 'connotation' is related to symbolical values, cultural conventions, and ideology (Eco, 1972, cited as in Terzoglou, 2018, p.121). Moreover,

according to his approach, not only a form of habitation whose certain conception has many connotations is denoted but also a certain ideology of its functions and the other things are, symbolic and connotative, notated by an 'architectural object' (Eco, 1980b, pp.20-24). Because of the fact that connotations are described through the certain denotation (Eco, 1980b, pp.20-24), this object, which is a kind of design that consists of urban and architectural components to define urban and architectural spaces, denotes itself within a form having utilitarian functions and connotes its diverse functions by making any related various meaning be possible. In short, the approach of him takes account of 'the form and function relationship' within a consideration of 'denotation' and 'connotation' (for his opinion about 'denotation' and 'connotation', with reference to L. Hjelmslev, see: Eco, 1976, pp.54-57), by defining an 'architectural sign' "as system of manufactured objects and circumscribed spaces that communicate possible functions" (Eco, 1980a, p.213). Accordingly, this sign could be associated with any urban and architectural thing pertaining to a built environment such as components, objects, and spaces through their denotative and connotative functions, with the received and transferred 'information' in terms of the borne meanings, and with the corresponding behaviors and experiences. It could be discussed, thus, in a general sense, within the framework of not only a relationship between 'form' and 'function', by considering the concepts and contents, but also the relationship of this 'form-function' dual together with the 'concepts and contents', by considering 'denotation' and 'connotation', to make an understanding about the ways of bearing meanings in design processes that include draft-expressions and embodied manifestations as '(re)presentation' for their 'interpretation'. All of them get involved in a kind of 'signification' which has urban and architectural perspectives. On the other hand, this 'signification' also has a capability that enables a continuation of some architectural signs in such an ordered and interwoven way like a chain since there are several hierarchically ordered physical, spatial, and social sign-systems in designing and building an environment. This refers to several orders of 'signification' in a sign-system. Though contained in urban and architectural context, it could be actually considered as general, just as in L. Hjelmslev's point of view adopted by R. Barthes, which means that "there are different 'orders of signification" (Barthes, 1957; Hjelmslev, 1961, cited as in Chandler, 2017, p.166).

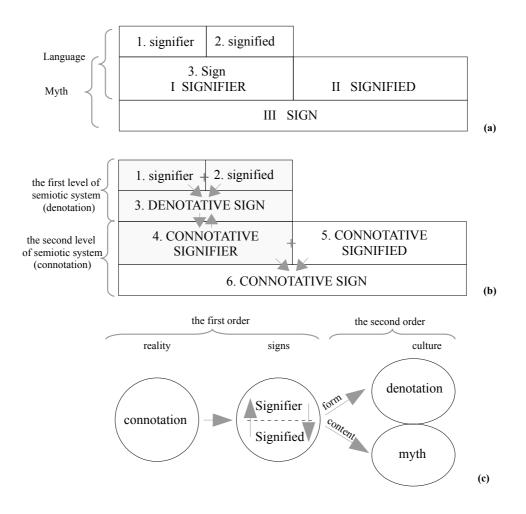


Figure 3.5: the semiotic system of Barthes (redrawn by the author as the same as the sources)

(a)Barthes's two semiological systems³⁴ (source: Barthes, 1991, p.113)
(b)Barthes's map of sign functioning³⁵ (source: Cobley & Jansz, 1999, p.51)
(gray backgrounds, gray pluses, gray arrows, two annotations on the left added by the author (with reference to a source: Barthes, 1967, cited as in Chandler, 2017, p.166))
(c)Barthes's two orders of signification³⁶ (source: Fiske, 2002, p.88)

³⁵ Including 'denotation' and 'connotation', it implies that (3) which is made up of (1) and (2) is also (4) which engenders (5) producing (6) together (Cobley & Jansz, 1999, p.51). In that, 'connotative sign' derives from 'denotative sign' as its 'signifier'.

³⁶ _Signifier & Signified: the form and the concept (Saussurean terms)

Language: the first-order semiological system; "the modes of representation ... which myth gets hold of in order to build its own system" (Barthes, 1991, p.114)

_Myth: the second-order semiological system; "a second language, in which one speaks about the first" (Barthes, 1991, p.114); message, speech, meta-language in a traditional sense

_Denotation - Connotation: literal meaning (the first order) - suggested meaning (the second order)

_Form: one of the duplicity of signifier of myth (the other one is meaning) (Barthes, 1991, p.127)

Concept: a constituting element of myth filling the form of the myth with a situation (Barthes, 1991, pp.117-127)

³⁴ Saussurean semiotic pattern of 'sign' with 'signifier' and 'signified' is defined as 'the first order', and 'the second order', in which 'the first order' becomes a mere 'signifier', is proposed as a reference to 'myth' (Barthes, 1991, p.113) (see also: Barthes, 1991, p.115).

Shown in a diagram that sorts the hierarchical orders from up to bottom, it constitutes a system where 'denotation' sets at the first order of a 'sign' with its 'signifier and signified' and 'connotation' becomes the second order by using the first order as its 'signifier with an attachment of a signified' (Figure 3.5). It means that "connotation involves the translation of a sign into other signs and denotation leads to a chain of connotations", which makes such a mechanism that "signs may seem to signify one thing but are loaded with multiple meanings" (Chandler, 2017, p.166). When this is considered in the urban and architectural context, it could be surely said that this mechanism would be a fortune in order to interpret any urban and architectural thing hierarchically, just because a built environment is organized with the togetherness of all the things as a whole in an ordered way and each and every one of these things constructs a system of 'signification' having orders to bear multiple meanings as a 'sign', by becoming a 'signifier' or a 'signified' according to the others in respect of 'denotation' and 'connotation' within a 'form and function relationship'.

• In consequence, it will be a great idea to keep 'the system of orders' in mind as one alternative constituent of the model in order to use the first level 'denotation' with 'signifier' and 'signified' and the second level 'connotation' with 'signifier' and 'signified' for further developments of its concept, because both make sense of the orders in 'signification'.

Returning back to the part where 'the system of orders' is begun to be included as a brief addition to the text like an in-brackets description, and going on from this part by enclosing it in parentheses, which means that it is left aside in an extent, it could be inferred that, along with the approach of Eco, this criticism has moved on to the scope of 'architectural semiology or semiotics', a branch of sign-studies dealing with the sign-systems pertaining to urban and architectural environments. Thus, it focuses on 'architectural meanings' to understand and to interpret the sign-relations between the urban and architectural things. It searches for the answers to what and how a built environment (re)presents through a design with its (visual and articulate) language in terms of the (notational) relations between the things that designate and the things that are designated. It thus intends to examine 'architectural meanings' and its elements.

• In consequence, it will be very good to consider 'denotation' and 'connotation' in a relationship with 'form' and 'function' as one of the necessary constituents of the model in order to use both of them for the development of its concept since they are the aspects of one of the approaches to 'architectural semiology/semiotics'.

In the context of 'architectural semiology/semiotics', it is important to mention also about the approaches of C. A. Jencks who cares the essence of architecture in relation to 'architectural meaning', through the 'architectural signs'. According to him, there are two major models applied to 'architectural sign', both of which incorporate the aspects of Saussurean sign: the 'semiotic (semantic) model' of Ogden and Richards (see: Figure 3.2); and the 'double partition model' of L. Hjelmslev (see: Table 3.2, the last row) (Jencks, 1980, p.80). Both are the references of his own opinions about the study of signs, one of which falls within the architectural domain.

For his model, that is, 'the semiological triangle' (Figure 3.6, left), he refers to 'the triangle of reference' in the book of Ogden and Richards (The Meaning of Meaning, 1923) (see: Figure 3.2). Thus, it is very similar to this model in terms of not only the points at which the similar elements are placed but also the lines by which any two elements are connected; except for the arrows that Jencks uses to make the relations be turned into equivalent positions. However, the similarity is distracted through the reduction of the theoretical complexity (that is, 'adequate', 'correct', and 'true') and the elimination of the notions (that is, 'stands for', 'refers to', and 'symbolizes') of the 'triangle of reference'; but, the differences exist in the linguistic forms: Jencks's model contains synonyms for 'referent' or 'symbol' while the one of Ogden and Richards includes 'reference' as a synonyms for 'thought'. (Steen, 2016, pp.104-107)

Adapting these two main elements of Saussure, which are 'signifier' and 'signified', together with the element of Peirce, which is 'object' (as a thing) (Jencks, 1999, cited as in Lakawa, 2018, p.25), he states, with reference to the semiotic (semantic) model of Ogden and Richards, that "the signifier (symbol, word of architectural form) connotes a signified (concept, thought, content), and may or may not denote a thing (referent, object, or 'actual function' in architecture)" (Jencks, 1980, p.80) (Figure

3.6, right). Depending on 'the semiological triangle' of him (Figure 3.6, left), this explanation is illustrated in a model which becomes the one applied to architecture (Figure 3.6, right). In the model, 'thought' and 'symbol' are respectively renamed as 'signified' and 'signifier' whereas 'referent' becomes the element 'actual function or object's properties', in other words, "intended meaning" (Jencks, 1980, p.81).

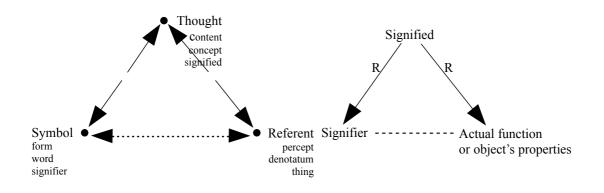


Figure 3.6: the semiological triangles of Jencks³⁷ (redrawn *by the author* as the same as the sources) (**left**) the one concerning general semiotic relations³⁸ (source: Jencks, 1969, p.15) (**right**) the one applied to architecture³⁹ (source: Jencks, 1980, p.81)

Inspired from the model of Ogden and Richards, this model defines a 'sign' through the relationships between its elements, that is, 'signifier' and 'signified' of Saussure, and 'object' of Peirce. It emphasizes (the relationship between 'thought' and 'reality' by considering a language -he gives an explanation⁴⁰ by referring to the concepts of

³⁹ Signified: similar to 'thought'; concept, content

³⁷ There is a term, 'archisemiotics' (Jencks, 1980, p.74), proposed by Jencks as a contribution to the architectural theory in order to establish an architectural corpora among the semiotic groups through which any architectural expression could be able to refer to any related architectural meaning.

³⁸ Thought: preexisting concept; set of ideas (with synonyms: concept, content; signified) Symbol: a way of expression (with synonyms: form, word; signifier)

Referent: object (with synonyms: percept, denotatum, thing)

_Signifier: similar to 'symbol'; form

Actual function or object's properties: "intended meanings" (Jencks, 1980, p.81)

⁴⁰ "Consider that happens in the sign situation in which we say 'I see the table'. There is (1) the ideal table of Plato, or the 'thing in itself' of Kant, or the 'concrete set of events' of the scientist -particles in motion at a certain moment in time and space, (2) the 'phenomenon' of the table made up of light waves, (3) of a certain spectrum which man can see, (4) coming at a certain angle (5) just from the surface of the table (not the set of events), (6) which make an image on the retina, (7) which is more

Plato and Kant) the relation of 'thought' between 'referent' or 'symbol', in other words, the relation of 'signified' between 'signifier' and 'actual function or object's properties' (intended meaning) by using the arrows differently from the ones in 'the semiological triangle'. That is to say, these arrows have only one-way direction from 'signified', pointing to both 'signifier' and 'actual function or object's properties'. In addition, the ones, which were put on the both sides of 'symbol' and 'referent' in the other model, are removed here. In fact, it focuses on 'object' or 'actual function' which is made possible by an object by determining it as the substantial element of 'architectural meaning'. In short, it tries to indicate an architectural perspective and to explain the sign-relations between the elements through its graphics.

• In consequence, it will be a great idea to propose 'graphical expression' as one of the necessary constituents of the model in order to use it for its presentation just as Jencks used in his models, 'the semiological triangle' and 'the model applied to architecture', since it shows the way of representation of the relations between the elements in a sign-system.

Other than the model of Ogden and Richards, Jencks (1980) touches on 'the double partition model' of Hjelmslev to examine 'architectural meaning' through the codes in the system. Thus, it is necessary to give a brief explanation about this model. In Hjelmslev's model, there are two basic entities of a 'sign', having the elements 'signifier' and 'signified': the former, that is "plane of expression", generally refers to "forms, spaces, surfaces, volumes which have suprasegmental properties"; the latter, that is "plane of content", can be "about any idea or set of ideas" (Jencks, 1980, pp.73-74). Through the 'denotative and connotative levels' that are defined in an interconnected way from the former one to the latter one, the coupling of these two planes forms another 'plane of expression' where 'connotation' is included after 'denotation', which consists of the previously formed coupling of 'plane of expression' and 'plane of content' (Jencks, 1980, p.82) (remember 'the system of orders' given a few pages ago). Hereby, it plays an important role for the articulation

or less adequate to our thought or expectation of a table, (8) which is called by an arbitrary convention, the word, table." (Jencks, 1969, p.14)

⁽This statement, which mentions about the existence of an object as a copy of copy of ideal, could be found valuable, in terms of referring to design processes, that is, a kind of signification, which deal with the representation of an idea(l) through expressions and manifestations.)

of 'architectural meaning', especially in terms of the historical aspects of an architecture pertaining to an era because this architecture could only be concerned with "the particular way the culture articulates and conventionalizes content and expression" (Jencks, 1980, p.81). This refers to a 'signification' having 'codes'. That is why, for Jencks (1980), what an architecture means and how it articulates the meanings depend on the 'codes', in accordance with these planes: they are "codes of content"⁴¹ and "codes of expression"⁴² (pp.107-110). Therefore, 'codes' including the aspects of ideas, social patterns, language features, etc. are important in terms of making the practice of architecture recognizable at any time of history (Jencks, 1980, p.72). In this way, architectural eras and styles could be interpreted allowing for a discussion about the societies and their ways of life peculiar to the epoch. That is to say, such a historical meaning depends on the codes that make sense of architecture and facilitate the articulation of architectural meanings. Furthermore, it is built upon the essential foundation of the definition of architecture, and this definition includes "the traditional triad of form, function and technic within a signification process" (Jencks, 1980, pp.72-73). It is because, architecture is the use of a 'form' (material), that is 'signifier', to articulate 'function' (way of life, value), that is 'signified', making use of certain means (structural, economic, technical, mechanical) (Jencks, 1980, p.72). In short, Jencks holds a (semiological and) semiotic analysis for the interpretation of 'architectural meaning' through this traditional triad which is called, by him, as "architistics", referring to "formenes', 'funcemes' and 'techemes", that is, exactly the fundamental units of 'architectural meaning' (Jencks, 1969, p.17). To explicate, his analysis is based on a principal which is "to break the rigid categories in which architecture had been framed, ie, the spatial and functional paradigms" (Haddad, 2009, p.494). In each section of 'form' and 'function', an 'architectural meaning' is contained (Jencks, 1999, cited as in Lakawa, 2018, pp.23-24); moreover, 'functional feature' is associated with the components of an architecture such as

⁴¹ It includes architecture, in terms of its importance to a user, as a sign of a way of life, concerning ethnic domain, inhabitation, comfort, building activity, historical process of change, traditional ideas and beliefs, various functions, socio-anthropological meaning, economical aspects, and psychological motivation (Jencks, 1980, pp.107-108).

⁴² It includes architecture, in terms of its importance to an architect, as a sign of spatial manipulation, surface covering, and formal articulation (Jencks, 1980, pp.108-110).

columns, floors, doors, windows, etc., like the words of a language (Jencks, 1980, p.95; Jencks, 1984, pp.60-63). Just as meanings can be understood from the words through a language, "understanding an in-depth review ... of each ... can give a profound and thorough meaning" (Botwina & Botwina, 2012, cited as in Lakawa, 2018, p.24) because any of them signifies a certain meaning depending on the codes through its language. That is why, as Jencks (1984) says, "architecture must have a signifying reference" (p.112).

In consequence, it will be good to consider 'signifier' and 'signified' with 'actual function or object's properties' in relation to the aspect of 'the traditional triad' of 'form', 'function', and 'technic' as some of the necessary constituents of the model in order to use them all for the development of its concept since they are the elements and the aspect of one of the approaches to 'architectural semiology/semiotics'. What is more, it will be necessary, in this regard, to keep (relevant) the codes in 'architectural semiology/semiotics' in mind.

In brief, any urban and architectural thing pertaining to a built environment has meanings by becoming a 'sign' which is based on several 'codes' through 'forms', 'functions', 'objects', 'concepts', and 'contents' in a relationship with 'denotation' and 'connotation', and by generating several sign-relations which set connections between them through a 'language': all literally construct the foundational aspects of 'architectural semiology/semiotics' (for the summation, see: Figure 3.7).

As stated a while ago, it is a study on built environment and it tries to understand not only the (notation or component) relations between the things that designate and the things that are designated but also, much more, 'architectural meanings' together with 'architectural sign' and its elements. Hence, to touch on the causality and the meaningfulness of these relations with such a sign, by referring explicitly to the built environment in terms of experiences or individual and social lives and by addressing 'architectural meaning' with a consideration about the roots of the word 'meaning', becomes an appropriate approach in terms of explaining and examining semiology and semiotics having an urban an architectural perspective because it can give some opinions for the way to fulfill them with this perspective.

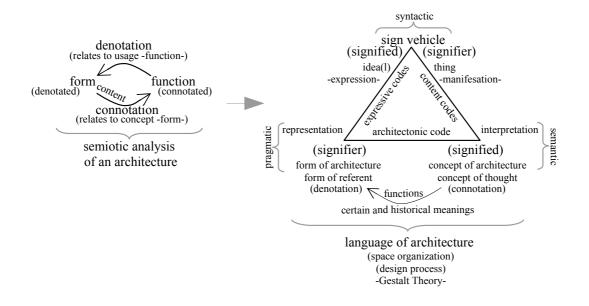


Figure 3.7: a diagram that shows the sign-system of urban and architecture⁴³ (drawn *by the author* as a summation of all the aforementioned things)

To explicate, there are two definitions of 'meaning': the first item defines it as "the significance, purpose, underlying truth, etc., of something", and "a metaphysical or spiritual kind; the (perceived) purpose of existence or of a person's life" which reveals "the early significance of pre-scientific religious ideology; the rise of science; and the rise of romantic ideology"; and the second item defines it as "the sense or signification of a word, sentence, etc.", whose usage "represents a preoccupation with the stakes of communication" (Oxford E. D., cited as in Steen, 2016, p.23).

⁴³ It is prepared and presented as a summary of the aforementioned concepts, approaches, opinions, and perspectives, regarding the study of signs in respect of urban and architectural theories. Considered in the context of not only form-function and denotation-connotation relations but also architectural or architectonic code, for U. Eco, architecture does not communicate, but it functions (1980b, p.12) and architectural sign, which is "a unit of an architectural code" (1980a, p.213), processes 'denotation' (primary function) and 'connotation' (secondary function) (1980a, p.214). Moreover, for D. Preziosi (1979), 'architectonic code', which is the system of built environment, is inevitably related to the 'functional' and 'formal' organization of any built environment (p.15). In the context of signifier-signified, form-function-object, concept-content relations, codes, and language, for C. Jencks (1980), 'signifiers' have 'expressive codes' (forms, spaces, surfaces, volumes) and 'signifieds' have 'content codes' (functions, space concepts, architectural ideas, any idea or set of ideas, iconography, intended meaning, aesthetic meaning, social and religious beliefs, activities, way of life, etc.) (p.74), making use of 'certain means' (structural, economic, technical and mechanical) (p.72). In the context of language, for A. Rapoport, 'syntactics' refers to 'structure'; 'semantics' points to 'the components with properties'; and 'pragmatics' means 'experience' (1990, p.38) (it can also be interpreted with reference to Morris). In the context of space-organization in terms of design processes and design languages, Gestalt Theory should be taken into account importantly.

On the other hand, the examples for the use of 'meaning' stated in the OED generally refers to a pre-modern desire to find out the main points of thoughts and behaviors in a society. Many of them are inflected by religion and often concern the metaphysics. However, twentieth century intellectual history is associated with 'signification' in the most convenient sense of 'meaning'. The things in the social world before the seventeenth century, understood as spiritual mysteries, become contingent upon individuated and objective analysis at those times. This change is represented with the question type 'what is the meaning of ... ?'. In that, the divine would have been replaced with 'signification' in the years since the scientific revolution. Even if 'meaning', defined as a 'message' or an 'idea' symbolized by a dream or a vision, becomes to be discredited with the scientific revolution mainstream, it is possible to think that its effects continue within the symbolization processes being present in the collective subconscious. (Steen, 2016, p.24)

As it is inferred, the term 'meaning' has a similar history in accord with urban and architectural eras (and with the word 'archetype', see it later in the following pages). It covers many discourses on several fields, especially of sign studies, and usually of urban and architectural theories. For C. K. Ogden and I. A. Richards, "meaning is a logical and pragmatic object of inquiry that is involved in the complex relationship between words and objects"; for E. Panofsky, "meaning is related to vision, helping process interpretations of cultural forms"; for C. E. Osgood, G. J. Suci and P. H. Tannenbaum, "meaning can be scaled and factored using experiments in psycho linguistics and mathematical modeling" (Ogden & Richards, 1923; Panofsky, 1955; Osgood, Suci & Tannenbaum, 1957; cited as in Steen, 2016, p.25). Moreover, it is included in the works of not only D. A. Crane who focuses on "meaningfulness in the urban environment", and C. Norberg-Schulz who "gives meaning intensive and extensive treatment in its examination of the symbolic dimension of architecture" (Crane, 1960; Norberg-Schulz, 1963, cited as in Steen, 2016, p.26) but also D. S. Brown (The Meaningful City, 1965), J. Rykwert (Meaning and Building, 1960), R. Venturi (Complexity and Contradiction in Architecture, 1966), P. Eisenman (Building in Meaning, 1970), L. Martin (The Search for a Theory in Architecture, 2002), and many others (see all cited in, (Steen, 2016, pp.25-36)).

In other words, there are many approaches to 'meaning'. However, in the context of architectural meaning, four of them could be considered that they can frame a basic structure for 'architectural semiology/semiotics'. The first one is of U. Eco who uses 'denotation' and 'connotation' to define the 'function' as primary or secondary by its meaning (Eco, 1980a, p.214) in that meaning itself is the "most important aspect of function" (Rapoport, 1981, cited as in Rapoport, 1990, p.15) which corresponds to behaviors and experiences through its inseparable relations with 'form'. That is to say, "An architectonic object can only be adequately understood as a formation wherein there is manifest a simultaneous bundling of varying functional orientations" because "forms have a life of their own only in an indirect sense" (Preziosi, 1979, p.96). It could be inferred that it has a relationship with some deep sides whose investigation needs to be touch on this context so that it can provide an idea about an urban and architectural environment which manifests its 'concepts' and 'contents' as an '(in)formation' enriched and embodied with 'functions', and as an insight for its importance in terms of behaviors and experiences. In turn, through the interpretation of these behaviors and experiences, an urban and architectural environment could be described. This refers to the purposefulness of the architectonic activities and design processes. That is why 'outcome of purposeful actions' must be associated with 'meaning' pertaining to this environment, by Jencks (1969, p.11). Given that "Unlike even the most elaborate animal construction, human building involves decision and choice, always and inevitably; it therefore involves a project" (Rykwert, 1991, p.56), it makes sense of 'idea(l)s' generating 'functions' within 'forms' having 'contents' in line with 'concepts'. The second one is of R. G. Hershberger who puts 'meaning' into two categories⁴⁴: one of both is 'representational' meaning (formally reaction) with its subcategory, that is, referential meaning (functionally reaction); and the other is 'responsive' meaning with its subcategories, that is, affective meanings, evaluative meanings, and prescriptive meanings (Hershberger, 1970, pp.44-47). To explicate,

In representational meaning, the architectural environment ... and anything to which it refers, is represented in the human organism as a percept, concept, idea, or whatever. We see the rectangular object, recognize it to be a door ... The second, or responsive meaning, consists of internal responses to the

⁴⁴ Hershberger established, indeed, a framework in this regard by promoting a two-stage model theory which combines the 'mentalistic' and the 'meditational' theories of 'meaning' (Hershberger, A Study of Meaning in Architecture, 1969, cited as in Steen, 2016, p.26).

already internal representations. These responses might be affective, evaluative, or prescriptive in nature; tingling in our spine, feeling of disgust or contempt, thoughts about the value of represented environment, or ideas concerning what should be done about it. (Hershberger, 1974, p.148)

In brief, it seems that they are depended on each other causing human experiences; they are related to each other connecting the outer and inner realms with behaviors, thoughts and feelings. The third one is of J. Rykwert who considers that architecture is based on body. According to him, for the construction of a meaningful world, the metaphorical projection of the body into architecture is a primal condition; thus, being a human depends on the identification between them (Hight, 2007, cited as in Steen, 2016, p.59). This makes a built environment quite satisfactory and sustainable for the human lives because "Architecture ... organizes space with respect to man in his entirety, with respect to all the physical and psychic activities of which he is capable" (Mukarovsky 1978, cited as in Preziosi, 1979, p.48) due to the fact that any built environment governs "the presentation of self, in establishing group identity" (Rapoport, 1981, cited as in Rapoport, 1990, p.15). This representation which has meaningful expressions happens responsively and purposely in order to perform for the individual and social activities, and it is revealed through a 'signification' of the contents in inner side as their manifestations in outer side. The fourth one is of R. Venturi who focuses on the complexity and contradiction in architecture which is considered, by emphasizing the hierarchical organization of it, as a manifestation that expresses the layers and levels of meaning inherent in daily lives (or, the richness of meaning) (Venturi, 1966, pp.16-23). This points to the richness in multivariate lives of all (social)individuals, and correspondingly to the richness in all historical and current conditions of a built environment that these (social)individuals accommodate.

• In consequence, it will be very good to consider 'denotation' and 'connotation' for the definition of 'function' (referring to the form-function relationship; in addition to this, associated with 'purposeful actions' and 'usual experiences', referring to the consistency of idea between concept-content & form-function); 'representational meaning' and 'responsive meaning' (referring to the connection between outer-inner realms); 'the projection of human body' (referring to the human and built environment relationship); and 'complexity and contradiction' within hierarchical organization (referring to the richness in lives and built environment and to the layers and levels of meaning) together as

one of the necessary constituents of the model in order to use it for the development of its concept, because, concerning the wholeness 'in the psyche', 'in the intellect', and 'in the reality' through not only the matters of '(re)presentation and interpretation' but also 'expression and manifestation' in terms of 'design processes' within a 'signification', they are <u>four approaches to 'architectural meaning'</u>.

As an ending, there is one more thing to add necessarily about the field of the signstudies. It is 'the universal sign structure theory', 'USST', which has three principles in order to express a 'sign structure'. The first one is 'the representation principle', which means "A sign must consist of a triadic relation, and ... three relational dimensions: a syntactic structure, a pragmatic structure, and a semantic structure" (Pearson, 2015, p.137). The second one is 'the principle of internal/external balance', which means "The internal and external structure of a sign must be balanced", consisting in syntactic, semantic, and pragmatic dimensions in line with the internal and external components (Pearson, 2015, p.137). Here, the external ones are called "information generators"⁴⁵ which are required in the pragmatic structure due to the fact that they mediate between other two structures whereas the internal ones are called "components of meaning"⁴⁶ (Pearson, 2015, pp.137-138). The third one is 'the principle of additional structure', which means "Whenever a sign has more than the minimum structure, the additional structure is built up from the center out ... and for each dimension independently" (Pearson, 2015, p.138). All concern the relations in a sign-system and provide a common ground for all systems in a general sense.

• In consequence, it will be appropriate to consider 'the representation principle', 'the principle of internal/external balance', and 'the principle of additional structure', that is, 'the universal sign structure theory, USST, as the necessary constituents of the model for its conceptualization since these three are the 'principles of a sign system'.

⁴⁵ Syntactic information generators: the syntactic context, the shape of the sign, the medium in which it is embodied. Pragmatic information generators: the source social/behavioral context of the sign and the target social/behavioral context of the sign, the source of interpretation and the target interpretation, the source emotive mentellect and the target emotive mentellect of the sign. Semantic information generators: the dynamic object of the sign, the dynamic ground of the sign, the cognitive mentellect of the sign. (Pearson, 2015, pp.139-140)

⁴⁶ Components of syntactic meaning: tagmension, eidension, ontosion; Components of pragmatic meaning: contension, purposion, emosion; Components of semantic meaning: denotation, connotation, pronotation. (Pearson, 2015, pp.139-140)

Up to this point, some approaches in semiology and semiotics have been criticized in accord with the theme of the thesis. A few of them have, in their views, an urban and architectural perspective. Unfortunately, to an extent, there is no remarkable or clear explanation in the semiological and semiotic approaches about the causality in the context of urban and architectural environment or about the underlying facts of the meaningfulness of a built environment. Nonetheless, they seem very fundamental to reveal the necessary constituents of a model which would be suggested as a new formula(tion) to urban and architectural semiology and semiotics that concerns these matters of the causality and the meaningfulness. To compensate this deficiency/lack, as it has been noted since the very beginning of the thesis, there is one possible answer which will be the main and the needed constituent of this model.

Therefore, it is now the time to lead the criticism towards to this answer, that is, 'the concept of archetype': here, it is the point where the criticism lastly goes to the deeper side for the matters, to talk about 'the concept of archetype'.

To begin, it is necessary to note that it is very difficult to interpret an urban and architectural environment due to its 'visuality' and this make 'architectural meaning' somehow incomprehensible, covered, or hidden. It is similar to all other visual things such as dreams, the understanding of whose meaning is also difficult because of the same reason. Thus, just as how any dream is interpreted, which possibly depends on the analysis of all the images that it contains, it is exactly the same for a built environment to understand its 'architectural meaning'. That is to say, its visual composition embedded with articulations makes sense of this environment as it is syntactically structured in mind and adapted from intellect into reality with semantic aspects to maintain pragmatic conditions through its special language. All are the functions of 'the conscious and unconscious mind' which has connections with 'the forces in the psyche'. They are 'the psychodynamic affairs' which have physical, mental, and psychological effects on any architectonic activity involving -designprocesses in order for designing and building a living environment. To explicate, 'conscious mind' refers to human consciousness which is the state of awareness, and 'unconscious mind' refers to the place of embedded implicit things which both exist as the encrypted daily facts that human consciousness experienced and influence this consciousness with the feedback of these facts decrypted meaningfully into many images making a composition whereas 'the psychodynamic affairs' refer to the forces between consciousness and unconscious, which are lied under the human behaviors, feelings, and thoughts, through the experiences having effects on and affecting the daily life of a person and thus his/her personality. Their comprehensions require an 'analytical survey' which endeavors to discover what is desired to be aware of and to reveal all the 'meanings' behind, from this encryption. In this regard, 'archetypes'⁴⁷ come to mind; because, being related to 'conscious and unconscious mind', they are, possibly, the manipulative forces of the mental, psychic, and material states regarding human behaviors, thoughts and feelings, and experiences; they are the triggers of the functioning of the physical, mental, and psychological structures of the humans; they are the agency of architectonic activities in which design processes are involved. In fact, it is assumed that they are, thus, as many as the typical circumstances in life (Jung, 1959/1968a, para.99): each of them probably exists in any person as 'a certain, innate/inborn and universal template' or 'a unique and fundamental pattern, mold, model' that forms some certain responses to the possible circumstances in his/her lives. That is why they are believed as the things having significant roles in the interactions of the humans with an environment, in other words, in the interactions of any one with his/her 'physical, spatial and social environment' which provides many ideal, desired and needed, conditions for him/her to have all his/her daily experiences sustainably, with satisfaction, and in safety. As a result of these experiences, this person becomes a 'social-individual' who leads both individual and social life in a society in an environment, by developing a unique personality. In short, 'archetypes' are presumably important for all in terms of these processes of 'individua(liza)tion' and 'socialization', both of which should be one pair of the main matters of urban and architectural theories because the essence of any urban and architectural space is based on the design of an environment which thus allows the desired and needed

⁴⁷ With reference to Jung, it is 'primordial image', in which the word 'primordial' refers to 'first, prehistoric, primitive'. However, the word 'archetype' is used, in the thesis, in order for referring to a thing very 'specific' but 'not explicitly named or stated'; 'a type of a something unknown but quite certain'. Hence, it will be re-named as 'archi-type' to provide an adaptation to the theme of the thesis, and to the context regarding the built environment, just for being used in this framework (it will be explained later, in the following part of the chapter, titled as 'The Formulation').

conditions for these experiences and for the experiencing of these processes as it is supposed to be. That is to say, a built environment that envisages this fact becomes meaningful with regard to all experiences sustaining individual and social lives. In brief, this explains clearly why 'archetypes' come to mind and why they are preferred together with 'personality development' and 'the individua(liza)tion and socialization processes' for this study of the thesis, as an initial reference: it is, for, to give a depthpsychological ground to semiology and semiotics, having an urban and architectural perspective, in the context of the causality and the meaningfulness in and of the 'built environment' in terms of the daily lives of all (social)individuals and societies.

In this regard, there is an idea which was formed by C. G. Jung who made use of 'archetypes' in his theory of personality development (there are some of the others⁴⁸, without taking advantages of archetypes). It was based on the conceptualization of 'personality types'⁴⁹ which were theorized that each type has a set of motivations to perform its own role in a society as a social-individual to lead individual and social lives. This conceptualization was formulated through a categorization that was made in accordance with the behavioral patterns which, in fact, refer to the 'archetypes'. However, it caused a comment which implies that it was founded on Kant's system. On one hand, the logical isomorphism of the 'idea' notion of Kant to the 'archetype' notion of Jung (Bär, 1976, cited as in Balanovskiy, 2016, p.119), and on the other, a

⁴⁸ For example, psychoanalytical and psycho-sexual (tripartite) theory of S. Freud; psycho-social (eight-stage) theory of E. Ericson; social-cognitive (trait) theory of A. Bandura, etc. (In fact, the cognitive-intellectual development theory of J. Piaget could be kept in mind, maybe for the further studies, because, containing the stages of object permanence, symbolic thought, operational thought, and abstract concepts, this theory on development may touch on the issue of the interactions of a person with the environment that this person belongs to.)

⁴⁹ These types are formulated with two predispositions, which are 'extraverted' and 'introverted', in relation to four functions, which are 'thinking', 'feeling', 'sensation', and 'intuition', by defining eight personalities as extraverted-thinking; extraverted-feeling; extraverted-sensation; extraverted-intuition; introverted-thinking; introverted-feeling; introverted-sensation; and introverted-intuition.

On the other hand, the types are also formulated in a different way, through a categorization based on behavioral patterns or archetypes: it consists of four basic categories with three subcategories for each; as a result, there are twelve archetypes in a personality. These four basic categories with their unique three subcategories are ego, which provides structure, with innovation, control, service; freedom, which relates to spiritual journey, with safety, knowledge, freedom; social, which connects to others, with belonging, pleasure, intimacy; and order, which leaves a mark, with liberation, power, mastery: twelve archetypes in a personality are categorized respectively, as artist; ruler; caregiver; innocent; sage; explorer; member/everyman; jester; lover; outlaw; magician; and hero.

range of concordance between the views of Kant and Jung (Vuksanovic, 1996, cited as in Balanovskiy, 2016, p.119) are just two of the assertions. However, Jung took his stand on Kant (Jung, 2015, cited as in Balanovskiy, 2016, p.119) as the personality types of Jung and the categories of understanding of Kant have differences on their natures (Balanovskiy, 2016, pp.120-121). Jung's 'archetype' is based on 'instincts'⁵⁰ in which all the historical humankind experiences root whereas Kant's 'idea' has roots in 'reason' and a 'priori nature' (Huskinson, 2004, cited as in Balanovskiy, 2016, p.120). Moreover, the system of Kant is suited for the orientation of the things in the world both existing 'in the reality' and 'in the intellect' while the system of Jung includes the indication of a third between these two, the one which exists 'in the psyche' (Balanovskiy, 2016, p.123). Furthermore, Jung not only had a perspective about the archetypes on the line that P. Judaeus had, who thought that the humans have divine images (as the inner force inspiration) through which their development is influenced, but also accepted the stance that M. Eliade held, which was that the archetypes are the transcendent origin (of models of institutions and norms of the behavior patterns); as well as both, Jung also had an additional view which is that their activeness (dynamic structure) places in both inner spiritual and material realms of the human lives (Beverly, n.d.).

In fact, these notions primarily date back to the far past, to the Miletus School and the scholars such as Socrates, Plato, Aristotle, Thales, Anaximandros, Anaximenes, Parmenides, Democritus, Plotinus, and explicitly to 'arche problem' which deals with the (possible) elements being the (first and main) sources of the existing things -whether natural or abstract entities- in the context of a matter which points that they require being eternal. It is the term 'archetype' which literally comes from Greek word 'archetupon', or Latin word 'archetypum', having the meanings of 'original pattern', 'a typical example of something', and 'prototype', and, in general, 'the first (molded) model' of its possible derivative copies. Importantly to underline, it is used

⁵⁰ In fact, according to behaviorists, instincts do not belong to humankind; because, any of the instincts goes against the ability of the humans to design. Thus, this aspect of Jung's concept will be eliminated in the formula(tion) of the model and its conceptualization; consequently, the word 'archetype' will be redefined as 'architype' in line with the theme of the thesis (it means that this aspect is eliminated as well as many other aspects of it/him, which are considered as very speculative and unacceptable, too) (see: the following part of the chapter, titled as 'The Formulation').

in the thesis, only in the sense of 'a specific kind of type', 'a certain, innate/inborn, universal template', 'a pattern, mold, model of something unique and fundamental', driving for any thought, feeling, behavior, experience, and architectonic activity, etc. (in the context of individuation, 'a character belonging to the cast of personality').

In Hellenistic times, 'archetype' was used in the religious writings as a prominent term but, in modern times, it gained a psychological perspective beyond its place in religious contents, in that, it was conceived as the fundamental structures of human psyche and as the key point for the determination of human experiences, which, in turn, makes it something be accepted as both vital and holy. It was believed that any 'archetype' constructs a scared reality previously presented to humankind: this results in considering it as a supernatural or transcendental origin. In other words, it has a sacred quality which compels a person to be able to orient his/her life around the absolute power and value, in that, the life will be filled with the sense of being and meaning evoked by the encounter with the sacred. It means that the behaviors burst by the drives of any of them are formed for the profane existences being the imprints of the eternal patterns and for a comprehension of paradise on earth. So, archetypes are mostly and concretely conceived as instincts⁵¹ which are felt through the images driven from every experience; they support either the outer experiences or the inner imaginations through reflection or projection. (Beverly, n.d.)

That is why an 'archetype' corresponds to a thing which combines the inner realms with the outer world, 'intellect' and 'psyche' with 'reality', as a specific mold that forms thoughts and feelings, and also behaviors for the experiences. In line with the theme of the thesis, it is considered thus as a thing causing interactions between the humans and their environments, and also as a thing referring to all architectonic activities such as designing and building an environment through the functioning of the physical, spatial, and psychological structures: it means a '(re)presentation' of a 'thought, and feeling, and sensation, and intuition,' revealed as, in a defined way, a 'manifestation', through depicting 'expressions', which is, briefly, a 'signification'.

⁵¹ About this word, *the author* of the thesis notes that it is important to keep in mind that it is a misuse according to the behaviorists; thus, she avoids from this word and prefers the words innate/inborn.

It is just like a mimic presented in a face as a 'manifestation' of something being an 'expression' which is caused by an ('archetypal') inner drive about any inner or outer experience through the 'signification' of that thing in accord with itself ('archetype') in terms of comprehension of 'meaning'. Accordingly, this mimic can be interpreted after a 'perception' which defines it as a related image, and so this 'interpretation' can be comprehended as a 'meaning' after the relevant analysis of this image which (re)presents the mimic that has been finally uncovered. What is more, it could be inferred from this explanation to some extent that why the word 'representation' is related to the term 'mimesis' derived from the Greek word 'mimeisthai', by meaning 'imitation' (Gebauer & Wulf, 1996, cited as in Shojaee & Saremi, 2018, p.35), 'indication' and 'iteration' (Dehkhoda, 1994, cited as in Shojaee & Saremi, 2018, p.35), and 'display'; this surely makes the 'Platonic consideration'⁵² correct (Shafiee Kadkani, 2001, cited as in Shojaee & Saremi, 2018, p.35). In short, the thing imitated, indicated, and displayed as a 'manifestation' that expresses a 'psychic or psychological content' is not only the 'representation' of 'a certain, innate/inborn, and universal template', namely, of an 'archetype', but also the 'signification' of its underlying 'meaning': that is to say, there anywise include meanings; it does not matter whether a mimic or any other thing, all of which are mediated by 'signs' and 'symbols', that is, the main elements of the relations in a sign-system.

⁵² It possibly contains Plato's 'theory of Forms' (Ideas) and the 'theory of language'. In the theory of Forms, there are two realms: one of them is the Realms of Forms where the Forms, being the abstract, perfect, unchangeable, timeless, absolute ideas (or concepts), exist; the other one is the physical realm which has only appearances, shadows, and images, of the Forms which represent the most accurate reality, not only the causes of everything but also sole objects of 'knowledge'. Due to the fact that there is a relationship between the Forms and 'knowledge' which has semiotic relations of language. According to Plato, language "must simply be capable to discern the nature of the things" (Barbosa, 2015, p.61): it must simply for recognition and understanding, and also 'conceptualization' of such things. In short, 'knowledge' relates to language, and thus, 'naming' and 'knowing' become relevant to each other. On the other hand, in the theory of language, there are two models. The first one is binary: "on the one hand there is a speaker (or a knower) who signifies (or knows), and on the other hand there is an object that is signified (or known)" (Scolnicov, 2006, p.181). The second one is triadic: it has a knower, an object, and a name (Scolnicov, 2006, p.181). That is to say, in terms of having relationships with 'naming', and because of gaining 'meaning' ('knowing') through these relationships, 'knowledge' could be used correspondingly together with 'in-formation', in the thesis. It may true that (iff) any thing has the same root of its (known-meaningful) name at the very beginning and that names, then, spread gradually across the world in differentiated versions. Furthermore, this may express the similarities among many myths, or stories, in that (iff), they may base on the same event and have a similar history, and then, through the auricular traditions, result in differentiation. (Respectfully, this assertion may critically provide a new -extraordinary- standpoint -against- to Jungian archetype, or Jungian perspective: maybe, it depends on many things?, instead of instincts.)

As it is now known, 'sign' and 'symbol' are two basic elements of semiology and semiotics, and thus, they are sometimes used almost synonymous with each other. However, there appears a difference within the scope of 'arbitrariness'; for example, for Saussure, 'sign' is arbitrary but 'symbol' is not wholly whereas, for Peirce, 'symbol' is arbitrary. In addition, both differ from each other in the context of analytical psychology which examines preferably 'symbol' much to make sense of the human creativity in thoughts, feelings, behaviors, and even dreams, designs or fictions, etc. According to Jungian perspective (Jung, 1964b), on one hand, 'sign' is the thing related to 'consciousness', which means that it is quite comprehensible; on the other, 'symbol' emerges in 'unconscious mind' and influences 'consciousness', which means that it is more incomprehensible, elusive, complicated to be interpreted obviously at once. On that account, by assuming, 'symbol' comes out as 'sign' in a 'signification' in the way that the things appeared in 'consciousness' coming from 'unconscious' as the reflections of themselves, or as their representational appearing. Briefly, throughout this 'signification', there runs a 'representation' process in which a 'symbol' turns possibly into a 'sign', carrying a 'meaning', that is, the 'meaning' associated with an 'archetype'. In other words, a 'sign' appears in relation to its 'symbol', and both are correspondingly related to an 'archetype' that is referred by themselves. That is to say, this 'archetype' presents itself with 'symbols' and then with any 'sign' of these 'symbols': symbol is an 'expression' relating closely to a 'representation' of archetype while sign is a 'manifestation'; but, both indicate a similar relationship in terms of signifying a 'meaning' (or an 'archetypal content'). In short, the 'interpretation' of this 'representation' maintains from 'sign' to 'symbols', and then, in association, to 'archetypes'. That is why 'signs', being clear enough to be comprehended, are interconnected with 'symbols', and why 'symbols', being not clear yet to be comprehended, are related to 'archetypes', being very ambiguous to comprehend: all are the mediators of the things in the 'psyche', in the 'intellect', and in the 'reality', in respect of the 'meanings' borne through 'information'. In this context, it is necessary to remark with regard to 'sign' and 'symbol' that

Signs are supposed to be univocal ... to have a one-to-one correspondence to what they stand for because they are related to those things ...; hence they have only one proper meaning. Symbols, on the other hand, are supposed to be multivocal ... they have a one-to-many correspondence and are hence susceptible to many meanings. (Rapoport, 1990, p.46)

That is to say, 'sign' has a particular meaning unlike 'symbol' which has much more than 'sign' and has many expressions for its sign. This reminds of 'denotation' and 'connotation' because both are two of the ways of the definition of a word by its 'meaning'. In that, the former refers to the explicit or direct meaning, which means that there is only one meaning, and the latter refers to the associated or additional meaning apart from its explicit or direct meaning, which means that there are more than one meaning. Respectively, it could be said that 'denotation' could likely be assumed for 'sign', and 'connotation' for 'symbol'. In addition, cor-relatively, for 'archetypes', which evokes both, directly or indirectly, it could be possible to make an assumption in this regard; hereby, a notion that refers to the 'deep (psychic and psychological) meanings' could be assumed for them. As a result of a thinking which includes these associations of not only 'sign' and 'symbol' with 'expression and manifestation' and 'denotation and connotation' in relation to the 'archetypes' but also 'archetypes' with 'architectonic activities' and 'design processes' in relation to 'thoughts, feelings, behaviors', and 'experiences', it becomes possible to make a contribution to urban and architectural semiology and semiotics with a depthpsychological ground in respect of 'urban and architectural meaning'.

In consequence, it will be good to consider 'the concept of archetype' ٠ being a complementary approach to 'personality development theory' (with its aspect of being 'a certain, innate/inborn and universal thing' or 'a unique and fundamental pattern, mold, model' which drives for thoughts, feelings, behaviors, and experiences) as the main constituent of the model in order to use it for its conceptualization because it is a tip for a psychological ground for 'urban and architectural semiology/ semiotics'. Therefore, 'archetypes', that is, a psychic/psychological cast considered as 'the notion that refers to the deep (psychic and *psychological) meanings* 'will be <u>a tip for the connection of 'Semiology'</u> and 'Semiotics' with 'urban and architectural theories'. What is more, it will be necessary to keep in mind the difference between (the element) 'sign' and (the element) 'symbol', that is, the assumption that a 'symbol' comes out as a 'sign' in a signification, both of which have a relationship with 'archetypes', and that 'sign' has a particular meaning unlike 'symbol' (associated with 'connotation' and 'expression') which has many meanings with many expressions for (a) its sign (associated with 'denotation' and 'manifestation') for the development of its concept because it will be the important constituent, being the very basic one, in the formula(tion) of the model.

All in all, some of the approaches in Semiology and Semiotics and one concept in Analytical Psychology were examined in a relationship with urban and architectural perspectives through a criticism which has been held up to this point. Consequently, many important things have been unfolded and uncovered with regard to the problem and the objective of the thesis, in line with the theme of the thesis: they would be presupposed as the fundamental constituents of the model for its conceptualization.

As a result, all the constituents were listed below by putting them together according to their facilities and capabilities, which describe what they can be and be able to do systematically in the conceptualization of the model:

- <u>the basic content of 'communication'</u>: '*information'* with its material, *psychic, physical, psychological, spatial, social, and historical aspects*
- the relevant terms of 'information' (with reference to its roots, and regarding and reminding the architectonic activities that includes design processes): 'concept', 'context', 'idea', 'representation', 'shape', 'form', 'type', and 'morph'
- the mediator of 'communication' to receive and transfer 'information': 'language' that covers a set of sign-system having some particular 'notations' peculiar to itself
- <u>three components of 'language'</u> (with reference to Bloom and Lahey): *'form'*, *'content'*, and *'use'*
- <u>three dimensions of 'language'</u> (with reference to Bloom): 'syntactic dimension', 'semantic dimension', and 'pragmatic dimension'
- <u>two basic studies of sign-systems</u> (in terms of 'notational relations of meanings' and 'bearing meanings'): '*Semiology*' and '*Semiotics*'
- <u>two elements of 'Semiology'</u> (with reference to Saussure): 'signifier' and 'signified'
- three elements of 'Semiotics' (with reference to Peirce): 'sign vehicle / representamen', 'interpretant', and 'object'
- <u>the relations between the elements in a sign-system</u> (with reference to Saussure, Peirce, Morris): *'dyadic relations'* and *'triadic relations'* and *'three dyadic-relations'*

- the main three dimensions of a sign-system, the main three dimensions referring to the relations between the elements of this sign-system (with reference to Morris): *'syntactic dimension'*, *'semantic dimension'*, and *'pragmatic dimension'*
- <u>two aspects of how the connection is set by an interpreter or a user</u> <u>between the elements</u> (with reference to 'design process' in relation to the terms 'idea', 'concept', 'contents', and 'form'): '(*re*)presentation' as a 'creative production' and 'interpretation' as an 'experiential feedback'
- three aspects of how the connection is set by an interpreter or a user between the elements (with reference to 'information' being the basic determinant of a 'triadic relation' generated through 'three dyadicrelations'): 'information as thing', 'information as process', and 'information as knowledge'
- <u>the key which refers to the connection that is set in a sign-system</u>: *the association between 'information' (through which the meanings are borne) and 'design processes'*
- the relevant processes of 'design' (with reference to Gestalt Theory and with regard to the architectonic activities that are controlled through conscious and unconscious mind): 'problem definition', 'background research', 'dreaming-desiring idea(l)s', 'idea generation', 'brain storming for solution', 'decision making', 'design optimization', 'conceptualization', 'image making', '(re)presentation', 'expression', 'designing', 'sketching', 'drawing', 'modeling for prototypes', 'design evaluation', 'formation', 'manifestation', 'building with materials', 'perception', 'experiencing', 'comprehension', and 'interpretation' (any of them is a 'signification')
- <u>the mediator of 'design processes'</u>: 'design or architectural language' that maintains 'visuality' and 'articulation'
- <u>three dimensions of 'design/architectural language'</u> (with reference to Rapoport): *'syntactic dimension'*, *'semantic dimension'*, and *'pragmatic dimension'*
- <u>the aspects of 'design/architectural language'</u>: *'form and function relationship'* and *'concept and content relationship'* in line with *'idea'*
- <u>the orders in 'signification'</u> (with reference to Barthes and Hjelmslev): 'the system of orders'; the first level 'denotation' with 'signifier' and 'signified' and the second level 'connotation' with 'signifier' and 'signified'

- the aspects of one of the approaches to 'architectural semiology/ semiotics' (with reference to Eco): 'denotation' and 'connotation' in a relationship with 'form' and 'function'
- the elements and the aspect of one of the approaches to 'architectural semiology/semiotics' (with reference to Jencks): 'signifier' and 'signified' with 'actual function or object's properties' in relation to the aspect of 'the traditional triad' of 'form', 'function', and 'technic'
- <u>the codes in 'architectural semiology/semiotics'</u> (with reference to Jencks, Preziosi): *'content codes'*, *'expressive codes'*, and *'architectonic code'*
- four approaches to 'architectural meaning' (with reference to Eco -with 0 the view of Jencks additionally; Hershberger; Rykwert; Venturi; with regard to design processes): 'denotation' and 'connotation' for the definition of 'function' (referring to the form-function relationship; in addition to this, associated with 'purposeful actions' and 'usual experiences' -referring to consistency of idea between concept-content & form-function); 'representational meaning' and 'responsive meaning' (referring to the connection between outer-inner realms); *'the* projection of human body' (referring to the human and built environment relationship); and 'complexity and contradiction' within hierarchical organization (referring to the richness in lives and built environment and the levels and layers of meaning) -concerning the wholeness 'in the psyche', 'in the intellect', and 'in the reality' through not only '(re)presentation and interpretation' but also 'expression and manifestation' in terms of 'design processes' within 'signification'
- <u>the 'principles of a sign system'</u> (with reference to the universal sign structure theory, USST): 'the representation principle', 'the principle of internal/external balance', and 'the principle of additional structure'
- <u>a tip for a psychological ground for 'urban and architectural semiology/</u> <u>semiotics'</u> (with reference to its root, and to Jung): 'the concept of archetype' being a complementary approach to 'personality development theory'
- the difference between (the element) 'sign' and (the element) 'symbol' (with reference to Saussure, Peirce, Jung; with regard to arbitrariness or human creativity in terms of consciousness and unconscious): 'sign' is arbitrary but 'symbol' is not wholly (Saussure) whereas 'symbol' is arbitrary (Peirce), or 'sign' is the thing related to consciousness, which means that it is quite comprehensible while 'symbol' emerges in unconscious mind and influences consciousness, which means that it is more incomprehensible and complicated to be obviously interpreted at once (Jung); thus, a 'symbol' comes out as a 'sign' in a signification, both of which have a relationship with an 'archetype'

- <u>the difference between (the element) 'sign' and (the element) 'symbol'</u> <u>in terms of meaning</u> (with reference to Rapoport): *'sign' has a particular meaning unlike 'symbol' (associated with 'connotation' and 'expression') which has many meanings with many expressions for (a) its sign (associated with 'denotation' and 'manifestation')*
- <u>a tip for the connection of 'Semiology' and 'Semiotics' with 'urban and</u> <u>architectural theories'</u>(with reference to 'Analytical Psychology', Jung): *'archetypes', a psychic/psychological cast considered as the 'notion that refers to the deep (psychic and psychological) meanings'*
- <u>the way of representation of the relations between the elements in a</u> <u>sign-system</u> (inspired from 'the triangle of reference' of Ogden and Richards, and from 'the semiological triangle' and 'the model applied to architecture' of Jencks): 'graphical expression' (form, shape, tool)

All of the things listed above are considered as the potential constituents which are fundamentally needed for the formulation of the model of urban and architectural semiology and semiotics. Indeed, this was the main idea of this criticism which has been made throughout this part of the chapter. To form the model, many of these constituents are needed to be accepted as the same to provide a common ground with the existing approaches in Semiology and Semiotics while the others need to be reviewed and re-conceptualized either as new terms derived or with new terms preferred, according to the theme of the thesis, for their adaptation to become as specific to this new perspective of urban and architectural semiology and semiotics. This will be done in the following part of the chapter.

Therefore, the following part of the chapter will, firstly, handle the formulation of the model by considering its conceptualization and by determining its elements, aspects, and principles, all of which are acquired as the particularities of its concept, through the formula which will be devised according to the previously rendered descriptive list (see the listed items above), and it will, lastly, present the model, in line with its concept, through some explanatory diagrams and a matrix/table which is based on an exemplification prepared as an evaluation of some of the fundamental urban and architectural things; at the end, finally, the model will be formed with its developed concept and it will be ready for the explanation as its introducing.

3.2. The Formulation

Up to this point, in the previous part of the chapter, a criticism was made to find out the fundamental constituents to formulate the model, which were considered as its particularities, so that they would form and firm a basis together for its concept by abiding by the existing approaches in Semiology and Semiotics and by enhancing them with a depth-psychological ground for the urban and architectural perspectives. At the end, they were put together in a descriptive list to explain briefly what they could be and do in the conceptualization of the model.

From now on, in this part of the chapter, a formula will be devised for the model along with the development of its concept by means of the list which describes the facilities and the capabilities of the constituents found out and put together. That is to say, this list will be used as a guideline for the formulation of the model and for its conceptualization by determining some particularities such as elements, aspects, and principles, being peculiar to its concept. Through this formulation, the particularities, especially some elements, aspects, and principles, will be structured around a content assigned in line with the theme of the thesis. In this way, the model will be formed with the development of its concept that acquires particularities considered as the thematic schema of its conceptualization; furthermore, the concept will be configured with an idea which is to emphasize both the matter of the causality of behaviors and experiences and the matter of the meaningfulness in and of the built environment in terms of all kinds of individual and social lives by offering a new perspective on urban and architectural semiology and semiotics with a depth-psychological ground. As a result, the model with its concept will be presented, at the end of this part, through some diagrams and a matrix/table, all of which will elucidate it.

To do all of them, all the constituents in the descriptive list need to be evaluated by considering their facilities and capabilities to identify the content systematically and to determine the elements, aspects, and principles of the model accordingly within its conceptualization; this means the formulation. Hereby, the formula of the model is guided; consequently, it is formulated by developing its concept.

The Basic Content of the Model:

In this context, any architectonic activity of the humans is taken into consideration in that these activities end up with a built environment which relates, in turn, to the humans. It is a kind of mutual relationship managing an interactive *'communication'*. Through this communication, any information is received and transferred between the humans and their built environments. Therefore, *'information'* through which any meaning is borne has an important place in this relationship which becomes a kind of signification. In this signification, there involve architectonic activities or basically design processes. It means that all are intertwined to convey the meanings through information and even design ideas. That is why design processes need to be handled with reference to *'information'* in a sense.

• That is to say, information, being the basic content of communication, will be the basic content of the model; any relation will be associated with information, for example, it will be considered in relation to the terms peculiar to a design process which is based on Gestalt Principles and mediated by a design/architectural language that maintains on one hand visualities and articulations and has on the other hand specific notations, some aspects, and three dimensions -syntactic, semantic, and pragmatic- in line with three components -form, content, and use.

The Structure of the Model:

As it is an information-based system which is in a relationship with design processes, some fundamental elements, and constructional aspects, and general principles are assumed to form the structure of this system through some intellectual standpoints.

Fundamental Elements of the Structure of the Model:

To propose the fundamental elements, it is logical to use the elements of Semiology and Semiotics. On one hand, two elements of Semiology, *'signifier'* and *'signified'*, are acceptable without any change because they will be convenient for the studies of signs in the context of urban and architectural environment in terms of linguistics. On the other hand, three elements of Semiotics, *'sign vehicle'*, *'interpretant'*, and *'object'*, are also acceptable. However, it would be better; if *'sign vehicle'* contains *'sign'* and *'symbol'* together (with/out their differences in Semiology and Semiotics) to find a holistic way (regardless of this, both will be handled later within a depthpsychological perspective); if '*interpretant*' is assumed as '*urban and architectural concept*' to not only include the idea behind the design of an urban and architectural environment but also provide a consistency between the idea and the interpretation of this design; and if '*object*' is redefined as '*urban and architectural thing*' to denote or designate specifically urban and architectural objects, components, and spaces, all of which not only have specific properties pertaining to their concept, content, form, function, material quality, and technical detail but also depend on specific idea(l)s together with corresponding concepts ('*thing*' can be called as '*designation*', which will be an easy option to distinguish it from the other elements in semiology or semiotics). Hereby, these three elements will be convenient for the sign studies in the context of urban and architectural environment in terms of any categorization. In a general sense, when all of them are considered together, '*sign vehicle*' containing '*sign*' and '*symbol*' becomes a '*signifier*' whereas '*urban and architectural concept*' and '*urban and architectural thing (designation*)' become a '*signified*' separately.

• That is to say, on one hand, the elements will be signifier and signified to study on signs within a Saussurean perspective in the context of built environment; on the other, the elements will be sign vehicle, urban and architectural concept, and urban and architectural thing to study on signs within a Peircean perspective in the context of built environment. Both will be an alternative to the model separately. In a general sense, indeed, signifier is a sign vehicle while signified turns into an urban and architectural concept and an urban and architectural thing.

In addition to this, one more element is surely needed, as well as these elements, to form a sign-system in the context of urban and architectural environment. This element refers to the deficiency which is emphasized from the very beginning of the thesis and defined as its problem. It covers the understanding of the matters of the causality and the meaningfulness in and of a built environment in terms of human behaviors, everyday experiences, and individual and social lives of all persons and the peoples, which is the subject of the thesis. It is the underlying meaningful cause of the functioning of human physical, mental, and psychological structures, which moderates consciously and unconsciously all the involved -mostly design- processes of all their architectonic activities in order to build a physical, spatial, and social environment to live and to survive there. As it has been mentioned, it refers to the archetypes and this element should concern them.

To add them into this sign-system, however, a re-conceptualization is required for their adaptation to the content. It is because, the concept of archetype, of Jung, has a variety of subject areas many of which are quite speculative on account of being contradictory, open-ended and unlimited, in abeyance, and fall outside the theme of the thesis in an extent; for example, the matters of primitiveness or primordiality, a consideration depending on instincts and ancestors, similarities in myths, and so on. These matters will not be discussed in detail because it is not the idea of this study to include such a discussion needing to be considered within several other perspectives which go further away from the thematic frontier of the thesis. In other words, they are eliminated and the archetypes are accepted within a highly narrowed framework for the study with respect to the main argument of the thesis and this framework is designed to be based on the subject and the context of the thesis. The archetypes thus will be considered, in the formula(tion) of the model, as 'a kind of common, innate/ inborn, and fundamental pieces' or as 'the things of human psyche triggering the physical, mental, and psychological structures which drive for thoughts, feeling, and behaviors and experiences', and are considered that 'they have roles in the interactive communication of the humans with/in their physical, spatial, and social environment; as a result of this, any one develops a personality by becoming a social-individual developing a society with the others. It would be rational to recall them with another word to distinguish; for example, a coinage standing for architectonic perspectives might be derived through a pun (wordplay) just by using another prefix with the root of the word 'archetype'. To explicate, the prefix 'arche-' (Greek root), which comes from 'arch-' having the meanings of 'rule' or 'chief who takes the lead' or 'the most important, extreme example of something', refers to 'original element or the source of actions or the root of things'. Fortunately, it has a synonym, that is, the prefix 'archi-' (Latin root) that reminds of and resembles to the prefix 'arche-' in terms of pronunciation and is more like the words such as 'architectonic' and 'architecture'. Thus, the prefix 'archi-' could be used for this context as a synonym of the prefix 'arche-' without loosing its meanings. Hereby, the word 'architype' is obtained and adopted instead of 'archetype', with a meaning of 'being a pattern or a prototype', in detail, a meaning of 'being certain building blocks of a character (trait) driving for anything (such as any behavior and experience) in relation to architectonic'.

• That is to say, the other element of the sign-system in the context of built environment will be architype included in all possible alternatives of the model as their main element by providing a depth-psychological ground for all the alternatives. It will refer to any behavioral pattern or a prototype or a trait of personality all of which correspond to everyday experiences of any social-individual.

Constructional Aspects of the Structure of the Model:

To propose the constructional aspects, to focus on some points each of which has a great significance is necessarily welcome: the matter of *'design process'*; the matter of *'language'*; and the matter of *'meaning'*. To construct a sign-system, all these three are considered in a relationship with *'signification'* depending on the conscious and unconscious mind operations of which coordinate these three matters through *'signification'*. Therefore, they will be handled together with *'signification'* in a way based on not only the differences between the elements *'sign'* and *'symbol'* but also the relationships of these two elements with *'archetypes/architypes'*.

The first one stands for the related processes of 'design', which reminds architectonic activities. In this regard, 'design process' will be needfully divided in two each of which includes some groups of processes: one maintains a 'creative production', that is, '(re)presentation'; and the other maintains an 'experiential feedback', that is, 'interpretation'. The former includes the processes which begin in mind and end in the reality, and it contains several steps from idealization to construction, such as 'conceptualization', 'designing', and 'building'. The latter includes the processes of the opposite direction, and it contains several steps based on experiencing, such as 'perception' and 'comprehension'. Indeed, these two groups of processes are not only mediated through a language bearing meanings with the idea(l)s but also run through the operations of conscious and unconscious mind; the same applies to 'signification' as well. This refers to the relationship between 'design process' and 'signification'. At this point, there involve both 'sign' and 'symbol', but, regardless of the ones in semiology and semiotics. Thus, both could be considered as the elements of the signsystem in this relationship; they need to be handled by focusing on not only their relations with 'archetypes/architypes' but also their differences through which they are connected to each other and to them. As a reminder, 'sign' is the thing related to

consciousness, so it is quite comprehensible, while 'symbol' emerges in unconscious and influences consciousness, so it is more incomprehensible to obviously interpret at once; and both are related to 'archetypes/architypes'. In a sense, a 'symbol' comes out as a 'sign' through a relationship with an 'architype', that is to say, a 'symbol' can appear as different 'signs', which means that each 'sign' pertaining to its symbol' acquires one particular manifestation of this symbol by becoming differentiated from its other signs, unlike this 'symbol' having many expressions of the 'architypes' by ensuring to form many other manifestations all of which are initially related to an/its *'architype'*. These differentiation happening from *'architype'* to a *'symbol'*, then to a 'sign', could be considered as a signification and be divided in two as the steps of this signification. By the author, the one from 'architype' to 'symbol' is associated with 'expression', and the other, from 'symbol' to 'sign', with 'manifestation' (with reference to Jung, see: Jung, 1964b; 1966; 1959/1968a); furthermore, this line from 'architype' to 'sign' is considered, by the author, as a kind of representation and presentation, and its opposite direction as an interpretation of this (re)presentation. Hereby, 'expression' and 'manifestation' have been associated with '(re)presentation' and 'interpretation': four refer to 'signification' with a depth-psychological ground.

• That is to say, the matter of design process with its two main items, (re)presentation and interpretation, and with its items related to these two, expression and manifestation, will be one of the constructional aspects of the model, having a relationship with signification.

The second one stands for the dimensions of a *'language'*, which is assumed as a design or architectural language that maintains the visualities and articulations of a design. It is acceptable and reasonable to take its *'syntactic dimension'*, *'semantic dimension'*, and *'pragmatic dimension'* into account since they have already taken places in urban and architectural theories. However, it would be better to include them in relation to *'information'* by means of *'information as thing'*, *'information as process'*, and *'information as knowledge'* since *information'* is the basic content of *'communication'*, which makes it, thus, the central point of its *'signification'*. Here, there is an important thing to put emphasis on: it is about *'urban and architectural thing and concept*; for example, the element object, which was considered before as semantic or syntactic dimension owing to having a form together with content, has

now turned into 'urban and architectural thing' that is embodied in a 'form' with 'contents' and 'functions'. That is to say, it therefore requires some changes in the dimensions. To explicate, it could be assumed that, this element thing has gained 'pragmatic dimension', while the element 'urban and architectural concept', which was the element interpretant before, has gained 'semantic dimension' due to having interpretations about the ideas (pertaining to the element thing, through this element concept). In other words, both have exchanged in terms of their own dimensions; furthermore, 'syntactic dimension' has also assigned to 'sign vehicle' that combines the idea and its thing by itself, at the same time (see: Figure 3.7). Hence, the sign-relations, that is, 'information as thing', 'information as process', and 'information as knowledge', need to be changed accordingly, in a relationship with the related processes of design, and they will be recalled, for example, as 'information as idea', 'information as term', and 'information as design' respectively.

• That is to say, the matter of language with its syntactic, semantic, and pragmatic dimensions, which is related to signification and associated with information, will be another constructional aspect as well as the matter of design process, by recalling the sign-relations as 'information as idea', 'information as term', and 'information as design'.

The third one stands for urban and architectural 'meaning', that is, the main content of 'signification'. That is why it requires to be in a relationship with both 'sign' and 'symbol', and their heads, that is, 'architype'. In this context, the approaches of Eco (with those of Jencks), Hershberger, Rykwert, and Venturi are very supportive and are very complementary when they are considered together. Respectively, they are 'denotation' and 'connotation' for the definition of 'function', both of which refer to the relationship of 'function' with 'form' (with, 'purposeful actions' and 'usual experiences', both of which refer to the consistency of 'idea' with 'concept'-'content' and 'form'-'function'); 'representational meaning' and 'responsive meaning', both of which refer to the connection between outer and inner realms; 'projection of human body'; and 'complexity' and 'contradiction', both of which refer to the richness in a built environment (in terms of layers and levels of meaning). It could be said that all of them concern the wholeness 'in the psyche', 'in the intellect', and 'in the reality', through not only '(re)presentation' and 'interpretation' but also 'expression' and 'manifestation' in terms of 'design processes' within a 'signification'. Furthermore, their togetherness gather all three dimensions in one hand. In terms of meaning, 'expression' and 'manifestation', which are associated respectively with 'symbol' and 'sign' could be respectively associated with 'connotation', which is considered for 'symbol' having many expressions for the different manifestations, and with 'denotation', which is considered for 'sign' being a particular manifestation. To explicate this association, the word 'notation' could be practically used by referring to the root of these words, that is, denotation and connotation, because, in the thesis, 'notation' has been considered as the elements bearing meanings in terms of their relations in a sign-system. In view of this consideration, both could be assumed as two derived forms of the word 'notation' with prefix 'de-' and prefix 'con-'; for illustration, 'de-notation' and 'con-notation'. In that, here, the prefix 'de-' makes the meaning of the words have the meanings of 'down, off, away from, remove, out of' while the prefix 'con-' adds the meanings of 'together, with, thoroughly' to them. Hereby, it could be said that in 'de-notation', derived with the prefix 'de-', 'notation' looses semiological/semiotic relations and carries one obvious meaning instead; in 'con-notation', derived with the prefix 'con-', 'notation' gains many semiological/ semiotic relations and carries many meanings through a set of aspects such as social, cultural, historical, etc. Therefore, it becomes possible to correlate and to associate these assumptions with their well-known explanations. In other words, the former, 'denotation', means the precise and literal definition or the referential and basic meaning while the latter, 'connotation', naturally carries the wide array of not only positive and negative but also emotional and imaginative associations, or suggestive and additional meanings surrounding its strict dictionary or denotative meaning. For example, 'house' and 'home' refer to the same de-notative thing in the sense of 'housing or homeland'; nonetheless, 'home' has different meanings or many connotations when it is compared to 'house' even if both are in the same form built up with the function of 'housing or homeland' through a (design/architectural) language which organizes the spaces accordingly to make an architectural unit of 'housing or homeland' with the fundamental and necessary notations (components) of this unit. In terms of design, both are the '(re)presentations' of the idea behind them and the 'interpretations' of both, in turn, point to this idea. Hence, one can say that 'home' is a 'connotation', having many 'expressions/sensations', and 'house' is a 'denotation', having one particular meaning as a 'manifestation' of one of the expressions of 'home' (sense). For this reason, 'house' becomes a 'sign' of 'home' 'symbol': both, as a unit, become a '(re)presentative and interpretative signification' of an 'architype' that reminds of its sign and/or symbol. Similarly then, a term which implies 'a deep psychic/psychological notion', can be desired and used for 'architype' in the context of 'meaning'. However, it would be better to propose a new word, being a coinage having a depth-psychological perspective, to point the meaning that is associated with 'architype' through this new word: it would relate to the word notation just in order to provide a similarity with the words denotation and connotation. To do this, some prefixes come to mind to be used for the derivation of some possible words. For example, 'be-notation' with the prefix 'be-' which means 'make, cause, seem', 'provide', 'thoroughly' (but, it may confuse with the meaning of 'two, dual' and result in misunderstanding); 'pre-notation' with the prefix 'pre-' which means 'before in time or place', 'at, thereupon, forward' (but, 'prenotation' means 'a feeling or guess or act based on prediction rather than fact' (see online dictionary, Wordhippo, n.d.)); 'a-notation' with the prefix 'a-' which means 'in the process of', 'in a particular state' (but, this one could be confused with the another meaning of prefix 'a-', that is, 'not', which would then imply there is not any notation); and 'pronotation' with the prefix 'pro-' which means 'forward', 'in advance', 'on behalf of', 'in exchange for', 'just as', and 'in favor of' (interestingly, there is a term as 'pronotation'⁵³ that is included in the study of sign-systems). Among them, (keeping

⁵³ It was a coincidence to come across the term 'pronotation', just while searching the internet to find out whether there exists such a word like pro-notation since it is a speculative trial of a derivation made with the word 'notation' and prefix 'pro-'. Although a similarity, which is to be related to the study of signs, could be followed between the word 'pronotation' came across in the internet and the proposed word 'pro-notation', there is a distinction, however. The former has Peircean and Kantian views only (see, Pearson, 2015) whereas the latter has (also) Jungian and Platonic perspectives much.

In fact, the word 'pronotation' is mentioned in a theorem which states that "A sign is a symbol iff it has three levels of semantic structure", and this structure has not only "three components of semantic meaning (denotation, connotation, and pronotation)" but also "three semantic information generators (the dynamic object, the dynamic ground, and the cognitive mentellect of the sign)" (Pearson, 2015, p.140). In addition, these three levels point to Peirce's taxonomy of signs, to icon, index, symbol: with a Kantian veil, symbol, associated with universal perceptual process, has pronotation as a semantic function, dynamic cognitive mentellect as external structure, immeadiate cognitive mentellect as internal structure (icon, associated with general latent properties, has connotation as a semantic function, dynamic ground as external structure, immeadiate ground as internal structure; and index, associated with individual compulsive sensation, has denotation as a semantic function, dynamic object as external structure) (Pearson, 2015, pp.161-164).

in mind the derived words 'be-notation' and 'a-notation' as the other possible alternatives), the derived word 'pro-notation' sounds good to prefer it for urban and architectural semiology and semiotics to provide a reference for the things having 'architypal contents' or the meanings associated with 'architypes': it is 'pro-notation' which will be used instead of the phrase, that is, 'the notion that refers to the deep (psychic and psychological) meanings'. Thus, it would be possible to define 'a core notion of meaning' together with 'connotation' and 'denotation', and 'pro-notation'.

• That is to say, the matter of meaning with its three items, denotation, connotation, and pro-notation, three of which define a core notion of meaning, will be the other constructional aspects of the model, like the matter of design and the matter of language, by relating to signification.

On the other hand, urban and architectural meaning has other things which are based on these three items. Depending on design processes, any urban and architectural design intends that people have many experiences in individual and social lives. This purpose contains an idea about any design and is achieved through concept-content and form-function relationships by managing a consistency with the idea. It is a way of a response to the needs which are constantly desired by all persons and the peoples to be compensated. It is a way of a (re)presentation of the inner realm as a design in the outer world, and a way of an interpretation of the design as the idea. It happens through the functioning of the physical, mental, and psychological structures that are triggered by the architypes. Considering all the relationship of architypes with sign and symbol, it becomes a kind of signification having a depth-psychological ground. Hereby, all together generate the wholeness of psyche, intellect, and reality.

• That is to say, urban and architectural meaning will revolve around the consistency between the inner realms and outer world by generating the wholeness of psyche, intellect, and reality: it keeps all the processes of design in mind and it concerns all of them in the framework of a semiological-semiotic perspective.

Briefly to note, these constructional aspects are considered in an interconnected way to each other, by considering the relationship of them with a signification. In short, all of them are the parts of a signification process in a broader sense.

• That is to say, the matter of design, the matter of language, and the matter of meaning, will be the constructional aspects of the model and handled together with signification.

Regarding signification, there is one more thing to add other than these three aspects, which is the fact that a sign-system contains 'codes' (reminding of idea, information, and meanings) in a signification process. All the 'codes' of this system (for example, expressive and content codes as Jencks mentions by referring to Hjelmslev) will be accepted for the model, just as a single code in a general term; it is 'architectonic code' (remember Preziosi). Without going into any detail for now, it will be only a simple prelude to this urban and architectural semiology and semiotics. It is a bare and easy suggestion for the model just to give an idea about the codes of signification that is related to the design processes. Therefore, it will have one main role which is to integrate all the elements together in the system. However, it would be optional to differentiate any code for any element just by using the same name with the related element. For example, the code identified with the element 'urban and architectural concept' could be named as 'concept code'; according to this rule, 'signifier code' must then refer to the code identified with the element 'signifier'.

• That is to say, the architectonic code referring to all codes in one hand will be involved in the matter of signification with their terms identified with the names of each element of the model.

General Principles of the Structure of the Model:

To propose the general principles, 'the universal sign structure theory', 'USST', is a quite adequate reference. With its principles, 'the representation principle', 'the principle of internal/external balance', and 'the principle of additional structure', it can ensure the adaptation and compatibility of this model in the universal platform. However, any detailed explanation, which goes further, is not necessary for such a model which will be just a simple suggestion for urban and architectural semiology and semiotics. Therefore, these principles should be generally accepted in order to conform with 'USST'; but, importantly, the elaboration needs to be greatly left to more specialized scholars and more comprehensive studies in this regard.

On the other hand, only few things about all could be assumed briefly by considering the urban and architectural perspectives. To explicate, the first one could be handled in a relationship with a design or architectural language, in that, different binary and ternary relations are allowed between the fundamental elements of the model and three relational dimensions are used as one of its constructional aspects. Therefore, it would be fine to include it with an another name, for example, *'the principle of relations'*. The second one could be associated with the balance between the realms and the levels of the layers, which concern the wholeness, as well as the balance, in the psyche, in the intellect, and in the reality because there is a mediator, that is, a design/architectural language, which organizes this by concerning the relationship among its three dimensions. Accordingly, this needs to be handled, in some extent, together with 'the principles of Gestalt'. Thus, it would be fine to include it with an another name, for example, *'the principle of wholeness'*. The third one might, in a way, remind any one of the models of L. Hjelmslev and R. Barthes, which could be a template for any addition into a sign-system. To denote, the idea behind these models could be helpful for more comprehensive studies regarding urban and architectural environments which are designed and built as an organization of the things came together hierarchically as additions. Thus, it would be also fine to include it with an another name, for example, *'the principle of hierarchy'*.

• That is to say, the principle of relations (the representation principle), the principle of wholeness (the principle of internal/external balance), and the principle of hierarchy (the principle of additional structure) will be preferred, directly or indirectly, but much more hypothetically, as a necessary criterion, or as an argument, for the model.

The Graphical Expression of the Model:

To propose a graphical expression for this model having plainly four fundamental elements, the form of a triangular pyramid, or a tetrahedron, will be a good idea to show all the elements by locating them at its four vertices. In that, each vertex is connected to the other three without the need for a diagonal, which is an extra way outside, and this makes all the elements systematically or hierarchically be connected to each other on one single line. On one hand, this form is proposed as being a wire-frame to indicate the relations between the elements through its edges. Hereby, it will be easier to address all the binary, ternary, and also quaternary relations between the elements. On the other, it is proposed as being modifiable mass, not Euclidean, so that these relations could be modified according to any condition since the relativity is assumed as more important than the Cartesian distances in this context. That is

why it is considered as three-dimensional form with four vertices, which emphasizes the depth not only among the processes but also between the elements, rather than a two-dimensional shape. However, later, any other detail can possibly be proposed for this graphical expression of the model, for example, arrows or the types of lines, or any other thing in line with the further studies about these relations.

• That is to say, a triangular pyramid, being either a wire-frame structure or a modifiable mass, will be the graphical expression of the model.

All in all, <u>a Model for Urban and Architectural Semiology and Semiotics</u> is finally obtained through a formulation explicated previously. In this formula(tion), firstly, a content was defined for the model. Then, a structure was described with four fundamental elements, three constructional aspects, and three general principles by determining them as the particularities of the model. Lastly, a graphical expression was adapted to the model. In accord with the formula that conceptualizes the model, it is now the time to introduce this model which is suggested as a new opinion in the field by giving it a depth-psychological ground. Hence, not only some diagrams such as skeletal, conceptual, and pyramidal but also a matrix/table as an exemplification will be given in the following pages to present the model and its three alternatives.

URBAN and ARCHITECTURAL SEMIOLOGY and SEMIOTICS

	-			
Four		Three		Principles
Elements		<u>Aspects</u>		
_architype sign vehicle (signifier)	The Matter of Design Process	The Matter of Language	The Matter of Meaning	USST / the principle of relations
	_(re)presentation	syntactic dimension	_denotation	the principles of wholeness the principles of hierarchy
(signified)	_interpretation	_semantic dimension _pragmatic dimension		
	\ manifestation /	information as idea information as term nformation as design	form, function, purpose, experience representational-responsive meaning projection of body	
			complexity	and contradiction

Signification

Figure 3.8: the skeletal diagram of the model that is proposed for urban and architectural semiology and semiotics (proposed and drawn *by the author*)

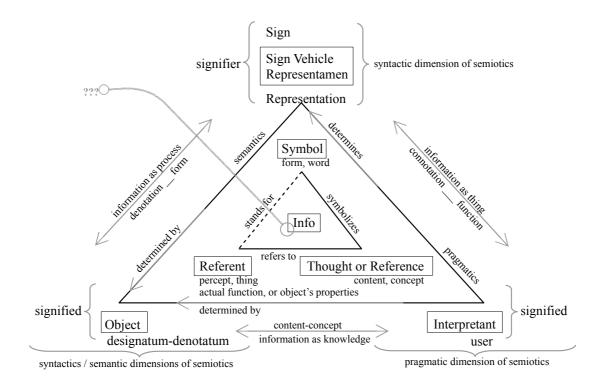


Figure 3.9: a triangle that brings together all the semiological-semiotic approaches that are mentioned in the thesis (drawn *by the author* by considering the references)

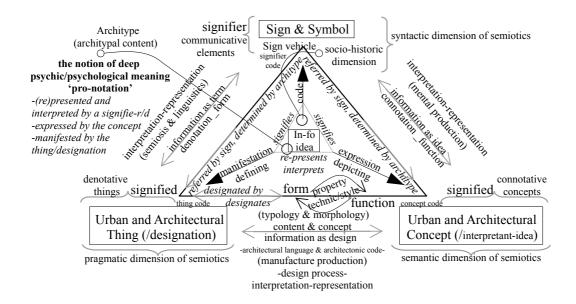


Figure 3.10: the section of the pyramidal diagram of the model, which shows the new perspective for urban and architectural semiology and semiotics (proposed and drawn *by the author* according to the criticism and formulation parts of the study)

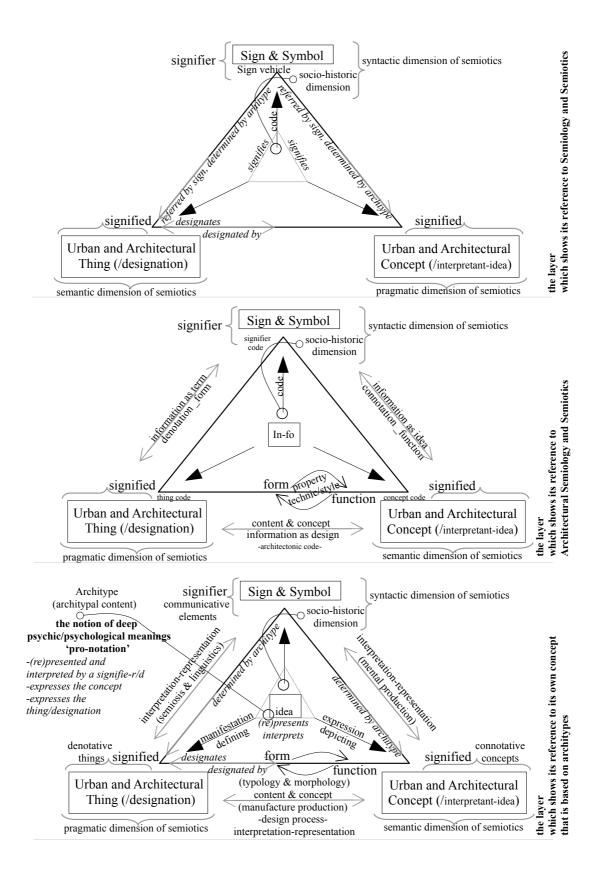


Figure 3.11: the section of the pyramidal diagram of the model with its layers (proposed and drawn *by the author* with reference to Figure 3.10)

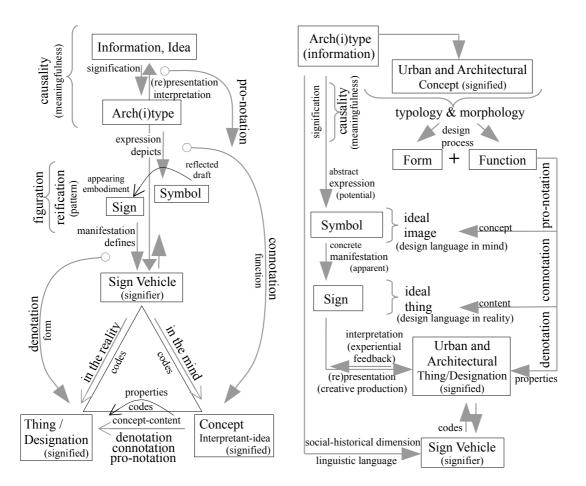


Figure 3.12: two conceptual diagrams of the model (left and right)⁵⁴, which show the new perspective for urban and architectural semiology and semiotics (proposed and drawn *by the author* according to the criticism and formulation parts of the study)

⁵⁴ They show the conceptual foundation of the new perspective for urban and architectural semiology and semiotics (proposed by the author) which considers that architectonic activities, especially design processes, are, actually, a signification, and have sign-systems pertaining to the physical, spatial, and social environment in terms of its sign-relations. To explicate, by assuming, these processes are, run through the functioning of human physical, mental, and psychological structures triggered by the basic pieces of psyche, that is, archetypes, redefined as architypes according to the theme of the thesis and to the model; they are 'certain, inborn/innate, universal templates' referring to 'the molds of any thing pertaining to built environment and the molds driving for any circumstance in human lives', and they are engaged with meanings, codes, idea(l)s, and information, and expressed through symbols peculiar to themselves, and in sequence, manifested through signs peculiar to these symbols. As a thing that patterns behaviors and connects the internal and external realms (mind, reality, and psyche) through experiences allowed in a built environment, an architype becomes an (ideal) urban and architectural thing (signified), which is designed and built as a form being full of information and embodied with functions and included with contents and particular properties in line with an (ideal) urban and architectural concept (signified), just as a result of these design processes that are maintained through a particular language from symbol to sign and to a sign vehicle (signifier) by bearing meanings with codes): this is a (re)presentation as a creative production, whose perception and comprehension are an interpretation as an experiential feedback; in other words, all are actually a signification, which means that there involve meanings the core notion of which is defined with pro-notation related to architype, connotation related to symbol, and denotation related to sign.

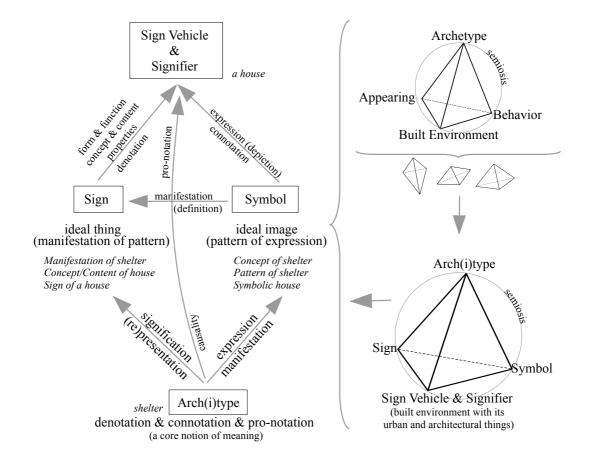


Figure 3.13: the primary and final pyramidal diagrams of the model with the unfolded net of the final one that conceptually shows the relations between the elements of the model (right and left)⁵⁵, both of which show the new perspective for urban and architectural semiology and semiotics (proposed and drawn *by the author* according to the criticism and formulation parts of the study)

(left) the net of one alternative (right down) of the pyramid of the model (right top) the preliminary draft of the model in a pyramidal diagram with some optional forms (right down) one alternative of the model in the pyramidal diagram (its net is on the left)

archetype (archi-type):'innate/inborn faculty;trigger to be behaved for sheltering'appearing (sign):'tree', 'hut', 'cave', 'tent', 'room', etc.human behavior (symbol):to be protected/isolated to survive; being a carer/guardianbuilt environment (sign vehicle or signifier):house, settlement, neighborhood, urban area, city, etc.

⁵⁵ The image on the right top of the figure shows the preliminary draft of the primary model with its four elements whereas the image on the right down shows its final form having the final elements. Through these elements which refer to a sign-system pertaining to a built environment, both try to illustrate, indeed, the main argument of the new perspective for urban and architectural semiology and semiotics (proposed *by the author*) (see: Figure 3.10, Figure 3.12), which is that there is a significant information-based mutual relationship between the humans and environment and that this depends on their coexistence to assure the life/survival. The diagram on the left, which is the unfolded net of the final model, shows the sign-relations in this system. It thus conceptualizes them through the terms peculiar to this new perspective by giving an example (see: the words written in italic, in the figure and at the end of this footnote) referring to the main statement of itself, which is that '*to shelter*' is one of the main behaviors of all persons and the peoples in an environment and one of the main aspects of designing and building an urban and architectural environment. All emphasize architectonic activities and design processes by considering any of them as a signification.

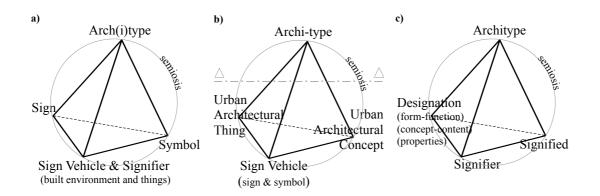


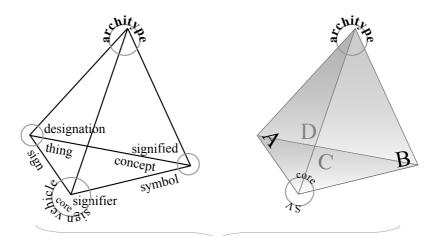
Figure 3.14: three alternatives of the model in pyramidal diagrams, all of which show the new perspective for urban and architectural semiology and semiotics⁵⁶ (proposed and drawn *by the author* according to the criticism and formulation parts of the study)

a) the one focusing on the causality and the meaningfulness in/of built environment, considering the architectonic activities and design-processes

b) the one focusing on the architectonic activities with the design processes for the categorizations of types and morphs

c) the one focusing on (urban and architectural) built environment in terms of linguistics

⁵⁶ Each is one alternative of the model, which shows the new perspective on urban and architectural semiology and semiotics (proposed by the author). All indicate different sign-relations through four elements peculiar to themselves since they are conceptualized for different usages by considering the matters of the causality and the meaningfulness in the context of built environment: each has four elements and each explains different point of views in this regard. One element stands for the form which the (urban and architectural) sign takes, that is, a sign vehicle or a signifier. Another element stands for the (urban and architectural) thing which (the form of) the sign refers to, that is, an urban and architectural thing or a designation (or, a sign -do not confuse this sign with the one in the item a, which is a manifestation). The other element stands for the concept, thought, interpretation, which (the form of) the (urban and architectural) sign refers to (by means of the thing which represents it), that is, an urban and architectural concept or a signified (or, a symbol -consider it together with its sign). The last one is the common element, that is, architype, which exists as the activator of all these three. The item a, as one alternative, is based on the main idea of the concept of the model, which points to the matters of the causality and the meaningfulness regarding the built environments in terms of human behaviors, everyday experiences, and individual and social lives, by providing a depth-psychological ground for the study of sign-systems. By using its approach and its four elements (architype; sign (signified); symbol (signified); built environment as an urban and architectural thing (sign vehicle or a signifier)), any deep analysis of urban and architectural meaning could be examined through the urban and architectural signs (with thing and concept), in a relationship with the core notion of meanings, that is, denotation, connotation, and pro-notation. The item b, as another alternative, is assumed to have a Peircean approach in order to focus on the design processes for the categorizations of urban and architectural things in terms of their types and morphs. By using its approach depending on the evaluation of a design, and four elements (architype; urban and architectural thing (signified); urban and architectural concept (signified); sign vehicle (including sign and symbol together)), any broad categorization regarding types and morphs could be handled through the urban and architectural signs (with concept and thing) in the framework of logic by taking a particular design language of a specific era/style into account. The item c, as the other alternative, is assumed to have a Saussurean approach in order to focus on urban and architectural environment in terms of linguistics. By using its approach depending on the evaluation of a design, and four elements (architype; signifier; signified; designation (an urban and architectural thing having form-function and concept-content relationships with its particular properties, as a signified[/-r?])), any evaluation of sign form in line with its sign concept could be handled through their urban and architectural sign (with concept and thing) in the framework of linguistics by taking a particular language of a specific period of time in history into account.



a wire-frame structure with the elements and a modifiable mass with the relations

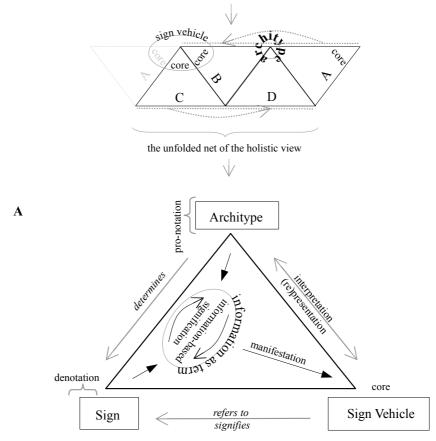


Figure 3.15: the elements and the sign-relations between the elements of the alternatives, shown through a holistic view on a wire-frame and a mass pyramidal diagrams⁵⁷ (proposed and drawn *by the author* with reference to the figures form Figure 3.10 to Figure 3.14)

⁵⁷ The figures on the top show all the elements of three alternatives on a single wire-frame structural pyramid through its vertices (left) and the sign relations between the elements on a single modifiable mass pyramid through its faces (right). This is not necessary for this model but it provides a holistic view among the alternatives which concern the sign-relations regarding the built environment. (see for detail, The Conceptualization part of the study/the chapter)

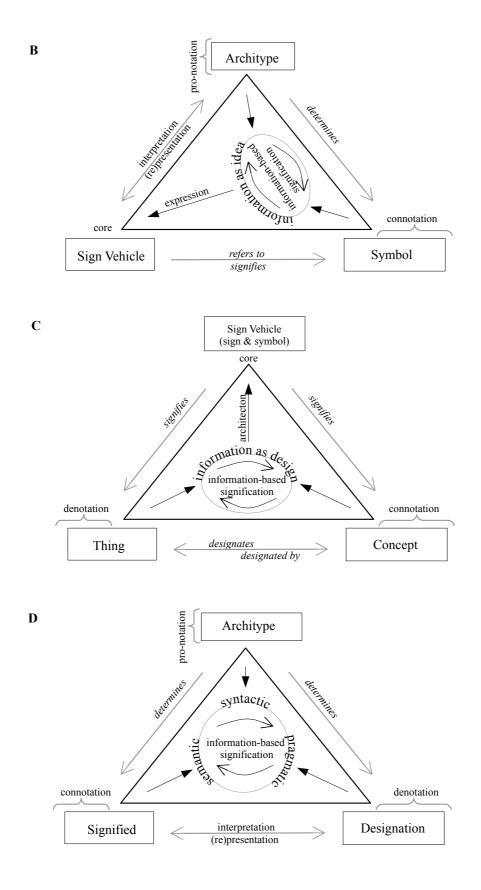


Figure 3.15 (continued)

Table 3.1: a matrix that shows some semiological-semiotic relations of 'urban and architectural environment' in accord with the model proposed (prepared *by the author*) (prepared according to Table 2.2, Table 2.3, Table 2.4, and Table 2.5 -see: the previous chapter)

The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
Territory (border - area)	_arch(i)type: _symbol: _sign: _SV (BE/things	tive, diagram a in Figure 3.14 to restrict, to limit, to surround, to protect, to control, to organize, to hierarchize, to own, to defend, to group, to differentiate, to govern, to separate, to make privacy, to extract, to belong to, to make policy anything expressing the sense pertaining to an architype, (as a behavioral pattern: guardian, ruler, conqueror, hero, rebel, caregiver, owner, protector, being privy, etc.); (as a concrete mold: an image that implies a certain area or a defined sphere limiting belonging or exceptions); (as a natural model: river, mountain range, etc.) any border-area in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology/morphology; (for example, border of countries, parcel, etc.)): border-area, as a designed/planned element rnative , diagram b in Figure 3.14 any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) border-area a specific border-area being the fundamental element of any physical/ political line, or architectural style or any idea, etc. (for example, coastline/land borders of a city, privacy/publicness, ownership, etc.) border-area, as a designed element with its specific features regarding the concept
	The third alterna _architype: _signifier: _signified: _designation:	specific features regarding the concept ative, diagram c in Figure 3.14 the meanings (psych-ic/ological) (referring to pro-notation) border-area, as a sound or written linguistic word (denotation) the concept of the word border-area, with its denotation and connotation border-area, as a designed element having core meaning ((or, be-/a- notation) pro- notation (arche(i)typal), connotation (additional), denotation (lexical))

The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alternative, diagram a in Figure 3.14	
	_arch(i)type:	to live, to like, to admire, to dream, to wander, to migrate, to rest, to wait, to beautify, to design, to show, to view, to observe, to move, to own, to lead (to), to govern, to product, to organize, to serve, to hide, to keep, to harvest, to bury anything expressing the sense pertaining
Ground and Underground	_sign:	to an architype, (as a behavioral pattern: guardian, ruler, owner, wanderer, hero, conqueror, borne, dead, nomad, rebel, creator/artist, producer, jester, etc.); (as a concrete mold: an image that implies anything about land and earth, or nature); (as a natural model: the nature itself) any space/place in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology/morphology; (for example, garden, agriculture, tumulus, cemetery, landscape/cityspace, infrastructure, field, mausoleum, underground tunnel, etc.) b): space/place, as a designed/planned element
Landscape and Cityscape	The second alternative, diagram b in Figure 3.14	
Garden	_archi-type: _sign vehicle:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) space/place
	_concept: _thing:	a specific space/place being the fundamental element of any architectural style, or any idea, etc. (for example, Pok Fu Lam cemetery hill, stacked cemetery building, subway in Tokyo, yard, Baroque garden, ancient/Medieval tunnel, etc.) space/place, as a designed element with its specific features regarding the concept
	The third altern	ative, diagram c in Figure 3.14
	_architype:	the meanings (psych-ic/ological) (referring to pro-notation)
	_signifier:	space/place, as a sound or written
	_signified:	linguistic word (denotation) the concept of the word space/place, with
	_designation:	its denotation and connotation space/place, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

Table 3.1	(continued)
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The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alterna	tive, diagram a in Figure 3.14
	_arch(i)type: _symbol:	to lead, to go, to walk/get away, to travel, to surrender, to wander, to explore, to move, to arrive, to pass, to come across, to migrate, to replace, to present, to connect, to bridge, to promenade, to continue, to journey, to see off, to access anything expressing the sense pertaining to an archi-type, (as a behavioral pattern: explorer, wanderer, everyman, hero, sage,
	_sign: _SV (BE/things	nomad, dead, borne, conqueror, migratory, passenger, etc.); (as a concrete mold: an image that implies continuity which arrives and ends with a destination); (as a natural model: continuous way or path on earth, water channel, river, waterfall, etc.) any street in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology; (for example, path, way, route, passage, tunnel, road, thoroughfare, channel, bridge, promenade, corridor, etc.)
Street	The second alter	rnative, diagram b in Figure 3.14
	_archi-type: _sign vehicle:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) street
	_concept:	a specific street being the fundamental element of any architectural style, or any idea, etc. (for example, the Spice/Silk routes; Ottoman Divanyolu; a maze and a
	_thing:	labyrinth; circumcision/wedding/funeral band; Bosphorus Bridge, etc.) street, as a designed element with its specific features regarding the concept
	The third alterna	ative, diagram c in Figure 3.14
	_architype:	the meanings (psych-ic/ological) (referring to pro-notation)
	_signifier:	street, as a sound or written linguistic word (denotation)
	_signified:	the concept of the word street, with its denotation and connotation
	_designation:	street, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alternative, diagram a in Figure 3.14	
	_arch(i)type: _symbol:	to come together, to meet/come across, to socialize, to communicate, to share, to cooperate, to sell/buy, to interchange, to exchange, to make policy, to speak, to discuss, to represent, to show, to serve anything expressing the sense pertaining to an archi-type, (as a behavioral pattern: everyman, hero, rebel, agent, merchant,
	_sign: _SV (BE/things	creator/artist, politician, jester, sage, player, presenter, etc.); (as a concrete mold: an image that implies a space/place which provides gathering to meet the needs); (as a natural model: a valley, a plateau, or a plain terrain, etc.) any square in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology/morphology; (for example, agora, forum, piazza, plaza, atrium, fair, (court)yard, bazaar, theater, karum, etc.)): square, as a designed/planned element
Square	The second alternative, diagram b in Figure 3.14	
	_archi-type: _sign vehicle: _concept: _thing:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) square a specific square being the fundamental element of any architectural style, or any idea, etc. (for example, Greek Agora, forum of Constantine, Renaissance piazza of San Pietro, Beyazid Square, Hippodrome, Colosseum, Grand Bazaar -Kapalıçarşı, Kültepe Karum, etc.) square, as a designed element with its specific features regarding the concept
	The third alternative, diagram c in Figure 3.14	
	_architype: _signifier:	the meanings (psych-ic/ological) (referring to pro-notation) square, as a sound or written
	signified:	linguistic word (denotation) the concept of the word square,
	_designation:	with its denotation and connotation square, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alterna	tive, diagram a in Figure 3.14
	_arch(i)type: _symbol:	to move, to reach, to strain, to climb, to ascend/descend, to go up/down, to pass, to enter, to migrate, to replace, to wander, to show, to watch, to spectate, to hierarchize, to make levels, to restrict, to limit, to protect, to seclude, to differentiate anything expressing the sense pertaining to an archi-type, (as a behavioral pattern: wanderer, hero, sainted, sage, spectator, sequestered, etc.); (as a concrete mold: an image that implies a way in any shape and
	_sign: _SV (BE/things	form leading to up/down for any different level of something); (as a natural model: hillside; stepped, sloping terrains, etc.) any stair/level/ramp in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology/morphology; (for example, staircase, step, level, slope, ramps, etc.)): stair/level/ramp, as a designed/planned element
Stair (level - ramp)	The second alternative, diagram b in Figure 3.14	
Stan (rever - ramp)	_archi-type: _sign vehicle: _concept: _thing:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) stair/level/ramp a specific stair/level/ramp being the fundamental element of any architectural style, or any idea, etc. (for example, paved glacis -defensive slope of Hattusa, Machu Picchu, steps of Buddhist temples, Rome Colosseum, Pyramids, Ziggurat, ancient or modern amphitheaters, etc.) stair/level/ramp, as a designed element with its specific features regarding the concept
	The third alternative, diagram c in Figure 3.14	
	_architype: _signifier: _signified: _designation:	the meanings (psych-ic/ological) (referring to pro-notation) stair/level/ramp, as a sound or written linguistic word (denotation) the concept of the word stair/level/ramp, with its denotation and connotation stair/level/ramp as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional),

The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alternative, diagram a in Figure 3.14	
	_arch(i)type: _symbol:	to stand, to stop, to wait, to rest, to carry, remind, to be permanent or eternal, to show the existence, to become a body, to come into existence, to re-present, to rise, to reach, to raise, to watch for, to keep an eye on, to capture, to stay anything expressing the sense pertaining to an archi-type, (as a behavioral pattern: hero, borne, dead, guardian, famed, reminder guiding, story teller, prisoner,
	implies any men heightening to ca natural model: a _sign: any column in an any function and additional eleme kind/typology/m caryatid, pillar, p (clock) tower, lig	etc.); (as a concrete mold: an image that implies any memory or lifting, raising and heightening to carry of show off); (as a natural model: a tree, an island, etc.) any column in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology/morphology; (for example, caryatid, pillar, post, statue, monument, (clock) tower, lighthouse, cupola, etc.) b): column, as a designed/planned element
Column	The second alternative, diagram b in Figure 3.14	
Column	_archi-type: _sign vehicle: _concept: _thing:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) column a specific column being the fundamental element of any architectural style, or any idea, etc. (for example, pillar in mosques, caryatids in ancient Greek temples, post of structural system of buildings, Big Ben Tower, Pharos of Alexandria, The Statue of Liberty, the maiden's tower, etc.) column, as a designed element with its specific features regarding the concept
	The third alternative, diagram c in Figure 3.14	
	_architype: _signifier:	the meanings (psych-ic/ological) (referring to pro-notaion) column, as a sound or written linguistic
	_signified:	word (denotation) the concept of the word column, with its
	_designation:	denotation and connotation column, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

Table 3.1	(continued)
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The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alternative, diagram a in Figure 3.14	
	_arch(i)type:	to live, to survive, to shelter; to restrict, to limit, to resist, to cover, to close, to hide, to protect, to belong, to group, to collect,
	_symbol:	to dwell, to carry anything expressing the sense pertaining to an archi-type, (as a behavioral pattern: caregiver, other/parenthood, member of a group, etc.); (as a concrete mold: an image that implies a cover which protects and gathers the things being beneath); (as a natural model: the part of a tree where
	_sign: _SV (BE/things	its branches, leaves are, or a cave, a mound of earth; the sky, the universe, etc.) any roof in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology; (for example, arch, vault, dome, pyramid, pitched/curved/flat floor, pergola, etc.) s): roof, as a designed/planned element
	The second alte	ernative, diagram b in Figure 3.14
Roof	_archi-type: _sign vehicle:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) roof
	_concept: _thing:	a specific roof being the fundamental element of any architectural style, or any idea, etc. (for example, the gabled roof with pediment/tympanon of ancient Greek temple; Egyptian pyramids; ancient Anatolian tumulus; Medieval/Gothic vault and arch; dome of Ottoman/Seljuk mosques, or of Renaissance churches; flat floor of modernism, etc.) roof as a designed element with its specific features regarding the concept
	The third altern	ative, diagram c in Figure 3.14
	_architype:	the meanings (psych-ic/ological) (referring to pro-notation)
	_signifier: signified:	roof, as a sound or written linguistic word (denotation) the concept of the word roof, with its
		denotation and connotation
	_designation:	roof, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alternative, diagram a in Figure 3.14	
	_arch(i)type: _symbol:	to restrict, to limit, to surround, to protect, to seclude, to stop, to rise, to lead, to live, to survive, to shelter, to govern, to define, to control, to hierarchize, to organize, to separate, to hide, to capture, to lie anything expressing the sense pertaining to an archi-ype, (as a behavioral pattern: guardian, caregiver, governor, organizer, defender, hermit, prisoner, leader, etc.);
	_sign: _SV (BE/things	(as a concrete mold: an image that implies any uncontrollable defined block, in any shape and height, which stops to go on); (as a natural model: mountain, cliff, etc.) any wall in any form and shape, with any function and material (with/out additional elements) appertaining to a kind, typology/morphology; (for example, city wall, fortification, castle, citadel, curtain or shear wall, tower, lighthouse, etc.)): wall, as a designed/planned element
	The second alte	rnative, diagram b in Figure 3.14
Wall	_archi-type: _sign vehicle: _concept: _thing:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) wall a specific wall being the fundamental element of any architectural style, or any idea, etc. (for example, the Great Wall of China; Constantinople Walls; Medieval castle; ancient city of Troy; Renaissance citadel Palmanova fortress; the fences of Anatolian houses; ancient Roman aqueduct, Pharos of Alexandria, etc.) wall as a designed element with its specific features regarding the concept
	The third altern	ative, diagram c in Figure 3.14
	_architype:	the meanings (psych-ic/ological) (referring to pro-notation)
	_signifier: _signified:	wall, as a sound or written linguistic word (denotation) the concept of the word wall, with its
	_designation:	denotation and connotation wall, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

Table 3.1	(continued)
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The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alternative, diagram a in Figure 3.14	
	_arch(i)type: _symbol:	to pass, to enter/exit, to stop, to guard, to restrain, to restrict, to limit, to exclude, to protect, to control, to mis/lead, to depart, to disorient, to hierarchize, to hide anything expressing the sense pertaining
	_sign: _SV (BE/things	to an archi-type, (as a behavioral pattern: guardian, prisoner, visitor, conqueror,etc.); (as a concrete mold: an image that implies any controllable openings, in any shape, framed with an arch or opaque material, any discernible and recognizable thing); (as a natural model: a facade or frontal surface of a cave, or tree hollow, etc.) any door in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology; (for example, door of house, gate of garden, door/gate of castle or fortification, door/gate of city, torii of shrine, triumphal arch, false doors, etc.)): door, as a designed/planned element
Door	The second alter	rnative, diagram b in Figure 3.14
	_archi-type: _sign vehicle: _concept:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) door a specific door being the fundamental element of any architectural style, or any idea, etc. (for example, ancient Egypt tomb doors; gate/door/portal with sill, knob, lintel, pediment, ornament; shoji of Japanese buildings; Edirnekapı, Grand Bazaar caravan inn gates, etc.)
	_thing:	door, as a designed element with its specific features regarding the concept
	The third alterna	ative, diagram c in Figure 3.14
	_architype:	the meanings (psych-ic/ological) (referring to pro-notation)
	_signifier: _signified:	door, as a sound or written linguistic word (denotation) the concept of the word door, with its
	_designation:	denotation and connotation door, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alternative, diagram a in Figure 3.14	
	_arch(i)type: _symbol:	to pass, to enter/exit, to watch, to look, to wander, to observe, to control, to hope, dream, to allow, to imagine, to organize, to equalize, to lead, to display, to unveil anything expressing the sense pertaining to an archi-type, (as a behavioral pattern: artist/dreamer, explorer, viewer, etc.); (as a concrete mold: an image that implies
	_sign:	any controllable or uncontrollable -in terms of masking- holes in any shape, framed with any opaque material, which allows vision, or entry/exist); (as a natural model: a gap between the plants, or vista; a space over hills, landscape, etc.) any window in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/typology; (for example, window of house, of mosque, of dungeon, loophole of fortification wall or castle, a hole on wall or roof as a chimney, etc.)
Window		rnative, diagram b in Figure 3.14
	_archi-type: _sign vehicle:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) window
	_concept:	a specific window being the fundamental element of any architectural style, or any idea, etc. (for example, rose window of cathedral in Romanesque and Gothic period; large window of modern era, hole on the fairy chimneys or rock tombs, etc.)
	_thing:	window, as a designed element with its specific features regarding the concept
	The third altern	ative, diagram c in Figure 3.14
	_architype:	the meanings (psych-ic/ological)
	_signifier:	(referring to pro-notation) window, as a sound or written linguistic
	_signified:	word (denotation) the concept of the word window, with its
	_designation:	denotation and connotation window, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

Table 3.1	(continued)
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The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment
	The first alternative, diagram a in Figure 3.14	
	_arch(i)type:	to live, to survive, to be protected, to shelter, to own, to nestle, to rest, to wait, to belong, to resemble, to group, to dream, to expect, to idealize, to get satisfaction, to stand apart, to seclude, to host, to care anything expressing the sense pertaining
	_sign:	to an archi-type, (as a behavioral pattern: caregiver, mother/father, parenthood, member of a group, sage, lover, jester, innocent, hermit, alive, owner, dreamer, resident; the self, etc.); (as a concrete mold: an image that implies warm and protective space or place which nestles and shelters, in a sense of belonging); (as a natural model: cave, tree hollow, hoodoo, etc.) any house in any form and shape, with any function and material (with/out additional elements) appertaining to a kind, typology/morphology; (for example, tent, hut, cell, megaron, cottage, palace, hostel, hospice, apartment, room, inn, etc.)
House		s): house, as a designed element
	_archi-type: _sign vehicle:	any specific content defining a concept the word, the pronunciation, the drawing
	_concept:	of (linguistic term) house a specific house being the fundamental element of any architectural style, or any idea, etc. (for example, Indian teepee, Mycenaean megaron, villa and palazzo of Renaissance, apartments of modernism,
	_thing:	Cappadocia underground city, etc.) house, as a designed element with its specific features regarding the concept
	The third altern	ative, diagram c in Figure 3.14
	_architype:	the meanings (psych-ic/ological) (referring to pro-notation)
	_signifier:	house, as a sound or written linguistic word (denotation)
	_signified:	the concept of the word house, with its denotation and connotation
	_designation:	house, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))

The Fundamental Urban and Architectural Things (Components, Objects, Spaces)	Semiological-S	emiotic Relations of a Built Environment	
	The first alternative, diagram a in Figure 3.14		
	_arch(i)type: _symbol:	to live, to survive, to live together, to be protected and protect, to shelter, to nestle, to settle, to cooperate, to share, to own, to communicate, to belong to, to resemble, to group, to socialize, to interchange, to exchange, to desire, to dream, to policy, to idealize, to get satisfaction, to organize anything expressing the sense pertaining to an archi-type, (as a behavioral pattern: guardian, caregiver, ruler, owner, settled, wanderer, resident, conqueror, hero, rebel, solidarist, inhabitant, dreamer, idealist, the self, etc.); (as a concrete mold: an image	
City (settlement)	_sign: _SV (BE/things	that implies any planned organization which provides settling and coming together; habitation); (as a natural model: animal nests, valley, caves, etc.) any settlement in any form and shape, with any function and material (with/out additional elements) appertaining to a kind/morphology; (for example, citadel, state, village, town, city, campus, acro/ pompeio/megapolis neighborhood, etc.) s): settlement, as a designed/planned element	
	The second alte	The second alternative, diagram b in Figure 3.14	
	_archi-type: _sign vehicle:	any specific content defining a concept the word, the pronunciation, the drawing of (linguistic term) settlement	
	_concept: _thing:	a specific settlement being the fundamental element of any architectural style, or any idea, etc (for example, Jaipur, Chandigarh; Athens; the Vatican, etc.) settlement, as a designed element with its specific features regarding the concept	
	The third altern	ative, diagram c in Figure 3.14	
	_architype:	the meanings (psych-ic/ological)	
	_signifier:	(referring to pro-notation) settlement, as a sound or written	
	_signified:	linguistic word (denotation) the concept of the word settlement, with	
	_designation:	its denotation and connotation settlement, as a designed element having core meaning (pro-notation (arche(i)typal), connotation (additional), denotation (lexical))	

3.3. The Conceptualization

Up to this point, in the previous part of the chapter, a formula was devised for the model along with the development of its concept by using the facilities and the capabilities of the constituents which were found out through the criticism of the approaches in Semiology and Semiotics and the concept in Analytical Psychology. In this way, these constituents were determined as the elements, aspects, and principles of the model; all are the particularities of its concept. As a result, the model was formed in three alternatives together with its concept. Its structure were described with these particularities all of which outlined together the thematic schema of its conceptualization by revolving around a content identified in line with the theme of the thesis: they are four fundamental elements, three constructional aspects, and three general principles. In addition, its concept was configured with the idea emphasizing both the matter of the causality of the behaviors and experiences and the matter of the meaningfulness in/of the built environment in terms of the individual and social lives by offering a depth-psychological ground for urban and architectural semiology and semiotics. Finally, the model and its concept were presented, at the end of that part, through a skeletal diagram, and some conceptual and pyramidal diagrams, and an exemplifying matrix/table: all of them elucidate the model and its concept.

From now on, in this part of the chapter, which is titled as 'the conceptualization', the concept of the model, developed through the previously handled formula, will be explained in detail by touching on its particularities, on its fundamental elements, constructional aspects, and general principles, and on its graphical expression. This will show its potency of having a role in assessing many theoretical, metaphorical, conceptual, and philosophical discourses and discussions on anything pertaining to built environment. For example, in the context of **the phenomenon of** '(*to*) shelter' which could be debated according to **the relationship between the humans and their built environment** and associated with, for example, 'territory', being the most powerful thing in designing and building a physical, spatial, and social environment and architectural spaces by managing them hierarchically for all kinds of individual and

social experiences through designing, through a togetherness of all the other things of a built environment: it defines the sense of personal space, and respectively any other space, through the hierarchy that is maintained by this organization of these urban and architectural spaces. In short, this concept in conjunction with its convenient model will have been introduced, at the end of this part, in line with the theme of the thesis. Consequently, the envisaged and expected result of this study will have been completed by accomplishing the objective of the thesis, by eliminating the problem, and by offering an advanced version or a further edition for urban and architectural semiology and semiotics that acquires a depth-psychological ground.

To begin with, the model which has been formed shows the thematic schema of its concept which is based on the idea of providing a depth-psychological ground for urban and architectural semiology and semiotics in terms of the sign-relations in an urban and architectural environment by emphasizing the matters of the causality and the meaningfulness in the context of built environment within a consideration about the human and environment relationship.

In this schema, 'a built environment with its physical, spatial and social dimensions' was considered as a kind of communication that arises from the mutual relationship of all persons and the peoples with such an environment for it is built through some design processes having a particular language, that is, design/architectural language being the mediator of these processes, and thus it is embedded with any information received and transferred through this language in its formation. All are based on this relationship which makes it a meaningful information system; in other words, as a result of this relationship, a built environment with its things such as components, objects, and spaces becomes a sign having meanings conveyed through its formation being full of information peculiar to this environment. It is a signification linked with the human-environment relationship through the design processes that are maintained consciously and unconsciously through the functioning of the physical, mental, and psychological structures of the humans, and thus through the pieces in their psyche, that is, arch(e/i)types, which trigger this functioning. That is to say, this schema tries to develop a concept that explains all the things mentioned here in a holistic manner.

First of all, this concept was grounded on a content which has an important role in this signification. It is information because it is related to the design processes by its meaning, and it has informed the things pertaining to a built environment through a language having lexis, linguistic terms and narrations, matrices throughout history.

Then, this content was structured around some particularities which define together a basic framework in order to make the concept be developed. For the development of the concept, this framework consisted of three structural parts: all of them together figure the thematic schema of this concept by forming the model presented in the previous part of the chapter. These parts are fundamental elements, constructional aspects, and general principles. Firstly, this concept has fundamentally four elements: architype, sign vehicle or a signifier, concept as a signified, thing/designation as a signified, four of which define together a quarternary relation in a general sense by considering binary relation of Semiology and ternary relation of Semiotics between their basic elements. One stands for the form which the (urban and architectural) sign takes, that is, a sign vehicle or a signifier. Another stands for the interpretation or thought, which (the form of) the (urban and architectural) sign refers to (by means of the thing which represents it), that is, an urban and architectural concept as a signified. The other stands for the (urban and architectural) thing which (the form of) the sign refers to, that is, an urban and architectural thing or a designation as a signified. And one more element, that is, architype, which could be a signifier or a signified in different cases. This is the main element derived for this concept which focuses only on the relationship between the humans and their environment in terms of individual and social lives in the built environment, by eliminating the speculative points of the Jungian archetype, however, just by adopting its conception about the human behaviors related to their individua(liza)tion and socialization processes, their experiences and lives in an environment. This element is the pivotal one due to its potential in being associated with meanings and in controlling the design processes having a visual and articulate language. That is to say, it is related to the concept of an urban and architectural design and to the thing/designation as an urban and architectural design, through a sign vehicle pertaining to both, to this concept and to this thing/designation. In this relationship as a signification, architype (re)presented

and interpreted by a signifier or/and a signified is expressed by the concept and manifested by the thing/designation while the sign/vehicle or signifier signifies the (signified) concept and the (signified) thing/designation: the former referred by a sign/vehicle (signifier) and determined by an architype is designated by the thing/ designation which (re)presents it in turn; and the latter referred by a sign/vehicle (signifier) and determined by an architype designates the concept which interprets it in turn. Secondly, this concept has three aspects: the matter of design process, the matter of language, and the matter of meaning. The first aspect underlines the side of this concept, which is related to design processes. Due to the fact that an environment is designed and built, perceived and comprehended, through such processes handled consciously and unconsciously in accord with an idea(1) which initiates this creativity for the desired and needed life stories and styles, this signification is set as not only the unity of the (re)presentation of the idea(l) as a creative production but also the interpretation of it as an experiential feedback. In detail, it is a way of signification, constituted from the element architype to the element concept and then to the other the element thing/designation, and vice versa. In this signification, the first step of the former way, called as expression, is associated with several symbols, and the last step of this way, called as manifestation, is associated with several signs peculiar to these symbols; but, both refer to the starter of this way, that is, architype which is associated with meanings, additionally with information and with idea attained into them as it is a design process. To denote, this concept is based on (re)presentation and interpretation, together with expression and manifestation, by constructing sign and symbol as the other elements of this concept, used together with architype and with its sign vehicle as an alternative to the general quarternary relation. The second aspect underlines the side of this concept, which is related to language. Due to the fact that there is a signification and this signification has a relationship with design processes, its dependence on a language is inevitable. This language is a design or architectural language which deals with the visual items indispensably and correlatively together with their corresponding 'lexis, linguistic terms and narrations', and renders an environment to be embodied with specific visualities and articulations through design processes. Thus, this concept gains three dimensions by this aspect: syntactic dimension, which means the configuration of the sign-relations in this

context of designing, building, experiencing an environment; semantic dimension, which means the making sense of the sign-relations in rendering its visualizations and articulations through the elements; and pragmatic dimension, which means the use of the sign-relations in purposing behaviors, experiences, and lives for the perception and the comprehension of this environment. The third aspect underlines the side of this concept, which is related to meaning. Due to the fact that there is a signification, assigning and conveying meanings surely happen in its quaternary relation which includes accordingly some binary and ternary relations between the elements. Through the way constituted from the element architype to the element concept and then to the element thing/designation, and vice versa, as the unity of the (re)presentation and the interpretation, the meanings are assigned and conveyed as a core which is made up of three kinds of association. They are denotation, conveyed through manifestation, which is assigned to the element thing/designation and to the element sign (of an architype); connotation, conveyed through expression, which is assigned to the element concept and to the element symbol (of the architype); and pro-notation, which is assigned to the element architype (with information and idea). The last one was derived for this concept to give the deep meanings (associated with architypes) a name that was generated by just providing a similarity with the roots of the other words. In this way, this concept establishes a core notion of meanings, which settles in its quaternary, ternary, and binary relations. Thirdly, this concept has three principles: the principles of relations, the principles of wholeness, and the principles of hierarchy, all of these three give a common ground concerning design principles to the concept by defining a concord of it within the universal platform. As a result, this concept was systematized as a whole for the sign-relations regarding design processes and any designed and built environment: it becomes a sign-system based on urban and architectural perspectives having a depth-psychological ground.

After that, a graphical expression was proposed for this concept to explain all the relations between the elements. Its quarternary relation, having binary and ternary relations, forms a pyramidal diagram on which all its elements were placed by showing the relations with arrows (see: Figure 3.15): at the four vertices of this triangular pyramidal form, that is, a tetrahedron, these elements were located; hereby,

they are connected to each other systematically or hierarchically on one single line, to define together the quarternary relation of this concept. It was, in fact, considered as not a Euclidean but a modifiable mass so that these relations could be modified according to any condition in the sign-system through a transformation of this mass; for example, they can be degraded or upgraded accordingly. In addition, this form can also be considered as a wire-frame structure to evaluate the relations through its edges. This indicates the relativity assumed as more important than the Cartesian distances for this concept because it emphasizes the depth in the sign-system.

Later, the general quarternary relation having with four elements was specialized in three alternatives each of which has and explains different approaches in the context of Semiology and Semiotics for urban and architectural perspectives enriched with a depth-psychological ground. All have four elements: one of them is architype being the common element, and the other three differ by performing similar tasks in each alternative. All indicate quarternary, binary, and ternary relations. However, there are differences between these alternatives in terms of their usages, and each of them explains something different. The first alternative (item a in the Figure 3.14) directly focuses on the matters of the causality and the meaningfulness in and of the built environment in terms of human behaviors, everyday experiences, and individual and social lives, through the general point of view of this concept. It introduces a new approach to urban and architectural semiology and semiotics by giving it a depthpsychological ground. Therefore, it can be used for the deep analysis of urban and architectural meaning through the built environments and its urban and architectural things such as components, objects, and spaces, in a relationship with the core notion of meanings, that is, denotation, connotation, and pro-notation. It has four elements: architype; sign (as a signified); symbol (as a signified); built environment as an urban and architectural thing (as a sign vehicle or a signifier). The second alternative (item b in the Figure 3.14) focuses on the design processes for the categorizations of urban and architectural things according to their types and morphs, through a Peircean perspective of Semiotics. It introduces a new approach to the evaluation of a design in this regard. Therefore, it can be used for broad categorizations regarding types and morphs. For example, by taking a particular visual and articulate language of a specific style into account, an urban and architectural sign could be handled in the framework of logic, and thus any relevant classification could be done for an urban and architectural concept and an urban and architectural thing/designation in the context of typology or morphology. It has four elements: architype; urban and architectural thing (as a signified); urban and architectural concept (as a signified); sign vehicle (including sign and symbol together). The third alternative (item c in the Figure 3.14) focuses on urban and architectural environment in terms of linguistics, through a Saussurean perspective of Semiology. It introduces a new approach to the evaluation of a design in this regard. Therefore, it can be used for the evaluation of a sign together with its form and concept. For example, by taking a particular language into account, an urban and architectural sign could be handled in the framework of linguistics, and thus any relevant form (signifier) (lexis, lexical term and narration, or linguistic matrix) used for a designation (as a signified), of a signified, in different languages, could be evaluated in the context of denotation or connotation. It has four elements: architype; signifier; signified; designation (an urban and architectural thing having form-function and concept-content relationships with its particular properties, as a signified). In short, all explain the sign-relations through different approaches.

Lastly, this concept with its three alternatives was exemplified through some of the fundamental urban and architectural things, that is, components, objects, and spaces, such as territory, street, square, roof, wall, window, door, house, and city, all of which are correspondingly associated with architypes containing some architypal contents by considering human behaviors and experiences (see: Table 3.1). For example, think about a kind of mass enclosed by any kind of material and structured as a *shelter* to provide a space basically for habitation (denotation). It is an urban and architectural thing (a signified, according to the alternative having Saussurean point of view) which is called as house in English (a signifier, according to the alternative having Saussurean point of view), as a term in any other language (linguistics). It has many properties such as a form having a style and these properties differ any house from the others by becoming peculiar only to itself and by making it a particular house (a designation, according to the alternative having Saussurean point of view) because it is embedded with particular properties which give some information about whom it

is addressed. It is (an urban and architectural thing/designation, according to the alternative having Peircean point of view) designed and built as a form with full of information, such as social, cultural, and historical aspects, and with many functions such as resting, gathering, and providing privacy, by depending on a concept having a content (an urban and architectural concept, according to the alternative having Peircean point of view) in line with an ideal expecting an ideal life to be presented by this house and experienced by its users. It is, in fact, a (re)presentation (typological and morphological) (sign vehicle, according to the alternative having Peircean point of view) which signifies several meanings (the core notion of meaning: denotation, connotation, pro-notation) behind its idea, its concept having a content, and its form having many functions. This is not just for this house, on the contrary, it is for all the houses (signifier, according to the alternative having the general point of view of this concept). However, through the experiences of its users, that is, all persons and all the peoples, the notion of house does not point only to a habitation. It does points to many other things such as, being a home, a shelter of those who have the same opinions, that is, an association (connotation), or, a shelter of those who have the same ancestry, that is, a mother/father fold (connotation). It is indeed a manifestation (a sign of a symbol, or some symbols of an architype or some architypes, according to the alternative having the general point of view) of some expressions (sensations) (some symbols of an architype or some architypes, according to the alternative having the general point of view): all are linked with experiences and behavioral patterns, that is, architypes (the common and the main element in all alternatives). It is a house (manifestation, sign of symbol, and signified) having some house images (expression, symbol, and signified) having sensations about security, comfort, and belonging (pro-notation in terms of ideas; thoughts and feelings) by giving the sense of warm like a mother/father, or a wife/husband (pro-notation in terms of behaviors); it is a home used by all the humans to be protected in order to rest, to accommodate, and to belong to a place or a group (pro-notation in terms of experiences).

As a consequence, just after by leaving the speculative parts of the (Jungian) concept of archetype aside and only adopting its association with behaviors corresponding to the experiences in their daily lives, this concept with its model and particularities can be called now as 'the concept of architype' which acquires a role in assessing many theoretical, metaphorical, conceptual, and philosophical discourses and discussions on anything pertaining to any built environment and to daily lives sustained in this environment. For instance, the reason why some urban and architectural projects do not effectuate the expected results and turned into ghosts by becoming desolation, or the reason why some others are unexpectedly used in more different ways over time by preserving their existences in more lively ways, or even the events affected the masses across the world such as migrations, invasions, and uprisings, could be evaluated through this concept. Hence, it could be possible to generate intellectually a debate, through this concept, by considering the phenomenon of '(to) shelter' with the relationship between the humans and their built environments. To explicate, '(to/the) shelter' could be associated, for example, with 'territory' in a reasonable manner. Just as Wilson (1971) implies that territoriality gives any one significantly the sense of a space by separating it from the things external (p.15), a territory could be considered as the most powerful thing in not only designing and building a physical, spatial, and social environment but also its perception and comprehension. It defines all the urban and architectural spaces by organizing them for all kinds of behaviors, and thus all kinds of experiences and individual and social lives, through designing that means the togetherness of all the things of a built environment. It thus arranges the orientations of any one through some distinctions achieved by the things for example by doors used for entering-exiting (Wilson, 1971, p.18), by considering the behaviors and experiences desired and needed in the most idealized sense. In fact, it defines substantially a personal space (Wilson, 1971, p.15) which fosters the other spaces correspondingly through a hierarchy organized by this togetherness and these urban and architectural spaces. In other words, defining a personal space could be literally considered as the primary phase of the development of an environment built not only physically and spatially but also socially. This space surrounding a person physically and socially could be regarded as his/her place being in a relationship with his/her self having a personality owned by only itself. It is a safe, satisfactory, and sustainable realm where the self presents its personality comfortably. It is a territory in which the self lives by having its own experiences through its own behaviors enabled by this personality. It is a *shelter* which regulates all kinds of relationships of the self with the other personal spaces of the other selves in a physically, spatially, and especially socially built environment. Through any of these relationships, for example, getting married, shopping to meet needs, and gathering on important days, each and every experience becomes consequently affected from each other since the humans have to and need to live together. This consciously or unconsciously changes their behaviors, experiences, and thus their personalities in accord with their personal spaces and their built environments. That is to say, such an (ideal) environment is surely developed by depending on these personal spaces in a way that (re)configures the territories through which all the spaces become *shelters enclosed concretely* by the things for the orientations of all this in order to lead a life.

In conclusion, the concept of architype tries to evaluate and examine the relationship between the humans and their environments, for all time, by focusing on the matters of the causality of behaviors and experiences and of the meaningfulness in/of an environment as a *shelter* in terms of the individual and social lives. Considering this relationship together with all the spaces that are hierarchically organized, it also tries to handle the urban and architectural discussions and discourses on how urban and architectural designs should be to provide physical and social spaces for the lives of the (social)individuals and the societies. In this regard, during any designing, not only form-function and concept-content relationships concerning the idea(l)s, and the styles and techniques in line with these relationships to make and build such a design but also the perception and comprehension of this design to be experienced should always be kept in mind. If they are taken into account sensitively, these designs build a meaningful environment having physical, spatial, and social dimensions, that is, the one being quite safe, sustainable, and satisfying for (the survival of all) the lives and having its traces in the languages which narrate the human-environment relationship in their own lexis by containing all the meanings pertaining to both the humans and their built environments as information that is received and transferred through this relationship. To conclude, the more meaningfully sheltered spaces in order to lead a life in safety and satisfactorily there are, the more meaningful environments in terms of the sustainment of the lives of all persons and the peoples, that is, the lives of the (social)individuals and the societies, there are.

3.4. Summary of the 'Study'

All in all, what was done in this chapter was to deal with the deficiency of a depthpsychological ground in either semiology or semiotics for the urban and architectural perspective, by considering the human-environment relationship. In other words, it was about all the behaviors that enable every experience for the individual and social lives sustained in a built environment which is a sign of all of them. As a result, it was associated with the causality and the meaningfulness in/of a built environment in terms of the behaviors, experiences, and also daily lives. For this reason, a study was conducted through the application of a method which was described as a plan to formulate one possible way to compensate this lack. It was assumed that this possible way could depend on the concept of archetype, then correspondingly turned into the 'concept of architype' to make an accordance with the theme of the thesis. Therefore, throughout this study, it was aimed to reinforce and to reinterpret not only semiology but also semiotics in terms of urban and architectural theories in the context of built environment, with an incorporation of the archetypes, actually, of 'the architypes'. In this regard, this incorporation was formulated as a conceptualized model by going through some steps which formed the model as a new perspective for urban and architectural semiology and semiotics in a way giving a depth-psychological ground to it. Hereby, this model was obtained by having a concept and some particularities peculiar to this concept holding an idea that emphasizes the matters of the causality and the meaningfulness by considering the human and environment relationship.

In fact, these steps which were taken for the development of the concept of architype made up the three parts of this chapter: they were, in sequence, 'the criticism', 'the formulation', and 'the conceptualization'.

In the first part titled as 'the criticism', a criticism was handled in a relationship with the theme of the thesis, regarding the architectonic activities with design processes and design language. On one hand, some approaches in Semiology and Semiotics were examined in order to unfold some of the things which would be suitable for the conceptualization of the model from their contents since these things would have been considered as the necessary constituents of the model. That is to say, they would have formed a basis for its concept, by abiding by these approaches. On the other, the concept of archetype was also examined together with the theory of personality development, being related to it, because it was considered as the main constituent of the model, which would compensate the aforementioned lack. That is to say, it would have firmed the basis, by enhancing these approaches. In a sense, this criticism allowed not only to find out and to distinguish the ones which could be used as the necessary constituents of the model becoming the new perspective for urban and architectural semiology and semiotics from those included in the contents of the approaches in Semiology and Semiotics but also to focus on the lack, which was expected to be in these contents and would be used as the main constituent, and to incorporate it into the contents in this regard. As a result, these constituents were put together at the end of 'the criticism' part of the chapter by listing them; hereby, this descriptive list, as the guideline of the formulation, covered what they would be and could do systematically in the conceptualization of the model. That is to say, it was then the time to form the model with its concept, as a formula(tion), by determining its particularities at the same time, and then to present the model and to explain the concept, in the following parts of the chapter.

In the second part titled as 'the formulation', a formula was devised systematically for the conceptualization of the model with its concept through the determination of its particularities by means of the descriptive list. Through this formulation, a content was identified in line with the theme of the thesis, and a structure was described with fundamental elements, constructional aspects, and general principles by determining them as the particularities, and a graphical expression was adapted to the model; and finally, all were applied to the model by developing its concept. In this formula, the constituents were used in the model in such a way as to give a new perspective to urban and architectural semiology and semiotics. For this reason, on one hand, some of them were accepted as the same to provide a common ground with the existing approaches in Semiology and Semiotics. On the other, the others were adapted either to get an accord with this new perspective or to be specific to it, respectively either by changing them with the other terms that were more relevant to the content or by deriving new terms as their counterparts that became more relevant to the content. Hereby, the model was formed together with the development of its concept: it was designed in a form of a pyramid, having three alternatives. It contained the common element architype with the same or similar elements of Semiology and Semiotics. It had some particularities peculiar to the concept, which defined a thematic schema of the conceptualization of the model. In addition to this, the concept was configured with an idea which is to emphasize the matter of the causality of the behaviors and experiences and the matter of the meaningfulness in/of the built environment in terms of the individual and social lives by providing a depth-psychological ground for urban and architectural semiology and semiotics. At the end of 'the formulation' part of the chapter, the model was presented in skeletal, conceptual, and pyramidal diagrams (see: Figure 3.8 - Figure 3.15), and in a matrix/table including some of the fundamental urban and architectural components, objects, and spaces (see: Table 3.1): all elucidated the model together with its concept by focusing on its content and its particularities having the perspectives of not only Semiology and Semiotics but also Analytical Psychology, in some extent and in a new way. That is to say, it was then the time to explain the concept according to the model, in the following part.

In the third part titled as 'the conceptualization', a (its) concept was explained by touching on its particularities by one by, and consequently called as 'the concept of architype'. It was of the model formed in three alternatives. It was developed to show its assumed potency of having a role in assessing many theoretical, metaphorical, conceptual, and philosophical discourses and discussions on anything pertaining to a built environment. For example, in the context of **the phenomenon of** 'to shelter or **the shelter'** which could be associated with, for example, 'territory' that defines primarily all personal spaces and consequently all urban and architectural spaces not only by organizing them hierarchically for all kinds of design(ing) which means the togetherness of all the things of a built environment but also by building an ideally meaningful environment embedded with physical, spatial, and social dimensions as *a* safe, sustainable, and satisfactory shelter for the ideal lives of (social)individuals and societies. Thus, through this concept, the human-environment relationship could

be evaluated and examined in a way which focuses mainly on the matters of the causality and the meaningfulness regarding the built environment: it provides any urban and architectural discussion and discourse on how urban and architectural designs should be. As a result of all of them, the concept of architype was developed in conjunction with its convenient model, at the end of 'the conceptualization' part of the chapter, by concerning the theme of the thesis: it was obtained as the envisaged and expected result of the thesis study which was completed by accomplishing the objective of the thesis and by eliminating the problem defined in the thesis. Hereby, the main statement and main argument of the thesis were turned into a model in a sense, through, by means of, this study.

To sum up, the problem which is defined in the thesis were handled in accord with the objective of the thesis by keeping always its main statement and main argument in mind. Thus, this study were conducted through such a method which suggested a new formulation for one possible way to eliminate the problem by revolving around the subject of the thesis and many terms (see: Table 3.2) pertaining to this context. In this way, finally, a new model which made sense of a depth-psychological ground in semiological and semiotic relations in the context of urban and architectural theories covering built environment was formed with a concept having a content regarding the theme of the thesis and some particularities not only abiding by and enhancing the existing approaches in Semiology and Semiotics but also having an idea based on the emphasis of the matters of the causality and the meaningfulness regarding the built environment in terms of behaviors, experiences, and individual and social lives.

That is to say, through this study, the thesis has possibly arrived at a conclusion which points to a new perspective, as an advanced version or a further edition, for urban and architectural semiology and semiotics having now a depth-psychological ground in the context of the matters of the causality and the meaningfulness in and of the built environment. As a conclusion, new debates and further studies are provided for these fields, and this furthers several envisaging broad discussions or discourses on designing, building, and experiencing a meaningful environment which enables the life/survival in a sustainable, satisfactory, and safe way.

Terms	Definitions, Expressions, Categorizations
'communication'	the act or process of imparting or exchanging 'information' by speech, writing, or notations
basic content of 'communication'	'information'
'information'	data with material, psychic, physical, spatial, social, and historical aspects, which refers to 'concept', 'context', 'idea', 'representation', 'shape', 'form', 'type', and 'morph'
the mediator of 'communication' to receive and transfer 'information'	* reminding of architectonic activities and design processes'language'
'language'	a system of communication that constructs a medium for the connection of its involved things which generate together a set of 'sign-system' processing the communication through some particular 'notations' peculiar to itself
the components of 'language'	 'form': the mechanism, the configuration, and the structure of language and its grammatical rules 'content': the meaning, in other words, concepts and ideas 'use': the purpose of language and its functions (Bloom & Lahey, 1978, pp.69-97)
the dimensions of 'language'	 'syntactic dimension': the one rendered by form 'semantic dimension': the one rendered by content 'pragmatic dimension': the one rendered by use (Bloom, 1980, pp.116-123)
main process in a 'communication'	'sign-system'
'sign-system'	a collection of 'notations', that are, 'signs' or 'symbols', in which particular meanings are gathered within specific 'codes' through relevant 'information' as a result of some 'notational relations of meanings' in a communication
main process in a 'sign-system'	'semiosis'
'semiosis'	a process of generating and conveying meanings, which makes a communication be possible in terms of these meanings through a sign-system that they are included in
specialized characters of a 'sign-system'	'notations'
'notation'	something pertaining to a certain sign-system, which is used for the display of the meanings peculiar to this system; 'signs' or 'symbols'
'sign' or 'symbol' (in a general meaning)	an indication that conveys meaning in a representative way; something which performs for another thing in 'sign-system' as if it is a representation; an association of the meanings peculiar to this system, acting as a messenger for their convey throughout the system; the unit of implication, that is, 'significance' or 'signification'
'signification'	'meaning'; sense, essence, understanding, etc.
the narrative form of 'signification' in a 'sign-system'	'codes'

Table 3.2: definitions, expressions, and categorizations of the terms mentioned throughout the thesis (prepared *by the author*)

Terms	Definitions, Expressions, Categorizations
'codes'	a set of things within which meanings are come together in line with signs or symbols; in other words, social contracts which are known and understood by only the members of a certain group who use this set that is accepted by them for a common ground making sense for themselves
the basic studies of 'sign-system'	'Semiology' and 'Semiotics'
'semiology' or 'semiotics'	a study which investigates 'sign-system' with 'signs' or 'symbols' to understand how meaning is gathered within 'codes' and borne through 'information' throughout a communication by means of the relations in this system
'semiology'	one main approach to 'sign-system' with the perspectives of the structural linguistics of Ferdinand de Saussure
the elements of 'semiology' (Ferdinand de Saussure)	 'signifier': the form that the sign takes (marker, sound, text) 'signified': the concept-meaning that the sign represents (outcome, interpretation, conception)
'semiotics'	one main approach to 'sign-system' with the perspectives of the pragmatic logic of Charles Sanders Peirce
the elements of 'semiotics' (Charles Sanders Peirce)	 'representamen': the form that the sign takes to represent something for its interpretation; sign-vehicle 'object': to which the sign refers (concrete and abstract thing in nature) 'interpretant': the sense made of sign (mental thought or effect on mind)
the differences between 'semiology' and 'semiotics' in terms of 'sign' and 'symbol'	 'sign': 'Saussurean sign': an arbitrary, but very fundamental, structure of form and concept together, which lies under human language; a dyadic relation between its elements 'Peircean sign': a system of a ground, a vehicle, a representation, grounded on ontological categories; a triadic relation between its elements 'symbol': 'Saussurean symbol': neither conventional nor arbitrary, but motivated; "a rational relationship with the thing signified" (Saussure, 1966, p.73) 'Peircean symbol': arbitrary, unmotivated, purely conventional; "the general name or description which signifies its object by means of an association of ideas or habitual connection between the name and the character signified" (CP1.369)
some other approaches in the study of 'sign-system'	 the semiotic-semantic model of Ogden & Richards (the triangle of reference or the triangle of meaning) the triadic (three dyadic) system of semiotics of Morris double partition model of Hjelmslev the semiological system of Barthes (orders of signification) semiotics of architecture of Eco architectural semiology/semiotics of Jencks (the semiological triangles -one of both is applied to architecture)

Table	3.2	(continued)
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Terms	Definitions, Expressions, Categorizations
the elements of the semiotic-semantic model of Ogden & Richards (the triangle of reference or the triangle of meaning)	 'thought or reference': an experience, knowledge, or idea relating to the word to understand this word 'referent': a thing, or an object 'symbol': a linguistic word which has its own meaning (a representation for semantic meaning) * indicating direct relations of 'thought or reference' with 'symbol' and with 'referent', and an indirect relation between 'symbol' and 'referent' (by using a graphical expression)
the elements of the triadic (three dyadic) system of semiotics of Morris	 • 'sign vehicle': "the mediator" (Morris, 1938, p.4); "an early phase of a social act" (Morris, 1938, p.36) • -'designatum(/designata pl.)': the thing that every sign refers to; "a later phase of this act" (Morris, 1938, p.36) -'denatatum(/denotata pl.)': the thing that actually exists such as objects, members and events (Morris, 1938, p.5) • 'interpretant': "the habit of the organism to respond, because of the sign vehicle, to absent objects" (Morris, 1938, p.31); "the preparatory response of the interpreter" (Morris, 1938, p.36) • 'interpreter': "an organism" (Morris, 1938, p.31); the agent * indicating three dyadic-relations between the elements, defining a triadic relation together, as a result of 'three dimensions of syntactics, semantics, pragmatics'
three dimensions of Morris	 'syntactic dimension': study of relations of signs to signs 'semantic dimension': study of relations of signs to object 'pragmatic dimension': study of relations of signs to interpreters (Morris, 1938, pp.13-30)
the aspects of how the connection is set by an interpreter or a user between the elements in 'sign-system' (considering 'information') (based on the semiotics of Peirce-Morris)	 information as thing: interaction between user (interpretant) and representation (vehicle) information as process: interaction between representation (vehicle) and meaning (designatum) information as knowledge: interaction between user (interpretant) and meaning (designatum) (Buckland, 1991, cited as in Huang, 2008, p.12) (see also: Capurro & Hjorland, 2005, p.394)
the double partition model of Hjelmslev	• 'plane of content' (similar to 'signified') having two subdivisions 'form' and 'substance' • 'plane of expression' (similar to 'signifier') having two subdivisions 'form' and 'substance' * defining denotative/connotative levels' by inclusion of the latter into 'plane of expression' (referring to Hjelmslev, cited as in Jencks, 1980, pp.81-82)

Table 3.2 (continued)	able 3.2 (continu	ued)
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Terms	Definitions, Expressions, Categorizations
the elements of the semiological systems of Barthes (orders of signification)	 'signifier': the form (Saussurean term) 'signified': the concept (Saussurean term) 'sign': the relation between these 'signifier' and 'signified'
	 'language': the first-order semiological system; "the modes of representation which myth gets hold of in order to build its own system" (Barthes, 1991, p.114) 'myth': "a second language, in which one speaks about the first" (Barthes, 1991, p.114); "a second-order semiological system" (Barthes, 1991, p.113)
	 'form': one of the duplicity of signifier of myth, the other of which is meaning (Barthes, 1991, p.127) 'concept': a constituting element of myth, which fills the form of the myth with a situation (Barthes, 1991, pp.117-127)
the orders regarding the semiological system of	Saussurean semiotic pattern of 'sign' with 'signifier' and 'signified' is defined as 'the first order', which is the plane of 'language'; and the other pattern of 'sign' with a mere 'signifier' identified by 'this first order', and another 'signified' is defined as 'the second order', which is proposed as a reference to 'myth'. On the plane of language, 'signifier' is 'meaning' whereas on the plane of myth, 'signifier' is 'form'; on both planes, 'signified' retains as 'concept'. Other than these two terms, there is a third term, which is 'sign', the correlation of these two. In addition to this, the 'signifier in myth', which is formed by the 'sign of language', and the 'signified in myth' form together the third term of myth, which is 'signification'. (Barthes, 1991, pp.113-115)
Barthes	Furthermore, the first level and the second level of this system are respectively associated with 'denotation' and 'connotation'. That is to say, there include 'denotation' and 'connotation'. To explicate, 'denotative sign' which is made up of 'signifier' and 'signified' is also 'connotative signifier' which engenders 'connotative signified' producing 'connotative sign' together (Cobley & Jansz, 1999, p.51). In that, 'connotative sign' derives from 'denotative sign' as its 'signifier'. Being a re-framing of the Saussurean model, it is ''analogous to the 'infinite semiosis' of the Peircean sign in which the interpretant can become the representamen of another sign'' (Chandler, 2017, p.166).
the principles of a 'sign-system' ('universal sign structure theory', 'USST')	 'the representation principle' 'the principle of internal/external balance' 'the principle of additional structure' (Pearson, 2015, pp.137-140)
'sign-systems in architecture' ('architectural semiology/semiotics')	a study of 'sign-system' for the discourses about 'an urban and architectural environment' to understand and to interpret 'urban and architectural meanings' which are obtained through the interactions with 'the urban and architectural components, objects, and spaces' in this built environment

Table 3.2	(continued)
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Terms	Definitions, Expressions, Categorizations
'built environment'	a 'physical, spatial, and social environment' designed and built by the humans through their 'architectonic activities with the involved (design) processes' as a place where they sustain their lives individually and socially and meet their all needs through everyday experiences
'the architectonic activities'	all the activities relating to the principles of designing and building, involving mostly 'design processes'
the thing driving for 'the architectonic activities'	the functioning of the physical, mental, and psychological structures of humankind and its underlying psychic structure
the system providing the functioning of the physical, mental, and psychological structures	'conscious' and 'unconscious' of mind (together with a psychic structure which triggers the functioning of these structures through the activities of its life/survival-oriented creativity, in Jungian approach)
the parts of mind	• 'consciousness': the awareness of someone about the things either internal or external
(which renders the functioning together with the psychic structure)	• 'unconscious': the region of the psyche containing any repressed thing such as personal memories and emotional conflicts which do not directly affect the awareness but rather have driving effects on thoughts and behaviors
basic things of the psychic structure which triggers the functioning	'archetypes' (according to Jungian approach)
'design processes' (performed through the functioning that is controlled through the parts of mind together with the psychic structure)	processes sequentially having manageable steps to figure out what is desired and needed and to try to compensate this; such as problem-definition, design-exploration, background research, brainstorming for solutions, idea generation, problem-solving, design optimization, decision-making, conceptualization, imagination, designing, re-presentation, sketching, modeling, design evaluation, production, using, construction, experiencing, perception, interpretation, etc.
the mediator of 'design processes'	'design or architectural language'
'design/architectural language'	the system of communication depending on visual aspects together with the corresponding lexical narrations for the 'visualization' of a built environment as its 'articulation', which is used in 'design processes' concerning 'form- function and concept-content relationships' in line with idea
basic principles of 'design process'	'the principles of Gestalt Theory'
	• 'gestalt': "an entire perceptual configuration made up of elements that are integrated and interactive in such a way as to confer properties on the whole configuration that are not possessed by the individual elements" (APA, n.d.)
'gestalt principles'	• 'gestalt theory': a theory proposed by M. Wertheimer, W. Köhler, K. Koffka in 1920s to understand how human mind makes sense of the world, dealing with the patterns and the perception of the visual things in these patterns unified as a whole through the principles of law of prägnanz, common fate, figure and background, relationship, proximity, closure, similarity, good-continuity; a movement emerged in response to behaviorism and appeared as a cognitive approach

Terms	Definitions, Expressions, Categorizations
the dimensions of a 'sign-system' in a 'built environment' with reference to 'design/architectural language'	 'syntactic dimension': "the relationship of sign to sign within a system of signs, that is, the study of structure of the system" 'semantic dimension': "the relation of signs to things signified, that is, how signs carry meanings, the property of the elements" 'pragmatic dimension': "the relation of signs to the behavioral responses of people, that is, their effects of those who interpret them as part of their total behavior; this, then, deals with the reference of the signs and the system to a reality external to the system-in a word, their meaning" (Rapoport, 1990, p.38)
'architectural signification' in the 'design processes' (proposed <i>by the author</i>)	 '(re)presentation' as a 'creative production' (associated with the terms 'expression' and 'manifestation'): the signification process from the very beginning of design processes to the end, from 'idealization' to 'conceptualization' and to 'construction', including all steps of designing and building, creating a 'production' in accord with the primary idea(l)s 'interpretation' as an 'experiential feedback' (with reference to behavioral and cognitive approaches): the signification process of 'perception/comprehension' and 'experiencing' the constructions, creating a 'feedback' consistent to idea(l)s
semiotics of architecture of Eco	'denotative' and 'connotative' 'functions' in relation to 'form'
the elements of architectural semiology/semiotics of Jencks (the semiological triangles)	 'thought': preexisting concept; set of ideas (with synonyms: concept, content; signified) 'symbol': a way of expression (with synonyms: form, word; signifier) 'referent': object (with synonyms: percept, denotatum, thing) 'signified': similar to 'thought'; concept, content 'signifier': similar to 'symbol'; form 'actual function or objects' properties': "intended meaning" (Jencks, 1980, p.81) * associating 'architectural meaning' with some 'codes', using the planes of Hjelmslev's 'double partition model' as a reference, therefore, what an architecture means and how it articulates the meanings depend on the 'codes', concerning these planes, "codes of content" and "codes of expression" (Jencks, 1980, p.107-110). These planes are 'plane of expression', that is, 'signifier', which refers to "forms, spaces, surfaces, volumes which have suprasegmental properties", and 'plane of content', that is, 'signified', which can be "about any idea or set of ideas" (Jencks, 1980, pp.73-74).
'archisemiotics' (proposed by Jencks)	a contribution to the architectural theory in order to establish an architectural corpora among the semiotic groups through which any architectural expression could be able to refer to any related 'architectural meaning' (Jencks, 1980, p.74)

Table 3	3.2 (c	ontinued)
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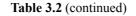
Terms	Definitions, Expressions, Categorizations
'architistics' (proposed by Jencks)	a term used for the triad of 'form', 'function', and 'technic', in other words, "'formenes', 'funcemes' and 'techemes'", which refers to the fundamental units of 'architectural meaning' (Jencks, 1969, p.17)
four approaches to 'architectural meaning' (preferred <i>by the author</i>)	 'denotation' and 'connotation' (form-function relationship, referring to 'purposeful actions' or 'usual experiences') 'representational meaning' and 'responsive meaning' 'the projection of human body' 'complexity and contradiction' (with reference to Eco&JencksHershberger;Rykwert;Venturi) * concerning the wholeness of psyche-reality-mind, through
the principles of architectural semiology/semiotics (as a summation of corresponding approaches) (with the one (') proposed <i>by the</i> <i>author</i> with reference to Gestalt Theory and the concepts of Jung)	'(re)presentation-interpretation' & 'expression-manifestation' 'physical, spatial, and social organization' maintained through 'design processes' having a mediator, that is, a 'design or architectural language', based on 'Gestalt Theory' (') 'signification process' including 'representation as a creative production' (it is associated with 'expression' and 'manifestation') and 'interpretation as experiential feedback' ('experience' and 'perception/comprehension' -the behavioral and cognitive approaches-) 'form'-'function' relationship based on 'denotation' and 'connotation' (Eco) _ 'concept'-content' relationship referring to the 'idea(l)s' _ 'dimensions' identified as 'syntactic dimension', 'semantic dimension', and 'pragmatic dimension' (Morris, Rapoport) _ 'codes' specified as 'expressive codes' (Jencks), 'content codes' (Jencks), and 'architectonic codes' (Preziosi)
the 'deficiency' in 'semiology' and 'semiotics' for an urban and architectural perspective	a lack of a 'depth-psychological ground', which refers to human behaviors and experiences in a built environment
a tip for a 'depth-psychological ground' for 'urban and architectural semiology and semiotics'	 'the concept of archetype' with a complementary approach to 'the personality development theory' (redefined <i>by the author</i> as 'the concept of architype') 'original pattern'; 'a typical example of something'; 'prototype'; 'the first model' of its possible derivative copies
'archetype'	* 'a certain, innate/inborn, universal template' or 'a unique and fundamental pattern, mold, model' presumably existed each and every person for any special response of them to the possible circumstances in their lives, thus affecting and developing their 'personality' which makes a person become a 'social-individual' through the experiences that are had by them to live and survive (reminding of the Jungian approach)
'arche (archai) problem' (Miletus School)	a notion which deals with the possible elements being the first and main sources of the existing things -whether natural or abstract entities- in the context of a matter which points that they require being eternal; referring to 'archetypes' as the copied forms of the things in a higher realm which are perfect and eternal (reminding of a kind of 'representation')

Terms	Definitions, Expressions, Categorizations
'the concept of archetype' of Jung (in relation to 'the theory of personality development')	the innate and universal structural elements of human psyche, which become obvious through interactions in experiences and make their unconscious pre-forming ability turn into consciousness as images, patterns, behaviors/characters, etc.
	_ twelve archetypes in a personality (four basic categories, that are, ego, freedom, social, order, with their unique three subcategories of each): artist; ruler; caregiver; innocent; sage; explorer; member; jester; lover; outlaw; magician; hero _ eight personality types (two groups of introvert and extravert with four basic functions of mind as thinking, feeling, sensation, intuition for both)
	 * the structure of psyche (having 'autonomous complexes'): • consciousness (subjective personality; Ego) • unconscious (personal subconscious) • collective unconscious (objective personality; Shadow)
the relation of Jungian 'archetype' in an urban and architectural 'signification' (design processes) (adapted <i>by the author</i>)	 'expression': signification process from an 'arche(i)type' to 'symbol' (including 'sensation, feeling, thought, intuition') 'manifestation': signification process from 'symbol' to sign'
the difference between 'sign' and 'symbol' (from Jungian perspective)	 'Jungian sign': "representation of something known" (Jung, 1971, para.816) with fix meaning (related to consciousness) 'Jungian symbol': "the best possible description or formulation of a relatively unknown fact" and "expression at the moment for a fact as yet unknown or only relatively known" (Jung, 1971, para.814, 817) (related to unconscious) * refusing to reduce symbol to sign (in the thesis, it is raised
'architype' (proposed <i>by the author</i>)	to connect these two with arch-e/i-types for a signification) a term proposed as a version of 'archetype', having the same root with the prefix 'archi-', to redefine its definition for the adaptation of it into the theme of the thesis, by eliminating its very speculative sides, in order to be used in the context of urban and architectural discourses on semiology and semiotics a term, proposed for the thesis, referring to 'any behavioral pattern' or 'a prototype' or 'any character of a personality' all of which correspond to everyday experiences of any social- individual; driving for things, feelings, images, behaviors, and internal and external experiences, urban and architectural components, objects and spaces, in order for leading a life
a new perspective for 'urban and architectural semiology and semiotics' (conceptualized <i>by the author</i>)	'the concept of architype'
'the concept of architype' (developed <i>by the author</i>)	a concept proposed to provide a depth-psychological ground to 'urban and architectural semiology and semiotics' for any urban and architectural point of views in the context of built environment, through a model devised for this reason

Table 3.2 (continued)

Terms	Definitions, Expressions, Categorizations
the properties of 'the concept of architype' as a new perspective for 'urban and architectural semiology and semiotics' (defined and systematized intellectually by the author) (emphasizing the matters of the causality of human behaviors and experiences and the meaningfulness in and of the urban and architectural environment in terms of their individual and social lives) (See: The Formulation and The Conceptualization)	 the basic content of the model: information the structure of the model: a) four fundamental elements (with reference to Peirce, Saussure, Jung) 1) sign vehicle (signifier) (sign & symbol) 2) thing/designation (signified) 3) concept (signifier or signified) b) three constructional aspects (with reference to Gestalt Theory, Jung) (in relation to signification that carries architectonic codes) 1) the matter of design process (rc)presentation and interpretation (with expression and manifestation) 2) the matter of language (with references to Morris, Rapoport, Bloom) syntactic, semantic, and pragmatic dimensions (with information; as idea, as term, and as design) 3) the matter of meaning (with reference to Eco (together with Jencks), Hershberger, Rykwert, and Venturi) denotation, connotation, pro-notation (form, function, purpose, experience, representational and responsive meaning, body, complexity and contradiction) c) three general principles (with reference to USST) principles of relations, principles of wholeness, and principle of hierarchy (all refer to design principles) graphical expression for the model: pyramidal form with wire-frames or as a modifiable mass three alternatives of the model: pyramidal form with wire-frames or as a modifiable mass three alternatives of the model: a) the one having general point of view, which focuses on the causality and the meaningfulness in terms of design processes 2) the one having Peircean perspective, which considers the typological and morphological categorizations 3) the one having Saussurean perspective, which considers the relationship with linguistics sign-relations between the elements of the model: architype (re)presented and interpreted by a signifie-r/d is expressed by a concept and manifested by a thing/designation

Terms	Definitions, Expressions, Categorizations
the elements of 'the concept of architype'	 'architype': the mandatory element pointing to the depth- psychological ground for semiological/semiotic relations in urban and architectural contexts; an experience or a conceptual content with meanings having relations with information or ideas or something else 'sign vehicle': the act of representations, including sign (referring to an architype and its relevant symbols) and symbol (referring to an architype with its contents) together 'signifier': the form 'signified': either the concept or the thing/designation 'sign': a very specific conceptual thing (referring to an architype and its symbols); a concrete manifestation which is an appearing embodiment and has a definition depending on a content, as an apparent reification referring to an architype) 'symbol': an image, or a behavioral pattern, or a thing in the nature inspired (referring to an architype and its architypal contents); an abstract expression which is a reflected draft and has a depiction depending on a concept, as a potential figuration referring to an architype) 'concept': an urban and architectural idea 'thing/designation': an urban and architectural component, object, and space, being in a relationship with concept
(types of) sign-relations between the elements of 'the concept of architype'	quaternary, ternary, and binary relations
'the core notion of meaning' (systematized <i>by the author</i> for 'urban and architectural meaning'), which integrates all the meanings assigned and conveyed with/in the sign-relations pertaining to a built environment and its all things	 'denotation': the precise and literal definition or referential and core meaning (associated with sign) 'connotation': the wide array of either positive, negative, emotional, imaginative or suggestive and additional meanings surrounding its strict dictionary or denotative meaning (associated with symbolic, and also 'Jungian symbol') 'pro-notation' (proposed <i>by the author</i>): 'the deep psychic/ psychological meanings' (associated with 'architype')
important points of 'the concept of architype'	 * 'the phenomenon of 'to shelter' which is surely one of the main behaviors of all persons and the peoples in an environment and one of the main aspects of building an urban and architectural environment that appears as the manifestation of this archetype and as the expression of the meaning (the sense) of being protected and of the meaning of the behavior of making a protection (the main statement of the thesis) * the significant interactive information-based mutual relationship between the humans and their built environments, which could be explained with intellectual terms regarding their coexistence that assures the life and the survival in an environment designed and built physically, spatially, and socially (the main argument of the thesis)



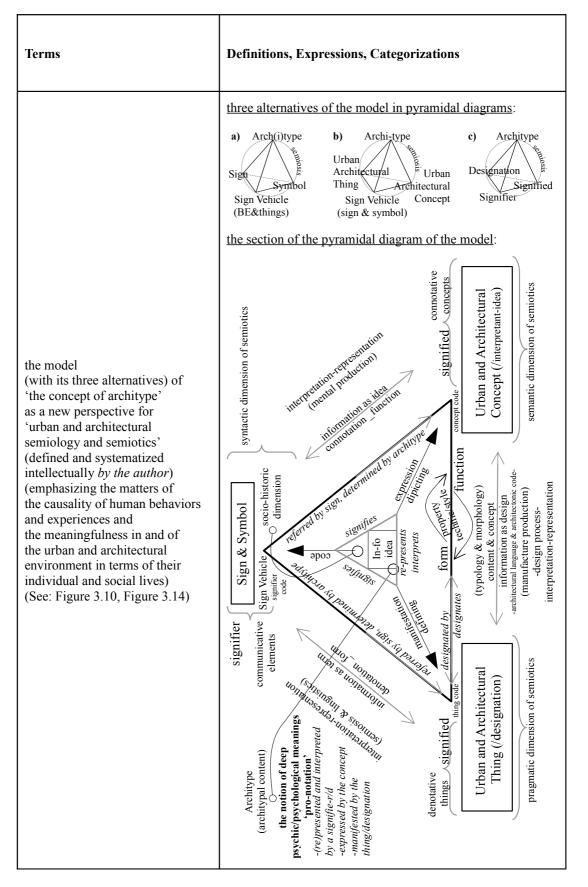
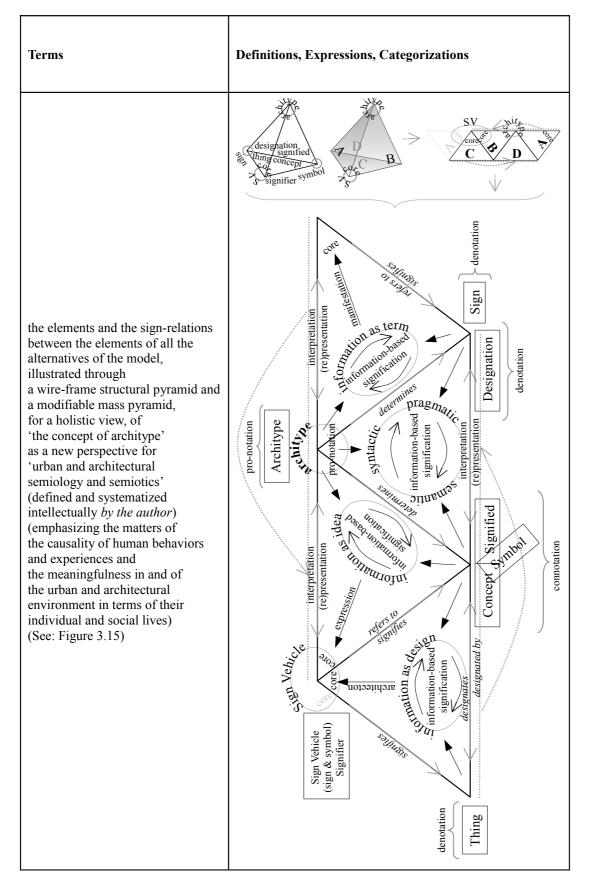


Table 3.2 (continued)



CHAPTER 4

CONCLUSION

"I didn't want anything pretty. I wanted to have a clear statement of a way of life. ... These are really crude statements. ... they should be primitively stated first rather than in a high degree of taste." (Kahn, 1991, p.126)

"Architecture is certainly the most close to human life, not only because it materially constitutes the place where we live, but more substantially because it replicates the condition and the contradictions of any human being." (Cappelletti, 2012, p.18)

"I was in a house I did not know, which had two storeys. It was 'my house'. I found myself in the upper storey, where there was a kind of salon furnished with fine old pieces in Rococo style. On the walls hung a number of precious, old paintings. I wondered that this should be my house and thought, "Not bad'. But then it occurred to me that I did not know what the lower floor looked like. Descending the stairs, I reached the ground floor. There everything was much older. I realized that this part of the house must date from about the fifteenth or sixteenth century. The furnishings were medieval, the floors were of red brick. Everywhere it was rather dinteark. I went from one room to another, thinking, 'Now I really must explore the whole house'. I came upon a heavy door and opened it. Beyond it, I discovered a stone stairway that led down into a cellar. Descending again, I found myself in a beautifully vaulted room which looked exceedingly ancient. Examining the walls, I discovered layers of brick among the ordinary stone blocks, and chips of brick in the mortar. As soon as I saw this, I knew that the walls dated from Roman times. My interest by now was intense. I looked more closely at the floor. It was of stone slabs and in one of these I discovered a ring. When I pulled it, the stone slab lifted and again I saw a stairway of narrow stone steps leading down to the depths. These, too, I descended and entered a low cave cut into rock. Thick dust lay on the floor and in the dust were scattered bones and broken pottery, like remains of a primitive culture. I discovered two human skulls, obviously very old, and half disintegrated. Then I awoke." (Jung, 1989, pp.158-159)

As a summary, the thesis defined the lack of a depth-psychological ground in urban and architectural semiology and semiotics, as its problem. It addressed to overcome this deficiency through a consideration of something meaningful which guides the humans for their life/survival-orientation, explicitly for their all kinds of behaviors and their all kinds of individual and social experiences, to render sustainable, satisfactory, and safe lives and survivals in a built environment. This brought into mind the concept of archetype which was considered and preferred in the thesis as one appropriate answer to the problem that is caused by this deficiency which uncovers the understanding of not only the matter of the causality of human behaviors and their experiences but also the matter of the meaningfulness in and of the built environment in terms of all kinds of individual and social lives. In that, it has (depth) psychological concerns in relation to these behaviors and experiences; because, this concept is accordingly developed through an association with a content which is based on an assumption that they are the deep and hidden pieces of the psychic structure of the humans and the priori determinants of their personalities. This, in turn, means that each and every person carries all of them for their entire inventory of behaviors, leading them through their lifelong experiences. Hereby, a person develops a personality, and thus, becomes a social-individual to meet his/her needs through these experiences. As a result, both individual and social lives are sustained and the survival in a built environment is assured for all social-individuals and all societies. That is to say, this answer was predicted as the starting point which would focus on the significance of a built environment for human lives, by referring to the human-environment relationship.

In this context, the backbone of this thesis was structured along the literature reviews of not only Semiology and Semiotics but also a topic in Analytical Psychology, that is, the concept of archetype with its related complementary theory, that is, personality development, which focuses on the processes of individua(liza)tion and socialization, on one hand, and also along the preparatory assay about the places of the concept of archetype in these study of signs, that is, Semiology and Semiotics, in the context of urban and architectural perspectives, in relation to human behaviors, their everyday experiences, and their daily lives, all of which regulate in a way the processes of individua(liza)tion and socialization that the humans have and face, on the other. This twofold theoretical framework provided a better understanding of the aforementioned deficiency in pinning the depth-psychological ground of the human and environment interaction with the help of an urban and architectural perspective. Accordingly, this

multifaceted approach was a requisite not only to fill the gap in conceiving the depthpsychological ground for these fields but also to show how the concept of archetype is an indispensable contributor in the analysis and synthesis of such an endeavor.

In this respect, the archetypes were taken into consideration in the context of built environment, with their guidance for the life/survival-orientation of humans. In other words, they were considered together with the self-regulating system of the psyche, which triggers the functioning of the physical, mental, and psychological structures for the architectonic activities (referring to the design processes), all of which cause a meaningful factor relating to built environment. Hence, regarding **the phenomenon** of '(to) shelter', which stands for an archetype with an associated meaning of a 'shelter', in other words, for an archetype pointing to a behavior of 'making a shelter' and to an experience of 'being sheltered' to live and survive, the main statement of the thesis, that is, 'to shelter' is surely one of the main behaviors of all persons and the peoples, by resulting in one of the main experiences of them, in an environment, and one of the main aspects of designing and building an urban and architectural environment appearing as the manifestation of this archetype and as the expression of the meaning of the experience of 'being sheltered' and of the behavior of 'making a shelter', was perpetuated all over the text of the thesis.

However, the concept of archetype was re-conceptualized around the content of this statement in accordance with the theme of the thesis. It was, thus, re-named as '<u>the concept(ualization) of architype</u>', in order to identify the new point of view based on the compensation of the lack of a depth-psychological ground in urban and architectural semiology and semiotics, which is done by differentiating itself as 'architypes', in a way, in the context of built environment, from 'archetypes'.

In this manner, the thesis described a plan which depended on a formula(tion) of a possible way for the incorporation of 'architypes' as the depth-psychological ground of urban and architectural semiology and semiotics, and this plan comes out as the method. In detail, it devised the plan to suggest a possible formulation to develop a hypothetical concept in conjunction with a model formulated as a

proposal to present and express the idea which concerns the architypes in terms of the causality of behaviors and experiences in relation to the architectonic activities with the design processes to emphasize the depth-psychological ground and the matters of the causality and the meaningfulness in the context of built environment. Hereby, it arrived at a new concept that has a model uncovering this idea and gets a depth-psychological ground, as it was envisaged. To denote, throughout the development of this concept, a formula was applied as to form the model through this formulation which was based on a list including some items that were taken, by accepting them as the constitutes of the model, from the contents of not only the existing approaches in semiology and semiotics but also the concept of archetype handled in the theory of personality development, which was in turn transformed into the concept of architype at the end: all were attained through a criticism. Consequently, the model, in line with its concept, was presented in some diagrams such as skeletal, conceptual, and pyramidal ones, and it was exemplified in a matrix/table including some fundamental urban and architectural things such as components, objects, and spaces, to pinpoint the model along with its concept by considering behaviors, experiences, and individual and social lives in terms of the causality and the meaningfulness regarding a built environment.

In this way, the thesis thanks to its study that attached an importance, in the context of architectonic activities and design processes, to not only the matters of the causality of human behaviors and experiences and the meaningfulness in/of the built environment in terms of individual and social lives leaded through their behaviors and experiences within a physical, spatial, and social environment but also the newly acquired intellectual standpoint which provides a new perspective for urban and architectural semiology and semiotics and introduces it especially in the context of 'life/survival-oriented human and environment relationship'.

As a result, it was the main argument, from the very beginning of the thesis, that, throughout history, there is a significant relationship, which has appeared and occurred interactively and intellectually between the humans and their built environments. Indeed, it is an information-based communication which appears

and surfaces mutually and correspondingly through receiving and transferring information, which, in turn, is the basis of their coexistence to assure the life and the survival in a physically, spatially, socially designed and built environment which becomes a meaningful place having visual and articulate (in)formation.

It is because, firstly, the humans are embodied in a complex entity rendered by the functioning of the physical, mental, and psychological structures. The self regulatory system of the psyche is the triggering force of this functioning. In other words, it is the underlying fact run for the assurance of the life/survival-orientation. All refer to the architectonic activities and design processes through which an environment is designed, built, and experienced, as a formation with full of any information, where individua(liza)tion and socialization are enabled and all the individual and social lives are sustained. It is because, secondly, a built environment with its physical, spatial, social, cultural, and historical dimensions is for all persons and the peoples all of whom need to lead their daily lives to survive there through shelter(ing). This is one of the most important things to be alive, and it requires to have a place, where the needs are met and the satisfactions are brought from this compensation through any individual and social experience with the help of many corresponding behaviors, so that the idea(l)s for ideal life stories and styles and for an idealized environment are realized ideally and meaningfully. These are expected to be experienced throughout the life times of all social-individuals. It is because, thirdly, 'the/to shelter for the life/survival' makes sense of a built environment in terms of maintaining protection and in terms of being protected for as regards sustainability, satisfaction, and safety, by pointing to the fact that the main existential experiences are the physical, spatial, and social ones to be safe to ensure to live, to satisfy the needs, and to sustain the life/survival.

That is to say, it was an effort, not an assertion but rather an attitude, through the thesis, to find a way to make any discussion about human-environment relationship be possible in this context; because, an understanding about how people relate to an urban and architectural environment for their daily lives and for the compensation of their needs to be able to live there is essential. Thus, how an urban and architectural

environment having physical, spatial, and social dimensions should be or could be designed and built becomes a very crucial question; because, the design of a built environment provides spaces and places for any kind of experience which leads to the development of the personalities to sustain the lives as a social-individual in a society, and it also provides ways to any kind of individual and social live physically, mentally, and psychologically. That is to say, it was a conception, of the thesis, to get a realization of the impact of the deep and hidden pieces in the physical, mental, and psychological structures of the humans on their physical, spatial, and social relations with/in a built environment on one hand, and to get a realization of the impact of the underlying meanings of 'an urban and architectural environment having multiple dimensions' on the other, by considering their individual and social lives, their all kinds of behaviors and experiences, and their idea(l)s and their ideal life stories and styles, in the context of architectonic activities and especially of design processes in line with the urban and architectural theories. This, therefore, furthers a great deal of envisaging discussions or discourses on designing, building, and experiencing a meaningful environment enabling the life/survival in a sustainable, satisfactory, and safe way.

That is to say, it was an expectation, from the thesis, to give an idea to the disciplines for their studies in order to focus on the relationship between the humans and their environments through a consciousness about the physical, mental, and psychological structures of the humans when considering it especially in a relationship with design processes. Then, it might be a help for the researchers to find out the importance of the deeper and hidden causes in order to interpret and evaluate and examine the built environments, designs, behaviors, individual and social experiences, and so on, in terms of the meaning of anything about the lives of social-individuals and societies. And finally, to be a hand or a hint to please from the quest which searches for the answers as to understand the nature of an urban and architectural sign, being a tool of the human-environment relationship, through the meanings that are embedded in a built environment together with its components, objects, and spaces, which postulate its particular language, styles, and idea(1)s, and all kinds of behaviors and individual and social experiences, etc. As a consequence, there is no certain final(e) about the thesis since it did not include a case study that depends on a comparison or a survey having certain or empirical results at the end; yet, it is just a proposal based on a thought-provoking viewpoint which can, rather, welcome debatable arguments for the conception of its study that holds a new thing, that is, the concept(ualization) of architype(s). Hence, there is no image/figure pertaining to or referring to a symbol or a sign, or to an expression or a manifestation, as a specific case, for example, any in cosmology or alchemy, which were considered quite extraneous; for, it was not important to comment upon and not indispensable to include any of them in the thesis. However, what was essential was to focus on the individua(liza)tion and socialization processes and also the individual and social experiences, by considering the physical, spatial, and social relations, but briefly, by concerning how all persons and all the peoples spend their lives in an architectonically built environment. In short, the behaviors and experiences sustained in a built environment were significant on behalf of all kinds of individual and social lives of the humans because they have connections with archi-types assigning and conveying meanings. It is due to the fact that both sign and symbol were just handled in line with the framework and the theme of the thesis, as visuality-oriented and articulation-oriented characters of a communication having the notations pointing to meanings. Thus, each was evaluated in accord with behaviors and experiences, as a thing peculiar to an urban and architectural environment; for, only a signification can enable the idea(1)s about a life story or a life style be realized in a built environment through urban and architectural designs. That is to say, the thesis highlighted the significance of behaviors, experiences, and the ways of living, all of which could be or should be considered or handled in a very specific context while designing and building an urban and architectural environment, by referring to the meaningfulness to which any designer, either an architect or a planner or else, needs to pay attention. This makes the thesis include, rather, not only an analysis method used to evaluate, examine, and interpret any built environment and all kinds of its things in terms of obtaining an idea about the lifestyle of all social-individuals and all societies but also a synthesis method used to design and build an urban and architectural environment by taking account of this idea, with this concept: it concerns existing environments and also the ones that are going to be designed, built, even changed or transformed.

That is to say, sharing for debates rather than having willingness for a confirmation, the thesis is simply concluded in a bare conformity with its expectations through a set of inquiries such as what it works for, how it is used, why it is so, how else it can be, and what else it can include, etc.: all of them give ways to a series of discussions and discourses especially for the further studies, and all give a fed-back to the stage, where the study just started by centering the topic on the human and environment relationship with its main statement and its main argument, to re-think the other ways of what was done throughout the thesis.

Therefore, the thesis lets its study be supported, developed, and re-formulated; or, on the contrary, be disproved or disregarded.

As the last words, the thesis asks many arguable questions for the further studies for many professions, for example:

How can this concept(ualization) be implemented with its model?

How can the relationship between the elements of the model of this concept, with its three alternatives, be evaluated or reviewed, and how can this affect the shape or the form of the model correspondingly?

What else can be added to or integrated into this concept(ualization) in what kind of a context as another ground? Is it possible to change the concept of architype with another for the depth-psychological ground?

Can the model of this concept be sufficient for the context of cognition or the perception theories? Can it be possible to review the relationship between the parts and their much more meaningful whole within this perspective?

How can the different aspects of the psychodynamic affairs, such as feelings or thoughts, be discussed, in the context of built environment?

What about its approach, is it structural or pragmatic or anything else?

How can any urban and architectural design, its component, or a built environment, be evaluated in the context of (design) language in terms of subjectivity of a designer or a planner or of objectivity of theories? Can this conceptualization give a chance to pave a peculiar stylistic manner, for the personal approaches of any scholar, and to urban and architectural theories and their practices? What about the architectural styles which will be faced in the near future? Can this concept offer new paradigms that would be more life/ survival-oriented for the built environments making sense for the lives?

How can any architectural era be discussed in the context of physical, spatial, and social dimensions through this conceptualization? Can it give a chance for the understanding of the ancient settlements about their physical, spatial, and social dimensions, or can they be discussed through the model of this concept? Can it give a chance to understand the built environments in utopias, novels, stories, legends, and movies, etc., or even virtual spaces, in terms of their physical, spatial, and social aspects with reference to the languages, the narrations, and the life styles, etc. held by them?

How can this study work on designing and building safe, sustainable, and satisfactory environments, and how can such an environment be achieved? Is it possible to propose a guideline for design and planning processes by using this model together with its conceptualization? Or, is it possible to make a generalization?

Other than (to) shelter, as an important thing for the lives in the world, what else, for example, according to the needs in Maslow's pyramid, can be discussed for the meaningfulness in/of the built environment in terms of the individual and social lives? For instance, how about the faith, which could be considered as one of the most powerful things in designing and building settlements, beyond or together with shelter?

What about the conscience, the moral, and the ethic, etc. in the context of cognition, behaviors, experiences, and the ways to live? Where are their places in the human complex, in the psychic structure, and in the functioning of their physical, mental, and psychological structures, and in the architectonic activities, and accordingly in this model and this concept(ualization)?

Remember that a built environment makes us aware of ourselves to become (social) individuals throughout our life times with the help of the physical, spatial, and (individual) social experiences of all of us lived by ourselves physically, mentally, and psychologically as we make the environment develop as a shelter to sustain our daily lives and have our individual and social experiences in a safe and satisfactory way: the causality in the human and environment relationship lies intellectually and meaningfully under our psychic structures, behaviors, thoughts, feelings, experiences, and correspondingly anything pertaining to our environments, and the meaning of life in the context of shelter(ing) is based on our co-existences with the built environment in a relationship with this causality and ourselves.

REFERENCES

- Acar, E. (1994). Ege'de Konutun Erken Tarihi. *Ege Mimarlık (Mimarlar Odası İzmir Şubesi)*, 2, 31-35. Retrieved April, 2021, from <u>https://www.egemimarlik.org/1994-2.index.php</u>
- Agata, C. M., & Maria, M. R. (2018, 19-21). Spectacular Symbols in the Imaginary of Sacred Contemporary Space. 5th International Multidisciplinary Scientific Conference on Social Sciences & Arts SGEM 2018, 5(5.1), 323-330. https://doi.org/10.5593/sgemsocial2018H/51/S17.038
- Akkerman, A. (2006). Femininity and Masculinity in City-Form: Philosophical Urbanism as a History of Consciousness. *Human Studies*, (29), 229–256. https://doi.org/10.1007/s10746-006-9019-4
- Alberti, L. B. (1955). *Ten books on architecture* (C. Bartoli & J. Leoni, Trans.; J. Rykwert, Ed.). London, A. Tiranti.
- Amen, M. A., & Nia, H. A. (2018). The Dichotomy of Society and Urban Space Configuration in Producing the Semiotic Structure of the Modernism Urban Fabric. Semiotica, 222, 203-223. <u>https://doi.org/10.1515/sem-2016-0141</u>
- Andreica, O. (2015). The Archetype of the Labyrinth. Signification and Metamorphosis. *Musicology Papers*, 30(1), 7–23. Retrieved April, 2021, from www.musicologypapers.ro/articole/MP_ISSN_2068-8601_2015_vol_30_issue_1_pg_no_007-023.pdf
- APA. (n.d.). Gestalt. In *Dictionary.apa.org dictionary*. Last visited on November, 2022. <u>https://dictionary.apa.org/gestalt</u>
- ARAS. (2010). *The book of symbols: reflections on archetypal images* (Ronnberg, A. & Martin, K., Eds.). Köln; London: Taschen.
- Arnheim, R. (1977). Symbols in Architecture (taken from "The Dynamics of Architectural Form", 1977, the University of California Press). Salmagundi, Winter 1977(36), 69-75. Skidmore College. Retrieved August, 2020, from http://www.jstor.com/stable/40546973
- Aslan Karakul, S. (2014). Kapı'nın Dili: Göstergebilimsel Bir Yaklaşım. *The Journal* of International Social Research, 7(35), 7-14. Retrieved April, 2021, from www.sosyalarastirmalar.com/cilt7/sayi35_pdf_1diledebiyat.htm

- Atkin, A. (2013, summer). Peirce's Theory of Signs. In *The Stanford Encyclopedia of Philosophy* (E. N. Zalta, Ed.). Retrieved April, 2020, from https://plato.stanford.edu/entries/peirce-semiotics/
- Bachelard, G. (1994). *The poetics of space: the classic look at how we experience intimate places* (M. Jolas, Trans.). Boston: Beacon Press.
- Balanovskiy, V. (2016). Whether Jung Was a Kantian? *International Journal of Philosophy*, (4), 118-126. <u>https://doi.org/10.5281/zenodo.163993</u>
- Barati, N., & Kakavand, E. (2016). Phenomenological Investigation in the Event of Archetype Recognition in Islamic-Iranian Architecture (Cases Study: Toopkhane Square, Laleh Park, Shahzade Garden, Naqhsh-e Jahan Square). *The Scientific Journal of NAZAR Research Center (Nrc) for Art, Architecture* & Urbanism, Bagh- e Nazar, 13(42), 5-18. Retrieved September, 2020, from <u>https://www.researchgate.net/publication/320057146_Phenomenological_inves</u> <u>tigation_in_the_event_of_archetype_recognition_in_Islamic-Iranian_architecture</u>
- Barbosa, M. F. M. (2015). A Brief way of Philosophy of Language: from Plato to Port-Royal Grammer. *International Journal of Language and Literature*, 3(1), 61-70. <u>http://dx.doi.org/10.15640/ijll.v3n1a8</u>
- Barbieri, M. (2009). Three Types of Semiosis. *Biosemiotics*, 2, 19-30. https://doi.org/10.1007/s12304-008-9038-9
- Barlas, M. A. (2006). Urban streets & urban rituals. METU, Faculty of Architecture.
- Barthes, R. (1991). *Mythologies* (A. Lavers, Trans.). New York: The Noonday Press.
- Bartles, C. K. (2021). A Semiotic Approach to Russian Military Map Symbology and Terms. [Doctoral-thesis, University of Missouri, Kansas City]. Retrieved September, 2021, from <u>https://www.researchgate.net/publication/351762509</u>
- Bellentani, F., & Nanni, A. (2018). The Meaning Making of the Built Environment in the Fascist City: A Semiotic Approach. Signs and Society, 6(2), 379-411. Semiosis Research Center at Hankuk University of Foreign Studies. <u>https://doi.org/10.1086/696850</u>
- Beverly, M. (n.d.). Archetypes. Encyclopedia of Religion. Retrieved August, 2021, from <u>https://www.encyclopedia.com/environment/encyclodepias-almanacs-</u> <u>transcripts-and-maps/archetypes</u>
- Bloom, L. (1980). Language Development, Language Disorders, and Learning Disabilities: LD³. *Bulletin of the Orton Society*, *30*, 115-133. Retrieved September 2022, from <u>https://core.ac.uk/download/pdf/161456492.pdf</u>

- Bloom, L., & Lahey, M. (1978). *Language development and language disorders*. New York: John Wiley and Sons.
- Britannica. (n.d.). Charles Sanders Peirce. In *Britannica.com encyclopedia*. Last visited on November, 2022. <u>https://www.britannica.com/biography/Charles-Sanders-Peirce</u>
- Britannica. (n.d.) Ferdinand de Saussure. In *Britannica.com encyclopedia*. Last visited on November, 2022. <u>https://www.britannica.com/biography/Ferdinand-de-Saussure</u>
- Broadbent, G. (1980a). Building Design as an Iconic Sign System. In G. Broadbent,R. Bunt, & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp.311-331).Chichester; New York: John Wiley & Sons.
- Broadbent, G. (1980b). General Introduction. In G. Broadbent, R. Bunt, & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp.1-4). Chichester; New York: John Wiley & Sons.
- Broadbent, G. (1980c). The Deep Structures of Architecture. In G. Broadbent, R. Bunt, & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp.119-168). Chichester; New York: John Wiley & Sons.
- Cappelletti, D. (2012). *Between External and Internal Space: an Urban Transition* (Publication No.805951543) [Masterthesis, MIT]. Retrieved April, 2021, from <u>https://dspace.mit.edu/habdle/1721.1/72623</u>
- Capurro, R., & Hjorland, B. (2005). The Concept of Information. In B. Cronin (Ed.), Annual review of information science and technology (pp.343-411). American Society for Information Science and Technology and Information Today, 37(1). Medford, NJ. <u>https://doi.org/10.1002/aris.1440370109</u>
- Cerasi, M. (2005). The Urban and Architectural Evolution of the Istanbul Divanyolu: Urban Aesthetics and Ideology in Ottoman Town Building. *Muqarnas*, 22(2005), 189-232. Retrieved April, 2021, from <u>https://www.jstor.org/stable/25482429</u>
- Chandler, D. (2017). Semiotics: the basics. 3rd Ed. Routledge, Taylor & Fransic Group.
- Ching, F. D. K. (2007). Architecture; form, space, and order. 3rd Ed. John Wiley & Sons, Inc.
- Cirlot, J. E. (1971). A dictionary of symbols. 2nd Ed. Routledge, Taylor & Francis Group.
- Cobley, P., & Jansz, L. (1999). *Introducing semiotics* (R. Appignanesi, Ed.). UK: Icon Books.

- Colman, W. (2018). Are Archetypes Essential?. *Journal of Analytical Psychology*, 63(3), 336–346. Wiley. <u>http://dx.doi.org/10.1111/1468-5922.12414</u>
- Cornoldi, A., & Cornoldi A. C. (2018). Architecture and Psychoanalysis. Nathaniel Kahn and the Search for the Father. *International Forum of Psychoanalysis*, 27(4), 274-282. Routledge, Taylor & Francis Group. <u>https://doi.org/10.1080/0803706X.2016.1253871</u>
- Crenshaw, D. A., & Green, E. J. (September, 2009). The Symbolism of Windows and Doors in Play Therapy. *Play Therapy*, 6-8. Retrieved April, 2021, from <u>https://manguterapeudid.ee/wp-content/uploads/2019/02/The-Symbolism-of-Windows-and-</u> <u>Doors.pdf&ved=2ahUKEwjX6L3UmMHwAhXSvosKHb1jBRUQFjACegQIA</u> <u>xAG&usg=AOvVaw3civoYp_yL0W0KMi6mDU7t&cshid=1620721417619</u>
- Crossley, P., & Clarke, G. (2000). Introduction. In G. Clarke, & P. Crossley (Eds.), *Architecture and language: constructing identity in European Architecture c.1000 1650* (pp.1-20). The Cambridge University Press. Retrieved May, 2020, from <u>http://catdir.loc.gov/catdir/samples/cam032/99052216.pdfs</u>
- Cullen, G. (1961). The concise townscape. New York: Routledge.
- D'Heurle, A., & Feimer, J. N. (1975). A New Image of the Psyche: the Archetypal Psychology of James Hillman. *Cross Currents*, 25(3), 289-298. Wiley. Retrieved August, 2020, from <u>http://www.jstor.com/stable/24457748</u>
- Daylight, R. (2014). The Difference between Semiotics and Semiology. Gramma Journal of Theory and Criticism, 20, 37-50. https://doi.org/10.26262/gramma.v20i0.6292
- DeArmond, I. M. (2017). Journeying: Internal and External Landscapes. Jung Journal, 11(3), 43-51. <u>https://doi.org/10.1080/19342039.2017.1332301</u>
- Deely, J. (2006). On 'semiotics' as Naming the Doctrine of Signs. *Semiotica*, 158, 1-33. <u>https://doi.org/10.1515/SEM.2006.001</u>
- Deely, J. (2016). Why Life Presupposes Semiosis. *Chinese Semiotic Studies*, 12(2), 159-175. <u>https://doi.org/10.1515/css-2016-0017</u>
- Dewey, J. (1946). Perice's Theory of Linguistic Signs, Thought, and Meaning. *The Journal of Philosophy*, 43(4), 85-95. Retrieved August, 2021, from <u>https://jstor.org/stable/2019493</u>
- Dorrian, M. (1999). Reviews [Review of the book *The dancing column: on order in architecture*, by J. Rykwert, 1996, MIT Press, 598 pages, ISBN:0262181703]. *Architectural Heritage*, 10(1), 98-102. <u>https://doi.org/10.3366/arch.1999.10.1.98</u>

Eco, U. (1976). A theory of semiotics. Bloomington, Indiana University Press.

- Eco, U. (1980a). A Componential Analysis of the Architectural Sign/Column/. In G. Broadbent, R. Bunt, & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp.214-232). Chichester; New York: John Wiley & Sons.
- Eco, U. (1980b). Function and Sign: The Semiotics of Architecture. In G. Broadbent,R. Bunt, & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp.11-69).Chichester; New York: John Wiley & Sons.
- Edinger, E. F. (1960). The Ego-Self Paradox. *Journal of Analytical Psychology*, 5(1), 3. <u>https://doi.org/10.1111/j.1465-5922.1960.00003.x</u>
- Eisner, J. (1996). Reviews [Review of the book *The dancing column: on order in architecture*, by J. Rykwert, 1996, MIT Press, 598 pages, ISBN:0262181703]. *An Architectural Research Quarterly*, 2(1), 92-93. <u>https://doi.org/10.1017/S1359135500001147</u>
- Eliuz, Ü., & Öksüz Güneş, E. (2016). Ayfer Tunç'un "Mağara Arkadaşları" Öyküsünün Metinlerarası Bağlamda İncelenmesi. *Turkish Studies, International Periodical for the Languages, Literature and History of Turkish or Turkic, ISSN: 1308-2140, 11/10*(Spring), 231-242. http://Dx.Doi.Org/10.7827/Turkishstudies.9161
- Encyclopedia. (n.d.). Carl Gustav Jung. In *Encyclopedia.com encyclopedia*. Last visited on November, 2022. https://www.encyclopedia.com/people/medicine/psychology-and-psychiatry-biographies/carl-gustav-jung
- Encyclopedia. (n.d.). Charles Sanders Peirce. In *Encyclopedia.com encyclopedia*. Last visited on November, 2022. <u>https://www.encyclopedia.com/people/philosophy-and-religion/philosophy-biographies/charles-sanders-peirce</u>
- Eren, E. (2013). Inconsistencies (Problems of) between Two Dimensional Graphics of (Urban) Design and its Three Dimensional (Urban) Forms (Publication No. 368809) [Master-thesis, METU]. Retrieved September, 2021, from http://etd.lib.metu.edu.tr/upload/12616715/index.pdf
- Ersoy, Z. A. (2003). Barınma Arketipleri ve Bir Simge olarak "Ev". *Arredamento Mimarlık*, (01), 124-128. Retrieved July, 2020, from <u>http://www.tasarimgunlukleri.com/wp-</u> <u>content/uploads/2015/03/Barnma_Arketipleri_ve_Ev.pdf</u>
- Erzen, J. N. (2011). Reading Mosques: Meaning and Architecture in Islam. The Journal of Aesthetics and Art Criticism, 69(1), 125-131. Retrieved August, 2020, from <u>http://www.jstor.org/stable/42635843</u>

- Fiske, J. (2002). *Introduction to communication studies*. 2nd Ed. Routledge, Taylor & Francis Group.
- Fitzgerald, J. J. (1966). *Peirce's theory of signs as foundation for pragmatism*. The Hague, Paris: Mouton.
- Fordham, F. (2001). *Jung psikolojisinin ana hatları*, (A. Yalçıner, Trans.). İstanbul: SAY.
- Frutiger, A. (1989). *Signs and symbols: their design and meaning* (A. Bluhm, Trans.). New York: Van Nostrand Reinhold.
- Gamsakhurdi, V. L. (2019). Constructive Urge for Self-Presentation-Mediating between the Past and the Future. *Integr Psych Behav*, 53, 238-257. Springer. https://doi.org/10.1007/s12124-018-9466-2
- Gandelsonas, M., & Morton, D. (1980). On Reading Architecture. In G. Broadbent,
 R. Bunt, & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp.243-273).
 Chichester; New York: John Wiley & Sons.
- Garroni, E. (1980). The 'Language' of Architecture. In G. Broadbent, R. Bunt, & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp.279-410). Chichester; New York: John Wiley & Sons.
- Gehl, J. (2011). Life between buildings. using public space. Island Press.
- Ghafari, A., Falamaki, M. M., & Habib, F. (2015). Evaluation the Theories of Semiotics Approach in the Reading of Architecture and Urbanism. *International Journal of Review in Life Sciences*, 5(4), 642-649. Retrieved August, 2020, from <u>https://www.researchgate.net/publication/280566553_Evaluation_the_Theories</u> <u>of_Semiotics_Approach_in_the_Reading_of_Architecture_and_Urbanism</u>
- Giurgola, R. (1965). Reflections on Buildings and the City: The Realism of the Partial Vision. *Perspecta*, 9(10), 107-130. <u>https://doi.org/10.2307/1566913</u>
- Gutjahr, C. M. (1999). *Culture & History of Urban Planing: Medieval Cities* (Lecture Notes). Faculty of Architecture: The University of Melbourne.
- Haddad, E. (2009). Charles Jencks and the Historiography of Post-Modernism. *The Journal of Architecture*, 14(4), 493-510. https://doi.org/10.1080/13602360902867434
- Hart, V. (1994). Carl Jung's Alchemical Tower at Bollingen. *Res: Anthropology and Aesthetics*, 25(Spring), 36-50. <u>https://doi.org/10.1086/RESv25n1ms20166889</u>
- Hendrix, J. S. (2012). Architecture as the Psyche of a Culture. In P. Emmons et al. (Eds.), *The cultural role of architecture: contemporary and historical*

perspectives (pp.208-215). Routledge, Abingdon, Oxon. Retrieved July, 2022, from <u>http://eprints.lincoln.ac.uk/id/eprint/7659/</u>

- Hershberger, R. G. (1970). Architecture and Meaning. *The Journal of Aesthetic Education*, 4(4), 37-55. Retrieved July, 2021, from <u>https://www.jstor.org/stable/3331285</u>
- Hershberger, R. G. (1974). Predicting the Meaning of Architecture. In J. Lang et al. (Eds.), *Designing for human behavior: architecture and the behavior science* (pp.147-156). Stroundburg; Pennsylvania: Dowden, Hutchingon & Ross, Inc.
- Hodder, I. (2012). Çatalhöyük: A Summary of Recent Work Concerning Architecture.
 In B. Söğüt (Ed.), Stratonikeia'dan Lagina'ya: Ahmet Adil Turpan armağanı/From Stratonikeia to Lagina: festschrift in honour of Ahmet Adil Turpan (pp.303-314). İstanbul: Ege Yayınları.
- Honour, H., & Fleming, J. (2005). Urban Development Constantinople: The Creation of a Christian Imperial Capital City. In, *A world history of art* (pp.308-313). London: Laurence King.
- Hopkins, B. C. (2010). Analytical Psychology. In *The Corsini Encyclopedia of Psychology and Behavioral Science* (W. E. Craighead, & C. B. Nemeroff, Eds.) (p.95-97). Vol.1. 3rd ed. John Wiley & Sons. Retrieved August, 2020, from https://doi.org/10.1002/9780470479216.corpsy0055
- Huang, S. C. (2008). Icons versus Words versus Nonwords: Neural Basis of Human Comprehension of Meaningful of Meaningless Visual Representations and A Neuroergonomic Approach o Their Usability. Retrieved July, 2021, from <u>http://researchgate.net/publication/268324970</u>
- Huskinson, L. (2013). Housing Complexes: Redesigning the House of Psyche in Light of A Curious Mistranslation of C. G. Jung Appropriated by Gaston Bachelard. *International Journal of Jungian Studies*, 5(1), 64-80. Routledge, Taylor & Francis Group. <u>http://dx.doi.org/10.1080/19409052.2012.679744</u>
- Jeffrey, S. (n.d.). How to Work with Archetypes. Retrieved September, 2020, from https://scottjeffrey.com/archetypes-psychology/
- Jencks, C. (1969). Semiology and Architecture. In C. Jencks, & G. Baird, (Eds.), *Meaning in architecture* (pp.10–25). London UK: Barrie & Jenkins.
- Jencks, C. (1980). The Architectural Sign. In G. Broadbent, R. Bunt, & C. Jencks (Eds.), Signs, symbols, and architecture (pp.71-118). Chichester; New York: John Wiley & Sons.
- Jencks, C. (1984). The language of post-modern architecture. New York: Rizzoli.

- Jung, C. G. (1954). Development of personality (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 17). Bollingen Series XX. Princeton, NJ: Princeton University Press.
- Jung, C. G. (1959). Part II: AION Researches into the phenomenology of the self (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 9ii). Bollingen Series XX. Princeton, NJ: Princeton University Press.
- Jung, C. G. (1964a). Civilization in transition (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 10). Bollingen Series XX. Princeton, NJ: Princeton University Press.
- Jung, C. G. (1964b). *Man and his symbols* (with M.-L. von Franz, J. L. Henderson, J. Jacobi & A. Jaffe'; J. Freeman, Co-Ed.). New York: Anchor Press Doubleday.
- Jung, C. G. (1966). The spirit in man art and literature (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 15). Bollingen Series XX. Princeton, NJ: Princeton University Press.
- Jung, C. G. (1968a). Part I: The archetypes and the collective unconscious (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 9i, 2nd ed.). Bollingen Series XX. Princeton, NJ: Princeton University Press. (Original work published 1959).
- Jung, C. G. (1968b). Psychology and alchemy (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 12, 2nd ed.). Bollingen Series XX. Princeton, NJ: Princeton University Press. (Original work published 1953).
- Jung, C. G. (1969). The structure and dynamics of the psyche (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 8, 2nd ed.). Bollingen Series XX. Princeton, NJ: Princeton University Press. (Original work published 1960).
- Jung, C. G. (1971). Personality types (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 6). Bollingen Series XX. Princeton, NJ: Princeton University Press.
- Jung, C. G. (1979). The symbolic life: miscellaneous writings (R. F. C. Hull, Trans.) (H. Read, M. Fordham, G. Adler, & W. Mcguire, Eds.), The collected works of C. G. Jung (Vol. 18). Bollingen Series XX. Princeton, NJ: Princeton University Press.
- Jung, C. G. (1989). *Memories, dreams, reflections* (A. Jeffe, Ed.; R. & C. Winston, Trans.). New York: Vintage Books.

- Jung, C. G. (1997). *Bilinç ve bilinçaltının işlevi*, (E. Büyükinal, Trans.). İstanbul: Say Yayınları.
- Jung, C. G. (2003). Dört arketip (Z. Aksu Yılmazer, Trans). İstanbul: Metis Yayınları.
- Jung, C. G. (2012). Introduction to Jungian Psychology: notes of the seminar on Analytical Psychology given in 1925. Princeton University Press. Retrieved November, 2022 from <u>https://books.google.com.tr/books?</u> id=gFpWrPKI4lcC&printsec=frontcover&hl=tr#v=onepage&q&f=false
- Kafescioğlu, Ç. (2009). Constantinopolis/Istanbul: cultural encounter, imperial vision, and the construction of the Ottoman capital. University Park, Pa.: Pennsylvania State University Press.
- Kahn, L. I. (1991). *Louis I. Kahn: writings, lectures, interviews* (L. Alessandra, Ed.). New York: Rizzoli International Publications.
- Kaup, M. L. (2011). The Significance of the Door in Nursing Homes: A Symbol of Control in the Domestic Sphere. *Home Cultures*, 8(1), 25-41. <u>https://doi.org/10.2752/175174211X12863597046613</u>
- Kiehl, J. (2016). The Evolution of Archetypal Forms in Western Civilization. *Psychological Perspectives*, 59(2), 202–218. Routledge, Taylor & Francis Group. <u>https://doi.org/10.1080/00332925.2016.1170499</u>
- Komatsu, K. (2019). Presentational Self and Cultural Psychology. In, Meaning-Making for Living the Emergence of the Presentational Self in Children's Everyday Dialogues (pp.117-119). Switzerland: Springer Nature. <u>https://doi.org/10.1007/978-3-030-19926-5</u>
- Krampen, M. (1989). Semiotics in Architecture and Industrial/Product Design. *Design Issues*, 5(2), 124-140. The MIT Press. <u>http://doi.org/10.2307/1511519</u>
- Krier, R. (1979). Urban space (C. Rowe, Foreword.). London: Academy Editions.
- Krier, R. (1992). *Elements of architecture. Architectural Design* (A. C. Papadakis, Ed.). London: Academy Editions.
- Kuban, D. (2011). The Foundation of the Ottoman Capital. In, *Istanbul an urban history: Byzantion, Constantinopolis, Istanbul* (pp.224-397). İstanbul: İş Bankası Kültür Yayınları.
- Kuberski, P. (1990). Unconscious Cities. *The Georgia Review*, 44(4), 678-689. Georgia Review. Retrieved August, 2020 from <u>http://www.jstor.com/stable/41400104</u>

Lakawa, A. R. (2018). Semiotic Analysis of Betawi Vernacular Architecture at Setu Babakan, Jakarta. *International Journal on Livable Space*, 3(1), 23-34. <u>https://dx.doi.org/10.25105/livas.v3i1.3883</u>

Laugier, M. A. (1977). An essay on architecture. L. A.: Hennessey & Ingalls, Inc.

- Le Corbusier, E. (Jeanneret, C. E.). (1967). *The radiant city; elements of a doctrine of urbanism to be used as the basis of our machine-age civilization*. New York, Orion Press.
- Le Corbusier, E. (Jeanneret, C. E.). (2007). *Toward an architecture* (J-L.Cohen, Intro.; J. Goodman, Trans.). Los Angeles, Calif.: Getty Research Institute.
- Lynch, K. (1960). The image of the city. Cambridge, Mass.: The M.I.T. Press.
- Marcus, C. C. (1997). House as a Mirror of Self. In, *House as a mirror of self: exploring the deeper meaning of home* (pp.1-18). Berkeley, Calif.: Conari Press.
- Morris, C. W. (1937). Peirce, Mead, and Pragmatism. Proceeding and Addresses of the American Philosophical Association, 11, 109-127. American Philosophical Association. Retrieved August, 2021, from https://www.jstor.org/stable/3129189
- Morris, C. W. (1938). *Foundations of the theory of signs*. Chicago: The University of Chicago Press.
- Morris, C. W. (1946). Signs, language and behavior. New York: Prentice-Hall.
- Neumann, E. (1951). Art and Time. In *Art and the creative unconscious* (pp.81-134). Princeton, NJ: Princeton University Press.
- Neumann, E. (1954). Creative Man and Transformation. In *Art and the creative unconscious* (pp.149-206). Princeton, NJ: Princeton University Press.
- Newman, O. (1996). Creating defensible space. institute for community design analysis. U.S. Department of Housing and Urban Development Office of Policy Development and Research. Center of Urban Policy Research Rutgers University. Diane Pub Co.
- Ogden, C. K., & Richards, I. A. (1923). The meaning of meaning: A study of the influence of language upon thought and of the science of symbolism. New York: Harcourt, BraceJovanovich & World.
- Pearson, C. (2015). The Semiotic Paradigm View of Theoretical Semiotics. In P. P. Trifonas (Ed.), *International handbook of semiotics* (pp.135-180). Springer.

- Peirce, C. S. (1994). The Collected Papers of Charles Sanders Peirce (J, Deely, Ed., electronic ed.). (C. Hartshorne, & P. Weiss, Eds., Vols. I-VI; & A. W. Burks, Ed., Vols. VII-VIII). Cambridge, MA: Harvard University Press, (1931-1935, & 1958). Retrieved March, 2020, from https://www.academia.edu/7410217/The_collected_papers_of_charles_sanders_peirce_2904s
- Peirce, C. S., & Hoopes, J. (1991). *Peirce on Signs : writings on Semiotic by Charles Sanders Peirce*. The University of North Carolina Press. EBSCO Publishing: eBook Collection (EBSCOhost). Retrieved May, 2020, from <u>http://0-eds.a.ebscohost.com.library.metu.edu.tr/eds/ebookviewer/ebook?</u> <u>sid=31d2cb17-c16d-4cae-a623-1ed5080b54fc%40sdc-v-sessmgr03&vid=1&rid=4&format=EB</u>
- Petocz, A. (2011). Re-Thinking the Place of Semiotics in Psychology and its Implications for Psychological Research. In Steven C. Hamel (Ed.), *Semiotics: theory and applications* (pp.99-147). New York: Nova Science Publishers. Retrieved June, 2020, from <u>http://0-</u> <u>eds.a.ebscohost.com.library.metu.edu.tr/eds/ebookviewer/ebook?</u> <u>sid=05291adc-8af0-468b-8956-</u> <u>21ef74cb5821%40sessionmgr4006&vid=0&format=EB</u>
- Porteous, J. D. (1977). *Environment and behavior: planning and everyday urban life*. Addison-Wesley Publishing Company.
- Preziosi, D. (1979). Architecture, language, and meaning: the origins of the built world and its semiotic organization. The Hague; The Netherlands: Mouton Publishers.
- Progoff, I. (1953). Jung's psychology and its social meaning; an introductory statement of C. G. (Jung's psychological theories and a first interpretation of their significance for the social sciences). New York: Grove Press.
- Raber, D., & Budd, J. M. (2003). Information as Sign: Semiotics and Information Science. *Journal of Documentation*, 59(5), 507-522. https://doi.org/10.1108/00220410310499564
- Rapoport, A. (1990). *The meaning of the built environment: a nonverbal communication approach*. Tucson: The University of Arizona Press.
- Remizova, O. (2015). The Structure of the Architectural Language. *Architectural Studies*, *1*(2), 81-86. Retrieved July, 2020, from <u>http://science.lpnu.ua/sites/default/files/journal-paper/2017/jun/3414/olenaremizovathestructureofthearchitecturallanguage.pdf</u>
- Remm, T. (2011). Understanding the City through its Semiotic Spatialities. *Sign Systems Studies*, *39*(2/4), 124-144. <u>https://doi.org/10.12697/SSS.2011.39.2-4.06</u>

- Robb, J. (2020). Art (Pre)History: Ritual, Narrative and Visual Culture in Neolithic and Bronze Age Europe. *Journal of Archaeological Method and Theory*, 27, 454-480. <u>https://doi.org/10.1007/s10816-020-09471-w</u>
- Rodning, C. B. (2010). Architectural Symbolism and Cherokee Townhouses. Southeastern Archaeology, 29(1), 59-79. Routlegde, Taylor & Fransic Group. <u>https://doi.org/10.1179/sea.2010.29.1.005</u>
- Rossi, A. (1982). *The architecture of the city* (P. Eisenman, Intro.; D. Ghirardo & J. Ockman, Trans.). Cambridge, Massachusetts: The MIT Press.
- Rykwert, J. (1991). House and Home. *Social Research*, 58(1), 51-62. Retrieved August, 2021, from <u>https://www.jstor.org/stable/40970630</u>
- Saussure, F. de (1966). *Course in general linguistics* (C. Bally, & A. Sechehaye, Eds.; W. Baskin, Trans.) in collaboration with A. Riedlinger. New York: McGraw-Hill Book Co.
- Sazyek, E. (2013). Jung Işığında HEBA. *Turkish Studies: International Periodical for the Languages, Literature and History of Turkish or Turkic, (8/8)*, Summer, 1097-1125. <u>https://doi.org/10.7827/TurkishStudies.4948</u>
- Schenk, R. (2017). City as Soul: The Serpent under the Stones. *Jung Journal*, 11(3), 52-67. Routlegde, Taylor & Fransic Group. https://doi.org/10.1080/19342039.2017.1332329
- Scolnicov, S. (2006). Language and Dialogue in Plato. *Classica (Brasil)*, *19*(2), 180-186. Retrieved November, 2021, from <u>https://dialnet.unirioja.es/descarga/articulo/6298345.pdf</u>
- Semper, G. (1989). The four elements of architecture and other writings (H. F. Mallgrave, & W. Herrman, Trans.; H. F. Mallgrave, Intro.). Cambridge: Cambridge University Press.
- Shojaee, S. M. & Saremi, S. A. A. (2018). Explaining the Methods of Architecture Representation Using Semiotic Analysis (Umberto Eco's Theory of Architecture Codes). *International Journal of Architecture and Urban Development*, 8(3(29)), 33-48. Retrieved August, 2021, from <u>https://www.sid.ir/en/journal/ViewPaper.aspx?id=700756</u>
- Şirin, T. (2019). Parallelisms Between Jungian Archetypes with Ibn 'Arabi's Concept of Ayani-Sabita. Spiritual Psychology and Counseling, 4, 25–37. <u>http://dx.doi.org/10.12738/spc.2019.4.1.0052</u>
- Smith, E. (1942). The Megaron and Its Roof. *American Journal of Archaeology*, 46(1), 99-118. Retrieved April, 2021, from <u>https://www.jstor.org/stable/499112</u>

- Sperber, E. (2014). Site, Incite, and Insight-Architecture and Psychoanalysis: Commentary on Leanne Domash's Paper. National Institute for the Psychotherapies: *Psychoanalytic Perspectives*, *11*, 122–132. Routledge, Taylor & Francis Group. <u>https://doi.org/10.1080/1551806X.2014.897869</u>
- Steadman, S. R. (2016). Archaeology of domestic architecture and the human use of *space*. Routledge, Taylor & Fransic Group.
- Steen, A. P. (2016). *The Figures of Charles Jencks, 'Semiology and Architecture'*. [Doctoral-thesis, The University of Queensland]. https://doi.org/10.14264/uql.2016.72
- Stein, L. (2019). The Urban Psyche: the Impact of the Neo-liberal City. Journal of Analytical Psychology, 64(5), 871–878. <u>https://doi.org/10.1111/1468-5922.12551</u>
- Stiles, C. (2017). The Interface of Carl Jung and Dissociative Identity Disorder: From Autonomous Complex to Personality. *The Free Library* (March, 22). Retrieved July, 2022, from <u>https://www.thefreelibrary.com/The+Interface+of+Carl+Jung+and+Dissociativ</u> <u>e+Identity+Disorder%3A+From...-a0520586798</u>
- Taylor, E. (2009). *The mystery of personality a history of psychodynamic theories*. New York: Springer.
- Terzoglou, N-I. (2018). Architecture as Meaningful Language: Space, Place and Narrativity. *Linguistics and Literature Studies*, *6*(3), 120-132. https://doi.org/10.13189/lls.2018.060303
- Timm, R. (2016). Textualities of the City -from the Legibility of Urban Space towards Social and Natural Others in Planning. Sign Systems Studies, 44(1/2), 34-52. <u>https://doi.org/10.12697/SSS.2016.44.1-2.03</u>
- Trisno, R., Hanli, N., Kasimun, P. R., & Lianto, F. (2019). The Meaning of Means: Semiology in Architecture Case Study: Villa Savoye. *International Journal of Civil Engineering and Technology (IJCIET)*, 10(2), 653-660. Retrieved May, 2020, from <u>http://www.iaeme.com/ijciet/issues.asp?</u> <u>VType=10&IType=02&JType=IJCIET&PageNumber=2</u>. Retrieved July, 2020, from <u>https://www.researchgate.net/publication/332251102_The_meaning_of_means</u> <u>Semiology_in_architecture_case_study_Villa_Savoye</u>
- Troutman, A. (1997). Inside Fear, Secret Places and Hidden Spaces in Dwellings. In N. Ellin (Ed.), *Architecture of fear* (pp.143-157). Princeton Architectural Press. Retrieved April, 2021, from https://www.annetroutman.com/annetroutman.com/Inside_Fear_.html

- Valsiner, J. (2001). Process Structure of Semiotic Mediation in Human Development. *Human Development*, 44, 84-97. Retrieved June, 2020, from <u>http://0-eds.a.ebscohost.com.library.metu.edu.tr/eds/pdfviewer/pdfviewer?</u> vid=1&sid=14d3a3bf-c3a5-4f20-a977-ecdffe09130a%40sessionmgr4006
- Venturi, R. (1966). *Complexity and contradiction in architecture*. New York: Museum of Modern Art.
- Vitruvius, M. (1914). *The ten books on architecture* (M. H. Morgan, Trans.). Harvard University Press.
- Vogler, A., & Jorgensen, J. (2005). Windows to the World, Doors to Space: The psychology of Space Architecture. [Based on the paper presented at "Space: Science, Technology and the Arts" (7th Workshop on Space and the Arts), European Space Research and Technology Center (ESA-ESTEC), Noordwijk, The Netherlands, 18-21 May 2004]. *Leonardo: Journal of the International Society for the Arts, Sciences and Technology, 38*(5), 390-399. <u>https://doi.org/10.1162/leon.2005.38.5.390</u>
- Waal, C. de (2001). On Peirce. Australia; Belmont, CA: Wadsworth/Thomson Learning.
- Wang, K. (2011, April 22-24). Notice of Retraction: Discussion on the archetype image of built environment. 2011 International Conference on Electric Technology and Civil Engineering (ICETCE), Lushan, China, 2011, (pp.1175-1177). IEEE. <u>https://doi.org/10.1109/ICETCE.2011.5774647</u>
- Wilson, F. (1971). *Structure: the essence of architecture*. Studio Vista: London; Van Nostrand Reinhold Co: New York.
- Wordhippo. (n.d.). Prenotation. In *Wordhippo.com dictionary*. Last visited on November 2022. <u>https://www.wordhippo.com/what-is/another-word-for/prenotation.html</u>
- Yakin, H. S. M., & Totu, A. (2014). The Semiotic perspectives of Peirce and Saussure: a brief comparative study. In The International Conference on Communication and Media 2014, Communication, Empowerment and Governance: The 21st Century Enigma, (i-COME'14), Malaysia. Procedia-Social and Behavioral Sciences, 155, 4-8. Elsevier Ltd. https://doi.org/10.1016/j.sbspro.2014.10.247
- Yavuz, B. (2001). Bir Mimari Arketip ve İletişim Nesnesi olan Duvara Ait Yananlamsal Bir Analiz (Publication No.104079) [Masterthesis, ITU]. Retrieved November, 2020, from <u>https://polen.itu.edu.tr/handle/11527/10417</u>
- Zeman, J. J. (1981). Charles W. Morris (1901-1979). Transactions of the Charles S. Peirce Society, 17(1), 3-24. Indiana University Press. Retrieved September, 2021, from <u>https://jstor.org/stable/40319899</u>

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