CHAPTER 8

NARRATIVE SEMIOTICS AND THE CITY: THE PLACE OF THE CONCEPT OF ‘CITY’ IN ITALO CALVINO’S *INVISIBLE CITIES*

ANLATI GÖSTERGEBİLİMİ VE ŞEHİR: ITALO CALVINO’NUN *GÖRÜNMEZ KENTLER* ANLATISINDA ‘KENT’ KAVRAMININ YERİ

Murat KALELİOĞLU¹

¹Asst. Prof. Dr., Mardin Artuklu University, School of Foreign Languages, Translation and Interpreting
Department, Mardin, Turkey
e-mail: kalelioglu.murat@gmail.com

DOI: 10.26650/BS/AA14.2021.001-1.08

ABSTRACT

The significant element is the subject of enunciation –author– considering literature and practice of writing. The author struggles to combine images via language and generates a semantic universe throughout the process in the system of literature. This universe is generated with systematic sequences of signs. The artwork, which has been qualified as being a specific message, turns into a sign just as Italo Calvino’s *Invisible Cities* (1972) is analyzed by the end of that generative process. The theme of the narrative is the image of happy cities, which have been lost in distorted and unhappy ones. In this way, the subject of enunciation establishes a link between symbolic cities and real cities, and he makes a tangible reference to the realities of urban life. The author of enunciation builds the semantic universe of the narrative on the dichotomy of happy and unhappy cities. These cities, where cultural exchange is realized, are described as a clearing place of desires and memories and are the protagonist of the narrative rather than the decor. Through the study, a semiotic analysis of how the meaning generation process is structured will be carried out by adhering to the theme of the narrative. Also, the place of the ‘city’ concept in Calvino’s narrative will be questioned.

Keywords: Semiotics, literary semiotics, semiotics of narrative, Italo Calvino, *Invisible Cities*

ÖZ

Söz konusu yazın ve yazma pratiği olduğunda, anlamı oluşturan sözceleme öznesi –yazar– önemlidir. Anılamla edimi süresince yazar, dil yoluyla imgeleri bir araya getirme ve edebiyat dizgesi içinde yeni

bir anlam bir evreni oluşturma çabası içindedir. Bu evren, göstergelerin sistemli dizilişleriyle meydana gelmektedir. Tıpkı Calvino'nun *Görünmez Kentler* 'i (1972) gibi özgün bir bildiri niteliği taşıyan bu sanat eseri üretici sürecin sona ermesiyle incelenmeye hazır bir göstergeye dönüşmektedir. Bu çalışmaya konu olan bu yapıtın teması, çarpık ve mutsuz kentlerde yitip giden mutlu kentlerin imgesidir. Yazar, sembolik kentler ile gerçek kentler arasında bir bağ kurmakta ve kent yaşamının gerçeklerine somut bir gönderme yapmaktadır. Sözcemele öznesi, anlatısının anlam evrenini mutlu ve mutsuz kentler karşıtlığı üzerine inşa etmektedir. Kültürel değiş tokuşun gerçekleştiği, arzu, istek ve anıların takas yeri olarak tanımlandığı bu kentler anlatının kahramanları durumundadır. Çalışmada eserin izleğine bağlı kalınarak anlam üretim sürecinin nasıl yapılandırıldığına yönelik göstergebilimsel bir çözümleme yapılacak ve Calvino'nun anlatısındaki 'kent' kavramının yeri sorgulanacaktır.

Anahtar Kelimeler: Göstergebilim, yazınsal göstergebilim, anlatı göstergebilimi, Italo Calvino, *Görünmez Kentler*

1. Introduction

Works of art are composed of various sign or systems according to their features. A theater play, painting, music concerto, or a literary work comes to life through the meaningful sequence of different kinds of signs. Regardless of type, the primary function of signs that lead to the emergence of works of art is the same because the most significant reason for the meaningful establishment of those signs is communication. Signs as a primary driving force of interpersonal dialogue are the means of communication that enables societies to transfer their lifestyle, belief, mood, socio-economic status, and cultural values from generation to generation.

Italo Calvino's *Invisible Cities*, which is generated within the system of literature, is a literary work that provides communication with the message it contains between the author and the reader. The work is also considered as an intangible literary object, which is the representation of aesthetic thought embodied on paper (Eco, 2017). The narrative, which has the characteristics of being a literary object, has an esteemed place in the world of literature with its diverse content and production style. The study object, here, is a communication tool. Therefore, the narrative of *Invisible Cities* as the object of literature becomes an instrument that acts as a bridge between the author and reader.

Works of art are a re-representation of images in the real world. In this representation, the way of reflecting reality is important (Günay, 2014). It is possible to see that importance in the study object, of which one of the most outstanding elements determining the value of the novel is aesthetics in its fiction. Aesthetics in fiction stems from the surreal world that Calvino can construct with images that belong to the real and imaginary world. Calvino's extraordinary style makes him one of the pioneers of literature (Saatçioğlu, 2019). *Invisible Cities* turns into a jigsaw puzzle that opens to infinity rather than a straightforward narrative that makes the analysis process of the novel quite tricky compared to other narratives.

Calvino manifests himself with a different form of communication that transcends the boundaries of language and rebels against traditional literary custom. Through his unusual act, he strives for literature, pulling away from the vicious circle by utilizing different branches of science. Roland Barthes defines the language away from power just as literature and claims the literature as writing practice. He also asserts that it is the author's assignment to get rid of the dystopic language, which suppressed all possible uses of language throughout the writing act. He describes the act of getting rid of that oppressive power of language as insurgency (2015). As it is understood from the configuration of the content and writing style of the

narrative, the author –the subject of writing practice– has managed to keep his work away from being ordinary by resisting a traditional writing style.

In *Invisible Cities*, a different coding system, syntax, and vocabulary, which bring diversified forms to the world of emotions and dreams of readers, are proposed. The system of codes that the author reflects in his work is the image of happy cities, which are hidden in distorted and unhappy ones and continuously in a state of flux. Calvino forges a link between the real and the symbolic cities in his mind and makes a particular reference to the facts of urban life. Those cities, where the immense cultural exchange takes place and which are defined as the cities of exchanging desires, wishes, and memories, are the symbolic heroes of the narrative rather than being decor.

Calvino, while describing his novel, emphasizes the symbol of ‘city’, which is chosen as a complex sign for expressing the tension between human life and geometric rationality in harmony. He mentions that he concentrates on that symbol with all his experiences, thoughts, and assumptions in *Invisible Cities*. He gives clues about numerous paths in different directions and mentions that a multifaceted narrative structure is established around the city symbol in a sequence that represents a network from which different results can be drawn (2007). What the author asserts can be an example of Eco’s ‘forest’ metaphor, he uses for complex structures of narratives.

According to Eco, there are two various ways of walking through the forest. The first is to move without looking around to get to the result as soon as possible. The second is to try to understand the structural arrangement of the forest by seeking answers for the reason why some of the paths are used, and some of them are not (2018). A reader who chooses the previous way to read the text is only interested in how the narrative ends, whereas a reader who chooses the latter way is a curious one who desires to explore the construction process of the narrative. In this case, it is possible to define the reader who desires to analyze the narrative within the scope of semiotics as the second type of reader in this study.

2. Literature and Function

Literature, which is a systematic language, is one of the essential cultural tools for passing down each society’s own culture. Components of culture, including tradition, belief, and lifestyle, are the facts that ensure a collective cultural consciousness in societies. This fact reveals the link between literature and reality, although there is an absolute definition of literature as ‘fiction’ (Todorov, 2015). It is literature which functions to present the facts belonging to the communal life and societal experiences systematically.

Literature is fictive. However, this fictiveness does not prevent it from presenting a model of truth based on a social matter of facts and events (Eco, 2017). Every man is affected by natural and cultural conditions throughout the era he lives. Such encounters give them countless experiences in most spheres of life. In general, the content of literature is based on those socio-cultural and psychological experiences. “Literature conceived as a ‘laboratory’ of human life, provides examples of human experience” (Tyson, 2006). Hence, it can be seen as a reflection of social and individual experiences of human life.

Literature calls forth the transfer of different dimensions of nature and human experiences through a fictional language. Although fiction conceptually points out potential real or unreal experiences, its primary material is the facts based on social and individual experiences, which can also be supported by Heidegger’s view of art. Heidegger, who examines the relationship between reality and art, defines art: “It seems to transpire, is only one of the ways in which truth happens” (Young, 2001). His concept of art is a reference to all means of cultural transference, which includes aesthetics. Literature is a branch of art among those tools. It has formative elements that support the establishment of the system, in which it takes place. Character, space, and time are some of those elements. Although the elements are fictious, they all have a close relationship with their equivalences in the real world.

One of the significant features of works of art is that they are objective in their use, which is also valid for literature. There are social and cultural facts and values that affect the state of mind and behaviors of men. At this point, Eco describes literature as an immaterial force produced by a man who reads it gladly to glorify himself. Literature is a spiritual power since it is an important instrument that caresses and influences the human spirit. However, that spiritual force becomes objective and a semi-immaterial power with the paper (2017). Therefore, the prominent tool, which enables literature to become an object, is the paper. Barely, literature is a kind of pleasure machine despite the semi-material property that does not lose its spiritual power to change the mood of man. For that reason, reading for pleasure is one of the crucial functions of literature to enjoy, spend time, and expand encyclopedic knowledge. Besides, literature can be seen as a vital instrument in the expansion of the reader’s imagination, language ability, and the capacity of self-evaluation and critical thinking.

Literature, which is created with cultural signs identified by social contracts, plays an essential role in the construction of social identity. In this manner, it creates nations and supports social solidarity while shaping language and minds (Eco, 2017). For instance, the significant reason for the formation of societies, values, and identities are in their tradition of written/oral literature from past to present. This tradition, which supports the conscious

construction of national identity, is the result of literary works produced throughout history. As a result, another function of literature –knowledge acquisition– emerges. Therefore, it is possible to obtain information/knowledge related to past events, wars, crises, and the impacts of them on personal thoughts and behaviors through literature. In this way, readers have the opportunity to compare, interpret, and draw conclusions from the experiences of people taking place in literary works.

Invisible Cities contains the features mentioned above. It has a fictional universe that reveals the connection between imagination and reality through the formative elements as person, space, and time. The narrative, which provides efficient communication between Calvino's thoughts/experiences and the reader, is the narration of the cities questioned.

3. Italo Calvino and *Invisible Cities*

Calvino is the author of one of the most challenging narratives to signify in the world literature. *Invisible Cities* has a special place, just as Calvino's other narratives, because of its fictional character. He brings literature and mathematics together with a post-modern perspective in his writing phase and benefits from those privileged fields in the production of *Invisible Cities* (Moreno-Viqueira, Ileana, 2013).

There are important names such as Roland Barthes, Raymond Queneau, Georges Perec, Paul Valéry, Charles Baudelaire, Charles Fourier in the development of Calvino's writing style. Besides, the imagination and intelligent games played by Queneau and the masters of mathematics and literature from the same group also affect Calvino (Saatçioğlu, 2019). For this reason, Calvino tries to write his novels by developing new forms of communication that remove the borders between himself and the reader. His works enable us to interact with other disciplines and increase the functionality of the works thanks to such a challenging writing act of the conscious combination of different disciplines.

Calvino is one of the members of the group of Oulipian authors who are the leading figures of the empirical literature movement in France. They use an algorithmic technique to narrate. The acronym for Oulipo is based on the French name of the group, "Ouvroir de Littérature Potentielle" (Queneau, 1965) –Workshop for Potential Literature. It is a movement formed by a group of writers and mathematicians, including authors Georges Perec and Italo Calvino, poet Oskar Pastior, poet/mathematician Jacques Roubaud and mathematicians Raymond Queneau and Francois Le Lionnais.

Le Lionnais explains the rule of the Oulipo movement:

The goal of potential literature is to furnish future writers with new techniques which can dismiss inspiration from their affectivity. There are two Lipos: an analytic and a synthetic. Analytic lipo seeks possibilities existing in the work of certain authors unbeknownst to them. Synthetic lipo constitutes the principal mission of the Oulipo; it is a question of opening new possibilities previously unknown to authors (Lescure, 2003).

The word ‘potential’ bears upon the nature of literature that enables the freedom of the writer in searching for new potential forms and structures that can be used. It is Calvino, who as one of the masters of Oulipo has the freedom to explore and apply that potentiality of the new styles and structures in the composition of his narratives in *Invisible Cities*, which presents the main reason why his narratives are arduous to signify.

The use of the computer as an aid to literary creation in the following situations: The structures chosen by the author are relatively few in number, but the possible realizations are combinatorially exponential. Only the computer may realize a number (more or less large) of these potentialities. On the contrary, the assistance of the computer takes on an *anticombinatory* character when, among a large number of possibilities, the computer selects those few realizations compatible with certain constraints (Calvino, 2003).

Oulipo writers define themselves as “rats who must build the labyrinth from which they propose to escape” (Lescure, 2003). The movement, which aims to push new possibilities and expand the boundaries of language, establishes an Oulipian technique by predetermining formal limitations based on mathematics. Representatives of the movement make experimental studies with the support of computer programs by taking advantage of the rules of mathematics. Language games, grammar restrictions, puzzles, terminology, sound games, intertwined stories, mixed sentence arrays are some of those studies of surrealist literary masters.

Calvino defends that the only way to fight against the complex labyrinth is to design a new one, and the most reliable tool to design this novel labyrinth is literature. He asserts that the only way to fight against the labyrinth is to design a new labyrinth, and the most reliable architect of this design is literature. He confirms his claim with the algorithmic structure of the table of contents section in *Invisible Cities*. The organizational structure of the table of content of the narrative is demonstrated by the systematic division of fifty-five cities into nine separate chapters. These glamorous cities are built in the borders of the labyrinth. Each city is distributed on the various surfaces of a crystal, which is capable of reflection and reproduction by refraction of light. The refraction of light in that crystal, depending on the principle of probability, creates the other cities. In that way, the potential cities with the refracted light and the other potentialities in these cities become apparent in the narrative.

Accordingly, the narrative formed with the technique of Oulipo is based on the dialogues between Kublai Khan and Marco Polo and the cities mentioned through the dialogues. The cities created by Polo are the ones that are generated by the impasse of the real cities. These cities, made of soil, glass, iron, sand, wood, spirit, faith, and imagination, are also new utopian urban models that are alternatives to the dystopian ones. The real and surreal sample cities, narrated in each section, multiply five times, and search for unity in the crystal architecture produced by Calvino (Saatçioğlu, 2019). Young Polo narrates the cities he dreams of to the powerful and experienced emperor Khan throughout the narrative.

The narrative *Invisible Cities* can be approached in many ways. However, it is analyzed within the context of literary semiotics since the primary aim of this study is to discover the formation process of the semantic universe and contribution of the ‘city’ concept to the narrative.

4. Semiotic Analysis

In this study, as the subject is the analysis of *Invisible Cities* pursuant to the semiotic approach, it is necessary to clarify the method and the concepts of its use throughout the analysis process. First of all, it must be known that literature and analysis of literature are two distinct concepts. Literature, within its boundaries, characterizes a creative field, which is art. The aim in this field is the infinity and extraordinariness of the literary works. The most effective means of that limitlessness is the language; of that unusualness is the systematic game played with language (Kalelioğlu, 2017). It is the game, which has a significant role in the fictionalization of the text, which can be regarded as a reference to the definition of literature dealing with an extraordinary language. Although the source of language used in the literary system is everyday language, it should not be mistaken as basic because the language, which forms the semantic universe of literary works, is the language that transcends the boundaries of everyday language and creates aesthetic and mystery. For this reason, it is necessary not to confuse that artistic transfer (literature), which requires using a metalanguage in its formation, with the analysis of it. The best example of this is the study object of this research –*Invisible Cities*.

On the other hand, a literature review is the work of examining the whole text according to the previously chosen methods, techniques, and approaches based on scientific data. The power of scientific knowledge is in its general character, universality, necessity, and objective reality. Scientific knowledge is universal, which is significant for humans to preserve nature and ease life. Although art reflects the world with artistic images, science recognizes the

same world by means of logical thinking and describes it with concepts in its system (Günay, 2018). The theory of semiotics, which has an interdisciplinary character, is one of those ways of systematic thinking and explaining such systems.

It is necessary to know the constituent elements of the narrative and their functions, which support the production of fiction, to examine *Invisible Cities* as a fictional narrative. Those elements take place within three various semantic strata. “The sum of the three levels of meaning can be defined as ‘narrative syntax’ (Greimas, 1971), which points out the systematic organization of each of the levels, the relations of the formative elements at each level, and the articulation process of them with each other to construct the semantic universe of the narratives” (Kalelioğlu, 2019). Such an act takes place with careful and repeated readings, which represents the act of analysis. This kind of reading is not an ordinary one when fiction and narrative become involved.

The act of reading is closely related to the use of the semiotic approach and its instruments, which have rules in its system to ensure the integrity and consistency of the study. Thereby, the approach to be applied in this study is the semiotics of literature developed by Algirdas Julien Greimas. “Greimassian semiotics became something more, and broader than pure lexicography” (Tarasti, 2017). His semiotic design, which proceeds towards becoming a science in time, is a systematic model of thinking that can be applied to all kinds of meaningful text. It is the work of semiotics to analyze the basic structure of the text, including descriptive, narrative, and thematic levels of meaning (Perron, 1989). In this systematic analysis process, the path followed in Greimas’s semiotic trajectory is from lexis to utterance.

Fictionalizing narratives takes place in various meaningful strata. The formative elements of each stratum are different in literary semiotics. They are different but interconnected. The use of constituent elements has two ways (Greimas & Joseph Courtés, 1982, p. 134). The first is the path followed by the author from the deep to the surface level during the writing process. The deep level includes abstract or thematic meaning, whereas the surface level includes both narrative and descriptive meaning. In such a program, the emphasis is on the text production process.

However, the second is the path followed by the reader from the surface to the deep level demonstrating the process of semiotic analysis (Bertrand, 2000). Accordingly, there is a three-stage process in literary semiotics while reading a text. Primarily, necessary identifications are made at the descriptive level. Then narrative level structures are analyzed. Finally, an analysis is made in the context of deep structure on which the narrative is established. Although those

three levels of meaning are handled separately, they are articulated to become a whole in the production process of fiction. The data obtained at each stage are constitutive elements that support the formation of fiction. In the first phase, space, time, persons, and the conditions of them are described. Such a description is required for the subsequent analysis. In the second phase, activities and functions of the narrative persons –actantial syntax (subject, anti-subject, object, sender, receiver) and their modal structures are revealed. In the last phase, the main themes and value judgment of the narrative are analyzed through the semiotic square.

Meaning is infinite and cannot be consumed, which is also valid for literary texts produced with meaningful sequences of both linguistic and non-linguistic signs. Consuming meaning also means consuming the pleasure of reading –the game of signification–, which is one of the most vital functions of literature. For Barthes, literary works go beyond the ideas of the society in which those works are produced. The most important fact, which causes this situation, is that the work is seen as a symbol rather than an image. The literary language established with symbols belonging to urban life, as in *Invisible Cities*, is more profound, complicated, and ambiguous than everyday language. These features of literary language open the work towards infinite meanings, which provide an opportunity for readers to re-interpret and create the text every time. The constructive feature of the work leads its readers to explore the texts with unlimited repetitions and consign itself to an endless audience (Barthes, 2017). Barthes' discourse, which links the eternity of meaning to the reader, pushes us, as a reader, into the jigsaw puzzle to explore the narrative in the sense of semiotics.

The theory is a hypothetical deductive jigsaw leaning towards the form of the content of narratives (Rifat, 2011). The characteristics feature of semiotics prompts us to establish our semiotic model to re-interpret the narrative. Therefore, a repetitive reading, in the form of content, is carried out with the bounds of possibility of literary semiotics as an interdisciplinary approach. Through the reading, *Invisible Cities* will be evaluated in terms of its structural adjustment due to the unordinary fictional feature of Calvino's literature. It is vital, first, to reveal the structural arrangement made in a complex manner by way of the Oulipo technique. Then the identifications to analyze the semantic universe of the text at different levels –descriptive, narrative, and deep levels– will be made.

4.1. Structural Organization

Invisible Cities (Calvino, 1974) was the first English book translated by William Weaver from Italian and published by Harcourt Brace & Company in the United States, 1974.

Table 1. Paper count and pages per chapter		
Chapter	Page Number	Total Pages
I	5 to 22	18
II	27 to 39	18
III	43 to 56	19
IV	59 to 69	11
V	73 to 82	10
VI	85 to 99	15
VII	103 to 118	16
VIII	121 to 132	12
IX	135 to 165	31

Table 1 shows the total number of pages per chapter. The paper count of the book in total is one hundred fifty. Those chapters and pages given in the table include the dialogues between Kublai Khan and Marco Polo. The other fifteen pages are blank, distributed at the beginning and the end of each chapter.

The narrative is divided into nine main chapters, and each of those chapters is separated into sub-chapters. The first and last chapters consist of ten sub-chapters, while the rest of the main chapters include five sub-chapters. The author does not associate sub-chapters with numbers, but different types of themes:

Table 2 illustrates the configuration of the content of the narrative. In that structural organization, there are themes –sub-chapters– within each main chapter and a different city in each theme. Calvino supports nine main chapters with eleven sub-chapters, which is equal to the total number of themes. There are ten mixed themes in the first and ninth chapters, and five themes in the other chapters, which are lined up according to a specific rule. Calvino’s writing technique facilitates the movement of the themes in a specific order. One theme is involved in the line while the other departs through the flow of the narrative. Chapters one and nine consist of ten themes, unlike the other chapters, since Calvino desires his narrative to be in constant movement, which allows an infinite number of reconstructions of the narrative.

Table 2. Organization of chapters and sub-chapters –themes										
Chapters	Themes									
I	Memory									
	Memory									
	Desire									
	Memory									
	Desire									
	Signs	Memory								
	Memory	Desire								
	Desire	Signs								
	Signs	Thin								
	Thin	Trading								
		Eyes								
		Names								
		Dead								
		Sky	Sky							
	Continuous	Continuous								
	Hidden	Hidden								
	Sky									
	Continuous									
	Hidden									
	Continuous									
	Hidden									
	Hidden									
IX	135-165	121-132	103-118	85-99	73-82	59-69	43-56	27-39	5-22	Pages

There are nine main chapters and eleven thematic sub-chapters. The first and ninth main chapters include ten positioned cities, whereas the rest of the main chapters have five cities:

Table 3. Organization of the cities						
Order →	5	4	3	2	1	Themes ↓
Chapter ↓						Memory
I					1. Diomira	Desire
				2. Isidora	1. Dorotea	Sign
			3. Zaira	2. Anastasia	1. Tamara	Thin
		4. Zora	3. Despina	2. Zirna	1. Isaura	Trading
II	5. Maurilia	4. Fedora	3. Zoe	2. Zenobia	1.Euphemia	Eyes
III	5. Zobeide	4. Hypatia	3. Armilla	2. Cloe	1. Valdrada	Names
IV	5. Olivia	4. Sophronia	3. Eutropia	2. Zemrude	1. Aglaura	Dead
V	5. Octavia	4. Ersilia	3. Baucis	2. Leandra	1. Melania	Sky
VI	5. Esmeralda	4. Phyllis	3. Pyrrha	2. Adelma	1. Eudoxia	Continuous
VII	5. Moriana	4. Clarice	3. Eusapia	2. Beersheba	1. Leonia	Hidden
VIII	5. Irene	4. Argia	3. Thekla	2. Trude	1. Olinda	
IX	5. Laudomia	4. Perinthia	3. Procopia	2. Raissa		
	5. Andria	4. Cecilia	3. Marozia			
	5. Penthesilea	4. Theodora				
	5. Berenice					

According to Table 3 (adapted from Gay, 2015), Calvino organizes the structure of the narrative like a chessboard, which is used as a critical metaphor to refer to the structural organization of the text. A chessboard includes sixty-four squares, and Calvino's cities take the place of fifty-five squares. In the table, each square displays the connection between the cities and a semantic category of the values of the city, in order that the table reflects other contrary categories forming a way of envisaging the city (Gay, 2015). From right to left on the horizontal axis, it represents the flow of the narration of the cities in different themes, whereas from top to bottom diagonally on the vertical axis, it presents the themes and their cities. In addition to the cities, there are nine conversations between Kublai Khan and Marco Polo for each chapter that makes the total number of squares sixty-four. Therefore, the leader of the Mongolian Empire Khan and traveler Polo play the game of chess while talking about the cities throughout the narrative. Polo abides by the horizontal order stated in the table during the narration of the cities within the scope of the themes.

In Oulipo, the algorithm can be seen as a potential creative tool for composing *Invisible Cities*. It is the instrument that provides an augmentation of possibilities in the creation of the text. The organization of the narrative is algorithmic because it is created by the intimate relations between themes and numbers, which construct a thematic and structural network such as mem 1; mem, des 21; mem, des, sig 321; mem, des, sig, thi 4321; mem, des, sig,

thi, tra 54321; des, sig, thi, tra, eye 54321; sig, thi, tra, eye, nam 54321; thi, tra, eye, nam, dea 54321; tra, eye, nam, dea, sky 54321; eye, nam, dea, sky, con 54321; nam, dea, sky, con, hid 54321; dea, sky, con, hid 5432; sky, con, hid 543; con, hid, 54; hid 5. This is the configuration constructed with the relationship of the themes and positional numbers that composes a syntactical and thematic network reflecting the paradigm of the city (Gay, 2015). The construction presents a numerical arrangement and the course of the narrative created by Calvino.

The tables above provide clues relating to the inner construction of the text, including the main chapters, subchapters, pages, themes, and cities. As can be seen, the narrative has an extraordinary structure created with a different technique. It provides the sequence, which shall be followed while reading the text.

4.2. Descriptive Level Signification

The field of occupation of semiotics is to explain the meaning and its production process. In this sense, semiotics can explain every meaningful whole produced through different types of signs. There is no field or discipline of which semiotics does not interact. Such an intimate interaction makes semiotics an umbrella theory and causes it to be an interdisciplinary approach. Every whole is meaningful in its own system. For instance, an essential work of world literature, *Invisible Cities*, is meaningful in the literary system, in which it is produced. Analysis of that whole, which is subjected to a particular production process, is the work of literary semiotics, which proposes various ways of analyzing the literary system.

The work of art, which is constituted at three distinct levels of meaning, is an ideal fiction that is different from the natural world and language. Such fiction points out the general narrative program, including the stated levels. The narrative program gives clues about the semantic configuration of the narrative. The first level, which supports the establishment of the general narrative program, is the descriptive level including person, space, and time. Thus, it is inevitable to analyze such delineative elements, which contribute to the formation of the level.

Revealing the arrangement of the narrative persons, their thematic roles, and of space and time are the fundamental issues throughout the analysis:

Table 4. Actorialization		
Persons	Descriptive values	Thematic roles
Kublai Khan	Curious (p. 5) ¹ , attentive (pp. 5, 212) governing (pp. 21, 55), wise (pp. 28, 59, 98, 121), mighty (p. 73).	Emperor of the Tatars (p. 5), chess player (pp. 121, 122).
Marco Polo	Young (p. 5), strong communication skills (pp. 21, 98), creative (p. 38), talented (p. 38), ruled (pp. 21, 85), open to learning (p. 22), wise (pp. 27, 59).	Venetian explorer and merchant (p. 5), narrator with a high persuasive skill (p. 5), chess player (p. 122).

In Table 4, Kublai Khan and Marco Polo appear as the main narrative persons. Khan is fictionalized as an Emperor of Tatars who is curious, attentive, governing, intelligent, mighty, and a chess lover. Polo is created as a Venetian explorer and merchant, who is young, creative, talented, ruled, open to learning, a smart chess player and has strong communication skills and powers of persuasion. The *Invisible Cities* narrative is built on nine essential dialogues taking place between the narrative persons. Those nine dialogues constituting for each main chapter are divided into eighteen smaller parts being at the beginning and the end. Along with the dialogues, “Kublai Khan does not necessarily believe everything Marco Polo says when he describes the cities visited on his expeditions” (Calvino, 1974).

The Emperor of Mongolia, who lived between 1215-1294, is the ruler of a great dynasty, which he built with his conquests, extending from China to Persia and Poland. Polo is governed by him as well. “‘Set out, explore every coast, and seek this city,’ the Khan says to Marco” (p. 55). Khan often employs Polo to describe the places and the cities to which he is sent.

Returning from the missions on which Kublai sent him, the ingenious foreigner improvised pantomimes that the sovereign had to interpret. The ambassadors were Persians, Armenians, Syrians, Copts, Turkomans; the emperor is he who is a foreigner to each of his subjects, and only through foreign eyes and ears could the empire manifest its existence to Kublai (p. 21).

Khan has increased his borders over time, and as he has expanded the borders, he becomes a powerful ruler. The ambassadors, who do not know the language of the sovereign, control the governance of the borders outside China. Kublai Khan wishes that his country should also grow inward. “From the high balustrade of the palace the Great Khan watches his empire grow. ‘My empire has grown too far toward the outside. It is time,’ the Khan thought ‘for it to grow within itself,’” (p. 73) shows that he is a mighty person as well as having a sharp mind and wisdom.

1 Numbers seen in parenthesis as (p/pp.) represent the page number of the given words/quote from Calvino’s *Invisible Cities* narrative.

All this so that Marco Polo could explain or imagine explaining or he imagined explaining or succeed finally in explaining to himself that what he sought was always something lying ahead, and even if it was a matter of the past it was a past that changed gradually as he advanced on his journey, because the traveler's past changes according to the route he has followed (p. 28). "And yet I know, "he would say," that my empire is made of the stuff of crystals, its molecules arranged in a perfect pattern (p. 60).

Khan does not content himself with Polo's tellings. He has a mind that can spoil Polo and the game he creates in the mind; therefore Khan does not necessarily focus on the preparations of Polo to bias his mind. "Returning from the missions on which Kublai sent him, the ingenious foreigner improvised pantomimes that the sovereign had to interpret" (p. 21). Khan disesteems Polo's tellings and attempts to place Polo in a dilemma whenever possible by developing an abstractive strategy against his imaginative cities. "This was the target of all Kublai's questions about the past and the future. For an hour he had been toying with it, like a cat with a mouse, and finally he had Marco with his back to the wall, attacking him, putting a knee on his chest, seizing him by the beard" (p. 98). While Polo is telling about the cities he built in his mind to Khan, he occasionally gets exposed to his shrewd attacks that represent a tremendous imaginary war between two legendary minds.

One of Khan's thematic roles is being an attentive and clever chess player as well as being the ruler of an endless bordered empire:

Kublai was a keen chess player; following Marco's movements, he observed that certain pieces implied or excluded the vicinity of other pieces and were shifted along certain lines. Ignoring the objects' variety of form, he could grasp the system of arranging one with respect to the others on the majolica floor. He thought: "If each city is like a game of chess, the day when I have learned the rules, I shall finally possess my empire, even if I shall never succeed in knowing all the cities it contains" (p. 121).

Prioritizing the mind, Khan reduces the cities described by Polo to the chess pieces in terms of their functions and places them into the squares. The chessboard and the pieces, which functionalize the board, are of great importance for Khan. The nothingness and lostness story of a contemporary itinerant, who draws an invisible route with the sadness of Great Khan for himself, is an identity and freedom seeking tested on the chessboard (Saatçioğlu, 2019).

Marco Polo is an explorer and a merchant who was born in Venice and lived between the years of 1254-1334 and took charge of various administrative duties in China for Khan. Every time Polo returns from his journeys, he comes into the presence of the Emperor and tells him

about the cities and his experiences along the journey by using both his uncommon talent and creativity. “Only in Marco Polo’s accounts was Kublai Khan able to discern, through the walls and towers destined to crumble, the tracery of a pattern so subtle it could escape the termites’ gnawing” (p. 5) that pleases the Emperor of the Tatars considerably and makes him give all of his attention to the cities, by which the emperor takes the chance to complete missing points of the cities created in his mind.

Even though Khan does not always believe what Polo tells, Polo has splendid depiction ability and persuasive communication skills. “The descriptions of cities Marco Polo visited had this virtue: you could wander through them in thought, become lost, stop and enjoy the cool air, or run off” (p. 38). Thanks to his skills, whenever Polo attempts to tell one of his imaginary cities based on his travels, Khan is always ready to listen to him gingerly. “The Great Khan, his ears always sharp” (p. 98). Even the fact that Polo did not know the language when he came to the empire, did not stop him from telling his stories:

Newly arrived and totally ignorant of the Levantine languages, Marco Polo could express himself only with gestures, leaps, cries of wonder and of horror, animal barkings or hootings, or with objects he took from his knapsacks—ostrich plumes, pea-shooters, quartzes—which he arranged in front of him like chessmen (p. 21).

In any case, Polo found a way to communicate with the emperor and explain his cities.

Polo deals with the problem of language in time, thanks to his strong communication skills and learning capacity. “As the seasons passed and his missions continued, Marco mastered the Tartar language and the national idioms and tribal dialects” (p. 22). He learned Tartaric, even the dialects and idioms he encountered during his travels. “The foreigner had learned to speak the emperor’s language” (p. 38). As a result, Polo becomes a narrative person who manages to maintain communication with the emperor in Tartaric.

Another crucial descriptive characteristic of Polo is that he is one of the members of the ruled class than can be understood from his discourse; “But when the young Venetian made his report, a different communication was established between him and the emperor” (p. 21). “No, sir,” Marco answered (p. 85).

Marco Polo also shines out as a person who can use his mind very well. He knows well how to read Khan’s mind to eliminate the emperor’s objections. “The Venetian knew that when Kublai became vexed with him, the emperor wanted to follow more clearly a private train of thought; so, Marco’s answers and objections took their place in a discourse already proceeding on its own in the Great Khan’s head” (p. 27). Polo also knows how he should deal

with Kublai Khan’s changing moods. “Polo knew it was best to fall in with the sovereign’s dark mood” (p. 59). Polo’s subtle wit and interpretations influence his communication and relationship with Great Khan positively.

Each narrative has a starting and an ending state. A distinct transformation comes in to question between the two states. A situation given at the beginning of the narrative changes at the end. However, there is not a distinct transformed or changed state of the narrative persons neither in the beginning nor the end of Calvino’s narrative. The narrative starts with the dialogue between Khan and Polo and ends with successive dialogues. There is only one observable element that changes narrative persons. Polo does not know Tartaric at the beginning of the narrative, and the situation of not knowing the language changes in the course of time: /not knowing/ Polo cannot speak Tataric; thus, he tries to communicate with Khan via body language at the beginning → /knowing/ learning Tataric; therefore, Polo starts to communicate with Khan in Tartaric. He switches the condition from not knowing Tataric to knowing it that creates the difference between the beginning and the end of the narrative concerning the changing situation of Polo.

As for space, the narrative takes place:

Table 5. Spatialization	
Space	Descriptive values
Kai-ping-fu Palace (p. 21)	Gardens of magnolias (pp. 21, 103), High balustrade (p. 73), terraces of the palace (p. 85), Pavilion of the August Slumber (p. 85)
Country of Khan (p. 21)	Levantine languages (p. 21), Tatar language (p. 22)
Ancient capital Kin-sai (p. 85)	Bridges arching over the canals, market squares balconies, platforms, domes, island gardens (p. 85),
Expanding borders (p. 21)	Persia, Armenia, Syria, Turkmenistan (p. 21)

As noted in Table 5, there are certain spaces where the dialogues between Khan and Polo take place. The spaces bring both setting and motion for the narrative persons. Such spaces also reveal a qualified relationship between the fictional and real-world as the spaces in the narrative are the representations of their equivalents in the real world. These representations are the facts that connect the reader to the narrative and support him/her in establishing a link between the fictional and real-world throughout the signification process.

The spaces, where Kublai Khan and Marco Polo’s dialogues take place, are generally Great Khan’s country, his palace, and other venues in the palace. “Sent off to inspect the remote provinces, the Great Khan’s envoys and tax-collectors duly returned to Kai-ping-fu and to the gardens of magnolias in whose shade Kublai strolled, listening to their long

reports (p. 21). “It seems to me you have never moved from this garden” (p. 103). The spaces, where narrative persons are located, allow the characters to move from one space to another. “The emperor, accompanied by his foreign dignitary, was visiting Kin-sai, ancient capital of deposed dynasties, the latest pearl set in the Great Khan’s crown” (p. 85).

There are various languages and cultures in the spaces. On the one hand, people speak Tataric in the vicinity of the empire; on the other hand, different languages are spoken far from the center. “The ambassadors were Persians, Armenians, Syrians, Copts, Turkomans; the emperor is he who is a foreigner to each of his subjects, and only through foreign eyes and ears could the empire manifest its existence to Kublai” (p. 21). The most important reason for that is Khan’s expanding borders and the nations whose language, culture and religion are different from one another live in those borders. Those spaces can be analyzed within the frame of certain oppositions (Günay, 2013). The semantic value of each space and semantic category of which those spaces belong will be revealed thanks to the predetermined contrarities:

Table 6. Comparison of space	
Spatial opposition	Space
Stable spaces	Country of Khan, Kai-ping-fu Palace, ancient capital Kin-sai.
Unstable spaces	Extending borders of the country; Persia, Armenia, Syria, Turkmenistan.

According to Table 6, space can be evaluated in different oppositions, such as stable/unstable. /Stable territory/ stands for the frontiers that have already been bordered and put under protection by the Empire that can make the necessary arrangements and legislative regulations for the future development of the country. Such a kind of space is reliable and confidential as Khan does not meet the reaction or interruption of others during that regulation process (Kalelioğlu, 2018a). So, the most reliable places for the Khan are his country, palace, and ex-capital city. On the other hand, /unstable spaces/ such as Persia, Armenia, Syria, Turkmenistan, and others are not as safe as the stable territories since those borders are far from the central administration. Most of those countries have different languages and cultures, and Khan has to assign foreign ambassadors to rule the countries in unstable places away from the central government.

As for the time, as one of the formative elements of the narrative, there is not much information about it except a few words such as ‘evening’ (pp. 5, 27, 39, 103, 117) and ‘sunset’ (p. 85)”, which point out when some of the dialogues take place between Khan and Polo. Moreover, the time when the narrative takes place is not precise. However, it is

possible to deduce it from the period in which the narrative persons –Kublai Khan and Marco Polo– lived.

A set of characteristics of the descriptive level has arisen in the narrative. In this analysis, based upon the dialogues between the two characters, the main narrative person, space, time, and the descriptive values of each of these formative elements are presented. The next step –narrative level– will be analyzed by making use of the data obtained from the descriptive level. Although the semantic layers of narratives are handled separately at three different levels during the analysis process, each of them emerges as a substantial factor in the construction of the others.

4.3. Narrative Level Signification

The narrative persons, who exist only with their presence as an actor at the descriptive level, emerge with their acts as an actant at the narrative level. Those actants of narration or utterance are sender/receiver, subject/object, and helper/opponent (Greimas & Courtés, 1982, p. 5). This means that the actor, who is passive at the descriptive level and offers importance only with its descriptive assets, turns into an active actant at the narrative level. Therefore, the acts of actants make themselves active, and the results of their actions direct the flow of the narrative. Actants are categorized according to their functions and narrative persons taking place in an actantial scheme can undertake a few functions at once that helps the narrative persons to take more than one actantial role.

In semiotics, an actantial scheme is used to illustrate actions of actants, reasons, and consequences of their acts, and interrelations of actants. Many things, which are changed by the acts of actants taking place in the actantial scheme, can be identified with the help of modalities. Both the positive and negative situations, which influence the narrative persons, are explained with the modalities. As the narrative discourse progresses, the actant may assume a certain number of actantial roles. These roles are defined by the position of the actant in the logical sequence of the narration and by its modal investment such as informing/ having to do/ wanting to do/ being able to do/ knowing to do/ being/ doing/ and persuading (Greimas & Courtés, 1982, p. 6). Therefore, it is revealed which actors finalize their actions positively or negatively due to the existence or absence of those modalities. The modalities acquired by the actors lead to the continuation or ending of the narrative programs.

Greimas's narrative trajectory –“a hypotactic series of either simple or complex narrative programs that is, a logical chain in which each narrative program is presupposed by another

narrative program”– is divided into four segments such as contract/ competence/ performance/ and sanction in which both actants and their modal roles take place (Greimas & Courtés, 1982, pp. 6-207). In the first segment, there is a contract between the sender and the subject. The sender directs the subject to perform the contract they made. In the second segment, the subject checks himself to be able to fulfill the contract. If there are any inadequacies or deficiencies, he tries to complete them. In the third segment, the subject performs his acts to keep his promise. After that, the subject is rewarded or punished as a result of his acts in the fourth segment. The narrative program, with its four segments and the actantial scheme with the six actants, is intimately connected because each of the actantial schemes is formed based on the incidents in the narrative program.

The actantial scheme of the two significant actants of the study object can be organized as follows:

Figure 1: Actantial scheme of the narrative program.

In Figure 1, the Emperor is the sender (S_n) of the scheme, who allocates a task to Polo to narrate the cities he visited on his journeys in the contract stage. “Set out, explore every coast, and seek this city,” the Khan says to Marco. “Then come back and tell me if my dream corresponds to reality” (p. 55). Marco Polo, as the subject of doing (S_i), does fulfill his duty throughout the narrative. “Kublai Khan does continue listening to the young Venetian when he describes the cities on his expeditions” (p. 5). He has the opportunity to get around many countries and cities as he is a merchant and an explorer. As the sender of the produced actantial scheme in Figure 1, Khan (S_n) can gain the necessary modalities such as /informing/ and /having to do/ to convince Polo (S_i) to take the responsibility based on the contract they have done in the /contract stage/ of the narrative program.

The subject, Polo (S_i), evaluates his qualifications and efficiencies in the /competence segment/ for fulfilling the task imposed by the sender:

Nevertheless, when the young Venetian made his report, a different communication was established between him and the emperor. Newly arrived and totally ignorant of the Levantine languages, Marco Polo could express himself only with gestures, leaps, cries of wonder and of horror, animal barkings or hootings, or with objects he took from his knapsacks -ostrich plumes, pea-shooters, quartzes-which he arranged in front of him like chessmen (p. 21).

Polo tries to describe the cities he visits throughout his journeys for Khan, even if he is not able to speak the Tatar language, which is the weakest side of Polo. As the seasons passed and his missions continued, Marco mastered the Tatar language and the national idioms and tribal dialects (p. 22). In time he is able to strengthen it by learning the Tatar language in a short time to be able to tell of the cities in all their parts in the /competence stage/. From now on, Polo (S_1) has the ability to tell Kublai Khan (S_n) about everything he desires to know in Tartaric. The native language of Khan can be seen as one of the impediments (S_2) of Polo at the beginning of the narrative. However, Marco overcomes it as he has grasps the language. For this reason, it can be said that Marco Polo, as an actant, completes this stage successfully as he managed to gain the necessary modalities such as /wanting/, /knowing/, and /being able to do/.

As for the subject of doing, Polo moves to the /performance segment/ after completing his deficiency in language. At every turn, Khan asks him to tell him about the cities he wonders. “Now his accounts were the most precise and detailed that the Great Khan could wish and there was no question or curiosity which they did not satisfy” (p. 22). Polo can answer all of Khan’s questions in this segment:

“Journeys to relive your past?” was Khan’s question at this point, a question, which could also have been formulated: “Journeys to recover your future?” And Marco’s answer was: “Elsewhere is a negative mirror, the traveler recognizes the little that is his. Discovering the much he has not had and will never have” (p. 29). Kublai asked (pp. 22-27-85-164). Marco answered/said (pp. 23-27-60-69-85-165).

Polo can respond to all the questions of Khan thanks to his supporters (H), such as his experience, knowledge, wisdom, language, and imaginary stories of the cities in his mind. He has the ability to imagine cities based on the city where he was born –Venice. “And Polo said: ‘Every time I describe a city, I am saying something about Venice’” (p. 86). Marco, as a wise explorer, covers the demands of Khan with the visionary fifty-five cities (O) he produced in his thought throughout the narrative.

Although the cities exist as the object of the actantial scheme in Figure 1, they turn into a specific subject of the conversation between Khan (sender) and Polo (subject of doing)

throughout the narrative. The cities become the main interest of both actants in this way. As in the contract between Khan and Polo, the primary duty of the subject of doing (Polo) is to give information related to the cities to the sender (Khan). Polo does discharge his duty ideally to show the realities of urban life at every stage.

The endless conversation between Khan and Polo, in this part of the narrative, is based on the various imaginary cities and characteristic features of them based on the real ones. Each of the cities has different properties and functions. For example, some of the cities come to the forefront with their constructional and functional organizations as in Zaira, where Polo states that a city may speak with an intimate relationship between the “measurements of its space and the events of the past” (p. 10). The spatial organization of a city does not make sense without paying regard to the experience of its inhabitants who give meaning to the constructed spaces. “A description of Zaira as it is today should contain all Zaira’s past” (p. 10). Therefore, space gains its importance in the history of humans, including all facts and events in their lives that established a link between past and present, which may include a reference to the future. Polo gives significance to the network between the spatial organization of the city and life experiences in his narration.

The same importance, in terms of structural organization, can also be seen in other cities such as Armilla and Ersilia. In Armilla, the salient fact is the aquiferous system in the city:

The fact remains that it has no walls, no ceilings, no floors: it has nothing that makes it seem a city, except the water pipes that rise vertically where the houses should be and spread out horizontally where the floors should be: a forest of pipes that end in taps, showers, spouts, overflows (p. 49).

Polo underlines the vitality of the water and its distribution system throughout the city. It is not only significant but also attractive and inviting, which is linked to the beauty and fertility of young women in the city. As for the city of Ersilia, which is constructed with the relationship of inhabitants with each other, pays special attention to the interpersonal relations. Each corner of the city is formed with different colors of strained strings:

In Ersilia, to establish the relationships that sustain the city’s life, the inhabitants stretch strings from the corners of the houses, white or black or gray or black-and-white according to whether they mark a relationship of blood, of trade, authority, agency (p. 76).

The cities are built with the strings, which represent the importance of network or human affairs as the primary materials. They cannot be established without having the stated materials belonging to popularis. “When the strings become so numerous that you can no

longer pass among them, the inhabitants leave: the houses are dismantled; only the strings and their supports remain” (p. 76). Hence, as in the cities of Zaira and Armilla, in Ersilia, the city cannot be constructed by ignoring all the humanized characteristics and interpersonal relations of inhabitants. Polo gives particular importance to human relations in his cities, where any interpersonal exchanges, including culture, emotions, desires, and memories should take place.

Some of the other cities, such as Fedora, Olinda, and Berenice, find a middle ground in the narrative. Polo describes the significance of the structural organizations of them as in the previous cities stated above. For instance, the city of Fedora holds many other Fedoras in glass spheres:

In the center of Fedora, that gray stone metropolis, stands a metal building with a crystal globe in every room. Looking into each globe, you see a blue city, the model of a different Fedora. These are the forms the city could have taken if, for one reason or another, it had not become what we see today (p. 32).

The idea of constructing imaginary and various Fedoras as alternatives of the real one shows the importance of involvement; that Polo cares. The existence of those unreal Fedoras establishes an intimate connection with the existence of the real city of Fedora that points out the battle between the desirable and undesirable Fedora. “The building with the globes is now Fedora’s museum: every inhabitant visits it, chooses the city that corresponds to his desires, contemplates it” (p. 32). Each crystal globe, unreal Fedora, covers the demand of the inhabitants’ desire in the city since the present condition of the real Fedora is out of favor for them when they compare the past and present states of the city:

In every age someone, looking at Fedora as it was, imagined a way of making it the ideal city, but while he constructed his miniature model, Fedora was already no longer the same as before, and what had been until yesterday a possible future became only a toy in a glass globe (p. 32).

The past desirable, and the present undesirable, presence of the city of Fedora for its society establishes a connection with its miniature models giving a chance for people to fulfill their desire for the future. The inhabitants of the city fantasize about the viable Fedora in the future via those crystal globes, as they are aware of the fact that the city is destroyed and turns into garbage.

As for Olinda, it is possible to describe it as a city that can create new Olindas as it enlarges. “It becomes a full-size city, enclosed within the earlier city: a new city that forces

its way ahead in the earlier city and presses it toward the outside” (p. 129). Polo makes a comparison between the past and present conditions of the city, which expands its boundaries in time. The new Olinda, in the present time, includes the old Olinda, in the past time, which also shows the significance of involvement of the present and past states of the city.

The state of involvement is also valid for the city of Berenice, where the comparison of the past, present and future of the city within the framework of just and unjust and of evilness and goodness oppositions becomes prominent. “I should not tell you of Berenice, the unjust city. Instead, I should tell you of the hidden Berenice, the city of the just” (p. 161). The evilness reveals from the heart of the goodness for Polo. There is another involvement here; the goodness involves the evilness. “In the seed of the city of the just, a malignant seed is hidden, in its turn” (p. 162). Polo, the actant, asserts that emotions of people such as the sense of trust and pride, even if they are pure, shade off a strong desire that demolishes the goodness:

This seed ferments in bitterness, rivalry, resentment; and the natural desire of revenge on the: unjust is colored by a yearning to be in their place and to act as they do. Another unjust city, though different from the first, is digging out its space within the double sheath of the unjust and just Berenices (p. 162).

It is Berenice –the unfair city– waiting impatiently to take the place of the other Berenice –the fair city. There is an unended contestation between unfair and fair Berenice as both of them continuously struggle to substitute for each other. “All the future Berenices are already present in this instant, wrapped one within the other, confined, crammed, inextricable” (p. 163). The city of the unjust can be linked to the evilness that represents the intermingled structures –metropolis, and the city of the just is connected to goodness, which refers to the starting point of urbanization –a small city. The more the borders of the city expand, the more unrighteous the city becomes.

Polo denominates the cities with female names while presenting them. It is stated that the invisible cities do not deal with the well-known cities; they are fictitious cities, and I name them with the names of women (Calvino, 1983). That statement shows the importance of the image of women, including their names, existence, and behaviors, which show that the femininity is put forward in the cities. For instance, in Diomira, “from a terrace a woman’s voice cries ooh!” (p. 7) that represents tranquility, happiness, and erotism; in Isidora, “the foreigner hesitating between two women always encounters a third” (p. 8); a brawl over women among men. In Dorothea, “the women had fine teeth and looked you straight in the eye” (p. 9) shows the secret of beauty and attraction; the women I have seen bathing in the pool of a garden

and who sometimes-it is said-invite the stranger to disrobe with them and chase them in the water” (p. 12) reveals again the beauty of women, their tantalizing acts; in Zobeide, “they saw a woman running at night through an unknown city; she was seen from behind, with long hair, and she was naked” (p. 45) represents the mystery of woman in the city.

In Hypatia you have to go to the stables and riding rings to see the beautiful women who mount the saddle, thighs naked, greaves on their calves, and as soon as a young foreigner approaches, they fling him on the piles of hay or sawdust and press their firm nipples against him (p. 45).

Desire and erotism arise with the description and acts of women in Hypatia and Armilla “many young women, slender, not tall of stature, luxuriating in the bathtubs or arching their backs under the showers suspended in the void, washing or drying or perfuming themselves, or combing their long hair at a mirror” (p. 49). “A girl comes along, twirling a parasol on her shoulder, and twirling slightly also her rounded hips. A woman in black comes along, showing her full age, her eyes restless beneath her veil, her lips trembling” (p. 51). The examples of which Polo (S_1) provides as a subject of doing while narrating the cities to Khan (S_n) show that Calvino attaches importance to the image of women, sensuality, and sense throughout the narrative. The author presents the indispensable association of urban culture with human emotions and eroticism and the role of these two factors in the formation and development of cities and culture through the signs he selected (Saatçioğlu, 2017). Polo narrates his cities by establishing a mutual relation between the cities and its inhabitants, especially women, considering the concepts of desire and erotism that contribute to the development of the concept of the city in the narrative.

Polo manages to complete this narrative segment as he has succeeded in gaining /doing/ modality, which helps him to lead to the definite conclusion of the narrative program. He carries through to create and tell of his cities to Khan by engaging his attention to the specific features of each of those cities, where interpersonal communication based on personal experiences and cultural exchange are realized.

In this way, he moves to the last segment –sanction– in the narrative program to be punished or rewarded. In this segment, Polo and his cities gain remarkable acceptance, and the emperor Khan rewards him at the end of the narrative. Polo can convince Khan with his narratives based on the cities and gains the /persuading/ modality to complete the narrative assertively. The contract, which is done between Khan (S_n) and Polo (S_1) in the contract stage of Greimas, is realized by the faithful acts of the subject of doing ($S_1 \wedge O \vee S_2$). The formula in parenthesis shows that the subject of doing (S_1) has the object (O), whereas the opponent

(S₂) does not have the object (O) (Kalelioğlu, 2017). Accordingly, Polo, as the subject of doing, achieves to reach the objects by the act of narration of the cities for Khan.

4.4. Deep Level Signification

The signifying practice at the deep level analyzes the abstract, ideological, and implicit concepts and values taking place in the narrative. Greimas proposes a functional apparatus, which is used to reveal the elementary structure of signification by defining the relation between at least two contrary terms that characterize the paradigmatic axis of language (Greimas & Courtés, 1982, p. 308). Each narrative should have a specific objective, which includes abstract and ideological facts, to be produced. Calvino also has an aim, which can be revealed with the help of the semiotic square, as well as a strategy to generate *Invisible Cities*. As stated in the previous part, there is no conflict throughout the flow of the narrative between the two narrative persons –Marco Polo and Kublai Khan. Instead, the cities, which are described as the object of the descriptive level of the narrative, turn into the subject since they can affect the direction of their inhabitants' lives, at the narrative level. For this reason, the focal point of the narrative is the cities narrated by Polo that can be evaluated in the semiotic square.

Figure 2: Elements of the deep syntax of the narrative in the semiotic square.

The cities, which Polo narrates, can be evaluated into two groups as the unhappy cities (a¹) and the happy cities (a²) that constitute the contrariety in the semiotic square. In general, the happy cities arise out of the unhappy cities to overcome the deficiencies identified in the unhappy cities. The opposition of the unhappy cities and the happy cities brings forward the sub contrarities such as distorted cities and undistorted cities.

Figure 2 is designed to show the important relational values of each axis in the semiotic square. Each relational value can be presented as follows: Opposite axes: (D) / (-D) Present/ Past, (A) /

(-A) results/ process. Contrary relation: $(a^1) / (a^2)$ unhappy cities/ happy cities. Subcontrary relation: $(-a^2) / (-a^1)$ distorted cities / undistorted cities. Contradictory relation: $(a^1) / (-a^1)$ unhappy cities / undistorted cities, $(a^2) / (-a^2)$ happy cities / distorted cities. Implicative relation: $(a^1) / (-a^2)$ unhappy cities / distorted cities, $(a^2) / (-a^1)$ happy cities / undistorted cities. Suppositional relation: $(-a^2) / (a^1)$ distorted cities / unhappy cities, $(-a^1) / (a^2)$ undistorted cities / happy cities (adapted from Greimas & Courtés, 1982, p. 309; Kalelioğlu, 2018a, p. 252). The square with its relational values has bidirectional characteristics. It can be evaluated both in the perspective of unhappy cities and of happy cities, which establish a particular oppositional relation in the semiotic square.

The semiotic square reflects the movement of the happy cities (a^2) toward the unhappy ones (a^1) along the transformation process ($a^2 \rightarrow -a^2 \rightarrow a^1$), which also shows the battle on the ground between the past and the present situations of the cities. Polo narrates the cities by establishing a connection with their past and present situations, as stated in Figure 2. The starting point of the narrator is (a^2) –happy cities– which reflects the previous condition of the cities before their expansion. People were happier in their villages where they had a pure and peaceful life, and they did not have to search for a new form of life to guarantee their future. Because of the nostalgia, the previous (-D) condition of the cities is desired, whereas the latter (D) condition of the cities is not desired:

In Maurilia, the traveler is invited to visit the city and, at the same time, to examine some old postcards that show it as it used to be. If Maurilia had remained unchanged; and in any case, the metropolis has the added attraction that, through what it has become, one can look back with nostalgia at what it was (p. 30). No one remembers what need or command or desire drove Zenobia's founders to give their city this form (p. 35). "In Cecilia, worse luck!" he answered. "We have been wandering through its streets, my goats and I, for an age, and we cannot find our way out". "Cecilia is everywhere. Here, once upon a time, there must have been the Meadow of the Low Sage" (p. 153).

In the cities of Maurilia and Cecilia, the residents are not happy with the uncontrolled changes ($-a^2$) because they do not find their cities as they wish. Then there is a retrograde change toward ($a^2 \rightarrow -a^2 \rightarrow a^1$) considering the past and the present situations of the cities, which forces the residents to search for new possibilities to be able to get rid of the present (D) and distorted ($-a^2$) situations they are in. However, according to Polo's explanations, while narrating the cities to Khan, it is impossible to turn back as the damage is done in the cities, which shows the result (A) of the thoughtless act of human beings.

The form of the cities and the livableness of them changed what makes people unhappy, without reason, negatively (a^1) also in Zenobia:

No one remembers what need or command or desire drove Zenobia's founders to give their city this form. But what is certain is that if you ask an inhabitant of Zenobia to describe his vision of a happy life, it is always a city like Zenobia that he imagines, with its pilings and its suspended stairways, a Zenobia perhaps quite different, a-Butter with banners and ribbons, but always derived by combining elements of that first model. (p. 35).

Nobody is pleased with the new state of Zenobia (a^1), where having a happy life depends on the reverting back of the city to its former state (a^2). This dependency reverses the flow of the semiotic square, in Figure 2, as ($a^1 \rightarrow -a^1 \rightarrow a^2$), which stands for the pre-metropolization condition of the cities (a^2). The situation in the cities such as Maurilia, Cecilia, and Zenobia is the same. Those cities experience the negative effect of unexpected and rapid growth that forces people to look for a new form of city life based on previous experiences just as in other cities people suffer from the noncontrollable transformation process ($-a^2$) of the cities:

In the center of Fedora, that gray stone metropolis; The building with the globes is now Fedora's museum: every inhabitant visits it, chooses the city that corresponds to his desires, contemplates it, imagining his reflection in the medusa pond that would have collected the waters of the canal (if it had not been dried up), the view from the high canopied box along the avenue reserved for elephants (now banished from the city), the fun of sliding down the spiral, twisting minaret (which never found a pedestal from which to rise) (p. 32).

Because of the excessive urbanization, which destroys the balance of nature and habitat in the city, the city-dwellers are continuously in search of new models of the city, where they can live in safety as they did in the past. The endeavor of the residents expresses negative sides of the act of unplanned metropolization, which razes the natural and the habitual life to the ground.

The exhalations that hang over the roofs of the metropolises, the opaque smoke that is not scattered, the hood of miasmata that weighs over the bituminous streets. Not the labile mists of memory nor the dry transparence, but the charring of burned lives that forms a scab on the city, the sponge swollen with vital matter that no longer flows, the jam of past, present, future that blocks existences calcified in the illusion of movement: this is what you would find at the end of your journey (p. 99).

Accordingly, the flow of the semiotic square in Figure 2 shows the predominant development process of the cities from (a^2) to (a^1), which shows the victory of urbanization that makes people unhappy and always forces them to search for alternative space instead of the degenerated space of cities. The actualization of the overurbanization makes the residents very upset, as they cannot find the same taste of the cities in the past. There is no chance for the residents to revert back the movement of the square from (a^1) to (a^2) to overcome the process of extreme structuring in the cities.

What is the city today, for us? I believe that I have written something like a last love poem addressed to the city, at a time when it is becoming increasingly difficult to live there. It looks, in- deed, as if we are approaching a period of crisis in urban life; and *Invisible Cities* is like a dream born out of the heart of the unlivable cities we know (Calvino, 1983).

Calvino sheds light on the effort of those who seek ways to ensure that the current lives in cities and, whose traces of the past are gradually erased, are not the same in the future. Together with rapidly changing urban life, the picture of the lives, which are trapped between the real and non-real and between the past, present and future of urban life, is drawn.

It is possible to encounter various abstract or implicit concepts, which can be considered as the basic ones in the construction of the narrative, in the deep structure. The urbanization process, by establishing relations with human phenomena, their way of living, behavior patterns, emotions, and thoughts, are tried to be conveyed. The author makes evaluations of the past, present, and future situations of the cities and city-dwellers, who are depicted sometimes as a stranger, a passenger, an old man, and a young woman. By expressing, “my book opens and closes with images of happy cities which constantly take shape and then fade away, in the midst of unhappy cities” (Calvino, 1983), he associates happy and unhappy cities together with their conditions in the past, present, and prospective future and conveys them through the narrative person Marco Polo.

5. Conclusion

The study object has been evaluated with respect to its structural arrangement made by way of the Oulipo technique in the first place. After, the semantic universe of the text at different semantic levels –descriptive, narrative, and deep levels– has been explored by applying some of the analysis tools in semiotics.

First of all, it can be said that the narrative is well established with an extraordinary systematic writing style. It is set into an algorithmic structure with the aid of the Oulipo that displays the fact that the author successfully makes use of the data of mathematics and literature together. The analysis made towards the form of content, which is carried out within the covers of the book, starting from the table of content design to the end, to decipher the arrangement, shows that Calvino moves away from the mediocrity to form it as a complex labyrinth.

The configuration of the table of contents and the flow of the narrative is demonstrated by the systematic divisions of the fifty-five cities into nine separate chapters. A number of

tables are generated to expose both the inner construction of the text, which comprise the main chapters, subchapters, pages, themes, and cities respectively. The algorithmic organization of the content, aims to construct a matrix with a restricted number of elements, to create a multiplicity of diversifications in turn. This recursive procedure is accepted as an algorithmic method, which is well applied in the text formation by Calvino.

The narrative, at the descriptive level, proceeds in a quite stable manner with the dialogues between the persons. A limited depiction of time and space, on which the dialogues are positioned throughout the narrative, is one of the significant factors that indicates the stability of the narrative. Although it limits the descriptive level of the elements, it is a must to elaborate the level within the framework of the processes of actorialization, spatialization, and temporalization because the tangible data –clues– gained related to the formative elements gives rise to progress further in the analysis of the next semantic level.

As for the narrative level analysis, the interesting point of the narrative is that there is no fight, violence, or battle between the narrative persons, which is also supported with the data collected at the previous semantic level. However, narratives, in general, consist of conflicts and fights between the narrative persons that lead to significant peaks and troughs, physical and emotional changes, and transformations. This change, principally, entails new, opposed actantial schemes, in which actants may change their roles and places in the scheme. However, there is no contrary actantial scheme that would change the flow of the narrative. Therefore, it can be said that the narrative is formed mainly on the stunning descriptions of various cities, their existence, and potential impacts on the habitants and vice versa in Polo's mind.

At the deep level, both the positive and negative facts of the urbanization process are handled, in a semiotic square, not only with the objects, which contribute to the process, but also with its subjects. By this way, the process of urbanization and the roles of people, who make contributions to the process in urban life, are addressed. In this framework, the narrated cities have been examined pursuant to the unhappy cities and happy cities, which form the opposite axes in the semiotic square, to address the reason why and how the happy cities turn into the unhappy ones or vice versa over time. The most crucial factor, which adds value to the city concept, is not only the way of the construction of it, but also human relations. The relationship between women, men, nature, and the city, which enriches the process of urbanization, analyzed within the dichotomy of happy/unhappy cities via the semiotic square, are the most important constituent elements of the narrative.

References

- Barthes, R. (2015). *Bir deneme bir ders: Eiffel kulesi ve açılış dersi*. (M. Rifat, Trans.). İstanbul: Yapı Kredi Publishing.
- Barthes, R. (2017). *Eleştiri ve hakikat [Critique et vérité]* (M. Rifat, Trans.) (2nd Ed.). İstanbul: Yapı Kredi Publishing.
- Bertrand, D. (2000). *Précis de sémiotique littéraire*. Paris: Nathan-University.
- Calvino, I. (1974). *Invisible cities* (W. Weaver, Trans.). United States of America: Harcourt Brace & Company.
- Calvino, I. (1983). Italo Calvino on invisible cities. *Colombia: A Journal of Literature and Art*, 8, 37-42. Retrieved from <https://www.jstor.org/stable/41806854>
- Calvino, I. (2003). Prose and anticombinatorics. In N. W. Fruin & N. Montfort (Eds.), *The New Media Reader* (pp. 183-189). Cambridge & London: The MIT Press.
- Calvino, I. (2007). *Amerika dersleri. [Lezioni americane – Sei proposte per il prossimo millennio]* (K. Atakay, Trans.) (12th Ed.). İstanbul: Yapı Kredi Publishing.
- Chatman, S. (1993). *Reading narrative fiction*. New York: Macmillan Publishing Company.
- Eco, U. (2017). *Edebiyata dair [Sulla letteratura]* (B. Parlak, Trans.). İstanbul: Can Sanat Publishing.
- Eco, U. (2018). *Anlatı ormanlarında gezinti. [Sei passeggiate nei boschi narrativi]* (K. Atakay, Trans.). İstanbul: Can Sanat Publishing.
- Gay, F. (2015). A pattern so subtle it could escape the Tremite's Gnawing: Eidetic categories and values at play on chessboard of Calvino's invisible cities. *Disegno & Citta. Culture Arte Scienza Informazione* (1-8).
- Genette G. (1993). *Fiction and diction* (J. E. Lewin, Trans.). Ithaca: Cornell University Press.
- Genette, G. (1983). *Narrative discourse: an essay in method*. (J. E. Lewin, Trans.). New York: Cornell University Press.
- Greimas, A. J. (1971). Narrative grammar: Units and levels. *Comparative Literature*, (86)6, 793-806. Retrieved from <http://www.jstor.org/stable/2907443?origin=JSTOR-pdf>
- Greimas, A. J., & Courtes, J. (1982). *Semiotics and language: An analytical dictionary*. Bloomington: Indiana University Press.
- Günay, V. D. (2013). *Metin bilgisi* (4th Ed.) İstanbul: Papatya Publishing.
- Günay, V. D. (2014). Doğrulama ulamı bağlamında sanat yapıtında doğru ya da yanlış. In A. Güneş (Ed.) *İletişim araştırmalarında göstergebilim* (pp. 111-133). Konya, Turkey: Literatürk Akademia Publishing.
- Günay, V. D. (2018). *Bir yazınsal göstergebilim okuması: Kuyucaklı Yusuf*. İstanbul: Papatya Bilim Publishing.
- Kalelioğlu, M. (2017). The theory of signification: Semiotic criticism and literature. *IJLA*. 5(8), 170-182. <http://dx.doi.org/10.18033/ijla.3809>
- Kalelioğlu, M. (2018a). *A literary semiotics approach to the semantic universe of George Orwell's nineteen eighty-four*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Kalelioğlu, M. (2018b). Multidisciplinary approach to the texts: Semiotic analysis of the process of meaning construction in O. Henry's *the gift of the magi*. In M. N. Doru & Ö. Bozkurt (Eds.), *Dil bilimleri: Klasik sorunlar-güncel tartışmalar* (pp. 811-865). Mardin, Turkey: Mardin Artuklu University Press.
- Kalelioğlu, M. (2019). From semantics to semiotics: Re-interpretation of "shooting an elephant" and loss of identity of the west in the narrative. *Chinese Semiotic Studies*, 15(3), 317-348. <https://doi.org/10.1515/css-2019-0020>
- Lescure, J. (2003). A brief history of the oulipo. In N. W. Fruin & N. Montfort (Eds.), *The New Media Reader* (pp. 172-176). Cambridge & London: The MIT Press.

- Moreno-Viqueira, I. (2013). *Invisible mathematics in Italo Calvino's le citta invisibili* in Columbia University Library (Doctoral Dissertation) Retrieved from <https://academiccommons.columbia.edu/doi/10.7916/D8JW8N70>
- Perron, P. (1989). Introduction: A. J. Greimas. *New Literary History* 20(3), 523-538.
- Queneau, R. (1965). *Littérature potentielle. R. Queneau, Bâtons, chiffres et lettres. Ed. revue et augmentée.* Gallimard: Paris.
- Rifat, M. (2011). *Homo semioticus ve genel göstergebilim sorunları.* (2nd Ed.). İstanbul: Yapı Kredi Publishing.
- Saatçioğlu, I. (2019). Introduction. In *görünmez kentler [Le citta invisibili]* (I. Saatçioğlu, Trans.) (25th Ed.). İstanbul: Yapı Kredi Publishing.
- Tarasti, E. (2017). The semiotics of A. J. Greimas: A European heritage seen from the inside and the outside. *Sign System Studies*, 45(1/2), 33-53. <https://doi.org/10.12697/SSS.2017.45.1-2.03>
- Todorov, T. (2015). *Edebiyat Kavramı [La notion literature et autres essais]* (N. Sevil, Trans.) (2nd Ed.). İstanbul: Sel Publishing.
- Tyson, L. (2006). *Critical theory today: In a user-friendly guide.* New York: Routledge.
- Young, J. (2001). *Heidegger's philosophy of art.* Cambridge: Cambridge University Press.