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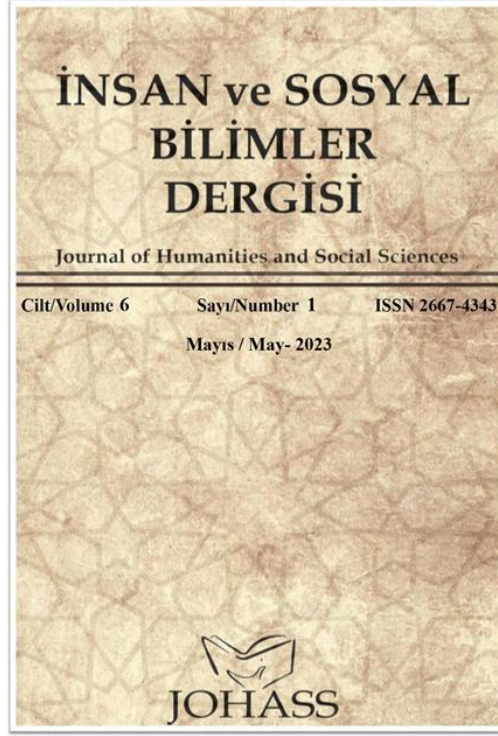
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AUTHORS: Emine KÖSEOGLU, Gizem Nur ÖNCÜ

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Analysis of the Sensory and Perceptual Aspects of Space in José Saramago's Novel Blindness

Emine KÖSEOĞLU¹

Fatih Sultan Mehmet Vakıf University, Faculty of Architecture and Design, Department of Architecture

koseogluemine@gmail.com

Orcid ID: 0000-0003-2457-7659

Gizem Nur ÖNCÜ²

Fatih Sultan Mehmet Vakıf University, Graduate Studies Institute, Master of Architecture Program

gizemnuroncu@gmail.com

Orcid ID: 0000-0002-6738-8682

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Analysis of the Sensory and Perceptual Aspects of Space in José Saramago's Novel Blindness

Emine Köseoğlu¹

Fatih Sultan Mehmet Vakıf University, Faculty of Architecture and Design, Department of Architecture

Gizem Nur Öncü²

Fatih Sultan Mehmet Vakıf University, Graduate Studies Institute, Master of Architecture Program

Abstract

The concept of space is not only related to the discipline of architecture but also to other disciplines because it involves human relationships. Literary works analyze space through the discipline of architecture. In novels, perceptual space is created through the character's multi-sensory perception, where senses become perceptions and perceptions become behaviors. The sense of sight dominates the perception of space, but other senses such as smell, hearing, touch, and taste also play a significant role in how space is perceived and given meaning. José Saramago's dystopian novel *Blindness*, which deals with the experiences of a group of individuals who lose their sight due to an epidemic, provides a unique opportunity to explore the production of perceptual space through the changing dynamics of space. As such, the novel is an ideal case study within the scope of this qualitative research project, which aims to examine the reflections of visually impaired individuals on space and analyze the perceptual and sensory aspects of space in the novel. Data were collected through purposive sampling and analyzed thematically, resulting in the formation of 10 themes expressed through 49 codes. The themes were transformed into visual expressions with form language. While *Blindness* has been the subject of numerous studies, this research explores the novel from an architectural perspective, an angle that has not been previously explored.

Keywords: Perceptual space, senses, José Saramago, blindness, novel

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¹ Corresponding author: Emine Köseoğlu
Associate Prof.
koseogluemine@gmail.com
Orcid: 0000-0003-2457-7659

² Gizem Nur Öncü
Architect. Master of Architecture Student
gizemnuroncu@gmail.com
Orcid: 0000-0002-6738-8682

Introduction

Architecture and literature are disciplines that complement each other. While architecture concretizes images in the mind through visual representation, literature does so through textual representation. Both disciplines construct spaces with different forms of representation within themselves. In literary works, architecture is used to depict space-defined as a place where human existence is located (Korkmaz, 2017). Its effect on characters, and its relationship with users. Space allows for various relationships between man and object (Gür, 1996), shaping our emotions and thoughts. The intersection of architecture and literature also involves other disciplines like sociology and psychology; thus creating a field where interdisciplinary contacts can be made. Architecture creates multi-sensory spaces by enabling bodily experiences beyond functional and social needs alone (Bachelard, 1971). Designed spaces are more than mere objects since individuals perceive the outside world not only through mathematical measurements but also via places they see or experience (Heidegger, 2007). Spaces designed by people are experienced through senses such as eyesight, hearing, smell taste or touch; these experiences create emotion based on an individual's filter. Similarly to architectural design processes that engage our senses to create emotional responses from us when engaging with it physically; literary works revive in readers' minds creating emotional responses too which shape their feelings and thoughts about them. Because both activate human senses while eliciting an emotive response from us when experiencing them respectively- Architecture & Literature form partnerships that go far beyond what meets the eye. The common element for both disciplines is space – a place where we interact daily in constant motion: "Our home is our corner of the world. It is our first universe" (Bachelard, 1996a: 32). Furthermore spatial narratives change according to each genre within literature emphasizing differences regarding function/importance depending on context/genre explored.

Although spatial studies in literary works are mostly conducted in literature and sociology, space is more than just a topographic location where events occur within literary works. Through literature, meanings about places are produced, and memories accumulated. The space becomes a fictionalized one that reveals the inner world of heroes (Korkmaz, 2017). In novels- one form of literary work- a "nature of outside-inside" (Bachelard, 1996b: 230) is constructed to describe an occurrence shaped by hero experiences while simultaneously shaping them. The fiction created through components such as event-time-character contains sociological, psychological cultural practices among others related to daily life phenomena experienced by novel characters on this fictional plane. These experiences constitute their perceptual space which they perceive with their senses on the fictionalized plane; providing interaction between people and the external world. Sensation is how we concretely experience our relationship with surroundings whereas perception creates images from stimuli inside our minds. Perception process entails transmission-reception-processing stimuli within an environment leading to formation of emotions-behaviors since sensory loss affects spatial perception significantly especially regarding vision impairment which represents dominant sense loss (Pallasmaa, 2011). Space has multi-sensory-multidimensional-interactive nature but given our visual-oriented habits; it still allows for perception without other senses as well. However individuals who cannot see discover spaces via other senses like hearing-smelling-tasting-touching resulting in multi-sensory perceptions transforming based on physical characteristics-subjective values held by perceiver (Schulz, 1971). Therefore sensory input contributes significantly towards perceived emotional responses or behaviors exhibited depending upon individual health status or personality traits dictating behavior within different spaces explored.

In this study, we chose to analyze "Blindness" by José Saramago due to its portrayal of places and how they transform following loss of sight. The novel is among Saramago's most notable works; it presents a dystopian narrative that follows a group of unsung heroes who lose their sight as an epidemic ravages an unknown country before spreading globally. The government quarantines victims in an abandoned mental hospital to contain the spread within the country. As events unfold both inside and outside the hospital, characters navigate through spaces that are affected by blindness leading to transformations or changes in perception over time. The novel portrays in an impressive manner how people who lose their sight must reconstruct their experience of living within spaces, conveying it to readers effectively. In this context, the story and events presented provide a rich foundation for understanding the relationship between space and sensory interactions. People spend most of their lives in various places designed for those with unimpaired senses. However, "Blindness" reveals how such spaces have become battle arenas for transforming standard bodies - through strategies developed by individuals compelled to act together despite sensory loss. Moreover, we witness characters developing new communication environments and strategies that enable them to navigate these transformed spaces as they adapt to new ways of experiencing surroundings without visual cues. The novel provides insight into issues related to spatial accessibility; changing our perceptions about what constitutes accessible design while highlighting challenges faced by differently-abled persons when navigating different types of built environments leading us toward greater empathy towards those struggling with varying levels/types-of physical limitations.

While studies have been conducted on "Blindness" regarding its social issues, there has been no study focused on spatial and sensory aspects through thematic analysis. Nurullah Ulutaş (2020) examined the novel from a socio-psychological perspective as an example of dystopia while Özlem Özen and Damla Ötenkuş (2021) analyzed it in relation to Lacan's concept of reality. Fesun Koşmak's (2021) research "From Fiction to Cinema: An Analysis of José Saramago's Blindness" is related to sociology. However, our study examines the novel specifically with regards to space-sense interactions; exploring how characters navigate spaces when dealing with blindness leading us towards new insights into accessibility in built environments for differently-abled individuals.

Maran (2019) approached "Blindness" from a phenomenological perspective, analyzing it in light of French philosopher Merleau-Ponty's body-world approach. In international literature, especially after Covid-19, the novel has come to the fore again. While there have been studies dealing with "Blindness" from a spatial perspective, none focus on space-sense relationships conceptually and visually as our study does. Şchiopu (2021) examined "Blindness" through geo-ecocritical lenses emphasizing humanity-space-environment interrelationships while exploring how people interacted with their environment during pandemics. Additionally, Şchiopu discussed emotions' relationship with space via the novel. Hamada (2021) preferred "Blindness," stating that its content offers an epiphanic insight into humanity; illuminating rather than obscuring despite paradoxical implications arising from blindness epidemic. Rajan (2020), based on this work, explained pandemic difficulties by describing them as being animals in extraordinary times; Saramago used blindness metaphorically for depravity/filth/social collapse. Akpınar et al.'s (2021) analysis focused on sensory paradoxes within places while reading pandemics through watching movie adaptations of Blindness. Our research adds to these existing works by examining spaces' role in sense-making and navigation among individuals experiencing visual impairment leading us towards insights about accessibility issues faced by differently-abled persons when navigating different types of built environments.

The purpose of this study is to examine how visually-impaired individuals' multi-sensory space experiences affect their perception and analyze perceptual spaces in

"Blindness." We explore how changing spatial dynamics impact characters in the novel, seeking answers to questions about how perceptual spaces are formed. Specifically, we investigate changes resulting from visual impairment and how memory-based images shape our perceptions of surroundings when visual cues aren't available; exploring accessibility issues faced by differently-abled persons navigating various built environments.

The Subject of the Novel Blindness

Blindness is a dystopian novel about the sudden spread of an epidemic called white blindness to the city and eventually, to the world. Dystopian novels are fictional works that reflect on political, social and technological situations of their time (Çelik, 2015). The story begins with a group of visually impaired people quarantined in a mental hospital. The novel takes place in two settings; first within the walls of the mental hospital where blind individuals try to establish order using multi-sensory perception despite facing various challenges, and secondly outside in streets and houses where some of our heroes reside. As time passes by, chaos ensues inside as density increases leading to breakdowns in order. Saramago portrays all weaknesses and evils inherent in human beings through his characters. With fire breaking out at the hospital, they are forced into experiencing life beyond its walls only to realize how similar it can be compared with their previous confinement. The narrative mostly follows seven different personalities who have lost their sight: an ophthalmologist along with his wife who has not yet lost her vision; an old man wearing a black eye patch; a young girl sporting dark glasses, a squint child; the first blind man introduced into quarantine along with them and finally a car thief. The novel's finale depicts blind individuals regaining their sense of sight one-by-one.

Method

Model

This study is qualitative research that examines behavior patterns of individuals with visual impairment through the novel Blindness. Qualitative research serves as a tool for discovering and understanding meanings which individuals or groups attach to social or human problems (Creswell, 2009). It aims to understand phenomena by creating knowledge specific to them rather than hypothesis testing (Tavşancıl Tarkun, 2000) and is generally descriptive and inductive. This study focuses on understanding sensory and perceptual aspects related to space using qualitative research approach. The case study design was preferred since it requires investigating situations within their current context or setting (Yin, 2014, 32). Investigating sensory and perceptual aspects of the chosen space via case studies appeared most suitable for what this particular study aimed to show. The selected literary work used rich narrative techniques; therefore, Blindness -a novel known for its shocking portrayal of sensory perception- was considered appropriate literature choice.

Sample

Quotations expressing visually impaired individuals' relationship with space were selected through purposive sampling. Purposive sampling is a widely used method in qualitative research where individuals or groups having particular knowledge or experience is relevant to an investigation are selected. Availability and willingness of potential participants also play important roles in selecting them (Palinkas et al., 2015). When dealing with literary works, paragraphs considered most appropriate for the subject matter -in this case quotations from Blindness novel- were preferred while selecting samples within the scope of purposeful sampling.

During initial readings, emphasis was given on identifying paragraphs that had high relevance regarding sense-perception content as both expression and context when

determining suitable quotes for analysis. Next, Table-1 shows those specific paragraphs chosen based on their capacity to address subjects related to space-sense-perception.

Table 1. *Quotations selected with purposive sampling method*

Quotes From the Novel- Chronologically	
Q-1	“Let's form a line, my wife will lead the way, everyone put their hand on the shoulder of the person in front, then there will be no danger of our getting lost.” (Saramago, 1998, 34).
Q-2	“That's my wife, my wife, where are you, tell me where you are, Here, I'm here, she said bursting into tears and walking unsteadily along the aisle with her eyes wide open, her hands struggling against the milky sea flooding into them. More confident, he advanced towards her, Where are you, where are you, he was now murmuring as if in prayer. One hand found another, the next moment they were embracing, a single body, kisses in search of kisses, at times lost in mid-air for they could not see each other's cheeks, eyes, lips.” (Saramago, 1998, 40).
Q-3	“Judging from the sounds outside, they imagined the door to be, but suddenly, overcome by a vague sense of disquiet that they would not have time to define or explain, they came to a halt and retreated in confusion, while the footsteps of the soldiers bringing their food and those of the armed escort accompanying them could already be heard quite clearly.” (Saramago, 1998, 55).
Q-4	“The blind moved as one would expect of the blind, groping their way, stumbling, dragging their feet, yet as if organised, they knew how to distribute tasks efficiently, some of them splashing about in the sticky blood and milk, began at once to withdraw and transport the corpses to the yard, others dealt with the eight containers, one by one, that had been dumped by the soldiers.” (Saramago, 1998, 58).
Q-5	“The doctor's wife watched the two blind men who were arguing, she noticed they made no gestures, that they barely moved their bodies, having quickly learned that only their voice and hearing now served any purpose, true, they had their arms, that they could fight, grapple, come to blows, as the saying goes” (Saramago, 1998, 65).
Q-6	“Persuaded by these sententious words, one of the blind men let go of the rope and went, with arms outstretched, in the direction of the uproar, They're not going to leave me out, but suddenly the voices fell silent and there was only the noise of people crawling on the ground, muffled interjections, a dispersed and confused mass of sounds coming from everywhere and nowhere. He paused, undecided, tried to go back to the security of the rope, but he had lost his sense of direction, there are no stars in his white sky, and what could now be heard was the sergeant's voice” (Saramago, 1998, 68).
Q-7	“Encouraged by the sergeant's kind intervention, the blind internees who had reached the top of the steps suddenly made a tremendous racket which served as a magnetic pole for the blind man who had lost his way. Now more sure of himself, he advanced in a straight line, Keep on shouting, keep on shouting, he beseeched them, while the other blind internees applauded as if they were watching someone complete a long, dynamic but exhausting sprint. He was given a rapturous welcome, the least they could do, in the face of adversity, whether proven or foreseeable, you know who your friends are.” (Saramago, 1998, 69).
Q-8	“Inevitably, the first internees to reach the stairway had to probe with one foot, the height and depth of the steps, the pressure of those coming from behind knocked two or three of those in front to the ground, fortunately nothing more serious occurred” (Saramago, 1998, 73).

Q-9	<p>“An old man with a black patch over one eye, came in from the yard. (...) Now it is his turn to seek shelter. Slowly, with his arms outstretched, he searched for the way. He found the door of the first ward on the right-hand side, heard voices coming from within, then asked, Any chance of a bed here.” (Saramago, 1998, 75).</p>
Q-10	<p>“The doctor asked his permission, ran his hands over the old man's face, and quickly found the patch. There is no doubt, here is the one person who was missing here, the patient with the black patch, he exclaimed, What do you mean, who are you, asked the old man, I am, or rather I was your ophthalmologist, do you remember, we were agreeing on a date for your cataract operation, How did you recognise me, Above all, by your voice, the voice is the sight of the person who cannot see, Yes, the voice, I'm also beginning to” (Saramago, 1998, 77).</p>
Q-11	<p>“The tuning knob continued to extract noises from the tiny box, then it settled down, it was a song, a song of no significance, but the blind internees slowly began gathering round, without pushing, they stopped the moment they felt a presence before them and there they remained, listening, their eyes wide open tuned in the direction of the voice that was singing, some were crying, as probably only the blind can cry, the tears simply flowing as from a fountain.” (Saramago, 1998, 78).</p>
Q-12	<p>“In the middle of the hallway, surrounding the containers of food, a circle of blind inmates armed with sticks and metal rods from the beds, pointing outwards like bayonets or lances, confronted the desperation of the blind inmates who were surrounding them and making awkward attempts to force their way through the line of defence, some with the hope of finding an opening, a gap someone had been careless enough not to close properly, they ward off the blows with raised arms, others crawled along on all fours until they bumped into the legs of their adversaries who repelled them with a blow to their backs or a vigorous kick.” (Saramago, 1998, 90).</p>
Q-13	<p>“Then he turned the sound up a little and listened attentively so as not to lose a single syllable. Then he summarised the news-items in his own words, and transmitted them to his immediate neighbours. And so from bed to bed, the news slowly circulated round the ward, increasingly distorted as it was passed on from one inmate to the next, in this way diminishing or exaggerating the details, according to the personal optimism or pessimism of those relaying the information.” (Saramago, 1998, 98).</p>
Q-14	<p>“The blind men were already getting down from the tables and asking, Who's there, even more alarmed when they heard the sound of running water, they headed in that direction” (Saramago, 1998, 121).</p>
Q-15	<p>“Everyone was suddenly distracted by an outcry from the women, already on their feet, in panic, anxious to get away from that place, but some had lost any notion of where the ward door was located, they went in the wrong direction and ran into the blind men who thought the women were about to attack them, whereupon the confusion of bodies reached new heights of delirium.” (Saramago, 1998, 124).</p>
Q-16	<p>“They filed out, the six braver ones in front as had been agreed, amongst them was the doctor and the pharmacist's assistant, then came the others, each armed with a metal rod from his bed, a brigade of squalid, ragged lancers, as they crossed the hallway one of them dropped his weapon, which made a deafening sound on the tiled floor like a blast of gunfire” (Saramago, 1998, 133).</p>
Q-17	<p>“The woman has gone out without saying a word, no farewell, no goodbye, she makes her way along the deserted corridor, passes right by the door of the first ward, no one inside there noticed her pass, she crosses the hallway, the descending moon traced and painted a vat of milk on the floor tiles, now the woman is in the other</p>

	wing, once more a corridor, her destination lies at the far end, in a straight line, she cannot go wrong. Besides, she can hear voices summoning her, figuratively speaking, what she can hear is the rumpus being made by the hoodlums in the last ward, they are celebrating their victory,” (Saramago, 1998, 138).
Q-18	“Say to a blind man, you're free, open the door that was separating him from the world, Go, you are free, we tell him once more, and he does not go, he has remained motionless there in the middle of the road, he and the others, they are terrified, they do not know where to go, the fact is that there is no comparison between living in a rational labyrinth, which is, by definition, a mental asylum and venturing forth, without a guiding hand or a dog-leash, into the demented labyrinth of the city, where memory will serve no purpose, for it will merely be able to recall the images of places but not the paths whereby we might get there. Standing in front of the building which is already ablaze from end to end” (Saramago, 1998, 142).
Q-19	“How do they find their way around, the doctor's wife asked herself. They did not find their way around, they kept very close to the buildings with their arms stretched out before them, they were constantly bumping into each other like ants on the trail, but when this happened no one protested, nor did they have to say anything, one of the families moved away from the wall, advanced along the wall opposite in the other direction, and thus they proceeded and carried on until the next encounter.” (Saramago, 1998, 228).
Q-20	“A blind man got to his feet and complained that a bit of glass had got lodged in his knee, the blood was already trickling down one leg. The blind persons in the group gathered round him, What happened, what's the matter, and he told them, A glass splinter in my knee, Which one, The left one, one of the blind women crouched down. Take care, there might be other pieces of glass around, she probed and fumbled to distinguish one leg from the other, Here it is” (Saramago, 1998, 148).
Q-21	“They would not be able to see her, but there was the smell of what she had eaten(...) She had to run, and she did. (...)blind man was shouting, Who's eating sausage around here no sooner were those words spoken than the doctor's wife threw caution to the wind and broke into reckless flight, colliding, jostling, knocking people over” (Saramago, 1998, 152).

Data Collection Tools

In order to collect data related to sensory and perceptual dimensions of space, document review was conducted on the novel *Blindness*. Document review is one of the stages in document analysis which involves data collection and analysis. Prior to conducting an analysis, documents are examined through various stages such as quick scan, speed reading, review and focused reading. These stages can be repeated for effective data collection (Bretschneider et al., 2017).

In this study's context, a similar approach was taken where initial scanning and quick readings were done before subject-oriented readings aiming to collect more accurate data from the novel.

Data Collection and Analysis

Thematic analysis was used to analyze the sensory and perceptual aspects of space in this study. Thematic analysis is a qualitative research method that aims to identify patterns, or themes, within data. These themes help researchers better understand the phenomenon being studied. In thematic analysis, codes are derived from raw data and grouped according to their common characteristics to form clusters and ultimately themes (Alhojailan, 2012).

In this study, two steps were taken for analysis. Firstly, 21 quotations (Table 1) were examined which together formed the sample size. Codes representing basic segments of raw data related to space perception and spatial actions were identified from these quotes using Boyatzis' definition (1998) as guidance; codes emerged. The codes were then grouped based on similarities among themselves resulting in formation of distinct themes. Secondly, verbal expressions were transformed into visual representations by creating images that reflected each theme's salient features through form language expression so as to visually reinforce the findings obtained through thematic analysis. This helped strengthen understanding about sensory-perceptual-spatial aspects embedded within visual narration while allowing further communication via other platforms. Overall, this approach allowed us to uncover patterns within our dataset leading towards deeper insights regarding how people perceive spaces they inhabit.

Findings

1. Thematic Analysis

The first step in our analysis involved obtaining 49 codes from the sample of 21 quotations. In the second step, these codes were grouped together to form a single theme.

From Quotes to Codes

The environmental image is the first step of the wayfinding action and the wayfinding action is the result of the perceptual and cognitive process that extends to the behavior (Passini, 1984). Quote-1 was chosen because it includes the actions of individuals who cannot see. Unlike individuals who have not lost their sight, the blind move forward in a single file by touching each other's shoulders in order not to lose each other. Two codes containing the wayfinding action of the blind have been obtained from the excerpt: We will be in one line, Everyone will put their hands on the shoulder of the person in front of them (Table 2).

Table 2. *Generating codes for Q-1*

Quote From the Novel	Codes
Q-1. "Let's form a line, my wife will lead the way, everyone put their hand on the shoulder of the person in front, then there will be no danger of our getting lost." (Saramago, 1998, 34).	C-1A. Let's form a line C-1B. Everyone put their hand on the shoulder of the person in front

The way individuals experience the space and their behaviors change with the loss of the sense of sight. Seamon (1979) mentions habitual behaviors in his examination on the structure of human behavior in daily life and states that these habitual spatial behaviors are guiding behaviors that people perform unconsciously. Quote-2 was chosen because it reflects the relationship of blind individuals with the space. Trying to find each other, a blind couple rushes towards each other, calling out and using their bodies to get to know each other. From the excerpt, four codes were obtained, which include the way the blind use their senses in their spatial behavior: Tell me where you are, where are you, waving their hands and arms, Moving forward trembling, One hand met the other, They strayed and remained in the air.

Table 3. *Generating codes for Q-2*

Quote From the Novel	Codes
Q-2. "That's my wife, my wife, where are you, tell me	C-2A. Where are you, where are you

where you are, Here, I'm here, she said bursting into tears and walking unsteadily along the aisle with her eyes wide open, **her hands struggling against the milky sea flooding into them.** More confident, he advanced towards her, **Where are you, where are you,** he was now murmuring as if in prayer. **One hand found another,** the next moment they were embracing, a single body, kisses in search of kisses, at times **lost in mid-air for they could not see each other's cheeks, eyes, lips.**" (Saramago, 1998, 40).

C-2B. Her hands struggling against the milky sea flooding into them.

C-2C. One hand found another

C-2D. Lost in mid-air for they could not see each other's cheeks, eyes, lips

The stimuli reaching the human sense organs from the outside world are too numerous to count. Incoming stimuli pass through the person's filter. Which of the stimuli is selected and perceived does not depend only on the stimulus. It also depends on interests, goals and expectations (Kahvecioğlu, 1998). Quote-3 was chosen because it reflects the collective actions of blind individuals. Blind people act in the direction of sounds. From the excerpt, four codes containing the bodily and mental reactions of the blind to stimuli were obtained: According to the sounds coming from outside, They turned to the place they calculated, They stopped with a vague anxiety, They retreated in a confused state (Table 4).

Table 4. *Generating codes for Q-3*

Quote From the Novel	Codes
Q-3. "Judging from the sounds outside, they imagined the door to be, but suddenly, overcome by a vague sense of disquiet that they would not have time to define or explain, they came to a halt and retreated in confusion, while the footsteps of the soldiers bringing their food and those of the armed escort accompanying them could already be heard quite clearly." (Saramago, 1998, 55).	C-3A. Judging from the sounds outside
	C-3B. They imagined the door
	C-3C. Overcome by a vague sense of disquiet
	C-3D. They came to a halt and retreated in confusion

Movement is learned with the body. The person reaches the objects through the movement of the body and responds to the call of the objects (Merleau-Ponty, 1962). Acting together, organizing and establishing order facilitates the daily life of the blind. Quote-4 was chosen because it reflects the space-body relationship. Blind people use their bodies to make their lives easier and act by organizing. Two codes were obtained from the excerpt, which included the actions performed by the blind using their bodies: They were stumbling and dragging their feet, probing the environment with their hands, They knew how to divide the work in the most appropriate way as if they had been organized beforehand (Table 5).

Table 5. *Generating codes for Q-4*

Quote From the Novel	Codes
Q-4. "The blind moved as one would expect of the blind, groping their way, stumbling, dragging their feet, yet as if organised, they knew how to distribute tasks efficiently, some of them splashing	C-4A. Groping their way, stumbling, dragging their feet
	C-4B. Yet as if organised, they knew how to distribute tasks efficiently

about in the sticky blood and milk, began at once to withdraw and transport the corpses to the yard, others dealt with the eight containers, one by one, that had been dumped by the soldiers.” (Saramago, 1998, 58).

“Sight separates us from the world, while other senses unite us” (Pallasma, 2011a, 32). Loss of vision enables the other senses to be used more actively and the way of communication in every moment of daily life changes. Quote-5 was chosen because it reflects the perception of space of blind individuals. The discussion of two blind people takes place differently from individuals who have not lost their sight. Blind people do not act when arguing with each other, only a discussion takes place through their voices. From the excerpt, a code was obtained that reflects the communication style of the blind: He observed that they did not make any gestures or even almost never moved their bodies (Table 6).

Table 6. *Generating codes for Q-5*

Quote From the Novel	Codes
Q-5. “The doctor's wife watched the two blind men who were arguing, she noticed they made no gestures, that they barely moved their bodies , having quickly learned that only their voice and hearing now served any purpose, true, they had their arms, that they could fight, grapple, come to blows, as the saying goes” (Saramago, 1998, 65).	C-5. She noticed they made no gestures, that they barely moved their bodies

Sensory involvement and bodily narrative participation are very important for a holistic architectural experience (Rasmussen, 1994). Quote-6 was chosen because it conveys the sensory aspects of the space. The blind person moves towards the sounds, but when the sounds are cut off, the blind person cannot move. Clear sound from a single point creates a magnetic pole for the blind person and enables the blind person to find their way. Three codes reflecting the act of direction finding and the behavior of the blind were obtained from the excerpt: He walked in the direction of the noise, waving his arms in the void, He stood not knowing what to do, The sense of direction was not enough (Table 7).

Table 7. *Generating codes for Q-6*

Quote From the Novel	Codes
Q-6. “Persuaded by these sententious words, one of the blind men let go of the rope and went, with arms outstretched, in the direction of the uproar , They're not going to leave me out, but suddenly the voices fell silent and there was only the noise of people crawling on the ground, muffled interjections, a dispersed and confused mass of sounds coming from everywhere and nowhere. He paused, undecided , tried to go back to the security of the rope, but he had lost his sense of direction , there are no stars in his white sky, and what could now be heard was the sergeant's voice” (Saramago, 1998, 68).	C-6A. Blind men let go of the rope and went, with arms outstretched, in the direction of the uproar
	C-6B. He paused, undecided
	C-6C. He had lost his sense of direction

“Architecture is the art of reconciliation between ourselves and the world, and this mediation takes place through the senses” (Pallasmaa, 2014, 50). Individuals who cannot see, on the other hand, open their senses to the environment in line with their expectations. External sounds are an important stimulus for the blind. Quote-7 was chosen because it reflects the importance of senses in the relationship established with space. The blind man who cannot find his way finds his way with the sounds of the blind. Two codes were obtained from the excerpt, reflecting each other and the spatial experience of the blind (Table 8).

Table 8. *Generating codes for Q-7*

Quote From the Novel	Codes
Q-7. “Encouraged by the sergeant's kind intervention, the blind internees who had reached the top of the steps suddenly made a tremendous racket which served as a magnetic pole for the blind man who had lost his way. Now more sure of himself, he advanced in a straight line , Keep on shouting, keep on shouting, he beseeched them, while the other blind internees applauded as if they were watching someone complete a long, dynamic but exhausting sprint. He was given a rapturous welcome, the least they could do, in the face of adversity, whether proven or foreseeable, you know who your friends are.” (Saramago, 1998, 69).	C-7A. The blind internees who had reached the top of the steps suddenly made a tremendous racket which served as a magnetic pole for the blind man C-7B. He advanced in a straight line,

Every important architectural experience is multi-sensory. The attributes of matter, space, and scale are measured by the eye, ear, nose, skin, tongue, skeleton, and muscle (Rasmussen, 1994). Quote-8 was chosen because it reflects the multi-sensory space understanding of blind individuals. Blind people calculate the height and depth of the step by experiencing it with their bodies and take action. Two codes were obtained from the excerpt, which included the experience of the blind with spatial elements: They had to feel the height and depth of the step with their feet (Table 9).

Table 9. *Generating codes for Q-8*

Quote From the Novel	Codes
Q-8. “Inevitably, the first internees to reach the stairway had to probe with one foot, the height and depth of the steps, the pressure of those coming from behind knocked two or three of those in front to the ground , fortunately nothing more serious occurred” (Saramago, 1998, 73).	C-8A. Had to probe with one foot, the height and depth of the steps C-8B. The pressure of those coming from behind knocked two or three of those in front to the ground

In the sensory and perceptual experience of space, the sense of sight overpowered all other senses. However, architecture is an act that affects not only our sense of sight, but also all our senses. For this reason, architecture is perceived with the body (Roth, 2000). Quote-9 has been chosen because it reflects the spatial experiences of blind individuals. The old blind man with the black eye patch uses his body to move forward and try to find his way by calling out. Two codes were obtained from the excerpt, which included the act of finding direction with the bodies of the blind: He slowly tried to find his way by stretching his arms forward, reached the door of the dormitory, heard the voices inside, then called in.

Table 10. *Generating codes for Q-9*

Quote From the Novel	Codes
Q-9. “An old man with a black patch over one eye, came in from the yard. (...) Now it is his turn to seek shelter. Slowly, with his arms outstretched, he searched for the way. He found the door of the first ward on the right-hand side, heard voices coming from within, then asked, Any chance of a bed here.” (Saramago, 1998, 75).	C-9A. His arms outstretched, he searched for the way. C-9B. He found the door of the first ward on the right-hand side, heard voices coming from within, then asked.

Spaces are not only reflected in our visual cortex; it is also perceived by the sound, feel and smell of the space (Anderton, 1991). Quote-10 has been chosen because it reflects the perceptions of blind individuals and their relationship with space. The blind doctor and the blind old man with the black band call towards each other and recognize each other by touch. Two codes have been obtained from the excerpt that reflect the way the blind use sounds and bodies: Can it come this way, I am walking towards it, Like two ants trying to recognize each other with their antennae (Tablo 11).

Tablo 11. *Generating codes for Q-10*

Quote From the Novel	Codes
Q-10. “The doctor asked his permission, ran his hands over the old man's face, and quickly found the patch. There is no doubt, here is the one person who was missing here, the patient with the black patch, he exclaimed, What do you mean, who are you, asked the old man, I am, or rather I was your ophthalmologist, do you remember, we were agreeing on a date for your cataract operation, How did you recognise me, Above all, by your voice, the voice is the sight of the person who cannot see, Yes, the voice, I'm also beginning to” (Saramago, 1998, 77).	C-10A. The doctor asked his permission, ran his hands over the old man's face C-10B. The voice is the sight of the person who cannot see

As a result of the analysis of the senses of sight and touch, it was determined that the visual sense enabled the perception of the shape, and the tactile sense enabled the perception of the structures (MacLeod, 1938). Quote-11 was chosen because it reflects the perception of space of people who cannot see. Blind people who hear the sound of the radio turn to the sound and gather around the radio. From the excerpt, a code reflecting the importance of the senses in the behavior of the blind is obtained: The blind gather slowly, they do not stumble, they stop as soon as they sense the presence of something in front of them (Tablo 12).

Table 12. *Generating codes for Q-11*

Quote From the Novel	Codes
Q-11. “The tuning knob continued to extract noises from the tiny box, then it settled down, it was a song, a song of no significance, but the blind internees slowly began gathering round, without pushing, they stopped the moment they felt a presence before them and there they remained, listening, their eyes wide open tuned in the direction	C-11. The tuning knob continued to extract noises from the tiny box, then it settled down, it was a song, a song of no significance

of the voice that was singing, some were crying, as probably only the blind can cry, the tears simply flowing as from a fountain.” (Saramago, 1998, 78).

Space is the raw material of architecture. Architectural space, on the other hand, exists with the perceptions obtained depending on the life and movement in it (Hoogstad, 1990). Quote-12 was chosen because it reflects the behavior of individuals who cannot see. The blinds gather around the food crates to form a defensive line and try to prevent the other blinds from getting the food. The other blinds try to enter the defense line and war ensues between the two blind groups. Two codes for the collective actions of the blind were obtained from the excerpt: The blind were in the ring, they were resisting the blind who tried to break into the defensive line (Tablo 13).

Table 13. *Generating codes for Q-12*

Quote From the Novel	Codes
Q-12. “In the middle of the hallway, surrounding the containers of food, a circle of blind inmates armed with sticks and metal rods from the beds, pointing outwards like bayonets or lances, confronted the desperation of the blind inmates who were surrounding them and making awkward attempts to force their way through the line of defence , some with the hope of finding an opening, a gap someone had been careless enough not to close properly, they warded off the blows with raised arms, others crawled along on all fours until they bumped into the legs of their adversaries who repelled them with a blow to their backs or a vigorous kick.” (Saramago, 1998, 90).	C-12A. Surrounding the containers of food, a circle of blind inmates armed C-12B. Confronted the desperation of the blind inmates who were surrounding them and making awkward attempts to force their way through the line of defence

Spatial perception may vary depending on the situation of the perceiver and environmental conditions. Quote-13 was chosen because it reflects the space-sense relationship. The blind person listens carefully to the news he hears on the radio and transfers it to his/her relatives, and thus the news circulates throughout the ward. Two codes were obtained from the excerpt for the way the blind people used their senses: He listened to not miss a single syllable of what was said, He summarized it in his own words and conveyed it to his nearest neighbors (Tablo 14).

Table 14. *Generating codes for Q-13*

Quote From the Novel	Codes
Q-13. Then he turned the sound up a little and listened attentively so as not to lose a single syllable . Then he summarised the news-items in his own words, and transmitted them to his immediate neighbours. And so from bed to bed, the news	C-13A. Listened attentively so as not to lose a single syllable.

slowly circulated round the ward, increasingly distorted as it was passed on from one inmate to the next, in this way diminishing or exaggerating the details, according to the personal optimism or pessimism of those relaying the information.” (Saramago, 1998, 98).

C-13B. Them to his immediate neighbours. And so from bed to bed, the news slowly circulated round the ward,

Sounds can indicate the function of the space by providing insight into the identity and physical dimensions of the space (Blessner & Salter, 2007). Quote-14 was chosen because it reflects the sensory perception of space. When the doctor's wife turns on the faucet, the blind hear the sound of water and retreat in fear. From the excerpt, two codes were obtained regarding the effect of sounds on the perception of space in individuals who cannot see: They became even more alarmed when they heard the sound of running water, The blind people got scared and backed off (Tablo 15).

Table 15. *Generating codes for Q-14*

Quote From the Novel	Codes
Q-14. “The blind men were already getting down from the tables and asking, Who's there, even more alarmed when they heard the sound of running water, they headed in that direction ” (Saramago, 1998, 121).	C-14A. Alarmed when they heard the sound of running water C-14B. They headed in that direction

The body is included in the body image through the relationship established with the objects around it. He is the human body, perceives the world with his body and exists in the world (Merleau-Ponty, 2012). Quote-15 has been chosen because it includes the behaviors of individuals who cannot see in the space. Blind women who want to go out try to find the door in a panic, but they turn in the wrong direction, causing misunderstandings among the blind. From the excerpt, four codes for the actions of the blind were obtained: All of them were distracted by the screams of the women, They did not even know where the door was, They were turning in the wrong direction and colliding with the blind, Thinking that the women were attacking them, they went on the defensive (Tablo 16).

Table 16. *Generating codes for Q-15*

Quote From the Novel	Codes
Q-15. “Everyone was suddenly distracted by an outcry from the women, already on their feet, in panic, anxious to get away from that place, but some had lost any notion of where the ward door was located, they went in the wrong direction and ran into the blind men who thought the women were about to attack them , whereupon the confusion of bodies reached new heights of delirium.” (Saramago, 1998, 124).	C-15A. Everyone was suddenly distracted by an outcry from the women C-15B. Lost any notion of where the ward C-15C. They went in the wrong direction and ran into C-15D. The blind men who thought the women were about to attack them

Space can be perceived by walking in it (Hoogstad, 1990). The human being is at the center of the space and spatial orientations are shaped in line with the movements of the human body (Norberg-Schulz, 1971). Quote-16 was chosen because it expresses the body-navigation act relationship. Blind people start to act together to make things easier in daily

life. They leave the ward in a single file. Two codes for the collective actions of the blind were obtained from the excerpt: They came out of the ward in single file, like a military unit in rags (Tablo 17).

Table 17. *Generating codes for Q-16*

Quote From the Novel	Codes
Q-16. “They filed out, the six braver ones in front as had been agreed, amongst them was the doctor and the pharmacist’s assistant, then came the others, each armed with a metal rod from his bed, a brigade of squalid, ragged lancers, as they crossed the hallway one of them dropped his weapon, which made a deafening sound on the tiled floor like a blast of gunfire” (Saramago, 1998, 133).	C-16A. They filed out, the six braver ones in front as had been agreed C-16B. Each armed with a metal rod from his bed, a brigade of squalid, ragged lancers, as they crossed the hallway

“Vision isolates, sound unites; vision is rectilinear, sound is directional. The sense of sight signifies externality, and sound creates an experience of interiority. I look at the object, but the sound comes to me; The eye extends, the ear meets. Buildings do not respond to our gaze, but they return our voices to our ears” (Pallasma, 2011b, 62). Quote-17 was chosen because it expresses the sound-space relationship. The blind woman coming out of the ward goes straight in the direction of the voices. Voices help women find their way. Two codes were obtained from the excerpt, showing the role of sounds in the experience of the blind by the place: The place to go is the bottom of the corridor, it will go straight, it is impossible to be mistaken, He heard voices calling him (Tablo 18).

Table-18. *Generating codes for Q-17*

Quote From the Novel	Codes
Q-17. ““The woman has gone out without saying a word, no farewell, no goodbye, she makes her way along the deserted corridor, passes right by the door of the first ward , no one inside there noticed her pass, she crosses the hallway, the descending moon traced and painted a vat of milk on the floor tiles, now the woman is in the other wing, once more a corridor, her destination lies at the far end, in a straight line, she cannot go wrong. Besides, she can hear voices summoning her, figuratively speaking, what she can hear is the rumpus being made by the hoodlums in the last ward , they are celebrating their victory” (Saramago, 1998, 138).	C-17A. She makes her way along the deserted corridor, passes right by the door of the first ward C-17B. She can hear voices summoning her, figuratively speaking, what she can hear is the rumpus being made by the hoodlums in the last ward,

“Architecture is perceived with the colors you hear with your ears, the sounds you see with your eyes, the spaces you touch with your palms, the taste of the space on your tongue, and the fragrance of dimensions” (Breuer, 1986: 15). Quote-18 was chosen because it expresses loss of sense. The emancipation of the blind becomes frightening for them. The blind people, who do not know where to go or what to do, continue to stand in front of the burning mental hospital. Three codes were obtained from the excerpt, showing the importance of the senses for the blind to experience the outside world: They do not move, they stand still in the middle of the street, the others are standing too, afraid they do not know where to go, They stand in front of the burning building, which is on fire from one end to the other.

Table-19. *Generating codes for Q-18*

Quote From the Novel	Codes
Q-18. “Say to a blind man, you're free, open the door that was separating him from the world, Go, you are free, we tell him once more, and he does not go, he has remained motionless there in the middle of the road, he and the others, they are terrified, they do not know where to go , the fact is that there is no comparison between living in a rational labyrinth, which is, by definition, a mental asylum and venturing forth, without a guiding hand or a dog-leash, into the demented labyrinth of the city, where memory will serve no purpose, for it will merely be able to recall the images of places but not the paths whereby we might get there. Standing in front of the building which is already ablaze from end to end ” (Saramago, 1998, 142).	C-18A. He does not go, he has remained motionless there in the middle of the road,
	C-18B. The others, they are terrified, they do not know where to go
	C-18C. Standing in front of the building which is already ablaze from end to end

Vision alone is insufficient in perceiving space. All senses are extensions of the sense of touch and the body is an interface to experience the outside world (Pallasmaa, 2011c). The body acquires information from the space and takes action. Quote-19 has been chosen because it reflects the body-space relationship. Blind people can't find direction. They move forward with their arms outstretched and explore the outside world with their bodies. From the excerpt, two codes showing the effect of the body in the wayfinding actions of the blind were obtained: They could not determine the direction, they were advancing from the bottom of the buildings with their arms extended forward, they were constantly colliding like ants.

Table 20. *Generating codes for Q-21*

Quote From the Novel	Codes
Q-19. “How do they find their way around, the doctor's wife asked herself. They did not find their way around , they kept very close to the buildings with their arms stretched out before them, they were constantly bumping into each other like ants on the trail, but when this happened no one protested, nor did they have to say anything, one of the families moved away from the wall, advanced along the wall opposite in the other direction , and thus they proceeded and carried on until the next encounter.” (Saramago, 1998, 228).	C-19A They did not find their way around
	C-19B. Advanced along the wall opposite in the other direction

It differs from the senses of touch, sight and hearing in that it requires contact and its receptors spread throughout the body (Hatwell, 2003). Quote-20 was chosen because it reflects the body-sound-space relationship. The blind man's shouting because of the bottle cap sinking on his knee gathers the blind around him. The blind woman tries to understand what happened by feeling the man's knee with her hands. Two codes were obtained from the excerpt, showing the effect of sound on the collective behavior of the blind, and the effect of the body in exploring space or object: The blind people gathered around, They felt the man's legs with their hands.

Table 21. *Generating codes for Q-20*

Quote From the Novel	Codes
Q-20. “A blind man got to his feet and complained that a bit of glass had got lodged in his knee, the blood was already trickling down one leg. The blind persons in the group gathered round him , What happened, what's the matter, and he told them, A glass splinter in my knee, Which one, The left one, one of the blind women crouched down. Take care, there might be other pieces of glass around, she probed and fumbled to distinguish one leg from the other, Here it is ” (Saramago, 1998, 148).	C-20A. The blind persons in the group gathered round him
	C-20B. She probed and fumbled to distinguish one leg from the other, Here it is

The memory of the place is associated with its smell. For this reason, the sense of smell differs from other senses. All living things need the sense of smell in order to survive. At the same time, the sense of smell is more developed than other senses due to its direct relationship with the brain (Moneim, 2019, 9). Quote-21 was chosen because it reflects the smell-space relationship. The sausage the doctor's wife ate leaves a trail of stimulant scent. The smell causes blind people and dogs to follow it. Three codes were obtained from the excerpt, showing the effect of scent on the way-finding actions of the blind: I will leave a trace by scattering smell, As soon as I heard, the doctor's wife put aside the precaution and started to run away, hitting people, pushing them to the ground, Stimulating scents reaching the nostrils of dogs (Tablo 22).

Table 22. *Generating codes for Q-21*

Quote From the Novel	Codes
Q-21. “They would not be able to see her, but there was the smell of what she had eaten (...) She had to run, and she did. (...) blind man was shouting, Who's eating sausage around here no sooner were those words spoken than the doctor's wife threw caution to the wind and broke into reckless flight, colliding, jostling, knocking people over ” (Saramago, 1998, 152).	C-21A. There was the smell of what she had eaten
	C-21B. Blind man was shouting, Who's eating sausage around here
	C-21C. The doctor's wife threw caution to the wind and broke into reckless flight, colliding, jostling, knocking people over

From Codes to Themes

The act of finding direction is an intellectual and operational process (O'Neill, 1991). Unlike individuals who have not lost their sense of sight, the blind move forward in a single line, touching each other's shoulders and stretching their arms forward. Blind people explore the space through their senses and act by calculating the direction they will go in their minds. In this context, the codes C-1A, C-1B, C-3B, C-7B, C-9A, C16A, C16B and C-17A were grouped to form the theme of “Finding the way using bodies” (Table 23).

Table 23. *“Finding the way using bodies” Theme*

Codes	Themes
C-1A. Let's form a line	
C-1B. Everyone put their hand on the shoulder of the person in front	
C-3B.	

They imagined the door.

C-7B. He advanced in a straight line,

C-9A. His arms outstretched, he searched for the way.

1. Finding the way using bodies

C-16A. They filed out, the six braver ones in front as had been agreed

C-16B. Each armed with a metal rod from his bed, a brigade of squalid, ragged lancers, as they crossed the hallway

C-17A. She makes her way along the deserted corridor, passes right by the door of the first ward

Blind people explore the outside world by using their bodies and other senses more than individuals with sight. They determine each other's positions through their voices and recognize each other through their sense of touch. The communication that takes place through the body and the sound enables the blind individuals to find their way in the space. In this context, the codes C-2A, C-2C, C-2D, C-5, C-9B, C-10A and C-10B were grouped to form the theme of "Communication using bodies and sounds" (Table 24).

Table 24. "Communication using bodies and sounds" Theme

Codes	Themes
C-2A. Where are you, where are you	2. Communication using bodies and sounds
C-2C. One hand found another	
C-2D. Lost in mid-air for they could not see each other's cheeks, eyes, lips	

The experience and interpretation of the patterns created by the stimuli in the environment through the senses is called perception (Atkinson et al., 1995). Environmental stimuli gain more importance in the perception of space of the blind than in the perception of individuals who have not lost their sense of sight. Sounds play the biggest role in stimuli. According to the sounds coming from outside, the blind people move towards the direction of the noise by waving their arms. In this context, the codes C-3A, C-6A, C-7A, C-13A, C-15A and C-17B were grouped to form the theme of "Orientation to sounds" (Table 25).

Table 25. "Orientation to sounds" Theme

Codes	Themes
C-3A. Judging from the sounds outside	3. Orientation to sounds
C-6A. Blind men let go of the rope and went, with arms outstretched, in the direction of the uproar	
C-7A. The blind internees who had reached the top of the steps suddenly made a tremendous racket which served as a magnetic pole for the blind man	
C-13A. Listened attentively so as not to lose a single syllable.	
C-13B. Them to his immediate neighbours.	
And so from bed to bed, the news slowly	

circulated round the ward

C-15A. Everyone was suddenly distracted by an outcry from the women

C-17B. She can hear voices summoning her, figuratively speaking, what she can hear is the rumpus being made by the hoodlums in the last ward,

Sound, which is a stimulating element in the space, allows blind individuals to visualize the space in their minds (Hadjiphilippou, 2013, 5). Sounds provide orientation for the blind and the blind gather around the sound source. In this context, C-11 and C-20A codes were grouped to form the theme of “Sound creates focus” (Table 27).

Table 27. “*Sound creates focus*” Theme

Codes	Themes
C-11. The tuning knob continued to extract noises from the tiny box, then it settled down, it was a song, a song of no significance	4. Sound creates focus
C-20A. The blind persons in the group gathered round him	

Information obtained from a single sensory source is not sufficient for spatial perception, and perception is strengthened by the senses realizing the experience of space in harmony with each other (Bachelard, 2017, 83). Blind people perceive and describe space or objects using their sense of touch. In this context, C-8A and C-20B codes were grouped to form the theme of “Perception using bodies” (Table 28).

Table 28. “*Perception using bodies*” Theme

Codes	Themes
C-8A. Had to probe with one foot, the height and depth of the steps	5. Perception using bodies
C-20B. She probed and fumbled to distinguish one leg from the other, Here it is	

Not knowing where he is and not being able to determine the direction of exit causes the blind person to be unable to find his way in sensory confusion and therefore to be unable to do anything. In this context, the codes C-6B, C-6C, C-15B, C-18A and C-18C were grouped together to form the theme of “Direction with sensory confusion” (Table 29).

Table 29. “*Direction with sensory confusion*” Theme

Codes	Themes
C-6B. He paused, undecided	6. Direction with sensory confusion
C-6C. He had lost his sense of direction	
C-15B. Lost any notion of where the ward	
C-18A. He does not go, he has remained motionless there in the middle of the road,	
C-18C. Standing in front of the building which is already ablaze from end to end	

Blind people move forward with their arms stretched out, waving, probing, and shuffling. They are unable to determine direction and are constantly colliding. The body is a tool in the blind's experience of space. In this context, the codes C-2B, C-4A, C-8B, C-15C, C-19A, C-19B and C-21B were grouped to form the theme of "Progress using bodies" (Table 30).

Table 30. *"Progress using bodies" Theme*

Codes	Themes
C-2B. Her hands struggling against the milky sea flooding into them.	7. Progress using bodies
C-4A. Groping their way, stumbling, dragging their feet	
C-8B. The pressure of those coming from behind knocked two or three of those in front to the ground	
C-15C. They went in the wrong direction and ran into	
C-19A They did not find their way around	
C-19B. Advanced along the wall opposite in the other direction	
C-21B. Blind man was shouting, Who's eating sausage around here	

The most important factor that determines the memory of a place is the smell of the place. Each area/region has its own characteristic scent (Pallasmaa, 2014). The sense of smell is an important cue element used to determine the position of blind individuals. The doctor's wife leaves a trail of scent, and the stimulus reaches the nostrils of blind dogs. In this context, C-21A and C-21C codes were grouped to form the theme of "following the odor" (Table 31).

Table 31. *"Following the odor" Theme*

Codes	Themes
C-21A. There was the smell of what she had eaten	8. Following the odor
C-21C. The doctor's wife threw caution to the wind and broke into reckless flight, colliding, jostling, knocking people over	

The blind people's being a ring and forming a defense line enables them to organize and do things together. In this context, the codes C-4B, C-12A, C-12B and C-15D were grouped to form the theme of "Organization using bodies" (Table 32).

Table 32. *"Organization using bodies" Theme*

Codes	Themes
C-4B. Yet as if organised, they knew how to distribute tasks efficiently	9. Organization using bodies
C-12A. Surrounding the containers of food, a circle of blind inmates armed	
C-12B. Confronted the desperation of the blind inmates who were surrounding them	

and making awkward attempts to force their way through the line of defence

C-15D. The blind men who thought the women were about to attack them

The space, which passes through the filter of the senses, creates emotion in the person and the person acts with the emotion. Blind people stop with anxiety, withdraw in confusion, panic, fear and do not know where to go. In this context, the codes C-3C, C-3D, C-14A, C-14B and C-18B were grouped together to form the theme of “Direction with emotional turmoil” (Table 33).

Table 33. “Direction with emotional turmoil” Theme

Codes	Themes
C-3C. Overcome by a vague sense of disquiet	10. Direction with emotional turmoil
C-3D. They came to a halt and retreated in confusion	
C-14A. Alarmed when they heard the sound of running water	
C-14B. They headed in that direction	
C-18B. The others, they are terrified, they do not know where to go	







2. Visual Expression of Themes


Due to the nature of literature, events and places are presented in a verbal form. The reader realizes the sense and experience of space, which is in the intersection of literature and architecture, with the images he envisions. In this direction, in the first step, the quotations in the novel were converted into codes and the codes into themes. In the second step, verbal themes were visualized by transforming them into images of expressions.

Formal Language

At the stage of transforming the verbal themes into images, form letters were created. The plastic or graphic expression of a certain expression in concrete arts is called form (Hasol, 2022, 84). The forma language created is a meaningful combination of simple lines. Interact with dots; the object is visualized by a single point and the sound by a double arc. The person is visualized with a line, and the blind person is transformed into an image with an arc line in front of the line, as he reaches out and experiences the space. The blind person finds his way by calling out, and the call sign is visualized by drawing a bow line in front of the expression of the blind person. The progress of the blind person, who finds his way by calling out, is visualized by drawing a bow line behind the expression of the blind line with the call sign. Thus, visual expressions were produced from the images created from dots and lines (Table 34).

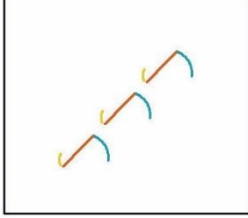
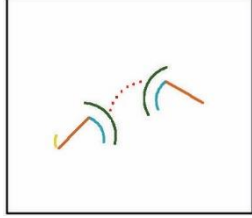
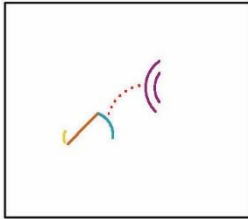
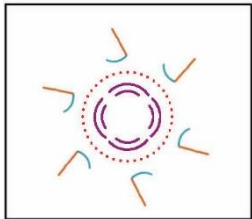
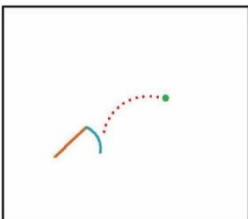
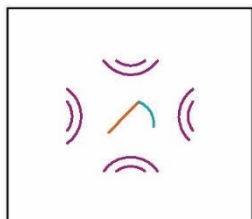
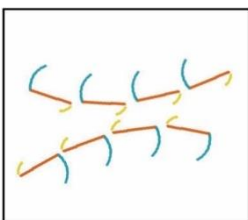
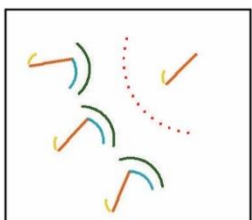
Table 34. Formal Letters

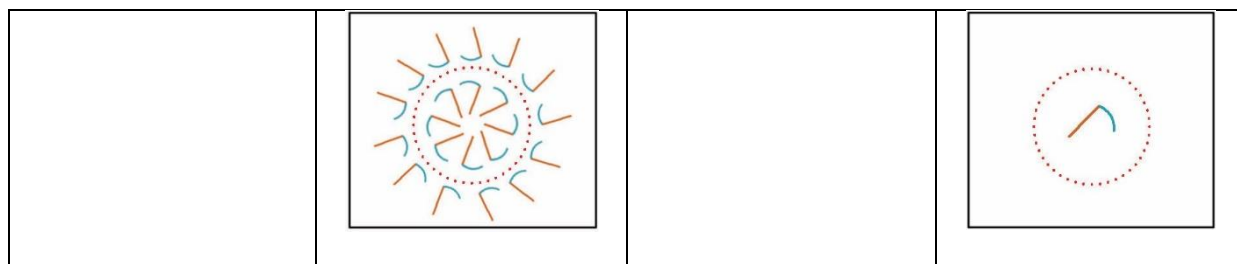
Person	Blind Person	Calling	Making Noise	Interaction	Object	Sound
						

						
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Form exists in the mind, so things are designed to be made concrete. Form drawing is shown with a drawing showing the nature of a verbal thing (Aksan & Demirhan, 2014). The 10 themes created were transformed into visual expressions by combining the form letters (Table 35).

Table 35. *Themes and Visual Expressions*

Themes	Visual Expressions	Themes	Visual Expressions
1. Finding the way using bodies		2. Communication using bodies and sounds	
3. Orientation to sounds		4. Sound creates focus	
5. Perception using bodies		6. Direction with sensory confusion	
7. Progress using bodies		8. Following the odor	
9. Organization using bodies		10. Direction with emotional turmoil	



Result and Discussion

At the intersection of architecture and literature, there is the concept of space. In literary works, the discipline of architecture is used while constructing the space. The event to be told is conveyed to the reader through the perceptual space. Perceptual space analyzes in literary works are made by considering the relationship that the hero of the novel establishes with the space. The hero of the novel experiences the space with his senses. The senses create perception. As a result of perception, the person acts. A person's physical and mental health affects perception. Loss of sensation, especially loss of vision, affects spatial perception. The aim of the study is to examine the reflections of the multi-sensory space experiences of individuals who have lost their sight through the novel, and to analyze the perceptual and sensory aspects of the space in the novel. For this reason, the study material was José Saramago's novel *Blindness*. *Blindness* is José Saramago's most famous novel, which has been the subject of sociological research and is open to psychological investigations because it reflects human relations. The novel is a dystopian work that tells the events that developed with the spread of the blindness epidemic to the world. The wards, corridors, courtyards, gardens and perceptual spaces in the mental hospital, which is one of the novel perceptual spaces, take place in the outside world with looted streets and houses. Through the events that develop in the novel, the relationship between the blind people who live in a closed space with each other and the space is explained.

For people who cannot see, their bodies are an interface for perceiving space and objects. They find their way by using their bodies and senses openly to the stimuli in the environment. They need each other and organize in order not to get lost. In this study, unlike other studies on *Blindness*, the novel was analyzed in the context of space-human relationship by using the discipline of architecture. Quotations that may include the subject of space-sense-perception were collected from the novel. At the end of the examination, it was determined that these quotes include the following facts: Quote-1 includes the actions of individuals who cannot see. Quote-2 reflects the relationship of blind individuals with space. Quote-3 reflects the collective actions of blind individuals. Quote-4 reflects the space-body relationship. Quote-5 reflects the spatial perception of blind individuals. Quote-6 conveys the sensory aspects of the space. Quote-7 reflects the importance of senses in the relationship established with space. Quote-8 reflects the multi-sensory space understanding of blind individuals. Quote-9 reflects the spatial experiences of blind individuals. Quote-10 reflects the perceptions of blind individuals and their relationship with space. Quote-11 reflects the spatial perception of blind individuals. Quote-12 reflects the behavior of blind people. Quote-13 reflects the space-sense relationship. Quote-14 reflects the sensory perception of space. Quote-15 includes the behavior of blind individuals in the space. Quote-16 expresses the body-direction-finding action relationship. Quote-17 expresses the sound-space relationship. Quote-18 refers to sensory loss. Quote-19 reflects the body-space relationship. Quote-20 reflects the body-sound-space relationship. Quote-21 reflects the smell-space relationship. With the thematic analysis, first the codes were captured from the quotations in the novel. Afterwards, the codes were grouped according to some common features and themes were

reached. While finding commonality among the codes in reaching the themes, the codes were repeatedly passed through, thus it was concluded that the codes in the quotations were distributed over different themes. The themes obtained as a result of the analysis are as follows: Finding direction using bodies, Communication using bodies and sounds, Orientation to sounds, Sound focusing, Perception using bodies, Disorientation with sensory confusion, Progress using bodies, following scent, Organizing using bodies, With emotional confusion. inability to find direction.

The action of direction finding, which is the product of perceptual and cognitive processes, is changing and transforming for individuals who cannot see. With the loss of the sense of sight, the individual discovers the space with his other senses and his body. Individuals who cannot see act collectively rather than individually. Loss of sense changes one's perception and behavior of the place. In the examination on the novel *Blindness*, it is read that the eye, which provides hegemony over the senses and the body (Pallasmaa, 2011, 28), restricts the subject in sensing the space. In a way, the unnamed novel heroes who cannot see interacted more with the places in the mental hospital than the wife of the doctor who could see. The experiences of the unnamed heroes, who cannot see, and the feelings of the wards, corridors, courtyards, houses and streets in the outside world, which are the places of the novel, are passed on to the reader. In this context, blindness novel spaces with their sensory and perceptual aspects can be defined as the labyrinthine world or closed and narrow spaces (Korkmaz, 2022, 13) in terms of their functional status. It is thought that readings about perceptual space through literary works will be effective for empathizing with people who cannot see and understanding their world.

Recommendations

In this study, the relationship between space-sense-perception and the reflection of this relationship to people individually and collectively are discussed through the novel *Blindness*. Spaces are generally designed with certain norms for standard sizes. Users use the spaces effectively and functionally with their bodies that do not have any significant deficiencies, malfunctions or losses, and can continue their lives in these spaces without any awareness of the space-body relationship. However, it may not be easy to live in these standard places for individuals who are non-standard, defective, missing or missing, in other words, disabled at various levels. In such matters, both users and designers can develop sympathy for disabled individuals, but it is not easy to capture a higher level of emotion, empathy, and it is an essential feeling for everyone in the name of design and for people with different characteristics to use the same spaces with the same ease.

In this context, in this study, we resorted to literature and its rich and sensitive language in order to understand the loss of sense, which is a phenomenon that is directly in life but also difficult to understand and develop empathy, and its vital reflections. The colorful and touching language of literature, within the scope of this study, has been able to present striking demonstrations about the perception of places in relation to sensory loss through the novel *Blindness* and the ways of communication between people through spatial perception.

Thanks to qualitative research, the subject could be conveyed with a detailed analysis, the patterns, motifs and patterns in the novel could be explained with a hierarchical flow, and a novel based on visualizations was re-read in an abstract visual language. This abstract language is almost like the special alphabets used by individuals with sensory loss. All attempts make this important content of the novel analytically much more readable, while at the same time moving away from the mechanicalness of the physical descriptions made for the phenomenon of space, in which perception is embedded in its basic meaning, especially in the field of architecture.

Individuals who read a good novel will be impressed by the novel. However, not everyone may have the ability to think and express with awareness why they are affected. Literature is an extremely effective tool for the transfer of some subjects, but re-reading and analysis on literary works will strengthen the guide feature of the literary work in question. For this reason, researchers should refer to literary works more when examining sensory and perceptual space, which is an abstract subject, and when dealing with the issue of sensory loss, which requires empathy.

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