

## Space and Spatial Commitment in the Construction of Individual Memory

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### *Abstract*

*This study was conducted with the aim of determining the influence of the connection between human and construction on remembering the space. The problem was addressed in the way taking a stand against the construction and researching the level of influence on remembrance of the constituents that form the manner. A survey was prepared aimed at fixation of the constituents remembered about the space and determining negative and positive feelings towards the space. The study discussed within the frame of memory, spatial commitment and manner was conducted upon the individual's spatial experience, following feelings and thoughts. In the study, the texts that tell of the construction were examined with the content analysis that was intentional for the determination of the architectural characteristics. It is seen that the construction's genuine, differential points have been remembered intensely. In the study which space commitment was evaluated with the concept of manner, a "Semantic Difference Scale" was formed. At the end of the factor analysis, five manner factors about the construction were determined. Using variables about factor scores, user characteristics and remembrance of the space, a regression equation was formed in order to reveal the influence of commitment to the space in remembering the structure. The construction's "importance for the individual" and "the manner belonging to the form's being positive increased the memorability of the structure. Based on these findings, it has been revealed one more time that the influence of visual, physical and functional fiction of the construction on people should be considered.*

**Key Words:** *Spatial Commitment, Memory, Attitude, Content Analysis, Logistic Regression.*

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### **Introduction**

The past holds a special qualification for the existence of humans. A person creates oneself through the things he/she has carried and gathered from past into today. The ability of the memory to remember and forget comes into play at this point. A human being that comes across many incidents, situations and places throughout his/her life hides some of these in his/her memory and forgets some of them. In addition to being an object that is remembered, place is used as an agent for the remembrance of the incident, feeling and situation that it has witnessed. Witnessing a person's intense experiences, place plays a role in remembering the incidents and the feelings that will form a scene for the memory.

As a location in which people struggle for existence, the place witnesses to many instants. One performs many deeds on the space. Space turns into an agent that a person expresses oneself. One changes the space, controls, personalizes, reflecting his/her identity gives it a meaning. These experiences cause to various feelings against the space being formed in the interaction space – human. In the study, the question of what the influence of commitment feeling that is felt against the space might be on the space which is used as a reference point in remembering the past, being remembered has been sought an answer. Recently in the architectural field in relation to space– memory, in general social memory is discussed within the frame of the influence of the memory on fictionalizing, perceiving the space and influential characteristics of the space on being permanent in the memory (Gür Öymen, 1991: Öymen Özak and Polat Gökmen, 2009: Turgay, 2009; Öktem Erkartal, 2014: Çakır and Gönül, 2015). In remembrance of the space, the effect of the feelings that are felt towards the space has been a subject that is generally left missing in the studies.

In this study that memory – space connection is searched, the subject is tackled on the memory’s ability to remember. The aim of this study is to reveal the affect of positive or negative feeling that occurred as a result of a person’s interaction with the space on the space’s permanence in the memory. As a domain, Department of Interior Architecture which was previously located in Karadeniz Technical University (KTU) was chosen. The survey was applied to the chosen group who were among people using this structure in various terms and the obtained data was assessed with the content and the regression analysis. At the end of the analysis, the influential architectural characteristics in forming the spatial memory and the affect of the feelings towards the structure on the level of remembering the structure. Thus, the importance of what the space makes feel in forming more qualified and livable spaces has been pointed out and it has been emphasized that the architecture must be sensitive in the design process.

### Conceptual Framework

The space forms the memory taking in various roles (Madran, 2001: 47). Space in life accompanies to the lived memories with physical and social environment that it represented. Feelings that spring as a result of the experiences in space take part in the memory as “reminiscence”. Escobar interprets the task that the space has undertaken in these memory’s taking place in space as “space gathers thoughts, memories”(2001:143), Connerton, “the layout of the space preserves the order of the things that must be remembered,” (2012: 14) and Assmann “memories are based on the spaces that are lived in” (2015;47). Here space gives the opportunity to the individual in understanding the permanence and change in life, placing oneself in the continuity of time (Pallasmaa, 2001: 88). The contribution that the space gives to the memory in the process of remembering and forgetting has an important place in forming the identity of the individual and the society and in continuing its existence.

In the most general sense, the memory can be defined as keeping past experiences and knowledge in mind and the strength of remembering. In order for information to stick in the memory and be called, it must pass through a series of mental processes such as being, first of all, perceived, later on, arranged, coded and hidden. In this process, storage period, capacity and fiction of the information is not connected with the type of memory (sensation, short and long termed memory). As for space, a space that is supported with the experiences, perceptions and sensations is associated, matched, directed, compared and coded (Öymen Özak and Polat Gökmen, 2009: 150). Here, the importance of physical and social environment in space’s sticking in memory is emphasized. Memory being formed with the space shows that the characteristics that the space has also plays an active role in the process of remembering and forgetting.

The characteristics of the space, merging with the individual, social and cultural values of the user of the space forms a spatial memory. Usually, the space is remembered immingled with subject, sensation, object and incident (Öktem Erkartal, 2014). Image that is revealed on the mind through experiencing the space is actually an appearance of the values of physical environment, activity and meanings that the space forms. This image belonging to the space gets its strength from the connection the individual has formed with the space.

Spatial connection is a situation that takes place as a result of the experiences and activities in the space. The notion of spatial commitment is identified as the emotional connection that is built between one and the space in a positive sense (Dovey, 1993: 247). Feeling like belonging to a place, committing to a place stem from functional and/or emotional reasons (Stokols ve Schumaker, 1981: 441). While the functional commitment is related to space's meeting one's needs functionally, emotional commitment to a space is an emotional relationship that one forms with the space giving meaning and value to the space and reflecting his/her identity (Tuan, 1977: 198, Relph, 1976). The commitment to a space, as an emotion that is revealed as a result of functional and social relations in the space as well as physical characteristics of the space, shows its influence on the space being at the back of one's mind.

İmamoğlu defines the structure as a complicated whole along with its functional structure and with its characteristics such as spaces, dimensions, order, light, conveyor system, acoustic, equipment, material, colour and texture (1980). In architecture, the structure is fictionalized on a composition. This composition is comprised of mass and spatial fiction of the structure; organization, relation, order and artistic level of two dimensional components (İzgi, 1999:189-190). This composition is recorded on the memory with a meaningful and coherent connection. In the process that starts with perceiving the state, reuse of the space in the information's going through from short termed memory to long termed memory and the classification of the information associated with previous information is affective.

People come across with many stimulants in everyday life and notice only a small part of them. The space that is at the stimulant position addressing to different types of perceptions and senses increases its permanence in the memory. In this process, eyesight and sense of hearing are seen as primary feeling and play an active role in perceiving. Especially the characteristics of the space's components and constituents such as colour, texture, form, material form a basis for the visual perception (Aydınlı, 1986). The prominent differences of the physical environment again are from the privileged information that is taken from the environment (Öymen Gür, 1996: 91). On the other hand, the recipient's, namely the user's previous experiences and motivation at that moment is another significant point that affects the perception. The individual tries to comprehend the space from outside to inside, from whole to detail physically (Gezer, 2008: 33). The physiological, psychological and socio – cultural characteristics that the individual has, past experiences, the characteristics such as interaction level with the space and the usage period of the space make differences in the process from obtaining the information to remembering it. As a result of all these, each individual creates his/her own image in relation with the space and carries it. However, there is a consistent reconciliation among the members of the same group (Lynch, 2012: 8).

The other main concept of the research problem is the manner. The connection with the space reflects the manner and the notion of commitment (Göregenli, 2010: 72). The manner is defined as the tendency of mental, emotional and behavioral reaction that the individual has organized depending on his/her experience, motivation and knowledge against any object, opinion, person or event (İnceoğlu, 2010: 5). The manner which is, in general, the expression of feelings directed at an object (Schiffman and Kanuk, 1997: 234), was used in the study to ascertain the user's feelings towards the space that is accepted as a social – physical object. Katz emphasizes that the manner might be positive or negative and the individual has used this in evaluating the environment (Tavşancı, 2005: 66). The manner can be identified verbally with such feelings as fine, beautiful, refreshing, nice, and magnificent.

In forming the manner, the individual has to have knowledge about the space. As far as the space is concerned, experiences about the space and the obtained knowledge are affective in forming negative or positive feelings against the space. When the individual develops a manner against the space, this manner does not change for a long time and now it has become a party.

Being an individual evaluation, the manner is hindered by its being a mental deed from its being measured directly with the way of observation. In order for the individual to take a stand against the space, it is applied to the method of measuring senses, tendencies and reactions against the space. For this, techniques such as questionnaire, content analysis, wrong option technique, incomplete sentences in the measurement

of the manner (Tavşancıl, 2005: 103-4). In the measurement of the manner, generally, semantical difference scale that includes such adjectives as strong-weak, important-unimportant, sufficient-insufficient, difficult-easy or Likert type manner scale is preferred.

## The Research of the Effect of the Commitment to Space in Remembering the Place

### Research Field

KTU was built in addition to the department of Architecture at the Kanuni Campus in the old Interior Architecture building (Figure 1). Space frame system had been used in the building that had steel conveyor system. In the general design understanding of the building, the colour had been used as an active constituent, the effect of the chosen construction system in the space was brought to the forefront. The building was designed as three-floored with basement floor. Main entrance to the building was located in the south façade, the entrance to the department of architecture was provided in the ground floor and basement floor. Also, two entrances that provided transition to the courtyard were left in the basement floor. In the ground floor of the building, there were a large classroom, archive and a hall line that provided the opportunity of an exhibition. In the basement floor, there were two classrooms and in the mezzanine floor, chairmanship of the department and three bureaus. These bureaus that were preserved for the meeting hall, secretariat and the assistants were located so as to see the courtyard. The building was destroyed in 2012 and a new building was built in its place at the end of the one year old construction process.

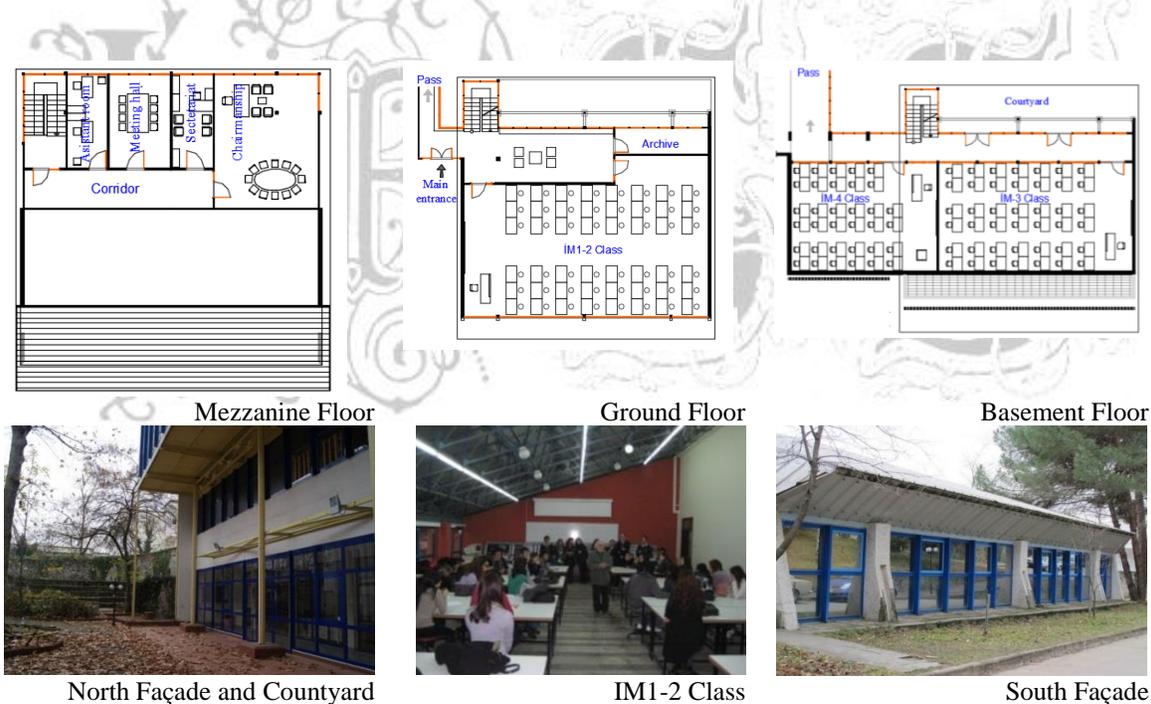


Figure1. Visual and drawings belonging to the KTU Department of Architecture Building

### Hypothesis

The main hypothesis in the study was determined as “Spatiality commitment is affective on the space’s being clearly remembered.” In order to test the hypothesis, first of all, for the determination of the characteristics that are left of the structure, the question of “*Would you write down a paragraph that tells of the impression that Old Interior Architecture Building has left on you and its meaning?*” was directed.

Later, in the study that the spatiality commitment was evaluated with the user’s manner, 25 points of Semantatic Difference Scale was prepared in order to measure the manner. With the help of the obtained data, a binary regression equation revealing the commitment’s affect on remembering against the space was formed.

**Research Technique and the Implementation**

In the study, KTU Old Interior Architecture building was chosen as the sample construction, people who used this construction for different purposes included in the study. Within the scope of the study, a survey was prepared. In the study, by which characteristics a structure that takes place in the permanent memory is remembered and to what extent the manner against the building is affective in this remembering was investigated. For this, in this study, four questions which one of them is open ended, were directed towards the determination of the building’s remembered constituents, as to the measurement of the manner against the building, the levels of participations to the sentences that include 25 couples of adjectives were investigated. Also, whether they remembered the building or not was asked to the users. The survey was implemented on 102 users (Table 1). The study was conducted after three years the building was destroyed.

Table1. The characteristics of the users whom the survey was implemented on

<i>Subjects’ invariables</i>	<i>Groups</i>	<i>%</i>
Gender	Woman	70,6
	Man	29,4
Frequency of Usage	Often	82,4
	Rare	17,6
Age	24 years and below	46,1
	25-34 years	29,4
	35 years and above	24,5
Level of Education	High school	38,2
	University	40,2
	Graduate	21,6
Profession	Student	40,2
	Academician	35,3
	State personnel	5,9
	Free-lance - Interior designer	18,6
Usage purpose	Workplace	14,9
	Get educated	74,3
	Workplace + Get educated	10,9
Usage duration	Less than 4 years	58,8
	4 years	23,5
	More than 4 years	17,6

For the determination of the remembered characteristics in the space, the question of “*Would you write down paragraph that tells of the impression that Old Interior Architecture Building has left on you and its meaning?*” was asked. In the evaluation of this open ended question, connection relation technique was used in the study out of the content analysis methods. This technique was imposed on determination of what is remembered as being related with what. In remembering the space, a matrix that was formed by component features (dimension, colour and material etc.), space organization (physical comfort, functional comfort and aesthetics etc.), space component (roof, wall and stairs etc.), social environment (human and incident) and space units was prepared. Linkage analysis was made in order to determine the connection between these constituents. The results were expressed on a matrix and turned into a graphic. In the graphic, the power of the connection between the constituents was expressed with thickness of the lines that connect the constituents (Bilgin, 2006: 24). For the determination of the manner against the space, for the sake of interpreting 25 points used in the measurement of the manner being more systematic, turning into a

few basic components were considered. For this, factor analysis was implemented and the articles were grouped under five components. The manner against the space which is linked to the five components was determined to the result of the factor analysis, as much as the number of factors factor score was obtained. Regarding to what extent the building is remembered, the participants were asked the question of “How clear is the view of the building in my mind?”.

In order to determine the affect of the manner which is the verbal expression of the emotions, in remembering the space, binary regression analysis was made using data that belonged to the clearness of remembrance of the space, manner data (Factor score) and user characteristics (age, gender, usage period etc.). effective variables on clear remembering was gathered. Analyses were done in Excell and SPSS programs.

## **Findings**

### **Characteristics that are Remembered about the Structure**

In this section, the analysis of the question “*Would you write down paragraph that tells of the impression that Old Interior Architecture Building has left on you and its meaning?*” that was used in the study with the purpose of determining the characteristics remembered about the structure was included. Sample answers about this question were given place below.

“... it was an unusual building both with its structure and its construction divided into two with reinforcements, far from the standard class plan, made one feel special. It was a special place where you heard the lesson told in the next room, footsteps of those going up upstairs, felt the rain pouring down on the roof, were in interaction with the environment...” (a participant who used the building with education purposes between 2001-2005).

“...It was a cosy place that was in accordance with the spirit of design with its sloping roof and steel structural system. The pleasure it gave visually was becoming troublesome with negative factors because of spatial arrangements interwoven. It was very noisy...” (a participant who used the building between 2000-2010 with both student and work purposes).

“...The noise coming from the upholstery when teaching a lesson in the classrooms, the quality of the blue roof structure, exhibitions at halls, good relationship I built with the students, the building that was coalesced with the courtyard, steel structure of the building...” (the participant who used the construction between 1998-2010 with only worker purposes).

User answers were examined with link analysis technique which is a content analysis method. Among the remembered characteristics of the structure, link and the power of the links were revealed. At the end of the analysis that was made, it was established that the strongest meaningful link with the IM1-2 class was “functional comfort” and again the strongest meaningful link with roof was “structure”. The construction has been remembered as IM1-2 class – functional comfort and roof – structure pattern. On the other hand, it was determined that aesthetically the strongest link was formed with the “form” of the construction and the strongest significant link with the “human” was formed with the incident. Besides being remembered with the strongest functional comfort conditions of the IM1-2 class, it is seen that it was remembered with incidents, meaning and physical conditions. Being the most used (%77.1) and liked (%85.4) space in the construction show that it is effective in remembering the space as all-purpose.

Similarly again, beside the roof being remembered with functional comfort conditions as the strongest, it is seen that it was remembered with form, physical comfort, IM1-2 class and the incident. It is seen that the roof was effective in the perception of the construction all-purpose. Other characteristics that were remembered about the construction and the relations take place in the Figure 2.

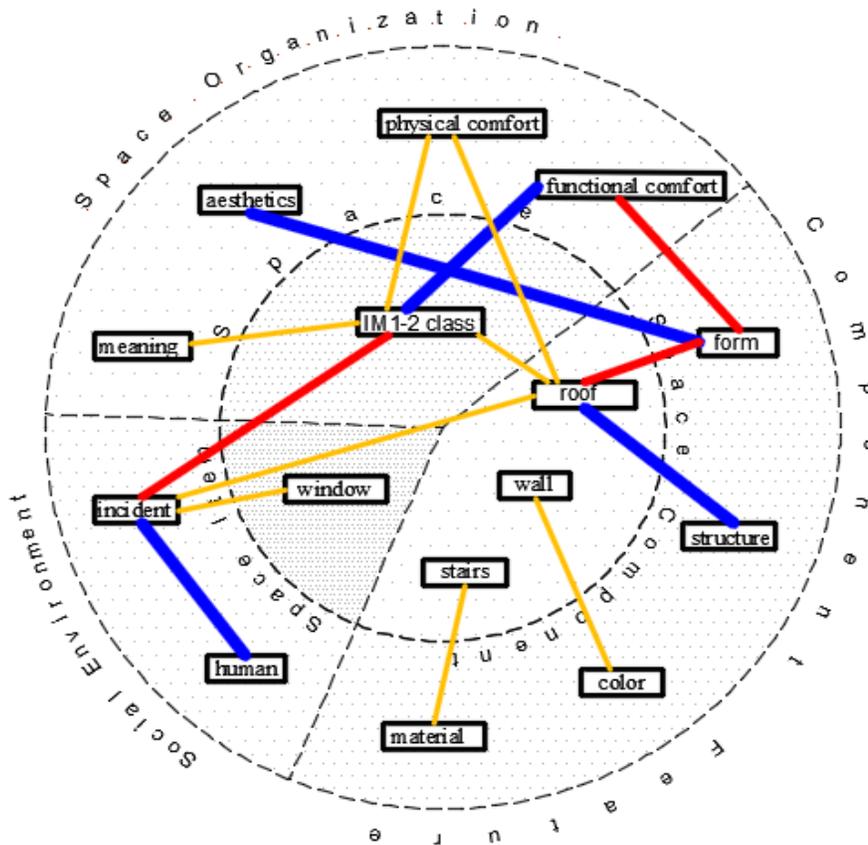


Figure2. Link pattern of the characteristics remembered in the space

## The Affect of Commitment to the Space in Remembering the Construction

### User Manner against the Construction

In the study which the commitment against the construction was evaluated with the concept of manner, the manner against the structure was exhibited with the 25 points semantics difference scale. Factor analysis was implemented on the articles in order to reveal the relation between the articles themselves that took part in the scale and turn into a few basic components. Steps of the factor analysis and the obtained results were given place in this section.

### Determining the Manner Factors

#### Suitability of the Data Set for the Factor Analysis

Firstly, whether the data set was suitable for the factor analysis or not was investigated. For this, whether the sample size was sufficient or not was seen with the Kiaser-Meyer-Olkin (KMO) value and the correlation between the variables were seen with Bartlett's Sphericity test (Kalaycı, 2014: 327). In order to implement the factor analysis into the data, it is expected that KMO value be bigger than 0.50. At the end of the analysis that was made, KMO value was determined to be 0,852. Considering the correlation between Bartlett's Sphericity test and the variables, the significance value is seen as 0.000. Bartlett's Sphericity test has been found significant. ( $X^2$ : 1316,293,  $P < 0.05$ ) (Table2). Data set is suitable for the factor analysis.

Table2. Kaiser-Mayer-Olkin (KMO) and Barlett's test

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		.852
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	1316,293
	df	231
	Sig.	,000

#### Determining the Number of Factors

As the method of obtaining factor, Principal components analysis was chosen. At the end of the factor analysis that was implemented, data regarding the manner whose eigenvalue is bigger than 1 ( $\lambda > 1$ ) gathered under 5 factors (Table 3). As a result of the factor analysis, 25 numbers of variables fell to 20. Five factors obtained in the study have explained %70.8 of the total variance. In Table 3, distribution of the factors that were thought to have affected the manner against the building in accordance with the five main groups has been shown.

Table3. Total variance and the factors' percentages of variance description

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
<b>1</b>	9,177	41,713	41,713	4,918	22,354	22,354
<b>2</b>	2,328	10,582	52,295	3,192	14,507	36,861
<b>3</b>	1,484	6,743	59,038	3,133	14,242	51,103
<b>4</b>	1,338	6,081	65,119	2,736	12,437	63,541
<b>5</b>	1,266	5,753	70,872	1,613	7,331	<b>70,872</b>

#### Interpretation and Naming of Factors

Factor rotation is done in order for the factors to be interpreted. In factor rotation, Varimax method was preferred. As the result of this, the matrix of recursive factor loadings gathered from 20 articles and 5 factors is seen in Table 4. The interpretation and naming of factors were done considering the factor loadings. First factor, having the most description power with %22,354, there are six manner articles.

These articles were in the form of "The building is beautiful architecturally, the building is important for me; my memories belonging to the building are positive; the building is meaningful for me; my level of remembering the building is frequently; I miss the demolished building." The articles point out the importance of the building for the participant, that's why 1. Factor was named as "significance". The second factor consists of five articles and as the articles comprise of statements in relation with the form of the building were named as "form".

Third factor consists of four articles and point out to spatial characteristic of the building. Third factor was named as "space". Fourth factor consist of three articles, as the articles include functional characteristics, factor was named as "function". And the fifth factor consists of two articles comparing the old and the new interior architecture building and the factor was named as "comparison".

As the result of the factor analysis, the article groups were assigned. In this section, manners belonging to the five groups that were obtained were give place. In the study, adjective couples that best describe the construction were given to the user and asked to rank them. In the evaluation of the question in which seven Likert scale was used, the mean of the articles that fall within the group was taken. The value between 0-3.49 shows positive situation, 3.50-4.49 the state of being neutral and 4.50-7.00 the negative state. When we have considered Table 5 in this regard, Significance Factor (2.51), Form Factor (2.90) and Function Factor (3.53) about the construction being found positive, about the Space Factor (3.53) and the Comparison Factor (4.49) remained neutral.

Table4. Matrix of rotation factor loadings

Articles about the manner		Component				
		Significance (1)	Form (2)	Space (3)	Function (4)	Comparison (5)
Seen from the outside the building is	Nice/Not nice		,689		,407	
In connection with its environment the building is	Positive/Negative		,500			
Architecturally the building is	Beautiful /Ugly	,758				
Architecture of the building	Unique/Ordinary	,432	,712			
The classes in the building	Spacious/Gloomy	,355		,662	,372	
Inner spaces of the building	Interesting/Common		,352	,583	,333	
In terms of function the building is	Practical/Unpractical			,412	,714	
Functionally the building is	Sufficient/Insufficient			,803		
Spaces the building has	Flexible/Stiff			,527	,372	
Emotion the building has evoked on people	Warm/Cold				,804	
The building is remarkably	Colourful/ Colourless		,610		,423	
Perception of the building	Easy/Difficult				,679	
For the designer the building is	Inspiring /Ineffective	,362	,669			
The building for me is	Important/Unimportant	,805	,302			
My memories about the building are	Positive/Negative	,881				
For me, the building is	Meaningful/Meaningless	,858				
My level of remembering the building is	Often /never	,768				
The demolished building	I miss/I don't miss	,735				
The old building	Recalls/Does not recall the new one					-,855
Compared with the old one, the new building	I love /I do not love	,307				,799

Table5. Manner against the space according to the factors

Factors	Articles about the manner	Manner
Significance (F1)	The building for me is	Important/Unimportant
	My memories about the building are	Positive/Negative
	For me, the building is	Meaningful/Meaningless
	My level of remembering the building is	Often /never
	The demolished building	I miss/I don't miss
	Architecturally the building is	Beautiful /Ugly
Form (F2)	Seen from the outside the building is	Nice/Not nice
	In connection with its environment the building is	Compatible/Not compatible
	Architecture of the building	Unique/Ordinary
	The building is remarkably	Colourful/Colourless
	For the designer the building is	Inspiring /Ineffective
Space (F3)	The classes in the building	Spacious/Gloomy
	Inner spaces of the building	Interesting/Common
	Functionally the building is	Sufficient/Insufficient
	Spaces the building has	Flexible/Stiff
Function (F4)	Emotion the building has evoked on people	Hot/Cold
	In terms of function the building is	Practical/Unpractical
	Perception of the building	Easy/Difficult
Comparison (F5)	The old building	Recalls/Does not recall the new one
	Compared with the old one, the new building	I love /I do not love

## Relationship between Remembering with Attitude

After this stage, the link between the factors about the manner obtained and remembering the building was searched with a regression equation that will be formed using the factors as explanatory variable.

### Binary Regression Analysis

In the study, it was aimed to determine the affect of the manner against the structure and the characteristics of the user on remembering the construction. Factor scores belonging to five factors that were obtained from the factor analysis and the affect of characteristics such as age, gender, education status, usage purpose etc. that belongs to the participant on remembering the building were searched with logistic regression analysis.

In order to test the manner factors that were effective in remembering the building and the effectiveness of each user characteristics, univariate logistic regression analysis was implemented on variables. The values obtained as the result of the analysis was included in Table 6.

As a result of the univariate logistic regression analysis, in remembering the construction clearly, “Manner belonging to the significance of the building (Factor 1), Manner Belonging to Form (Factor 2), Age, Level of Education, Profession and the Usage Period” variable was found important statistically ( $p \leq 0.05$ ).

In order to find a model that will explain the relationship between the remembrance of the construction and the manner, all the variables (Manner belonging to the significance of the building (Factor 1), Manner Belonging to Form (Factor 2), Age, Level of Education, Profession and the Usage Period) that were thought to be associated with remembering the space were put into the equation using Backward LR method. The results that were obtained are as follows;

In the explanation for the state of remembering the construction, “Manner belonging to the importance of the building, manner belonging to the form and the age of the participant” variables were seen to be significant. Interpretations that will be made out of the estimated logistic regression model are done with the odds ratio that is estimated for the variables in the model (Albayrak, 2014: 287). Odds ratios ( $\psi$ ) were given in the Exp (B) column of Table 7. Odds ratio of the manner variable belonging to the importance of the building was found to be 1,856. This coefficient shows that it is 1,856 times more effective against the state of being positive, negative that belongs to the importance of the building in remembering the building.

Odds ratio of the manner variable that belonged to the form was found to be 1,891. This coefficient shows that in clear remembering, the manner belonging to form’s being positive is 1,891 times more effective than the state of being negative. In logistic regression, the states of other groups are evaluated according to a subgroup determined in case of the independent variable group’s being more than two. In the study, 24 years of age and a smaller age group were taken as reference.

Odds ratio belonging to the age group2 (25-34 ages) variable was found as 0,238. Those who are between 25-34 ages remember the construction 0,238 times more clearly than those who are 24 years old and smaller. Odds ratio of age group3 (25 ages and above) was found as 0,041. Those who are 35 years old and above remember the construction 0,041 times more clearly than those who are 24 years old and smaller. The value of r square being 0,349, % 34, 9 of factors determining the clear remembering *can be explained by the variables in the model*. In this classification table which was acquired for this equation available data and values obtained from the model were given place (Table 8). Correct classification ratio of the model is %82.1.

Table6. The results of the variables that were considered to be effective in remembering the construction regarding the univariate logistic regression model (Enter method)

Variable	$\beta^{\wedge}$	SE ( $\beta^{\wedge}$ )	$\psi^{\wedge}$ Exp(B)	95% C.I.for EXP(B)		df	Wald	p
				Lower	Upper			
Manner belonging to the significance of the building (1)	,476	,239	1,610	1,007	2,573	1	3,962	<b>,047*</b>
Manner Belonging to Form (2)	,528	,250	1,696	1,039	2,767	1	4,473	<b>,034*</b>
Manner Belonging to Space (3)	,249	,237	1,283	,806	2,041	1	1,104	,293
Manner Belonging to Function (4)	,359	,240	1,432	,895	2,291	1	2,238	,135
Manner Belonging to Comparison (5)	,036	,237	1,037	,651	1,651	1	,023	,879
Gender	,360	,478	1,433	,561	3,657	1	,566	,452
Frequency of Use	,654	,593	1,924	,601	6,156	1	1,216	,270
Age	24 years and below	-	-	-	-	2	7,735	<b>,021*</b>
	25-34 years	-1,386	,574	,250	,081	1	5,824	<b>,016*</b>
	35 years and above	-1,224	,632	,294	,085	1	3,755	<b>,053*</b>
Level of Education	High school	-	-	-	-	2	6,661	<b>,036*</b>
	University	-,501	,482	,606	,236	1	1,083	,298
	Graduate	-2,724	1,077	,066	,008	1	6,395	<b>,011*</b>
Profession	Student	-	-	-	-	3	10,967	<b>,012*</b>
	Academician	-1,500	,582	,223	,071	1	6,642	<b>,010*</b>
	State personnel	,951	,924	2,588	,423	1	1,059	,304
	Free-lance - Interior designer	-1,283	,713	,277	,068	1	3,232	,072
Usage Purpose	Workplace	-	-	-	-	2	2,292	,318
	Get educated	,139	,651	1,149	,321	1	,045	,831
	Workplace + Get educated	-1,492	1,209	,225	,021	1	1,523	,217
Usage Period	Less than 4 years	-	-	-	-	2	6,680	<b>,035*</b>
	4 years	-1,912	,789	,148	,031	1	5,867	<b>,015*</b>
	More than 4 years	-,788	,632	,455	,132	1	1,552	,213
Constant	-,859	,239	,424	-	-	1	12,947	,000*

Table7. Multivariate logistic model results that were obtained using backward LR elimination method based on likelihood ratio test from the stepwise selection method

Variable	$\beta^{\wedge}$	SE ( $\beta^{\wedge}$ )	$\psi^{\wedge}$ Exp(B)	95% C.I.for EXP(B)		df	Wald	P*
				Lower	Upper			
Manner belonging to the significance of the building (1)	,618	,275	1,856	1,082	3,182	1	5,053	,025
Manner Belonging to Form (2)	,637	,293	1,891	1,064	3,361	1	4,712	,030
Age	24 years and below	-	-	-	-	2	10,026	,007
	25-34 years	-1,434	,638	,238	,068	1	5,044	,025
	35 years and above	-3,186	1,223	,041	,004	1	6,780	,009
Constant	-1,671	,451	,188	-	-	1	13,755	,000

\*P<0.05, statistically important variables

Table8. Classification table for the clear remembering

All groups		Predicted		Percentage Correct
		Clear remembering	Unclear remembering	
Observed	Clear remembering	56	3	94,9
	Unclear remembering	12	13	52,0
Overall Percentage (%)				82,1

## Conclusion

This study suggests that the connection people have established with the space is effective on remembering the construction. In the study, space memory relation, because of the memory being an individual competence and on the basis of user evaluations, was conducted taking KTU Interior Architecture building as the subject matter. Firstly, which constituents take place in the permanent memory about the construction was searched. Afterwards, the manner against the construction was detected and its effect on remembering the construction was revealed.

The individual's practice of everyday life in the space, beside objective features that the space has such as form, colour, material, texture, was affected by catalyzer, complicating, restrictive, discriminating, prohibitive features of the space (Pallasmaa, 2014: 78). Experience of the space is the experiencing of the environment which the function forms with the spatial components by the individual. At the end of these sensory and semantic experiences, an image belonging to the space is formed in the mind. At this point, revealing the connection between the feeling that the individual feels for the space and the clearness of the image that is formed in mind provides data for us to design livable, qualified spaces.

Considering the features remembered about the construction in the study, as a result of the content analysis, IM1-2 class was uttered most as the space name. This space is remembered for its many aspects (functional condition, physical condition, incident and roof features). The classroom which is also stated as the most used and beloved space, has been permanent in the memory as a place where the interaction is dense. When the points the user remembered about the space were examined it is seen in general that the construction was remembered within the framework of roof, form, IM1-2 class and some incidents that were lived through. Being remembered intensely with regard to human-incident, form-aesthetics, roof-structure and IM1-2-functional conditions, it has been seen that the points which is differentiating in the space and not being ordinary increased the permanence in the memory strengthening the perception. Remembering the space which is used densely with its more mainly functional conditions shows that the space left a mark with the direction that the space entering with the individual. Another point is that the user's using the space as a reference point in addition to the architectural characteristics that the space has and giving place to incidents-human matching with the space.

When considered in general, connections that were based on many justifications between the construction and the user can be established. For the sake of establishing the connection between the structure and the user, the concept of manner was used in the study. Five different manner factors were assigned against the construction as the result of the factor analysis that were applied to the articles formed so as to measure the manner. It has been seen that the user has a positive manner in general toward the construction but is hesitant in comparing the spatial characteristics of the structure and the new building. Significance factor that includes the articles reflecting the significance of the building for the individual shows that the user established a positive connection in general emotionally.

Regression analysis was applied to data that fell within the user characteristics with factor score belonging to five manner factors representing the connection between the construction and the user. "Significance factor" that expresses the importance of the construction for the individual, "form factor" that reflects the

user's manner belonging to the form of the construction and the user's "age" are effective on remembering the construction clearly. It has been revealed that in case of the manners being positive, the construction is remembered more clearly.

Considering the data obtained from the study in general, the form which the chosen construction in the study has and the state of being genuine, eye-catching and different that the structure brings to the construction have enabled the remembered characteristics in the space intensify at this point. On the other than, it has been established that the users who adopt a positive manner towards this form that the construction has remember the space more clearly. Also, the structure's having importance for the individual affects its being remembered clearly in a positive way.

In conclusion, it has been seen that the connection established in the study with the space creates positive effect on remembering the space. Considering the importance of the space that the individual uses as a reference point in his/her lifetime as well, it has been revealed the significance of designing spaces that the individual establishes a bond with. Considering the memory's leading effect of social and personal life and the role the space has undertaken at this point, approaches must be brought with strengthening the connection between the space and the individual in the design process, how the user will feel in the space must be dwelled on.

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