

## Evaluation of the Surface of Diyarbakır Grand Mosque Façade in the Semantic and Syntactic Dimensions

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### ABSTRACT

As a communication tool, architecture plays an important role in conveying the emotions, ideas, beliefs and culture of a society, as well as in transferring these values from one generation to another. The Diyarbakır Grand Mosque (DGM) has always been a centre for belief since it was built. This study aims to analyse, understand and redefine architectural discourses by interpreting the exterior surface of the DGM. In addition to this, The DGM, carries both concrete and abstract meanings. In this context, this study investigates how these meanings have been conveyed to the next generations through the semiotic signs. Based on this perspective and a semiotic approach, the yard and street façade of the east wing of the Diyarbakır Grand Mosque was semantically and syntactically analysed as a cultural indicator. The syntactic analysis was performed using the Gestalt and basic design principles, while the semantic analysis was performed through denotation and connotation. Semantic and syntactic evaluation revealed the influences of various religious beliefs on the social and cultural life of the Diyarbakır. This study has also shown that the semantic and syntactic evaluations of the DGM is important for creating a common language and ensuring the continuity of such studies. The semantic and syntactic evaluation of the DGM has been firstly conducted through this study

**Keywords:** Semiotic, Gestalt, Denotation Meaning, Connotation Meaning, Grand Mosque, Diyarbakır

### INTRODUCTION

The genesis of architecture is part of prehistory and as such, it plays an important role in conveying the sense of a society, and its ideas, philosophy, beliefs, and culture, as well as in transferring cultures from generation to generation. In doing this, architecture communicates through time; that is, architectural works are accepted as a language of signs and thus speak for themselves through generations (Uraz, 1999; Uraz, 1993). In the first half of the century, the tendency towards functionalism in architecture and urban planning resulted in the creation of one-dimensional, senseless products. Yet, from this, a search for the narrative of architectural works emerged. In the pursuit of identifying the meaning of architectural works and products, architectural theories began to form, first by applying linguistics, followed by semiology. In applying the theoretical approaches of semantics to architectural theory, the meaning behind the form and space and their interpretation were examined. With these approaches, architecture grew to become a 'language' through its products, while the products functioned as the signs (Kalpaklı, 1990; Kalpaklı, 1997).

Behind each architectural form, there lies a meaning and an assumption about a society's way of life. Architecture, a statement of the era to which it belongs, is a heritage, providing information about a society's life and socio-cultural structure and establishing an important communication network, where the signs function as the most important means of this network. Cities are settlements that bequeath the cultural and historical heritage they have accumulated over time to humanity through urban development (Berchem et al., 2015). In this study, the eastern wing courtyard and street-side façade of the Diyarbakır Grand Mosque (DGM) (also known as "Ulu Mosque") were investigated,

from a syntactic and semantic point of view, as cultural signifiers. By conducting a scientific analysis on the syntactic structure of the façade, a meaningful conception of it can be reached and will help to develop the sensitivity needed to facilitate healthy judgments. The design principles constituting the visual quality of the façades create and influence the character of the environment. In other words, the formal characters on the façade form the main features for determining the system of cultural formation of the architectural product. The DGM is part of an important building group located in the historic centre of the city. Over the years, the various governments managing the structure have preserved and restored it, constructing additions at times. Dating back centuries, the Grand Mosque presents not only physical characteristics but also abstract meaning generated from different cultures. In this study, the process governing the historical and social development of the building and how it has been transferred to the succeeding generations was evaluated semiotically, that is, the analysis of the architectural structure was carried out using semiotic theories and methods.

### ARCHITECTURE AND SEMANTICS

Semiology can be defined as a science devoted to the study of the creation of symbolic representation, where the aim is to establish a system through signs and to communicate through them. The field of semiology also studies all the tools used for communication, investigates their relations with signs, and tries to determine their genre (Erkman, 1987). Essentially, semiotics focuses on understanding and defining signs. At the same time, semiotic analysis involves identifying the discourse of signs by researching, deciphering, constructing and restructuring the signs (Rifat, 1992). According to Ferdinand Saussure (Erkman, 1987) who is recognized as the pioneer of linguistics, the notion of the signifier in the definition of semiology becomes the main term. A sign is briefly defined as all of the words, objects, appearances or phenomena that can refer to something other than itself and take its place. The notion of sign, which is regarded as the basic point of movement of semantics, is a collection of various units of every meaningful whole, such as natural language, behaviour, traffic signage, a city's arrangement, a picture, a theatre, an advertisement, and architectural arrangements that people use to negotiate with each other (Rifat, 1990; Eco, 1987). The first thing that comes to mind when the term sign is used is the object represented by the sign. Architecture is a field where semiotics is intensely involved (Barthes, 1993; Erkman, 1987). A review of the literature showed that one of the most commonly used diagrams in semiotics is the one presented in Figure 1 below. Architectural signifiers are physical spaces that carry declarations and are thus stimulating. The architectural elements that make up the identity of a place, such as shape and form, influence the character of the surrounding area, together with its layout. All building components that create visual communication are in a semantic relation with the user. In effect, the building becomes a sign, implying that the object has semantic value besides its functional purpose. The sign, therefore, is believed to be represented by the form that it takes, the signifier, and the concept it represents and signifies to the observer.

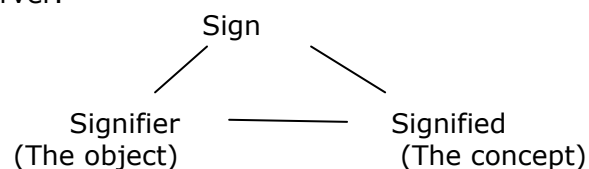


Figure 1. Barthes Semiotics Diagram (based on Erkman, 1987).

Semiology is the study of the relations and concepts governing various types of signs that emerge by identifying their concrete relationship with meaning. Today, as a result of socio-cultural, economic, and technological developments, and changes in lifestyle, an array of visual elements has factored prominently in the field of information and culture transfer. Every meaningful visual becomes a communication tool. In this sense, visual images related to the field of visual arts have communicational functions outside of their aesthetic and fictional integrity. Charles Morris deals with semantics in three ways:

syntactically, semantically, and pragmatically. The syntactic sign of a structure is defined as the meaning of the semantic function of the sign (Aksoy, 1975; Roth, 2002). In semantics, the meanings of the notation take on importance when examining, from a syntactic approach, the principles and relations operating in the merging of signifiers with other signifiers.

### CONCEPTUAL FRAMEWORK

In the field of architecture, all the possibilities and limitations of the 'natural environment', as well as all human dimensions, are taken into consideration. This field also includes the values related to the 'production' phenomenon, the characteristics of 'the structure of society', and the cultural values of society. With these qualities, architecture emerges as an action that reflects the social, political, cultural, and economic characteristics of the age in which it was constructed. Thus, architectural products exist as testaments, providing important information, such as the lifestyles of previous generations, the aesthetic sentiments, and the level of sophistication reached in the art of building and ornamentation. The examination and evaluation of architecture, therefore, presents us with a history, whereby we can learn from experience, take examples for the future, and pass the architectural products on to future generations as a living document. This study aims to apply a systematic design process to integrate the syntactic-semantic features that exist in the human interaction with façades. Bringing together objective and subjective data allows the façade to become an efficient open source that can be inspected and understood. This approach fostered the development of a method in which the syntactic and semantic structure of the façade is related. The proposed method is presented in Table 1. To recreate the story informing the façade requires an evaluation of the meaning and dynamic structure of the façade by applying an interdisciplinary approach, from which a method can be derived. The objective measurement method can be applied at the syntactic level using design principles (Ching, 2002; Lauer & Pentak, 2002). For this purpose, the design principles used by the researchers were examined (Şenyiğit, 2010; Aydın, 1993; Yücel, 1981). In the subjective evaluation of the façade, primary and secondary meanings were examined using the semantic approach, the scope for which included an analysis of the concept of the façade, the creation / development of the theoretical model, the practical application of the theoretical model established through fieldwork, and a discussion of the emerging data within the concepts of identity / legibility.

In the syntactic analysis, structure, natural light, circulation, additions and subtractions, hierarchy, mass, geometry, repeated units, constituent parts, and completeness are examined. Certain principles, like the use of light and shadow, the arrangement of colour, and texture, are used in the formal expression of space (Sentürer, 1995). From this point of view, in order to attach meaning to the physical characteristics of the street-side façade facing the city square and the composition of its visual features and the layout for the eastern part of the DGM, the Gestalt principles (Şenyiğit, 2010) and basic design principles are employed within the context of the syntactic part of the study. Visual unity is known as gestalt theory in visual psychology (Lauer & Pentak, 2002). Objects with common or closely-aligned sides have increased compatibility. Aspects such as form, dimensions, colours, and textures can serve to complement the suitability of object arrangement. While the physical items that play a role in shaping the façade are viewed within the framework of Gestalt principles and design principles, the principles of visual effects are also taken into consideration. The design principles selected for use in this study are investigated according to their importance in the façade. The advantages, intensities and orientations of these principles are considered in defining the composition of the façade [Table 1].

Table 1. Syntactic and Semantic relationships with Structure of Façade

Syntactic	Semantic	
	Denotation	Connotation
Gestalt principles Proximity, Similarity, Closure, Good Continuity, Pragnanz- Simple Open Structured Element, Immutability, Experience Rules	Indicated Objective Interpretation	-
	Indicated Objective Interpretation	Indicated
	Signifier	Signifier
Design Principles Hierarchy, Repetition, Datum, Rhythm, Balance, Contrast, Theory, Conformity	Primary Objective	Secondary Objective
	Structure, Functionality Possibilities of physical use, Surface	Personal Experience, Cultural Values, Cultural Memory, Symbolic Impressions

In the semantic analysis, the semantic aspect of the architecture, which is regarded as the basic form of communication and narration, is evaluated by considering that each form has a meaning. Semiology focuses on the established relationship between the signifier and the signified, where the sign is interpreted as a two-stage unit. In the first stage, each concept is an abstraction of the relationship between a real-world object and a sign. In the second stage, the representation of the concept in the communication phase is determined. The basic layer of the meaning is referred to as "denotation", which means understanding the object as it is. Taşkıran (1997) defined denotation as "The comprehension of what is shown objectively and as it is".

In short, denotation is the direct meaning, involving the simple relation of a signifier and signified (Yücel, 1981). Apart from denotation, there is also the concept of connotation (Şenyiğit, 2010). The connotation is the sensory secondary meaning of the signifier that is affected by the culture and social life of a society but has no corresponding concrete counterparts to the signifier. (Taşkıran, 1997). According to Lindsey, connotation reflects the interpreted cultural values of a building or community according to their personal experience (Aydınlı, 1993). Otherwise stated, the connotation reflects the purpose and ideas of the architect (Yücel, 2005). Symbolic notations (connotations) are conceptual features that lie behind spaces and surfaces (façades), and they depend on the individual's past experience and culture rather than the form and shape [Table 1] (Ertürk, 1984). In this study, the semantic features of the façade of the eastern part of the DGM and the surface of the street-side façade facing the city square were investigated. In order to elucidate the conceptual features of these façades, the study conducted evaluations based on the concepts of denotation and connotation in semiology.

## MATERIALS AND METHODS

For the analyses carried out in the field study, which was conducted based on a review of the literature, the main materials were obtained from on-site observations and included photographs, measurements and drawings. These materials were subjected to analysis and synthesis. The area selected for the study is within the boundaries of the old city centre of Diyarbakır and was chosen because it included the front façade of the eastern part of the DGM and the street-side façade facing the city square, which made it an efficient open source, capable of being investigated. It is hoped that the results from this study and the created model will contribute to the design and evaluation process of the façades.

For this study, the street-side and courtyard façades of the eastern wing of the DGM were evaluated on the basis of their syntactic and semantic dimensions by applying semantic methods to determine the relationship between meaning and space. At the syntactic level, Gestalt and basic design principles were applied, while at the semantics level, analyses were conducted based on the theoretical views posited by Umberto Eco and Roland Barthes (Barthes, 1993) in terms of the bilateral structure of denotation and connotation, which constitute two levels of meaning [Table 1].

Grand Mosque is a building complex of Diyarbakır and a religious worship structure. As a building complex, it also serves as a social education site with its religious education departments, as well as meeting place, where city affairs are spoken about and discussed. Characteristic features from different eras can be seen on the façade, along with their respective intervening contributions. When examined from different perspectives, different features, such as building beads, type of stone cutting, ornamental style, use of materials, and the traces of many different civilizations, can be seen. It is possible to discern the repairs, restorations and other changes the structure experienced by looking at the inscriptions and epigraphs, as these serve as historical documents. It is also possible to learn about the period from the ornamentation and building elements on the façade. The effects and reflections of this historical process can therefore be explained through the discourse expressed by the façades. The scope of this study is limited to the eastern wing, as it is believed that this part best reflects the building community, given that its façade faces both the outside and the courtyard.

## RESEARCH AREA

Located in the south-eastern part of Turkey, Diyarbakır is a long-standing ancient city, situated at the eastern edge of a large basalt plateau, 650 m high and extending from Karacadağ to the Dicle River, about 100 m above the Dicle Valley (Gabriel, 1940). Since ancient times, the city has served as a centre and has preserved its significance in every era, owing to its important transportation routes (Yılmazçelik, 1996). In addition, the region played an important role in the early development of Christianity and has hosted numerous civilizations and personages, including the Hurrians, Mitanni, Assurs, Urartians, Scythians, Med, Persians, Alexander the Great, Seleucids, Parthians, Tigranes the Great, Romans, Nisibis, and Persians (Beysanoğlu, 1998; Gabriel, 1940). This has made the Surîçi region one of the most important sites of rich historical and cultural accumulation, as it bears the traces of many civilizations. The traditional, organic, street texture of the area, home to a large concentration of monumental and civil architectural examples, is still preserved (Tekin, 1997). The DGM lies within the city walls, in the north wing of the road junction that divides the region into four parts. It is surrounded by inns, bazaars, baths and housing [Figure 2].



Figure 2: Location of Diyarbakır on Map of Turkey (Left) and Location of Grand Mosque in the Sur Region (Right) (Captured from Google Earth access date: 03.04.2015)



## DIYARBAKIR GRAND MOSQUE AND ITS STRUCTURAL PROPERTIES

The Grand Mosque in Diyarbakır is interpreted to be a reflection of the famous Umayyad Mosque of the Early Islamic period in Anatolia, and it is recognized as being the 5th Harem-i Şerifi of the Islamic world (Çetin & Özbudak, 2005). Although there are no sources that clearly date the construction of the DGM, Greek historians believe that it was built during the period of the Prophet Musa (Okumuş, 2012). In examining the courtyard façades of the DGM, the architectural ornaments, reliefs, and inscriptions from different periods can be clearly seen. The inscriptions on the site belong to the Seljuk Empire, Inaloğulları, Artuqids, Anatolian Seljuk, Aqoyunlu and Ottoman periods (Top, 2011). It is also mentioned by many sources that the building group had previously been used as a church by the name of Mar Toma. After the conquest of 639, it is said that one third of the churches of Mar Toma were transformed into mosques (Tuncer, 1996; Beysanoğlu 1998). However, the columns, exaggerated acanthus leaves and eaves, their general interpretation and influence, lead us to even before this period. It is believed that those additions refer to the Anatolian interpretation of the classical Greek Corinthian understanding, which was influenced by the Late Roman-Early Byzantine period. According to some sources, the temple was built before the 7th century AD and used for pagan worship and rituals, (Tuncer, 1996). The Grand Mosque of Diyarbakır was used as a structure of worship in every period of its history.

The DGM lies within a large courtyard made up of four quarters, which include the Hanafi section in the south, the Shafi section in the north, the northern entrance area, the Masudiye Madrasa cloister, a traditional house and toilets, the eastern section, where there is a library which is said to be the timekeepers place, the east entrance, the west entrance, where the west entrance cloister is located, and lodges for Qur'an houses in the upper part [Figure 3]. Around the shadirvan, there is an octagonal, pointed pyramidal cone fountain that was made in the Ottoman period, a prayer niche that rises up a few steps, a pool, a sun clock, and other units. The arched main entrance on the eastern side of the building can only be partially seen from the outside due to the elevation of the bazaar immediately in front of it. Other entrances open up to traditional streets. An examination of the materials used for the façade ornamentations of the DGM shows that mostly stone is used, that is, the locally sourced basalt and limestone. The basalt stone dominates the courtyard wings, which are enriched with different shaped columns and ornaments that are believed to be remnants from the past (Halifeoğlu, 2011). The columns, which are made of marble, and the capitals in the courtyard are of Byzantine influence (Tuncer, 1996).

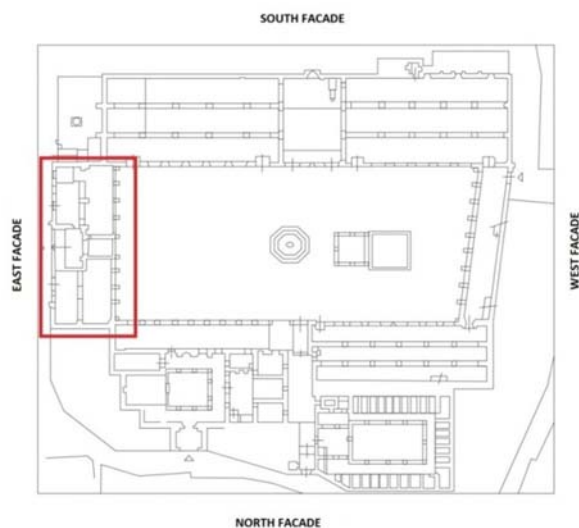


Figure 3. Grand Mosque plan (adapted from Tuncer, 1996)

### SYNTACTIC AND SEMANTIC ANALYSIS OF THE EAST WING COURTYARD FRONT

At the front side of the courtyard there lies the eastern cloister on the lower floor, the enclosed space on the upper floor and the eastern entrance. This enclosed place, which is now used as a library, lost its original function of being a time keepers area (Halifeoğlu, 2011). When the façade was subjected to the syntactic analysis, the similarity principle and the geometric hierarchy were shown to complement each other through the use of similar units, as they show strong perceptual unity. Moreover, the sequence of arches and columns creates a sense of rhythm and repetition. Since the lower floor consists of semi-open cloisters along the façade, when the eastern entrance in the middle of the front is considered as a whole, striking symmetrical balance on both sides can be seen. The surface of the building also features suitable formal, dimensional and spacing order. Looking at the epigraph and inscriptions that continue along the surface of the façade, the effects of the ordering principle can be seen [Figure 4].

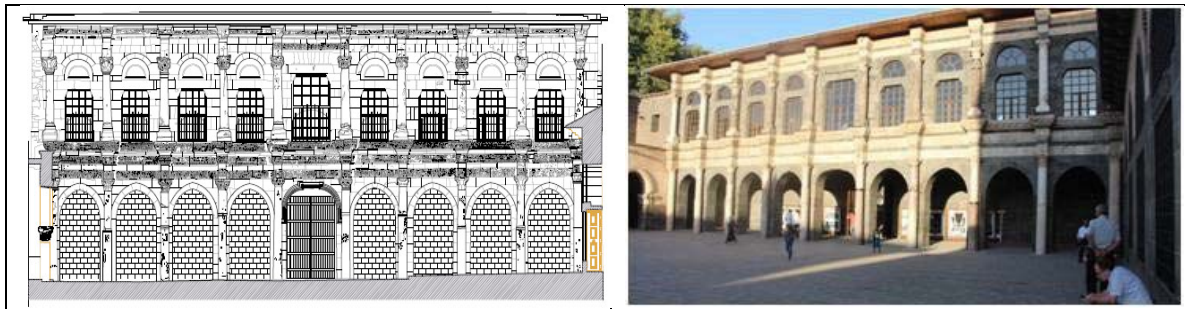

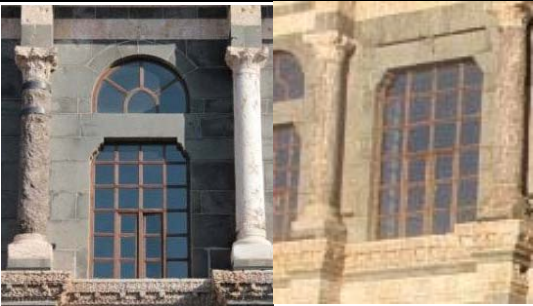




Figure 4. View of the Eastern Wing of the Grand Mosque from the Courtyard

The cloister is similar to a corridor, in the sense that it connects various parts. It has expansive spaces, and the sequential columns are covered over and form narrow, long sections. The stoa used in ancient Greek cities has a similar form. Building elements like cloisters serve to unite the form of the architectural design and symbolize transition (Arpacioğlu, 2006). Functionally, cloisters have become an indispensable element in hot desert climates, where the Islamic culture prevails, functioning to protect people from the heat (Arpacioğlu, 2006). The continuity that runs along the façade of the cloisters is not only functional but also enhances the visual effect by providing the complete integrity of the façade. The symmetrical distribution of the window openings contributes to the continuity of the same effect. Moreover, this style of arrangement is more than a stylistic feature of the design, it also serves to create a positive psychological effect, something akin to spiritual refreshment, by taking in more of the light. The east entrance becomes important in terms of location, as it is both a closure for the frontage and a central point of entry from the square and bazaar to the building [Table 2]. The entrance also emphasizes power and wealth in its welcoming and departing function. The entrance to the Holy Place, on the other hand, symbolises entry into the spiritual life (Arpacioğlu, 2006). The roof on the east side of the building becomes a complementary and limiting element on the façade surface. The building with the soil roof has been converted to a hipped, lead roof, which has been preserved to this day. The roof constructed in the 19th century was demolished and rebuilt as a lead roof. According to the Ching, the main overhead plane of a building is its roof plane (Ching, 2002). Not only does the roof allow the interior of the building to be protected from the sun, rain, wind, snow, and other weather-related elements, but it also protects the general shape of the building and influences the form of its spaces. The roof-plane can serve as the main space-defining element of a building's form, insofar as it can be used to visually arrange the forms and spaces it covers and encloses. From this point of view, the sloping roof gives the surface unity and complements the façade.








Table 2: Syntactic and Semantic Analysis of the East Wing Courtyard Façade Surface

<b>CLOISTER</b>		
<i>Syntactic</i>		Repetition, Symmetry, Rhythm, Balance, Continuity
<i>Semantics</i>	<i>Denotation</i>	Semi-open space, continuity along the façade, symbolizing passage,
	<i>Connotation</i>	Pragmatic, rain / sun protection (functionality), Visual Impact, Integrity
<b>WINDOWS</b>		
<i>Syntactic</i>		Repetition, Symmetry, Rhythm, Balance, Continuity, Similarity, Hierarchy
<i>Semantics</i>	<i>Denotation</i>	The corners in the middle are in a bevelled rectangular arrangement, with a two-level arrangement on the sides
	<i>Connotation</i>	More entry of light, spiritual refreshment effect, psychological effect, pragmatic, visual impact, stylistic shape change
<b>ENTRANCE</b>		
<i>Syntactic</i>		Closure, Experimentation
<i>Semantics</i>	<i>Denotation</i>	Passing from outside to inside, the entrance is basket arched, and the construction technique was used to allow for a wide opening
	<i>Connotation</i>	It symbolizes the passage between spaces and the transition of spiritual life, has a strong design and serves as a central gathering point
<b>ROOF</b>		
<i>Syntactic</i>		Closure, Experimentation, Completeness
<i>Semantics</i>	<i>Denotation</i>	Protection from external influences
	<i>Connotation</i>	Identification and delimiting element of the main space, making it stand out; effect of the period



The west wing features geometrically designed floral and figurative ornamentations as well as portraits of lions and bulls. There is no direct moulding or decoration on the pillars, but the column capitals are similar.

Table 3: Syntactic and Semantic Analysis of the East Wing Courtyard Surface

COLUMN						
Syntactic			Continuity, Repetition, Symmetric Balance, Hierarchy (Koram)			
Semantic s	Denotation		Bears architectural elements, Columns are named according to shape or style.			
	Connotation		Greek and Roman period effects. The decorations reflect the influence of the period. Corinthian order.			
ARCHWAY						
Syntactic			Continuity, repetition, symmetry, rhythm			
Semantic s	Denotation		Archways: the basket arch forms the opening to the entrance, while the four openings on each side have pointed arches.			
	Connotation		Style-dependent form change, visual diversity, cultural memory			
ORNAMENTATION			Ornamentation		Epigraph and Inscriptions	
						
	Syntactic		Continuity, Similarity, Proximity, Hierarchy, Conformity, Rhythm, Datum			
	Semantic s	Denotation	Ornaments can be seen on the architrave			
		Connotation	It carries the characteristics of the period it was built; visual effect		Historical value; Visual diversity	
	Animal and plant figures					
	Syntactic		Contrast in form, Experience Rule (Establishment of links to items)			
	Semantic s	Denotation	Bull	Tree of Life	Lion	
		Connotation	Sovereignty, the symbol of power, the symbol of fertility, the reflection of the social-culture-status of the period of construction, visual impact			

The inscriptions on the eastern wing are written in the frieze with Kufic art and continue along the façade, enriched with plant ornaments. The ornaments and figures are believed to reflect certain impressions, like protection and splendour, and take on the quality of a historical document [Table 3]. The surface of the façade, in general terms, exhibits an understanding that corresponds to the architectural style of the Hellenistic and Roman eras (Top, 2011) [Figure 3]. In the other part of the structure, the columns attract attention with its ornaments. The columns rising directly from the floor are made of marble, and the entablature shows different arrangements in Corinthian and composite style (Top, 2011). It has been claimed that this column entablature had been removed from the ceiling of an ancient theatre in Diyarbakır and placed here (Melek, 2009).

#### **SYNTACTIC AND SEMANTIC ANALYSIS OF THE EASTERN SIDE STREET FRONT**

It appears that the eastern wing's initial arrangement had two floors. Facing the street-side façade, there is an entrance on the lower floor, with an opening in the middle that includes an outside door, and two rectangular spaces on the north and south sides of the entrance. On the upper floor, one can see a façade surface be speaking a two-room arrangement, where a hipped roof is used. The most distinctive feature of the street-side entry is the large arch in the lower middle section. This archway is delimited by an arched cloister on the top. On the surface between this cloister and the arch is the most remarkable ornamentation of all, a bull fighting with a lion [Figure 5]. Apart from this arched arrangement, doors and windows that open on the lower and upper floors and a strut on both sides form other elements of the façade that complement each other.

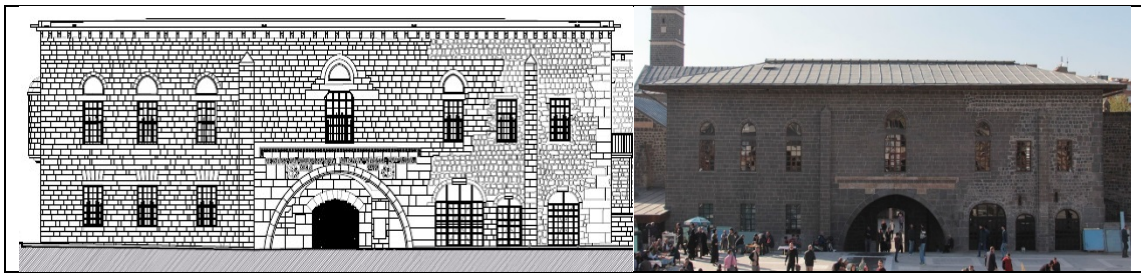

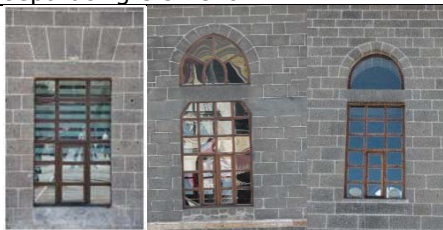




Figure 5: Grand Mosque East Street Front

The figures on both sides of the door at the main entrance of the eastern wing depict a lion and a bull fighting, a scene considered to be highly symbolic. In this depiction, which is also seen in Diyarbakır towers, the lion represents enlightenment, while the bull is associated with darkness (Parla, 2015; Yıldırım, 2003). The 12<sup>th</sup> century inscription on this wing was understood to have been made during the time of the Nisanogullari Empire (Top, 2011) [Table 4]. These inscriptions, along with the ornaments and depictions inside, are thought to symbolise protection and glory and to provide visual enhancement.

Table 4: Syntactic and Semantic Analysis of the East Wing Street-Side Façade Surface

ENTRANCE					
Syntactic			Closure, Experimental rule		
Semantic	Denotation		Outside to inside passage		
	Connotation		Transition symbol, strong emphatic effect, street and space separating element		
WINDOWS					
Syntactic			Continuity, repetition, rhythm		
Semantic	Denotation		Rectangular arrangement and Two-stage arrangement		
	Connotation		Style change due to artistic use, visual diversity, cultural memory		
ORNAMENTATION			<b>Strut</b>	<b>Epigraph and Inscriptions</b>	
					
	Syntactic		Continuity, Similarity, Proximity, Hierarchy, Conformity, Rhythm, Datum		
	Semantic	Denotation		In the upper part are ornaments and inscriptions in the frieze; The strut supports the bearer.	
		Connotation		Effects of the properties of the period of construction, Visual effect, Historical value	
	Animal and plant figures				
	Syntactic		Contrast in form, Experience Rule (Establishment of links to items)		
Semantic	Denotation		Figurative decoration; Lion and bull fighting.		
	Connotation		Reflects the social-culture-status of the period: Visual effect.		

In syntactically analysing the façade surface, the similarity principle and the geometric hierarchy show perceptual unity. Moreover, if the eastern entrance in the middle of the façade is considered as a whole, it appears to have taken on a definite shape compared to the other façades. This entry introduces a different meaning to the transition from street to street. In the places of worship, the main gate (transition) is usually a representation of a passage between two worlds, known and unknown, visible and invisible, functioning as a transition symbol (Arpacioğlu, 2006). The tops of the doors are usually decorated with symbolic items that reinforce their meaning, and with that, the

people who enter are provided with a passage beneath the Holy One. The entrance doors to the temples are located at the starting point of a path leading to the most sacred corner. The east side street front entrance seems to have similar characteristics, with the exception that the surface of the building also has suitable formal, dimensional and spacing order. In addition, the inscription along the façade of the entrance, surface and the planar datum principle are especially striking.

## **EVALUATION AND CONCLUSIONS**

The sharing of social meanings requires a social compromise. It conveys a sense of what humans have produced, used, or chosen. For this reason, almost everything related to human beings can be understood, evaluated and studied through a communication process. The context of understanding and interpreting an architectural work is mostly formed by the external appearance of the architecture. Therefore, the exterior surfaces of architectural products are important components in architectural products in terms of analysing the architectural discourse of the building, as well as defining, understanding and interpreting a society's way of life.

As a result of evaluations conducted in the context of design principles, the façade design can be regarded as having integral continuity (historical, cultural) rather than being seen as an independent piece of artwork, removed from time and space. This situation provides a dialogue between old and new, a conversation between the past and the present. The inherent nature of each language is the consistency of its syntactic structure. In other words, every new architectural arrangement made in the name of urban identity/continuity should be in communication with the previous cultures and use their codes in new formations.

The results of the syntactic and semantic analysis of the façade surface of the eastern part of the DGM and the street-side façade facing the city square are discussed below.

The general structure of the DGM which forms the city's identity and holds many symbolic meanings, has been shaped over time through the accumulation of the society's socio-cultural norms and the human need for order. The inscriptions and epigraphs scattered throughout various areas of the complex, but mostly concentrated in the courtyard, show that various repairs or additions were made on the structure during different periods between the 12th and 19th centuries (Tuncer,1996).The inscriptions and epigraphs are placed in an architectural arrangement which refers to the beliefs and cultures of the era. These arrangements of the facade gives a sense of integrity, which suggests just how rich the research area of the DGM is. The sloping roof application to the DGM forms a "place" and "image" feeling in terms of the city silhouette, while the flat roof forming the historical texture testifies to the climatic characteristic of the region.

Religious structures tend to be rich with symbols communicating social messages and meanings, as they serve, in their capacity as a place of prayer and worship, to cultivate a mystical sense in the people and foster their beliefs. Religious structures from all the religions became emotional and spiritual reflections of their societies through their system of symbols and understanding of shape patterns. Therefore, religious buildings boast rich material for semiological analysis. The DGM, which has been used for worship and social purposes ever since it came into existence, was addressed in this study as an symbol, in terms of the message it communicates to the audience/users, and its symbolic expressions, structural elements, beliefs, cultural values, and the ways it represents the sacred.

In this study, the east wing courtyard front view and street front view of the DGM was interpreted in the context of semiology. The elements recognized as the symbols of this historical and cultural work, whose history dates back centuries, were analysed both in terms of denotation and connotation. In this way, the meanings of the primary functions of these signs were able to be identified. Whenever a society is formed, every function



engaged in by that society becomes a sign in and of itself, acting as a reflection of itself or as a cultural sign. It was under this understanding of societies that the DGM has been analysed in this study.

Following the influence of the Muslim majority that came to reside in Diyarbakır, previous works of art were preserved but new Islamic art was added to it. This created a synthesis of religious art religions and cultures. This synthesis, which is common in many archaeological sites, is evident in the ornamentation on stones, the embossment on various structural elements, and inscriptions and epitaphs in the Grand Mosque. The writings on stones are especially important in the adornment of mosques. Epitaphs are not just historical documents, but also a work of art that represent the sense of art of Muslims. In other words, these writings are religious documents, in addition to being adornments. They also garnish the mosque with their aesthetic beauty. The stone dressings in the DGM feature various animal figures, like a lion and a bull, and also include a tree of life depictions alongside epitaphs. These symbols represent the cultural diversity in Diyarbakır, with the animal figures, whether realistic or symbolic, are thought to be related to past cultural values and beliefs of the society. The identification of the main principles governing the formal and semantic integrity of a city's architectural continuity helps to facilitate the mutual exchanges between traditional and contemporary façades and aids in preventing the people from feeling alienated by the settlements.

One of the key problems in architecture is the unfavourable developments that emerge in the community-environment relations when the structures cannot be understood or communicate a sense of meaning. This in effect creates an identity problem in architecture, increasing the indifference of the urban user to the environment. To circumvent this problem, greater importance needs to be given to the concepts of meaning and appreciation, the subject (city users) and object (façades) need to be considered as a dialectical relationship and the designs need to be shaped through semantic and syntactic thinking. However, to date, the data obtained for use in urban design has not been presented with a holistic approach, one that includes both objective and subjective data. In this sense, the "Evaluation Method", which takes into consideration design principles, has been established in order to take a more holistic view in examining façades. The aim of this developed method is to design and evaluate not only the façade but also all the elements of the structure. This model, therefore, can be further developed with new approaches and methods, allowing for greater variety in the design of application areas.

The DGM constitutes an important structural group, with both religious and social functions. This study has shown that the influences of the many religious beliefs, including Paganism, Christianity and Islam, on the social and cultural life of Diyarbakır can be seen on the front-facing façades of the DGM. The structure, whose meanings are protected within, is part of a cultural heritage that has been evolving in its journey to the present. As stated above, the identification of the main principles governing the formal and syntactic (subject/object) integrity for the continuity of an urban design will not only help to facilitate the mutual exchanges between traditional and contemporary façades, but also aid in preventing the people from feeling alienated by the settlements. In this sense, the evaluation of the DGM in this aspect, using a holistic approach, is important, both for the establishment of a common language and for the continuity of these works.

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