

## SEMIOTIC GOTHIC ERA IN CYPRUS

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### ABSTRACT

The main aim of this paper is to analyze Gothic Period in Cyprus during which cathedrals, churches, chapels were built in gothic style and also to discuss and analyze these gothic buildings according to the semiotic approach. Semiotic approach is silent language of buildings. Are forms and shapes most effective communication way between old memory of place? The main point of this research, create a relationship between physical, symbolic, spiritual memories and interpretation with gothic and contemporary building style. Contemporary designs and techniques have provided different effects and space feelings on users. But acutully there are many similarities between gothic and contemporary architectural designs. In addition, this paper focuses on structural, climatical, spatial organization and ornamentals through semiotics theory and deals with transparency approaches with selected buildings. The limitations of this text, however, is the restriction in the focus among a wide range of parameters offered by the semiotics theory by taking only one gothic styles among many into consideration as they reflect semiotic theories level. Semiotic theory is a very broad concept and semiotic approach deals with main ideas which signify some signs of other ideas or elements for people. Considering the fact that each element or text signify some ideas, theories, elements or some results, sign-object relations create semiotic theory. The method of research used in this paper is a qualitative one and it is prepared by using varied reference from books, magazines, texts to drawings regarding gothic architecture. Thirty six different gothic style buildings, which were built in Cyprus, have been anaylzed and all buildings are grouped in 3 categories according to the semiotic approach.

In conclusion, when gothic style buildings are analyzed architecturally in Cyprus, numerous similarities could be drawn between them and the contemporary architecture. As mentioned before, semiotic theory and approach is very effective on sign-object relations, since each architectural element or system is considered to be a sign and reference for contemporary architecture.

**Keywords:** Gothic Architecture in Cyprus, Semiotic, Sign-object relation

## INTRODUCTION

The Gothic architecture was first seen in twelfth century in France when the first Gothic building example, St. Denis Cathedral, was built. This cathedral marks the beginning of early gothic period in the 12th century. After this period, many Gothic cathedrals were designed and built in France and the style slowly and gradually spread to Europe. Gothic architecture has survived until today carrying its unique structural elements, facade design and sculptural figures. When Gothic architecture was influential and moved to Europe from France, many Gothic structures were built in Europe. When we analyze Gothic structures in Cyprus this influence becomes evident in many. The main aim of this paper is to analyze Gothic style buildings which were built in Cyprus according to Peirce's semiotic approach. At the same time, this research focuses on gothic characteristics: how they were adopted, how, as a sign, they continue to influence modern designs and how effective they are on contemporary designs. When gothic periods are analyzed, each period designer focuses on different construction and design problems affecting gothic buildings. In the light of semiotic theory which defines sign-object relations, it sheds light on how those relations provide some references and sign about particular objects. Sometimes sign can be some article which actually signifies some ideas or it can be some object which signify other objects.

The first part of this paper presents a general view about Gothic architecture in the world. In this part, the history and characteristics of gothic architecture are explained: how and where it was born, how it was developed in history and the main characteristic of gothic buildings have been elaborated on. Also focuses on the gothic architecture in Cyprus and presents details of when and how the gothic architecture was spread from Europe to Cyprus and what kind of characteristic the existing gothic buildings carry. Third part of the paper is based on Semiotic theory and it focuses on Charles Sanders Peirce semiotic approaches. This is followed by an analysis part where thirty six different gothic style buildings are analyzed and grouped according to semiotic theory. One building selected, which reflects the identity also selected according to semiotic theory. The main aim of this analysis is to compare gothic style buildings and modern approaches review the differences and similarities in gothic architecture and semiotic approach.

In conclusion semiotic theory and approach shed light on today's architecture and the main characteristics of gothic style developed, changed but still used by today's architecture.

### 1. GOTHIC ARCHITECTURE IN CYPRUS

In the history, every different architecture periods or currents have some different properties which is unique for each current. Architecture currents always reflect the change of social life. Also each current could find different construction techniques, different building forms, details and new materials. Gothic Architecture firstly started in 12 century in France and then spread to Europe and has been influential between 12-16 century. The main architectural identity is associated with linear vertical elements.

The island of Cyprus holds a strategic position in the Mediterranean. Throughout the history, the island has been a matter of interest and as a result of this attraction, Cyprus had been conquered by different nations. Each conquerer nation had also brought their people, traditions and social life practices. Among many structures, the most importantly they built many cathedrals, churches and other buildings which are associated with the architectural identity of each individual nation. For this reason, Cyprus has a distinct architectural wealth. Building of St. Denis Cathedral in France is the beginning of the gradual spread of gothic

architecture in Europe. With this approach in mind, many examples of gothic style buildings were built in Cyprus and when all of these gothic buildings are analysed, the exact same details, dimensions, structural systems and facade designs iconic to gothic buildings built in France and Europe can be found in Cyprus.

The Gothic structures built in Cyprus is situated in the north of island. Analysing the tourist attraction sites and cities which bear both social and historical value, one can observe that the Gothic structures are the main focus and moreover, the symbol of the region. In addition, Gothic structures were built in specific central locations at the time in order to enable social interaction considering trading and residence purposes. Today, the same importance of those locations is observed and the structures surrounding those locations remain in the same setting. Most of the Gothic structures have been renovated and refurbished as they are still in use, or they have slightly changed their functional use. However, some of them have been affected by natural disasters and decayed to a certain degree. The insufficiency of the static solutions and the weak bearing elements applied in those times are the main reasons for decay in these buildings because of their great mass and weight. Most of the early period Gothic structures have been deteriorated or collapsed completely.

## 2. SEMIOTICS

History begins with text, however long before the invention of text, people communicated through visuals such as paintings on the walls. The first paintings found in caves are milestones in the history of communication.

Undoubtedly, they bridge the past and present and maintain a very clear communication between today and history. Because visual communication is the most powerful communication system. Similarly, paintings, symbols, drawings are the most effective way of explaining or showing to reference something. Today, text and the usage of symbols have become the most powerful sign for the universal communication system.

The examination of signs, combination analysis, colour and symbol analysis have all formed the main reason for the birth of semiotics. Each visual tells stories, symbolizes some particular object or concept and they all are representations of something. This representations and meaningful visual symbols create semiotic approach in the visual communication system. For example, traffic signs are the most effective and successful visual communication object through which users easily understand what kind of message is given to them in a very clear way without using text. Therefore, it is natural to state that semiotic approach theory touches every aspect of our everyday lives and can easily be found everywhere in our world. This is to highlight how each letter or word or sentence try to give some message to the listener and the reader or encourage them to think of their representations and even direct them to think another way. Although historically semiotic approach started with visual communication, it deals with the language and communication in every possible way, forms come in different shapes: signs can be verbal, written or sculpted. Signs become symbols when they refer to its object by virtue of a law.

Visualization is the shortest and effective way to create communication and foundation of visual and verbal communication have many indexes. These index analysis and interpretations gave birth to semiotic approach. Generally semiotics consist of sign, symbols and indexes.

Modern semiotic approach foundation started at the beginning of 20th century. The American philosopher Charles Sanders Peirce (1839-1914) and Swiss linguist Ferdinand de Saussure (1857-1913) started to search and discuss their own semiotic theories. Also both scientists

started to search and discuss their theories within the same years but each scientist concentrated on some different approaches of semiotic theories.

Saussure concentrated on and defined semiotic approach as the “effect of the index on public life.” According to Saussure; linguistic index is more important than other indexes. Scientist defined linguistic index soundimage and concept indexes.

At the same time, the other scientist Peirce concentrated on other signs, symbols and interpretations on semiotic approach. Therefore, it is very important to understand Peirce's theory, ‘the triple grouping.’

### **3. GROUP OF GOTHIC BUILDINGS IN CYPRUS ACCORDING TO PEIRCE' S SEMIOTIC APPROACH**

Visual communication is the most effective and shortest way to explain or sign something for people. Visual communication becomes even more of an important communication system each day. Architecture has a direct relationship with visualisation. Geometrical combinations, material usage, space as such all define signs to some feelings and effects on the user. All these guidances are done with the visual communication system. Peirce's semiotic theory and levels of semiotic theory is the foundation of grouped Gothic buildings in Cyprus. All these buildings are grouped according to the density of characteristics of gothic elements. For example, the buildings which have all gothic characteristic on facades, structural systems and plan layouts is grouped in firstness group as they obviously show signs of Gothic architecture without confusion. Secondness; is the group of buildings that carry 3-4 gothic characteristics. Finally, thirdness group includes buildings that carry the least of gothic characteristics; those which may be demolished in time but when analyzed they have little details of gothic identity according to experience and knowledge.

All these buildings in all groups share the similar gothic characteristic elements and they are all in Cyprus. Gothic style buildings are grouped according to the semiotic theory's 'firstness', 'secondness' and 'thirdness' groups. Each group has a different semiotic principal and all of the following are analyzed and grouped accordingly. In this research, just focused on one gothic style building which is builded in Cyprus and compared with different contemporary examples which is create a relationship between gothic architecture and modern architecture with physical, symbolic and spiritual memories and interpretation.

### **4. ANALYSES OF SELECTED GOTHIC BUILDING WITH SEMIOTIC APPROACH**

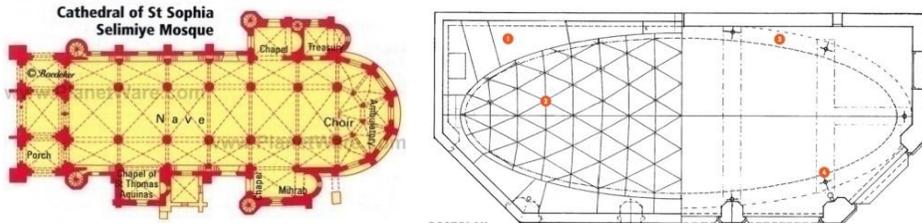
#### **4.1. SELIMIYE MOSQUE (ST. SOPHIE CATHEDRAL)**

The Selimiye Mosque built as gothic style in Nicosia which is changed from the cathedral to mosque in 1571. Forms and shapes of the cathedral give to some sign to user subliminal. These signs create directly relationship between any contemporary building and gothic style buildings. Modern buildings have too many advantages according to gothic style buildings with new material and structural system solutions with some new detailing. At the same time forms and shapes very effective on sign-object relationship and reminder on user old place with gothic architecture.

#### **A) Structural Analyses**

Selimiye mosque was built using traditional construction material stone. The main structural system is the masonry structural system. So, when the plan of the mosque is analyzed, a thick

wall, and thick vertical load bearing elements can be seen. When analyze the plan of mosque, projections of roof structure system give some sign architecture of today (Figure.1). Grid shell systems one of the system which is gothic roof system solution signs today architecture. Plan drawing, main idea (passing long space) other signs which is support semiotic approach from the other direction ( Figure.2). The main target on gothic style roof structure, for pass long span openings with minimum vertical elements and give spacious effect on users. This main target directly seen on today's modern architecture. These kinds of applications give some sings to users subliminal about memorial gothic style buildings.



**Figure 1.** Selimiye Mosque Plan (ref.1)

**Figure 2.** Grid Shell Roof Solution for Football Stadium Sign (ref. 2)

Together with masonry structure system, a different structural system which supports the main structure can be seen. The most important element is the flying buttress. The flying buttress structure system is apparent in gothic style buildings because gothic buildings have static geometrical shapes. In addition, towers and buildings are higher than other buildings, therefore some structural problems were discovered in this period. Flying buttress (Figure. 3) as a solution support the main building structure system from outside and help protect the building from earthquakes and erosion. The modern flying buttress elements still using today architecture. Also gothic architecture elements sign to modernity and modern systems. AT&T Stadium in Texas has steel elements (Figure.4) which is working like gothic flying buttress and it is the one example which is sign flying buttress system in today architecture.



**Figure 3.** Flying Buttress (ref.3)

**Figure 4.** AT&T Stadium Sign (ref. 4)

## B) Vertical Elements

Passing for long spaces on the top of the building, a ribbed vault system which helps passing the long span openings without vertical load bearing elements (Figure. 5) is used. Modern architecture and systems support and develop to pass long span openings with minimum vertical elements. Gothic architecture ribbed vault and column connection points directly use in modern architecture with new materials also new advantages. Oriente Station in Lisbon has this modern system and using very effectively to pass and design long span space (Figure.6)



Figure 5. Ribbed vault (ref.5)

Figure: 6. Ribbed Vault Sign - Oriente Station/Lisbon/Portugal (ref. 6)

## C) Transparency

Gothic style buildings do not have very big openings or glass covering for transparency. Especially in the early years of the application of the gothic style, these openings were smaller than the examples which were built in more recent periods. The main reason of this usage sources from the structural systems as the masonry structure system is not very useful for big window spaces or openings. Openings bring along limitations and may cause cracking therefore the destruction of the systems may be observed. Hence, the solid surfaces are generally bigger than the openings in the gothic buildings. During the time of construction, designer and engineers solved this problem with their approach. Rose window detail allows opening big spaces from the first period of gothic architecture (Figure.5). Transparency is the most important element of modern architecture. From the gothic rose window until today architecture, organic shapes and structure is the most effective structural systems on transparency. Organic structure has minimum solid elements with maximum transparency. Rose window organic detail sign today skyscrapers main structure and facade designs (Figure. 6).

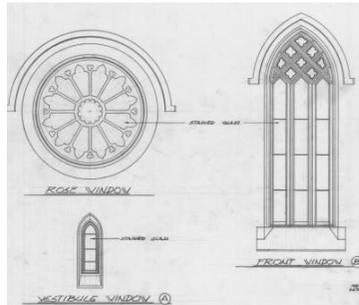


Figure 7. Rose Window- Pointed Window (ref.7)



Figure 8. Rose Window Sign (ref.8)

#### D) Climatization

Generally many gothic cathedrals, churches or buildings are designed under one roof. Although this design has some advantages, it also has some disadvantages. Especially in hot climates, inner design approach has some ventilation problems, however the climatization in many of the gothic style buildings is solved very carefully. Selimiye Mosque has windows at the top of the building to allow the escape of the warm air. When the cool air coming in from the bottom level warms up, it escapes from the upper level through these windows. So, natural ventilation keeps the climate cool inside the building (Figure. 9, 10)

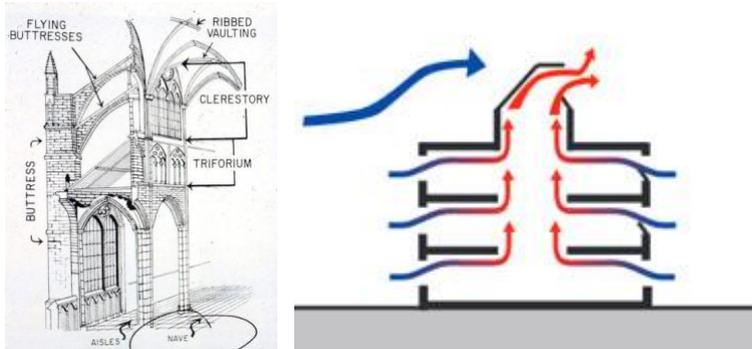


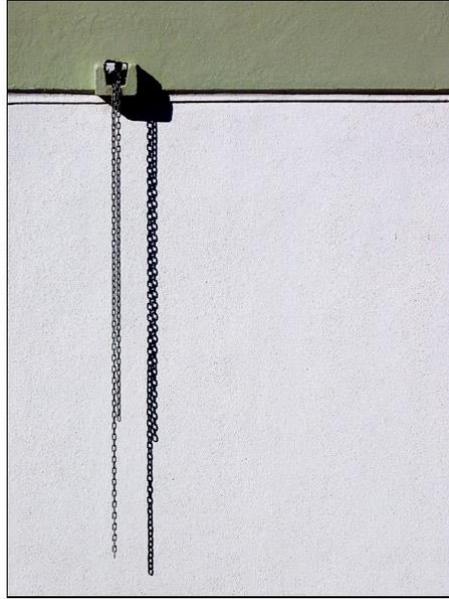
Figure 9. Top windows(ref.9)  
Figure 10. Natural Vantilation (ref 10.)

#### E) Ornaments

Gothic architecture has some unique, characteristic ornaments on facades and interior designs which share the same features with some distinct structural elements. Flying buttresses are the most successful examples of these ornaments. When approaching the building from outside, this structural element is never obvious as a flying buttress and it has some detailed ornaments and stands as a unique detail which combines facade and design successfully (Figure. 11). In architecture, a gargoyle is a carved or formed grotesque with a spout designed to convey water from a roof and away from the side of a building, thereby preventing rainwater from running down masonry walls and eroding the mortar between. Architects often used multiple gargoyles on buildings to divide the flow of rainwater off the roof to minimize the potential damage from a rainstorm. Rain water drain system still using today with new material usage. Gothic gargoyle details directly show modern rain water drain system (Figure. 12)



Figure 11. Gargoyle Detail (ref.11)



**Figure 12.** Modern Gargoyle Detail (ref. 12)

Gothic structure system solutions still using in today arhitecture with very small diferences. The most important diferences are material, shape or form. It is seen very clearly that in gargoyle gothic details how changed and still using modern designs with contemporary materials. Gothic architecture periods ended but influences of gothic details still using in today architecture and it follows that gothic architecture systems main ideas will continue in future architecture approaches. On the other hand, these similarities give some signs and effects between today architecture and gothic architecture and give some signs about the past periods of the spaces or cities.

## 5. CONCLUSION

The gothic style Selimiye Mosque building is analyzed under six different titles. According to the structural analysis, the main masonry system is used in all of the buildings. This system has some advantages for climatization. Also each building has differences for each research title. These differences source from the location (neighborhood), the size of the building and the plan layouts. Each element or architectural feature reflect some new ideas. These also show how light is kept indoors when the contemporary design approaches are concerned today. The Gothic style ribbed vaults show contemporary bridge arch systems which is commonly used nowadays. These ribbed vaults have been developed and used on contemporary designs today. Many architectural elements inspire some new ideas, these ideas are developed with new materials and the same system is used more effienctly on designs currently. Semiotic approach is very effective on people as signs send constant messages and in time these signs may be received differently. Today contemporary structures give birth to new ideas and in the future contemporary systems will be even more developed and will be used as an advantage in the field of architecture. The design principles change in time: This is how deconstructivism or futurism are born and developed today.

Finally, according to analysis, each gothic building follow different structural, ornamental and climatical approaches. These approaches shed light on today's architecture with semiotic theories.

## REFERENCES

- Asa Berger, A. 1999. Signs in Contemporary Culture, Create Space Independent Publishing Platform; 1 edition
- Bender T., The Basis of The Gothic Style, 1964
- Bridaham, L. S. 2006. The Gargoyle Book, Dover Publication
- Brodsky, C. 2009. In The Place Of Language, Fordham University Press, 1 edition
- Chandler, D. 2002. Semiotics The Basics, Routledge, 2 edition
- Enlart C. 1987. Gothic Art and The Renaissance in Cyprus, Trigraph
- Frankl, P. 2000. Gothic Architecture, Yale University Press; 2nd revised edition
- Hrazten, Z. 1992. Semiotext (e) Architecture, Semiotext (e)
- Kaya, N., Avrupa' da Gotik, Rönesans ve Barok Mimarilerinin Çatı ve Cephe Sistemleri Açısından Karşılaştırılması, 2010, p. 1-3
- McMurtie, R. J. 2017. The Semiotics of Movement in Space, Routledge
- Pırlanta G., Hellenistic, Byzantine and Gothic Influences in Orthodox Churches Located in North Cyprus, September 2014
- Preziosi, D. 1979. Architecture, Language, and Meaning, De Gruyter Mouton
- Saint-Martin, F. 2002. Semiotics of Visual Language, Indiana University Press
- Sevcenko, N. P. , Moss C. F. 1999. Medieval Cyprus, Princeton University Press
- Ullmann, H. F. 2012. Gothic, h.f.ullmann publishing; Special ed. Edition
- Hurwitz, L. W. 1993. Semiotics and Communication
- Hall S. 2012. This Mean This, This Means That, Laurance King Publishing
- Barthes R. 1977. Elements of Semiology, Hill and Wang Publishing
- Eco U. 1991. The Limits of Interpretation, Indiana University Press
- Shelby L. R. 1977. Gothic Design Techniques. Southern Illinois University Press