EXTRAPOLATION OF ARCHITECTURAL PATTERN IN UMAYYAD ARCHITECTURE, AL-ANDALUS CASE STUDY

A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF APPLIED SCIENCES OF NEAR EAST UNIVERSITY

By Majd ABDULHADI

In Partial Fulfillment of the Requirements for the Degree of Master of Science in Architecture

NICOSIA, 2020

EXTRAPOLATION OF ARCHITECTURAL PATTERN IN UMAYYAD ARCHITECTURE, AL-ANDALUS CASE STUDY

A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF APPLIED SCIENCES OF NEAR EAST UNIVERSITY

By Majd ABDULHADI

In Partial Fulfillment of the Requirements for the Degree of Master of Science in Architecture

Majd ABDULHADI: EXTRAPOLATION OF ARCHITECTURAL PATTERN IN UMAYYAD ARCHITECTURE, AL-ANDALUS CASE STUDY

Approval of Director of School of Applied Sciences

Prof. Dr. Nadire ÇAVUŞ

We certify this thesis is satisfactory for award of the degree of Masters of Science in Architecture

Examining Committee in Charge:

Prof. Dr. Zeynep ONUR

Supervisor, Department of Architecture

Assoc. Prof. Dr. Hassina NAFA

Jury member: Department of

Architecture

Assoc. Prof. Dr. Havva ARSLANGAZİ

Jury member: Department of

Architecture

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last name; Majd Abdulhadi

Signature: _______ Date: 09/07/2020

ACKNOWLEDGEMENTS

Foremost, I would like to thanks my Supervisor Prof. Zeynep Onur, thank you for supporting, time, and encouraging my thesis. And I would like to express my sincere gratitude to my parents, brothers, and sister who are always there for me. Your support and trust in me inspired and encouraged me to do all my best in life. Thank you for everything you have done for me. My sincere thanks also go to Prof. Jose Manuel Pages Madrigal for enlightening me on the first glance of research. I am truly thankful to all my instructors at the Near East University. I appreciate them for their time, patience, and consistent help. I am grateful to all of those with whom I have had the pleasure to work during this and other related subjects at Near East University. Each of them has provided me extensive professional guidance and taught me a great deal about scientific research.

To my parents ...

ABSTRACT

Islamic architecture has been found on the time while success was accomplished, in making, not just a new form of pillars and arches but a new kind of worship spaces that fit and defined by the Islamic religion. The Islamic civilization left a particularly rich heritage of exotic and beautiful mosques, palaces. Minarets, fortresses, and backyard, marked by the Horseshoe arches, complex ornamentation from geometric, plants and Qur'anic one, which is the most important features for the Islamic architecture, while the luxury materials in the buildings had given an elegant and rich character for the Iberian peninsula among the European cities in the past and which still presenting evidence of the greatness and beauty of this architecture. In a global culture where we are now, it is a professional improvement to analyze the Phenomena with cardinal values. This study will define the Umayyad architecture method that was used in that period and defines the changed and the effects that happened in the mosques by studding the mosque in that era, which is the great mosque of Damascus and Cordoba, which their function was more than a worship place. The Umayyad architecture was influenced and inspired by several different types of architectures, they have made the mosque a luxury monument more than a four walls building by adding different patterns which is inspired by different cultures and give inspiration to other religions.

Keywords: Umayyad architecture; architectural patterns; acculturation; extrapolation; alandalus; culture acculturation

OZET

İslam mimarisi, başarı elde edilirken, sadece yeni bir sütun ve kemer biçimi değil, aynı

zamanda İslam dinine uygun ve tanımlanmış yeni bir tür ibadet mekânları elde edilirken

bulunmuştur. İslam medeniyeti, egzotik ve güzel camilerin, sarayların özellikle zengin bir

mirasını bıraktı. At nalı kemerleri ile işaretlenmiş minareler, kaleler ve arka bahçe, İslam

mimarisinin en önemli özellikleri olan geometrik, bitkiler ve Kur'an'dan karmaşık

süslemeler, binalardaki lüks malzemeler zarif ve zengin bir karakter vermişti. geçmişte

Avrupa kentleri arasında ve hala bu mimarinin büyüklüğüne ve güzelliğine dair kanıtlar

sunan İber yarımadası için. Şu anda bulunduğumuz küresel bir kültürde, olayları kardinal

değerlerle analiz etmek profesyonel bir gelişmedir. Bu çalışmada, o dönemde kullanılan

Emevî mimari yöntemini tanımlayacağız ve camilerinde Şam ve Cordoba'nın büyük camisi

olan cami üzerine işlenen değişimleri ve etkileri tanımlayacağız. ibadet yeri olmaktan öte bir

şeydi. Emevî mimarisi birkaç farklı mimariden etkilenmiş ve esinlenmiştir, farklı

kültürlerden esinlenilmiş ve diğer dinlere ilham veren farklı desenler ekleyerek camiyi dört

duvardan daha lüks bir anıt haline getirmiştir.

Anahtar Kelimeler: Emevi mimarisi; mimari kalıplar; kültürleşme; ekstrapolasyon; endülüs;

kültür kültürü

TABLE OF CONTENTS

ACKNOWLEDGMENTS	ii
ABSTRACT	iv
ÖZET	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	xi
CHAPTER 1: INTRODUCTION	
Introduction	1
1.1 General Structure and Methodology of the Thesis	4
1.1.1 Research Problems	4
1.1.2 The Research Questions	5
1.1.3 The Aim of the study	5
1.1.4 Objectives of the study	5
1.1.5 Methodology	5
1.1.6 Research limitations	6
CHAPTER 2: HISTORICAL APPROACH	
Introduction	7
2.1. Early Islamic Phase	7
2.2. First Umayyad's Caliphate (Damascus phase)	8
2.3. Second Umayyad's Caliphate (Al-Andalus phase)	14

CHAPTER 3: RELATED RESEARCH

Related research	17
3.1 Acculturation	17
3.2 Al-Andalus	20
3.3 Umayyad Architecture	21
CHAPTER 4 : COMPARATIVE ANALYSIS OF ARCHITECTURAL TYPOLOGIES	
4.1 Description and Analysis	33
4.1.1 Great mosque of Damascus	33
4.1.2 The great mosque of Cordoba	40
4.2 Comparative Analysis of Architectural Typologies	45
4.2.1 Plans	46
4.2. 2 Motifs	68
CHAPTER 5: CONCLUSION AND RESULTS	
Conclusion and Results	77
REFERENCES	79
APPENDICES	
Appendix 1: Similarity Report	86
Appendix 2: Ethical Approval Letter	87

LISTE OF FIGURES

Figure 2.1: Map of Rashidun Caliphate from 622-661	8
Figure 2.2: Genealogic tree of the Umayyad family in Damascus and Cordoba	10
Figure 2.3: Expansion of the geographical frontiers of the Umayyad empire	12
Figure 2.4: The Abbasid caliphate	14
Figure 2.5: Umayyad of al Andalus 756-1031	16
Figure 3.1: Iberia before Carthaginian conquests	20
Figure 3.2: Plan and section for the dome of the rock mosque in Palestine	22
Figure 3.3: the Dome of the rock mosque in the old city of Jerusalem, Palestine	23
Figure 3.4: Umayyad Ruins of Aanjar, Anjar	24
Figure 3.5: Interior of the reception hall of Abd al-Rahman	27
Figure 3.6: The remarkable Umayyad architectural work between 661 & 719 AD	28
Figure 3.7: The remarkable Umayyad architectural work between 661 & 719 AD	29
Figure 3.8: The remarkable Umayyad architectural work between 661 & 719 AD	30
Figure 3.9: Vegetal ornamentation which indebted to the decorations of Late	
Antiquity that were an important point of departure for Umayyad art	31
Figure 3.10: Umayyad Mosque mosaic detail in Damascus Syria	32
Figure 3.11: Decoration at Umayyad Palace at Khirbat Ul-Minya	32
Figure 4. 1: St. John's Church 3d perspective	34
Figure 4.2: The old St. John's Church plan	34
Figure 4.3: walkway of the Umayyad mosque	35
Figure 4.4: Semi-circular and horseshoe arcades, Great Mosque of Damascus	36
Figure 4.5: The large areas of mosaics in the courtyard of the mosque	37
Figure 4.6: Mosaics in the main Entrance ceiling of the mosque	37
Figure 4.7: The walkway of the great mosque of Damascus	38
Figure 4.8: Saḥn "courtyard" of the great mosque of Damascus	38
Figure 4. 9: Double tiered arcades in haram of the great mosque of Damascus	39
Figure 4.10: Dome of the great mosque of Damascus	39
Figure 4. 11: Dome of the great mosque of Damascus from inside of the mosque	49
Figure 4. 12: A 3d ideal for the great mosque of Cordoba	41

Figure 4.13:	Forest of columns in the great mosque of Cordoba in Spain	42
Figure 4.14:	The changes of The Great Mosque of Cordoba between 784 and 988	43
Figure 4.15:	The central dome of the Maqsurah in Cordoba mosque	44
Figure 4.16:	The metaphysical similarity in the great mosque of Damascus&Cordoba	46
Figure 4. 17:	The division of the two mosques according to the architectural function	47
Figure 4. 18:	Section for the great mosque of Cordoba	48
Figure 4. 19:	Section for the great mosque of Damascus	49
Figure 4.20:	The entrances in the Great Mosque of Damascus	50
Figure 4.21:	The entrances in the Great Mosque of Cordoba	51
Figure 4.22:	The several rooms for the Great Mosque of Damascus	52
Figure 4.23:	The several rooms for The Great Mosque of Cordoba	53
Figure 4.24:	Great mosque of Damascus domes according to what Ibn Jubayr	
	explanted in his book	54
Figure 4.25:	The mosaic in The Great Mosque of Damascus representing buildings	
	has gable	55
Figure 4.26:	The interior design of The Great Mosque of Damascus dome	56
Figure 4.27:	Mihrab dome, Great Mosque at Cordoba	57
Figure 4.28:	Square towers in St. John's Church	58
Figure 4.29:	The hidden axis, which connect the Mihrab, Dome until the entrance	
	with a minaret	60
Figure 4.30:	The great mosque of Damascus Mihrab	61
Figure 4.31:	The great mosque of Cordoba Mihrab	62
Figure 4.32:	The connection between Mihrab and the domes in the great mosque	
	of Damascus and Cordoba	62
Figure 4.33:	The types of arcs, with the center of the circle determined by each type.	64
Figure 4.34 :	the formwork in horseshoe arches	65
Figure 4.35 :	the formwork removal from stilted arches	65
Figure 4.36:	Dimension of the horseshoe arches in The Great Mosque of Damascus .	66
Figure 4.37:	Horseshoe in the courtyard in The Great Mosque of Damascus	67
Figure 4.38:	The center of the horseshoe arches in The Great Mosque of Cordoba	67
Figure 4.39:	The mosaic in the back wall of the courtyard	69

Figure 4.40 : Damascus. Great Mosque. Qibla wall before 1893 from Creswell	
Archive	70
Figure 4.41: Damascus. Great Mosque. detail of vine frieze from a digital	
enhancement	70
Figure 4.42: Damascus. Great Mosque. Detail of vine frieze from a digital	
enhancement	71
Figure 4. 43: Decoration at Umayyad Palace at Khirbat Ul-Minya	71
Figure 4.44: mosaic at the great mosque of Damascus	73
Figure 4.45: Mosaic at the great mosque of Damascus in the left side and Santa	
Maria Maggiore church in the right side	73
Figure 4.46: Mihrab, Great Mosque at Cordoba, Spain	74
Figure 4.47: Mihrab, Great Mosque at Cordoba, Spain	75

LIST OF ABBREVIATIONS

AD: After Chris

CE: Common Era

KG: Kilogram

M: Meter

M2: Meter square

UNESCO: United Nations Educational, Scientific and Cultural Organization

CHAPTER 1

INTRODUCTION

Mobility is one of the characteristics of human initiation, through different ages. Mobility is more than simple movements of people, but evaluation of idea and cultures. The ideas were "traveling" with us, always cultures are the result of these "travels" when merged with our customs and our ideas. it can be called it acculturation, which is a process by one cultural or ethnic group move into association with the different cultural or ethnic group via migration and its psychosocial and emotional differences that result from this interplay with the second (host) culture (Aponte & Johnson, 2000). Acculturation has reached a different region of the world in different ways some of them as language, some of them as a lifestyle, or as a culture, and this is clearly seen in the Iberian Peninsula. The Umayyad path retrieves part of the journey, followed by the ruling family founded by Mu'awiya ibn Abo Sufyan from Damascus, which are the Umayyad caliphate capita and its following expansion along the southern shores of the Mediterranean to the Iberian Peninsula. Consequently, the path begins within the Near East. It follows the path to civilization. A Middle East itinerary begins in Jordan and Lebanon, runs through Egypt and Tunisia, stops in Sicily, and ends in the Iberian Peninsula, Spain and Portugal (Europeanunion, 2016).

The Mediterranean region has a reach architecture heritage, that has influenced architecture throughout history and introduced a new patterns which are used nowadays, therefore, understanding the history of architecture is one of the most important factors that increase the level of awareness of the architectural forms and how it become the way we know it in our century, it will help us in the process of developing and introduce new architectural patterns.

Dr. Omar highlighted the importance of the Mosque Foundation in the lives of Muslims. He stated that without any confusion, the mosque will and will always be the center of Muslim life. Two justifications were also mentioned for this comment. First, that a person is the inherent nature of a person longing for the worship of his Creator, and the second is the tendency of man to social interaction and collective gathering in order to establish the bonds of society that in turn secure the well-being of the individual as well as community life. It is

worth noting that this statement echoed the teachings of the Quranic verse mentioned above. When photographing the importance of the mosque as a central institution for Muslims, Dr. Omar between the spiritual and social role side by side, thus establishing the concept of Islam and the mosque as its central institution in order to direct Islamic societies towards the entire way of life (Utaberta, 2015).

The Umayyad's culture has provoked an important architectural and evolution in the Iberian Peninsula during 755 AD to 1031 AD. The near absence of architectural criticism in many Arab and Muslim countries facilitated the largely unquestioned propagation of these views and opened the door to superficial speculation about the meaning and identity of art and architecture of the Islamic world. Sometimes to frivolous and politically harmful speculation as, for instance, in Roger Garaudy's book The Mosque Mirror of Islam (Garaudy, 1985) where the space of the mosque mistakenly presented as decentered, and the 'forest of columns' in the Mosque of Córdoba described as an illustration of 'the Revelation of the Quran. This interpretation wholly contradicts the well-documented history of the building, which shows that the structure was designed to recall the great mosque at Damascus and other Umayyad structures and that its forest-like character actually resulted from the successive extensions of the building (Alami, 2013).

We cannot understand Umayyad's era within literary references but through the individual monuments which has been done in their time such as qusū r or whole cities like 'Anjar, Madinat al-Zahra, the great mosque of Damascus and the great mosque of Cordoba, etc..., and they sent a directed message to the posterity through their buildings patterns such as frescoes, mosaics, and a few objects, they were interested in memorializing themselves through their architecture and true documents and inscriptions. The expressive intent of Umayyad papyri,12 coins,13 and inscriptions14 has already been recently chronicled, and, like the "semi-documents" described above, provide a clear picture of Umayyad self-representation, particularly when used in tandem with Umayyad art and architecture. such as the Dome of the Rock in building monuments, well in planning cities 'Anjar city and in building retreats at places such like Qasr al-Ḥayr al-Gharbī and in commissioning artwork like the frescoes at Qusa yr 'Amra, the Umayyad's were sending an unambiguous message about themselves and where they stood in history. A quick summary of that message would read something like the following: The Umayyad's were monotheists, world-conquerors,

and, for lack of a better term, Arabian. The Umayyad caliphs were, of course, God's caliphs, appointed by Him to steward the community of believers that had submitted to His law. Islam, as they called their new creed, was moreover a triumphal creed, one that claimed close familial connections to the other monotheisms of Late Antiquity even as the Umayyad's claimed in their monuments that Islam had supplanted them (most obviously in the Dome of the Rock) (Borrut et al., 2010).

In 661–750 AD the past of the Middle East and the Islamic era had a lot of changes that make this period significant. Different region has been overcome by the Middle East, North Africa, Muslims, including a part of the Iberian Peninsula, which called nowadays Spain, they were ruled from Syria, and the Umayyad dynasty was the first caliph dynasty to appear in the history of Islam. Below their rule, the area occurred a process of change, which finally led to the rise of Islam, both as a religion and as a culture, in its classic pattern (Hawting, 2002). The largest Islamic state was the Umayyad state, one of the largest ruling states in history and the first ruling series in Islamic history. It ruled between 662 and 750 AD, they made Damascus their capital the tenth Umayyad caliph. Hisham son of Abd al-Malik, extended its borders from China to the east, until it reached the south of France, and opened Africa, Andalusia, Morocco, Sindh, South Gaul. The Umayyad's has an important role in the pre-Islamic time, and during the Islamic period as well, and it is worth mentioning that the end of the Umayyad dynasty was at the Battle of Zab, which was between the Abbasid and Umayyad state, led by Marwan bin Mohammed (Al-shobak, 2018).

The Andalusia buildings represent the latest evolution of Umayyad architecture by the creators of this pattern. My thesis is based on the comparative and analysis of some of Umayyad patterns in Andalusia and their counterpart in the first Umayyad Caliphate, to understand the changes and the reason behind it, in other words, to understand and shed light on the architectural acculturation that occurred in the middle Ages in the Iberian Peninsula.

However, travels are carrying cultural expressions too, which will be adapted after contacting with local cultures-. This is definitely the main topic of the thesis how the acculturation of the Al-Andalus cultures was the result of an acculturation process during 274 years due to the influences of the Umayyad's cultures, as dominant political structures of this territory.

1.1 General Structure and Methodology of the Thesis

1.1.1. Research Problems

The design of the mosques has moved from an empty space surrounded by four walls to become one the architectural monuments that are designed within particular architectural rules that Muslims do not argue about it, in despite the division of the Islamic religion into several sections, which appears to us as natural as the water we drink, without considering its existence. Therefore, this study has focused on the Umayyad era where the mosque has redefined and become one of the significant architectural monuments.

1.1.2. The Research Questions

During the process of a first personal literature review, different gaps were identified. They let us define the research questions, as follows:

- 1. Why did the Umayyad decide to change the shape of the mosque and make it in the classical form which we know in the present day? What are the motives behind that?
- 2. What elements did the Umayyad's incorporate in the mosque design during the process of developing mosques?
- 3. Did the Umayyad prefer one element on the other? In other words, what elements have been given greater value in mosques?
- 4. Which architectural patterns have been kept in the design of the mosque during the extrapolation process between Damascus and Cordoba?
- 5. Which hypothesized acculturation architecture strategies were applied in Al-Andalus mosque?

1.1.3. The Aim of the study

The thesis aims is to have an encompassing comparison understanding of the ways in which external cultures are re-interpreted in other contexts. A special focus on Umayyad architecture should be done. moreover, this thesis is a global and general study of the great mosque of Damascus and the great mosque of Cordoba, in disparity to the studies that were done before, which were either partly speaking, specific on few patterns or the meaning of the mosques in a specific era in history.

1.1.4. Objectives of the study:

- ➤ Identify and recognize the regional and cultural influences in the design of these buildings
- ➤ Enhance our understanding of architecture within its historical and socio-cultural contexts
- A discussion of type and typology can promote a way of looking at the built environment, that can not only help us recognize and discover basic types but also enhance our ability to see the differences as well as similarities among architectural artifacts by recognizing the invisible connections between them

1.1.6. Methodology

This study reviews the methodology of an encompassing comparison, with the qualitative method to assist the understanding of the Umayyad inflows in the mosque design passed on some old Arabic literature review, Spanish and English ones as well, which does not focus in the meaning of those mosques in a specific time or a specific part as many studies have shown but to understand the recent form of the mosque through this tow mosques as they are the most important monuments which have been built by the first Islamic caliphate. This study 'places different instances at various locations within the same system on the way to explaining their characteristics as a function of their varying relationships to the system as a whole'

1.1.7. Research limitations

The thesis could not have the opportunity to visit Spain scenarios, because of the visa scenario. The comparative typological analysis was based on the abundant graphics

information from the various monuments and a Spanish, Arabic and English literature review to reach as much as possible knowledge about those buildings. It is going to be specified during the Umayyad era in 661-750 and 756–1031 and it is going to be about mosques only.

CHAPTER 2

HISTORICAL APPROACH

The Mediterranean area has a fascinating and varied heritage. The area has suffered from a lot of war and migrations it was religious most of the time, this chapter will explain a brief summary of the most important events of the Mediterranean regain during the Umayyad period, which is related to our case.

2.1. Early Islamic Phase

In the fourteenth century and since Muhammad, is believed to have received the first of his prophetic revelations on Mount Hira near Mecca (c.610 CE), Islam has spread to every corner of the world (Sluglett, 2014). In 636, the Muslims Arab had defeated the Sasanians in southern Iraq and moved on to Syria, in 637 where the Byzantines had lost and the Umayyad 's had entered Jerusalem, after that in 639 they captured Edessa (modern Urfa) and much of eastern Anatolia. By 642, Arab forces had invaded Egypt, founded Fustat, taken Alexandria, and begun the conquest of North Africa. In the 640s, Arab armies penetrated to the Iranian plateau after all that in (644), Arab/Muslim armies had invaded Egypt, Syria, Iraq and most of what is now Iran, building many stronghold towns, took the province of Fars in 645, and reached Khurasan in 650. Meanwhile, to the south, they attempted to conquer Nubia on the upper Nile but faced fierce resistance and were obliged to conclude a peace treaty in 651–62. Whilst the conquerors asserted on fiscal submission and political, they normally left the communities who they overcame to continue to follow their own faiths. The Quran said: 'Let there be no compulsion in religion: Truth stands out clear from error' (2:256) (Sluglett, 2014).



Figure 2.1: Map of Rashidun Caliphate from 622-661 (Adil, 2008).

Between 640 and 670, the mosque, as an architectural typology, had a certain shape and pattern that showed the power of the rising empire (Alami, 2013). The Islamic conquests were not widespread during the era of the Rashidun's era, yet this time was very effective. During this period, a great empire was defeated and the other was weakened, this epoch ended with the death of the Prophet's uncle Ali, they were able to preserve Muslim community unity in the face of regional tendencies. Despite their differences, almost all Muslims believe this only one successor must lead them, and notwithstanding the enormous geographic spread, all retained a mutual culture and mutual religion. (Kennedy, 2015).

2.2. First Umayyad's Caliphate (Damascus phase)

Mu'awiya bin Abi Sufyan was the ruler of Syria in 639 and after the outbreak of the first civil war in 656, which led to the division of Islam into main three parts (Sunnis, Shiites, and Kharijis). This war ended with the joining of Mu'awiya Ibn Abi Sufyan to the Caliphate, Mu'awiya bin Abi Sufyan followers and supporters in the Levant help him to settle as a caliphate. The development of the idea as Islam is a universal religion can be traced to the Umayyad period (Hawting, 2002). Mu'awiya regained from 661 to 680, his power based in Syria, which Syrian tribes, those who appeared during the occupation and these ones who steady in the Byzantines time supported him. Nevertheless, the dispute between al-Qays and al-Yaman, which Syria had suffered for centuries, was not a big problem at his regain. He

transformed himself into what could be defined as the government of the Syrian rulers who were his right foot, and some of them were sharks, including Abdul Rahman, the son of General Khaled the Great. Complete Muawiyah's limited income derived from regional taxes in two ways. The first was through the Border War, and there is no doubt that at this point the spoils and praise helped secure the Syrians 'loyalty. The second method was through intensive agricultural developments. The Caliph Mu'awiya is politically decentralized. He has also decentralized administratively. No attempt has been submitted to introduce a general administrative system that speaks Arabic to the entire Islamic world. On the contrary, each province continued the local traditions of the former rulers. In Syria, financial management was almost entirely in the hands of local Christians, including Sargin Bin Munir, who was in the same position while Heraclius at the time of the Islamic conquest. Sharck, the byzantine regularity remained almost with no changes among the local presidents (Kennedy, 2015).

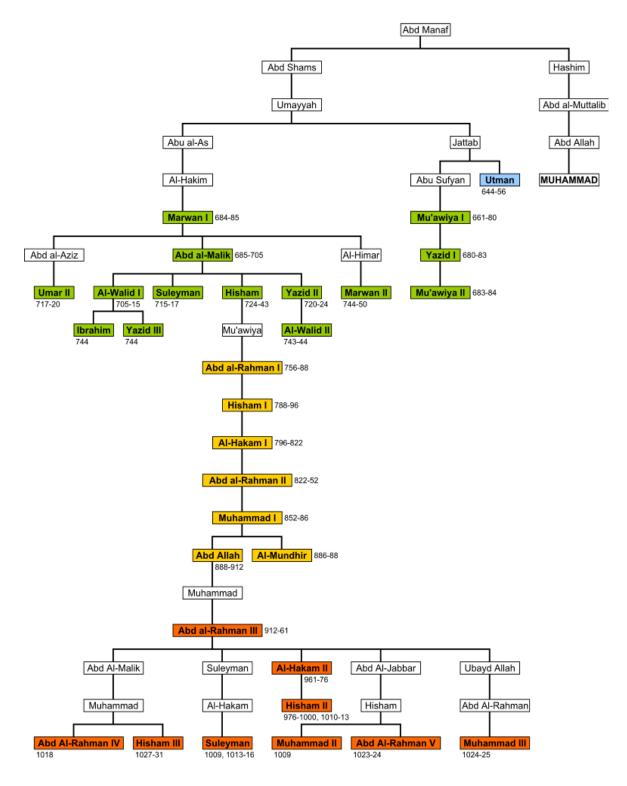


Figure 2.2: Genealogic tree of the Umayyad family in Damascus and Cordoba (Nachoseli, 2010)

At the end of Mu'awiya rule for the succession, he organized the affairs of the caliphate to his son Yazid as the new caliph to ruler after him, although the dynastic implications that this created much dissatisfaction. Consequently, at the time of Muawiya's death, the Umayyad rivals again tried to pressure them to take over the rule of the Caliphate. Hussein the son of 'Ali left the Medina "which it is in Saudi Arabia nowadays" in an attempt to mobilize his supporters in Kufa, but the son of Ziad, 'Ubaydullah, intercepted him near Karbala. Hussein and his party were killed in subsequent circumstances. In 684, a major battle took place at Marj Rahit, north of Damascus, at which the Yamani supporters of Marwan defeated the Qaysi supporters of Ibn-Zubayr. A superficial reconciliation between the two factions was effected, but their continuing rivalry was to be an important factor in the Umayyad's' eventual downfall. After defeating his rival Ibn Zubayr, and the Byzantines in the eastern. Marwan died shortly after his accession and succeeded smoothly by his son 'Abd al-Malik (685–705). After defeating his rival, Ibn Zubayr, and the Byzantines in the eastern Mediterranean, 'Abd al-Malik started to fortify his own authority, establishing up a centralized chancery. The Arabic language converted as the language of administration of the empire, gradually replacing Coptic, Persian, and Greek. (Kennedy, 2015).

In 691, 'Abd al-Malik constituted the Dome of the Rock in Jerusalem, partially as a place of pilgrimage, since Ibn Zubayr still control Mecca, partly, perhaps, to challenge the Church of the Holy Sepulcher, and partly to signify the success of the Islamic belief. Its inscriptions emphasize the unity of God and specifically denounce the Trinity and the divinity of Jesus. Of fundamental importance for the development of Islamic civilization, it is the earliest work of Islamic architecture retaining most of its original structure. Although Islam was preeminently the religion of the Arabs, and the Qur'an had been revealed in Arabic, the conquests rapidly brought the new religion to peoples who were not Arab by birth. When non-Arabs converted to Islam, they became, in practice if not in theory, second-class Muslims, since they were still tax as if they had not converted. In addition, taxes varied substantially from region to region in accordance with local practice before the conquests. At some stage of Umayyad rule, this was changed, Taxes on ground uniforms regardless of the owner's believes. Non-Muslims continued to give the Jizya, the vote tax, but all gave the Kharaj, the tax of land (Sluglett, 2014).

The reign of al-Walid 705, saw the farthest growth of the geographical border of the Umayyad caliphate. During the al-Walid era, Muslims were in the west and Spain was invaded in 711, and almost entirely taken in 716 (Kennedy, 2015).

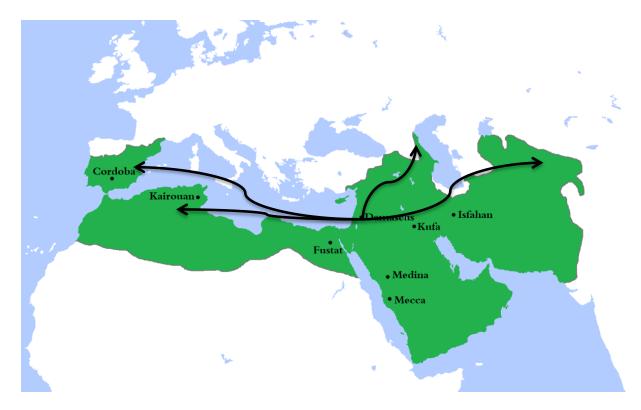


Figure 2.3: Expansion of the geographical frontiers of the Umayyad empire (Edited by the author, 2019)

The Great Mosque of Damascus, also known as the Umayyad Mosque, built by Caliph al-Walid, in 715 within the old city of Damascus. This mosque considered as one of the largest and oldest congregational mosque in the Muslim world (Demirhan, 2013).

Well, after the Islamic conquest of North Africa originated with missions from Egypt to Cyrenaica and Tripoli in 640 and continued in 670 with the establishment of the town of Kairouan the garrison, where Arab armies and barbarism gradually spread west through Morocco and eventually moved to Spain. The Balearic Islands, Sardinia, Sicily and other Byzantine enclaves in Italy also raided between 704, 711, At the same time, Muslim armies had penetrated to Khorasan and Transoxania 705 and to Farghana and the Indus Valley 708, and Constantinople besieged unsuccessfully by a large Muslim force in 717. While in 711, the distinguished Berber general, Tariq ibn Zayid, led a Umayyad force of some 7,000 new

converts across the Strait and past the Rock, which bears his name (Gibraltar, Jabal Tariq, and the Mount of Tariq).

Within five years, most of the Iberian Peninsula incorporated into the Umayyad Caliphate as Al-Andalus, and in 713 another army, led by Musa Ben Nusair, took Seville and Merida, the early conquests coincided with a period of dynastic upheaval in Spain; most resistance collapsed with the defeat of the monarchy, but the Muslim invaders also offered generous surrender terms. Well, many Visigothic aristocrats converted to Islam and thus retained their lands and positions of authority (Lapidus, 1996).

Although Al-Andalus was nominally a region of the Umayyad and 'Abbasid caliphates, it is doubtful whether any tribute was remitted to the center after about 720. However, even this rapid wave of expansion and a period of relative stability under the caliph Hisham 724 could not check rising discontent. The Muslims also raided into France until checked by Charles Martel near Poitiers in 732. Three major rulers, each with long reigns, were the principal architects of this prosperity. the Umayyad's had expelled the Byzantines from the North African coastal towns, Muslim rule permanently established in Central Asia; Samarkand and Bukhara became provincial capitals, and Sind and northwestern India were absorbed into the Umayyad Caliphate. By the time of Hisham's death, there was profound strife between the Qaysi and Yamani factions in Syria, a Berber rebellion had been raging in North Africa for three years, and there were no Umayyad troops west of Kairouan. In addition, three of Hisham's nephews succeeded each other in less than two years. Eventually, Marwan ibn Muhammad, a member of another branch of the Umayyad family, took over the caliphate in December 744 with the support of the Qaysi faction. The major threat to the dynasty, however, and the one that eventually overthrew it, was rising in Khurasan that aimed to replace the 'usurpers of Damascus' (as they said) with a descendant of the Prophet. It expanded very greatly. By the end of the seventh 18 the Umayyad Caliphate of Damascus 661–750. By the early 740 the Khurasani Muslims had transferred their loyalty from the Umayyad to the 'Abbasids, the descendants of Muhammad's paternal uncle, 'Abbas; the Umayyad's, it will be remembered, were not related to the house of the Prophet (Sluglett, 2014).

2.3. Second Umayyad's Caliphate (Al-Andalus phase)

In 747, Abu Muslim, the leader of the 'Abbasid mission (da'wa) in Khurasan, had assembled an army that he led westwards from Marv to Iraq. After his troops arrived in Kufa in October 749, Abu Muslim gave public allegiance to Abu'l-'Abbas, whom he declared the first 'Abbasid caliph. Eventually, the forces of Marwan and Abu Muslim joined the battle on the banks of the River Zab near Mosul; Marwan was defeated and fled to Egypt where he killed a few months later. The caliph seat moved from Damascus to Iraq, and Baghdad, founded in 762 by the caliph al-Mansur, became the center of an Islamic rather than an Arab empire the 'Abbasid Caliphate would survive many vicissitudes until its overthrow by the Mongols in 1258. By the late ninth century, most of the population (Arabs, Berbers and native Iberians) spoke Arabic; many Christians and Jews had converted to Islam (Muwalladun), perhaps because of the heavy fiscal obligations that had been put upon them. Seville and Córdoba developed into rich commercial centers, with splendid buildings and sumptuous courts, where the rulers patronized musicians, poets, and scholars (Sluglett, 2014).

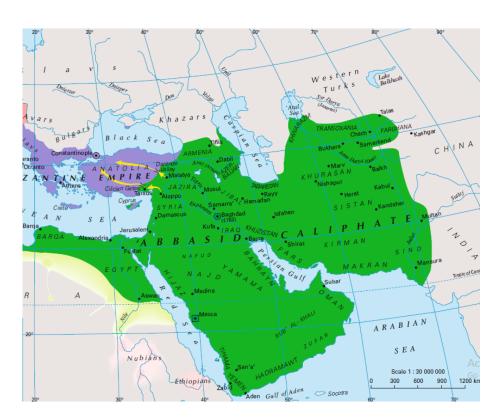


Figure 2.4: The Abbasid caliphate (Atlas of Islamic history, 2014)

In 740, there was a massive rebellion, which effectively drove the Arabs out. An expedition sent to retrieve the situation was heavily defeated and it was only with difficulty that the remnants of what had been a large Syrian army fought their way through to Spain where they settled. In 742, another force under (Kalbi) command (Hanzala Bn Safwan) succeeded in restoring the situation to some extent and the rebellion ceased from danger. But this turmoil has caused great damage to the country. Spain was virtually cut off, and the Umayyads did not maintain any military presence west of Kairouan. What was more, a large number of Syrian troops had been lost and a further strain put on the Syrian military machine. The conqueror of Bukhara and Samarqand, whose associations with the Umayyad cause did not prevent them, being recruited to the 'Abbasids. One group alone excluded from this general reconciliation, the members of the Umayyad family itself. Abd al-Rahman bin Mu'awiya, a grandson of the Caliph Hisham were one of the survivors from Abd Allah bin 'Ali when All the prominent Umayyad's were hunted down and many of them executed, he succeed by escaping to the Iberian peninsula and join to Umayyads supporters there where he established a long-lived and successful branch of the dynasty at the western end of the Islamic world (Kennedy, 2015).

The first was the founder of the Umayyad dynasty, 'Abd al-Rahman I 756, the second, 'Abd al-Rahman II 822, and finally 'Abd al-Rahman III al-Nasir 912. The latter came to power following a profound crisis in the late ninth century brought on by a combination of local rebellion, family intrigue and mass conversion to Islam, with its corollary, the diminution of the tax base. 'Abd al- Rahman III's reign marked the revival, and perhaps the zenith, of Muslim power in Spain, which extended as far north as the Duero river, to the Pyrenean marches, and beyond Tortosa on the Mediterranean coast. In 929, after restoring his authority in the south, and after having largely halted attacks from Christian states of the north by leading a number of decisive counter-raids, 'Abd al-Rahman took the titles of caliph and Amir al-Mu'minin, Commander of the Faithful. This coincided with a major crisis in the 'Abbasid state in Baghdad and with the struggle between the Umayyad and the Fatimid's for control of the gold route through North Africa (Sluglett, 2014).

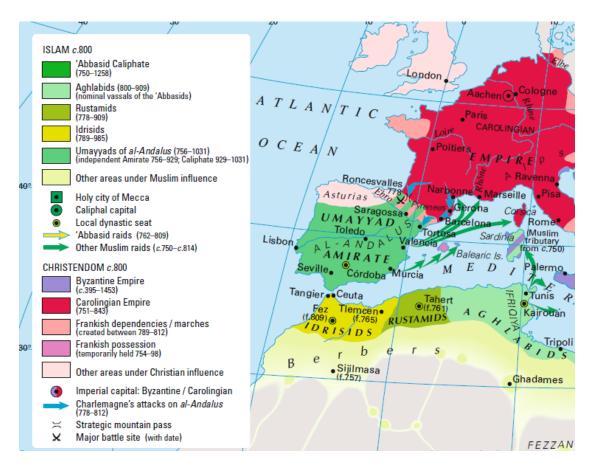


Figure 2.5: Umayyad of al Andalus 756-1031 (Atlas of Islamic history, 2014)

CHAPTER 3

RELATED RESEARCH

This chapter of the thesis explains a different stage about some previous studies that are related to the thesis topic, the first stage about acculturation what it is? And how it is done? Second, it talks about the history of the case study Al-Andalus, while in the third stage it explains some of the Umayyad architecture, to give a brief description of the main subtitles which will help to understand the case study

3.1 Acculturation

Cross-cultural and community psychology introduced many questions on the acculturation, to understand the effects of immigrants on new societies and what is the new societies effects on the immigrants (Berry, 1980). Well, in the earlier notion, acculturation was representing a replacement of local culture with another culture, later on; this theory had led to further questions, moreover, (Berry, Trimble, & Olmedo, 1986; Oetting & Beauvais, 1990) they assert that acculturation happens with respect to both the new and origin culture. Certainly, current work suggests that multiple cultural identities are possible, and likely, depending on the population (Persky et al., 2005). Actually, and as (Rohmann et al., 2009) stated we must follow the interactional case in which it happens, to understand acculturation,

Acculturation experiences are those phenomena that arise when groups of people from different cultures continue to communicate directly, with subsequent differences in the fundamental cultural patterns of each or both groups (Bonnerj, 1939). Acculturation is a method in which a person or group of culture preserving their distinct culture while they contain different cultural practices and values. This process commonly considered in association with a minority culture that embraces elements of the preponderance culture, as occurs the fact with immigrant societies that are ethnically or culturally sharp from the majority in the area where they moved. Yet, acculturation is a double-way method, so those inside the majority culture usually appropriate elements of the minority cultures they deal with. The process takes place within groups where there is not necessarily a majority or a minority. This can happen at the group and individual level and can happen because of personal connection or expression within literature, media or art (Cole, 2018)

The emphasis on multiple definitions and uses of the concept of culture suggests that "all definitions fall into one of three aspects:

The first is a regular way of life of a group of society, the second as a system of symbols and meanings, cognitive systems transmitted through symbolic symbols, third as an assortment of adaptive strategy for subsistence Linked to the resources and environment. Frequently, these three views not supposed to be in conflict but complementary (Rapoport, 1980). Gordon's model, formulated in 1978, examines how new settlers influence the larger community. He thought that there were platforms that the immigrating person passes through:

- Assimilation of structural
- •Assimilation of cultural
- Assimilation of marital
- Assimilation of civic
- Assimilation of behavior
- •Specific assimilation
- •Situational reception assimilation

In addition, during each step, the immigrant is absorbed more and more in the host community, this is what called unidimensional model of acculturation, we can find another example explaining the unidimensional model of acculturation (Szapocznik et al., 1978). According to Berry's study on the acculturation, we can see that there are four hypothesized acculturation strategies:

- Assimilation
- Separation
- Integration
- •Marginalization (Berry, 2003).

Assimilation is the process when a group of people abandons their traditional habits and indulges in the culture of the host country. By contrast, when the privileged minority group seeks to preserve their culture / traditions and avoid interaction with the host culture, the group develops the separation strategy. Strategy integration is a means between the two strategic parties. Here, the immigrant maintains his traditional culture and also interacts with the culture of the host. Marginalization involves the migrant's lack of interest in not preserving his culture as well as interacting with the host culture. Marginalization maybe caused by missed opportunities in absorption or may be due to discriminatory attitudes / practices by the host culture (Triandafyllidou, 2014).

Bourhis et al. (1997) maintain that if we create a matrix of the host community and another matrix of the immigrant community's strategies, which it is (integration, assimilation, segregation, exclusion, and individualism) three main relational consequences are produced: Consensual, problematic, and conflictual.

The conclusion of a consensual relationship consequence is a positive relationship between the immigrant and the hostess country. While the consensus is that when both migrant and host group members fall into union, assimilation or individual orientation/strategies for acculturation. The problematic or conflictual is two relational outcomes that result from the disagreement between the host and immigrant acculturation strategies. These different stands can create communication challenges between the two groups, which can moreover lead to denying intergroup stereotypes and discriminatory behaviors. Conflictual relations are provided when the immigrant embraces a detachment strategy, while the host country embraces either a segregationist or exclusionist agenda. Bourhis has state that most intergroup struggle happens when the host society confess an exclusionist adjustment while the immigrant endorses a separatist strategy? (Richard Y et al., 2012).

Acculturation of cultural is a culture change of an individual, group, or people by adjusting to scrounge features from different cultures.

Acculturations of culture have reached many regions around the world through wars, migration, and trade, which is the reason behind different studies that mentioned or done to clarify what happened, what was the change and where it was. Sri Rachmayanti, Christianto Rusli, Anak Agung Ayu Wulandari, explained Cultural acculturations in interior and

architecture of old straits-born in chinses Lasem house, the concluded their study that there was a massive transformation of the Straits-born Chinese home, although the transformation only occurred in facades, decorations, and styles(Rachmayanti et al., 2017).

3.2 Al-Andalus

Visigoths first entered the Iberian Peninsula in 414 and occupied the northeast of the country - the Romanian province of Taraconnesis. Then they maintained their control under various political arrangements, but there was no real unity because Visigoths were adhering to the hierarchical form of Aria Christianity, while the majority in the Iberian Peninsula were indigenous Catholics. An important change occurred, however, in 589, when the king and the Western Saints gave up the Arian saints for Catholicism. This has helped to establish a stable and the United Kingdom comprising the entire Iberian Peninsula and the province of Septimania in southern France. By the beginning of the eighth century, the Gothic aristocracy and the Spanish Roman nobles seemed to have merged into one distinct group that could be referred to as "clasas elevadas". There were partisan divisions with the upper classes, but apparently, they did not follow purely racist lines. Belongs to the upper layers of the canonical hierarchy (Cachia, 2017).



Figure 3.1: The Iberian peninsula before the Islamic conquest (Atlas of Islamic history, 2014)

The Muslims conquest the Iberian Peninsula in 711, and they called it Al-Andalus. As Jayyusi explant in his book The Legacy of Muslim Spain, The conquest of the Iberian peninsula possibly considered as one of the most consequential historical events of the early days of what it is known now as the middle ages, for it was in this corner of the world, that there rose the first Arab-Islamic state on the continent of Europe.

In 929, Andalusia became the most important center of art and knowledge in the western Mediterranean, competing directly with the Byzantine Empire, as well as the Fatimid and Abbasid caliphate. The caliphs of Andalusia derive mostly from the work of their Umayyad predecessors in Damascus for their cultural and artistic endeavors, as well as from the Abbasid Caliphate and the Byzantine Empire. All this, in addition to the Spanish heritage before Islam, allowed them to build their own visual and iconic identity which will also become apparent in later Andalusia art. Thus, opposed to the concept that Andalusia performed in reply to its political enemies or by emulating oriental patterns, my individual analytical study of the results made me more informed of the independence of Cordoba's succession in the research for its ideology and image as forms of affirmation and legitimacy. There were three central features of the effect. Firstly the Andalusia Umayyads used the right of the "Well Guided" caliphs and of their eastern and Andalusia founders to confirm their demand as principal guides and protectors of Sunni orthodoxy. Secondary, and furthermore to the Abbasid Caliphs and their Umayyad predecessors, they raised the arts and the sciences, circling themselves with scientists and taking care of the rulers' education, following the ideal of the most educated and prestigious leaders since Hellenistic times. Lastly, the Andalusia caliphs also declared to be successors of the Greco-Latin culture and the Roman and Hispano-Visigothic legacies, which enabled them to develop their own political, cultural, and visual corpus of knowledge (Capilla, 2014). These three monuments were translated into their main artistic projects: the Great Mosque of Cordoba and the palacecity of Madınat al-Zahra (Capilla, 2018).

3.3 Umayyad Architecture

The early buildings of Islam express and show a novel cultural installation, the anecdote of Islamic architecture is one of remaining adaptation, change, and shift in response to the mixed cultural and radical diversity, which presents up the Muslim nation (Demirhan, 2013).

When Umayyad occupies some Christian basilica in Syria, they changed its lengthwise axis to a transverse one, and this difference was made in any case by its reorientation. Mecca lay to the south from Syria, whereas churches were orientated on the east. One outcome of this transformation of direction was to give the arcades detach the different naves a completely new character, rather of guiding the eye to the deep interior in the choice of the choir, they cross the rhetoric frontally and carry the eye to rest, in accordance with the substantially static and non-dynamic visualization of space, in the state of balance and repose that Islamic architecture come across in all forms (Burckhardt, 2009).

The Umayyad's provided a concept of themselves as legitimate Islamic leaders through many buildings. The Dome of the Rock special, the mosque shape is octagonal with a central huge dome made out of wood, approximately 20 m in diameter, the dome is mounted on16 piers high columns. This circle is surrounding by an octagonal arcade of 24 piers and columns, the interior of the dome is lavishly decorated with mosaic, faience, and marble, which contains Quranic, geometric, and plant inscriptions (Grabar, 2006).

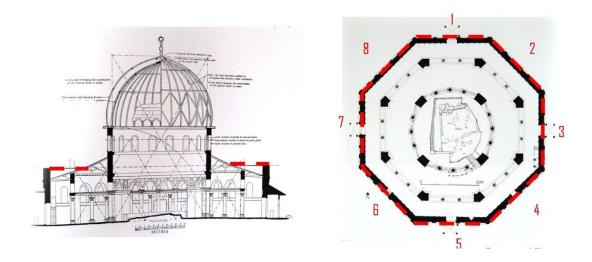


Figure 3.2: Plan and section for the dome of the rock mosque in Palestine (Islamic Architecture, 2015)



Figure 3.3: the Dome of the rock mosque in the old city of Jerusalem, Palestine (Shiv, 2013)

Scientists are yet not in agreement on exactly what Abd Al-Malik thought when building this magnificent monument, and this is not the point to review into an analysis of such things, but there can be little doubt that its built by the Amir Al-Muminin necessity have reinforced the identification of the Umayyad princes with the Quran and, hence, with the prophet, and surely declared a public right to royal splendor, sovereignty, and holiness. The construction of the great mosque of Damascus, on the site of the Church of St. John the Baptist as a spectacular effort to promote and grow the reputation of the Umayyad's, as royal rulers and as champions of the prayer cult that would lead the faithful to salvation in paradise (Borrut et al., 2010).

Umayyad urban planning was as prevalent as building cities or compound, and we see this embodied in the Anjar city, Lebanon which a lot of archeologists have written about the ruins of 'Anjar which were part of a well-established settlement of the Umayyad's and their peoples, which includes:

- 1. The land enclosed has a surface area of I 14,000 square meters.
- 2. The land has a slope from south to north of I 3 meters.

- 3. The main canalization runs from the middle of the south side toward the middle of the north side.
- 4. Two streets, bordered by shops and porticoes, link the four doors, and must cross one another in the center of the enclosure.
- 5. The residential section occupies the east side of the center of the city.
- 6. The bathing area is near the north door.

The residential section, is formed of two groups. First is a rectangular building 71 meters from north to south and 59.5 meters from east to west. The exterior walls of this building are 1.2 meters thick. The facing of the walls is made of rectangular blocks which are well cut and well seated. After a certain height, these layers of stone are alternated with layers of brick. This treatment recalls the architecture of the bayt al-mdl which stands in the courtyard of the mosque of al-Walid I at Damascus 28 and certain parts of the palace of Mafjar (Chehab, 1963).



Figure 3.3: Umayyad Ruins of Aanjar, Anjar (Unesco, 2006)

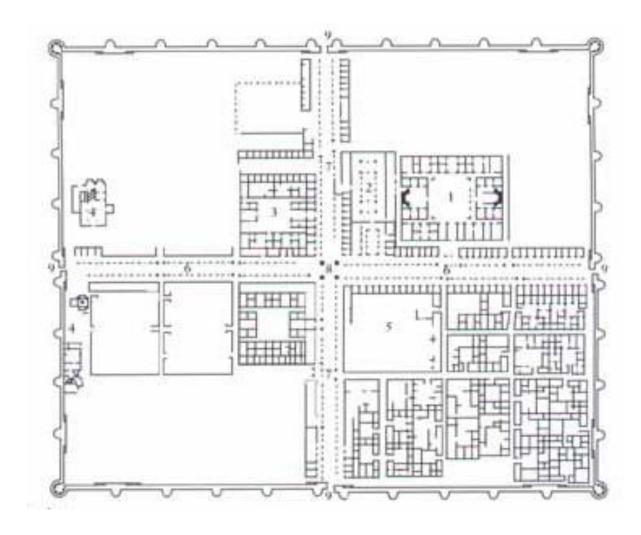


Figure 3.4: Ruins of the Great Palace in Anjar, Lebanon (Creswell, 1969)

We see that through the Umayyad's caliphate when they moved to the west to the Iberian Peninsula carrying their culture, the architectural pattern was one of them, which reflected in different architecture monuments such as mosques and palaces (Ettinghausen et al., 2003).

In contrast to the majority in the Near East, the Umayyad's architect in the Iberian Peninsula had the stone, and marble at his control, yet, evidently guided by Eastern influences; they made great use of ornamental brickwork. The Umayyad's proved themselves as peerless designers with arches which can be seen in first in the great mosque of Cordoba and other monuments which has tiers of double and hex foil arches. The decoration, in marble and stucco, was based on classical naturalistic motifs and is most skillfully executed. Finally, we

find a purely 'Abbasid element in the floriated Kufic script that occurs both in mosaic and in stone carving in the Great Mosque of Cordoba (Holle, 1970).

The archaeological site of the city of Al-Zahra is considered one of the most prominent sites in Spain, for being the subject of pioneering archaeological research in the middle Ages and for its historical and artistic importance. The lavish city of the Umayyad caliphs was in the caliph princes. Andalusia, located a few kilometers from Cordoba, which had a fleeting presence, lasted only for seventy years. Perhaps the most important problem was due to the fact that it had plundered for centuries of its materials as if it were a quarry. This led to the almost complete disappearance of many of its architectural structures, although it is not, because this was not useful as building material and was abandoned on site, and a high percentage of decorative elements appeared in the excavations, although they were broken into fragments. Precisely carved limestone slabs can be found in thousands of pieces, like the huge jigsaw puzzle that, when combined together, provides us with impressive pieces of Umayyad caliph art, as well as vital information about the buildings to which it adheres (Almagro, 2007).



Figure 3.5: Interior of the reception hall of 6Abd al-Rah: man III in Madinat al-Zahra (Wikisoriano, 2006)

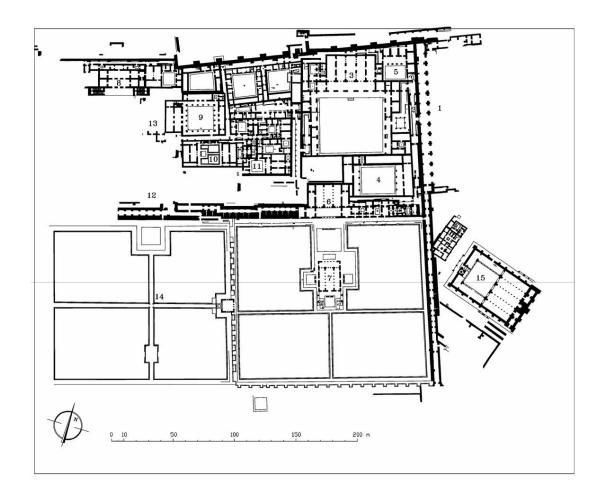


Figure 3.6: Map of the excavated parts in Madinat Al-Zahra (Almagro, 2012)

It was a common factor in the aesthetics of medieval Islamic as well as Byzantine aesthetics mineralizing nature and architecture, to present them by transcendent features. In this knowledge, palaces, mosques, and gardens were converted for visual tropes into valuable treasures, therefore obtaining the nature of the unending and permanent lives, in the signs of divine light and the power emitted from God on planet (Cutler et al., 1996).

The Umayyad's tried to stabilize their own legitimacy as rulers by reaffirming connections between themselves and the prophet Muhammad or between themselves and the text of the Quran (Donner, 2010). The upcoming figures show the remarkable Umayyad architectural work during which caliphate time, it has been built.

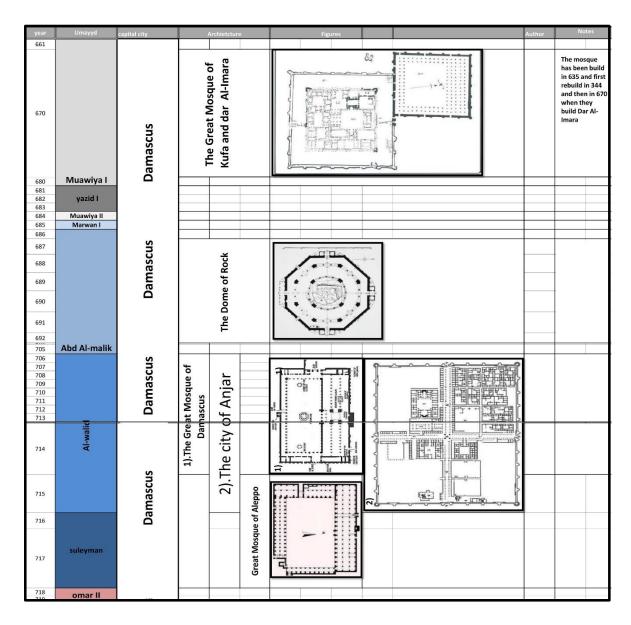


Figure 3.7: The remarkable Umayyad architectural work between 661 &719 AD (Done by the author, 2019)

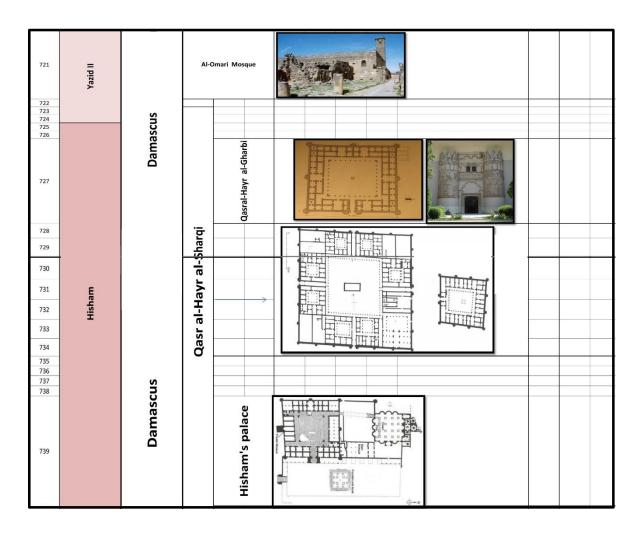


Figure 3.8: The remarkable Umayyad architectural work between 721 & 739 AD (Done by the author, 2019)

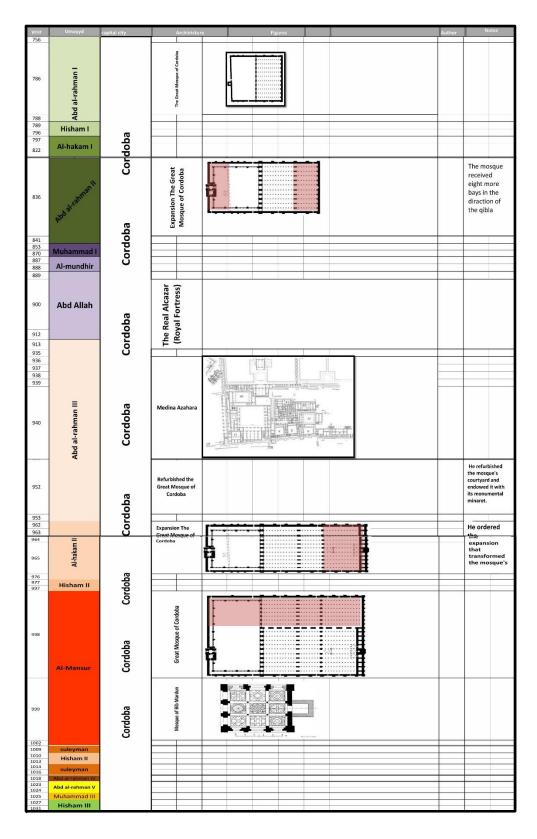


Figure 3.9: The remarkable Umayyad architectural work in the Iberian Peninsula, from 756 to 1031 AD (Done by the author, 2019)

I must also mention that Oleg Grabar remains skeptical about his own view of ornament. He writes: By stating that the Muslim world, for whatever reasons, diverted its energies into an ornament, we are actually making a highly debatable assumption that the dichotomy between the ichnographically meaningful and the ornamental reflects two entirely independent artistic purposes and visual experiences. In reality, we must ask whether some meaning cannot be given to those forms of early Islamic art that appear ornamental only in contrast to the art of other traditions. Alternately, we may have to conclude that the Muslim world simply rejected visual forms as major expressions of its culture, or that it discovered some totally new ways of contemplating and then making works of art.

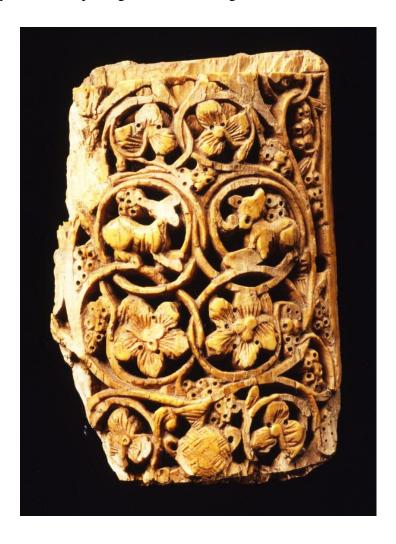


Figure 3.10: Vegetal ornamentation which indebted to the decorations of Late Antiquity that were an important point of departure for Umayyad art (The David collection, 1978)



Figure 3.11: Umayyad Mosque mosaic detail in Damascus Syria (Jackmalipan, 2012)



Figure 3.12: Decoration at Umayyad Palace at Khirbat Ul-Minya (Mahmoud, 2010

CHAPTER 4

COMPARATIVE ANALYSIS OF ARCHITECTURAL TYPOLOGIES

Mosques are the best product of Islamic architecture in terms of structure and construction, which are still standing from the middle Ages to document the early period of Islam, which Muslims created to create their Islamic architectural heritage. This type of building faithfully reflects - like the church in the Christian world - the influence of many architectural traditions that together shaped Islamic architecture (Hillenbrand, 1985).

We see that through the Umayyad's caliphate when they moved to the west to the Iberian Peninsula carrying their culture, the architectural pattern has moved with them, which reflected in different architecture monuments, well the mosque was giving the biggest attention therefore, the thesis focused on the most important monument of the Umayyad era, which still exists nowadays, The Great mosque of Damascus and The Great mosque of Cordoba. This chapter has been divided into two parts first description and analysis, second Comparative Analysis of Architectural Typologies.

4.1 Description and Analysis

In early Islamic times, the mosque was not only the temple. It was the temple, the parliament, where the election is congenial and in which the laws were thought and derived from the Sharia and then announced to the people, it was the school, the social club, and the court (Altantaawii, 1990). Therefore this study is going to observe the flourishing of mosques in that period. The thesis will take two mosques as a case study, one of them in the first Umayyad's caliphate, which Damascus was their capital, The Great Mosque of Damascus, and the second one in the second Umayyad's caliphate, which Cordoba was their capital The Great Mosque of Cordoba, These two mosques are considered to be the most important

Umayyad architecture monuments, the most famous and the most influential in the Islamic era

4.1.1 Great mosque of Damascus

The Great Mosque of Damascus or as it is also known by Umayyad mosque are located in Damascus, the Umayyad caliphate capital and Syria capital now days. It is one of the most important buildings in the Islamic world. Several facets mark the Great Mosque of Damascus, one of them was the location of an ancient Aramaic temple dedicated to the god Hadad. Then it became a Roman Temple of Jupiter ancient religious site, with the expanded of Christianity during the Roman Empire, Theodosius which was the Roman Emperor in 391 changed the temple into Cathedral of Saint John (Demirhan, 2013).

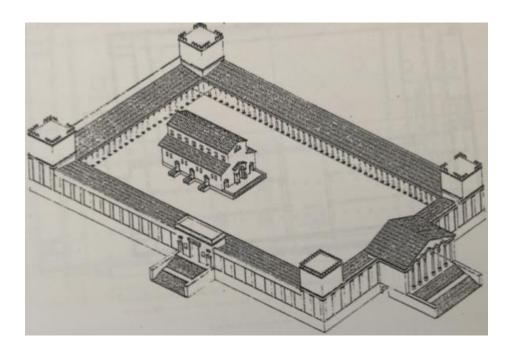


Figure 4. 1: St. John's Church 3d perspective (Creswell, 1969)

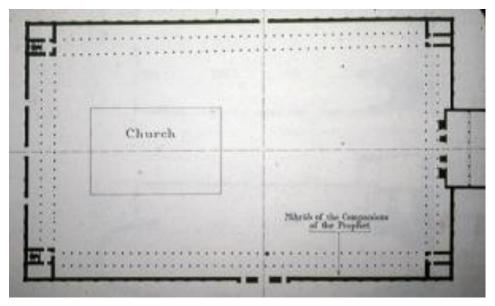


Figure 4.2: The old St. John's Church plan (Creswell, 1969)

Between 661 and 705 AD, and during the first reign of the Umayyad, both of the religion has shared the same building. The Muslims made their worship on the eastern side of the building and the Christians on the western section. At this time, the Umayyad wanted to build a new architectural symbol that would highlight the power of their empire. Thus, Al-Walid I agreed with the Christians of Damascus to take the church in complete in exchange for the protection of the city's churches and to build a new church for the Virgin granted to the Christians as compensation. The new plan of the Umayyad great mosque showed the rising political status of the Umayyad Empire, well they planned the mosque according to Islamic principles, which is why the first step that Umayyad's take was to remove all the remaining parts on the site from Byzantine and Roman periods. Its magnificent has become a strong Islamic architectural style for mosques being constructed in all modern areas, and the mosque plan constructed by a rectangle 97m x 156m with a Saha on the north side which covered around four edges. Because the campus occupies the southern part of the rectangle, the outer wall has three gates that connect to the city from the north, east, and west sides. The southern outer wall that borders the sanctuary has a door that connects directly to the outside (flood, 2001).

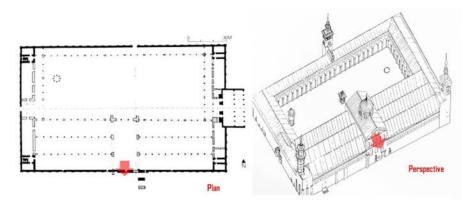


Figure 4.3: walkway of the Umayyad mosque (Krystle, 2015)

Some medieval authors classify the Umayyad Mosque in Damascus as two of the five wonders of the world. It rests a fourth place of the beauty of the mosque and the enormous amount of the state budget spent on its construction. The fifth place is due to the mosaic, marble, carved marble slabs that used in the interior design of the mosque, according to various accounts, 12,000 marble carvers, and 10,000 individual pieces of marble were used in the embellishment of the mosque (flood, 2001) and (Qader, 1979). The mosaics were the paradise described by the Qur'an, where the mosaics on the main entrance to Haram represent paradise. In addition to the mosaics, the Umayyad used other patterns of art in the decoration to give the holiness and grandeur of this building, the use of, carved wood, and glass mosaics in addition to repeated semi-circular and horseshoe arcades.



Figure 4.4: Semi-circular and horseshoe arcades, Great Mosque of Damascus (taken by the author, 2019)

The mosaic that survived in the courtyard of the mosque is the mosaic that has been the focus of many studies. Any writing in the current century indicates that the karma was either vine motifs executed in gilded marble, golden mosaic in mihrab columns, or alternatively, a mosaic frieze that runs along the qibla wall. Karma is the meaning of the word karma. If a person carefully measures the frieze of Damascus, it is clear that the interpretation of karma as a karma is certainly not correct. What appears to be the case, is a complex wording composed of acanthus scrolls where the mass of grapes alternates with grape leaves or pomegranate in each scroll center. Two types of sources can be used to try to determine its appearance and location: medieval literary descriptions and visual recordings left by artists and photographers who recorded inside the mosque before a fire 1893 (Necipoğlu, 2005).

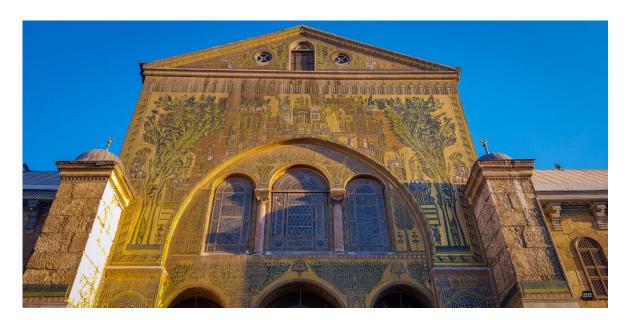


Figure 4.5: The large areas of mosaics in the courtyard of the mosque (Taken by the author, 2019)

Originally, the front porch of the sanctuary consisted of a single pier that alternated with 2 columns but this later changed to piers only. Collection of various arch shapes used in the arcades including round, slightly pointed arches, and semi-circular horseshoes. The mosque walls are decorated with glass mosaics with depictions of locations and houses next to the river perhaps the Barada River which located in Damascus. The side rooms in the east and west were marble grilles with geometric patterns dependent on circles and octagonal (Petersen, 1996).



Figure 4.6: Mosaics in the main Entrance ceiling of the mosque (Taken by the author, 2019)

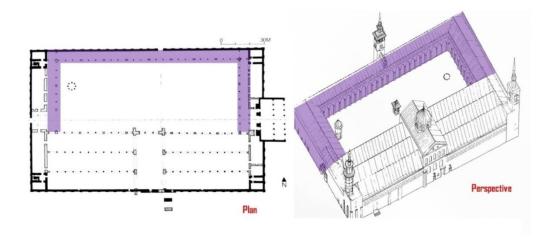


Figure 4.7: the walkway of the great mosque of Damascus (Krystle, 2015)

The area of the mosque is about (157×97) meters, the area of the Haram is (136×37) meters, and the area of the courtyard is (22.5×60) meters. The mosque has four doors: AL-KALLASEH door in the north, AL-BARID door in the west, AL-ZIEADE door in the east and AL-JARN door in the south. Inside the mosque compound, there is a space called (SAHN) surrounded by columns and galleries with a height of c meters. The mosque compound consists of 24 similar and parallel vaults of the tribal wall with a wing that runs through the main front door and up to the mihrab. The wing covers a sigmoid roof with an eagle dome in the shape of a semicircular dome made of laminated wood (Altantaawii, 1990).

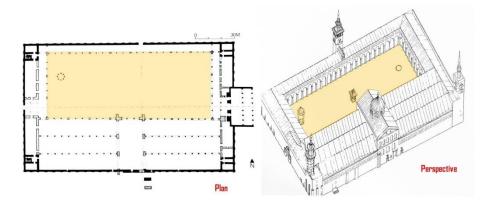


Figure 4.8: Saḥn "courtyard" of the great mosque of Damascus (Krystle, 2015)

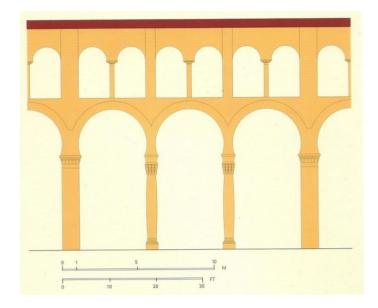


Figure 4.9: Double tiered arcades in haram of the great mosque of Damascus (El Islam, 2017)

Al-Walid I wanted to cover the dome of the Umayyad Mosque with gold but he did not, he use the graphite instead of gold. The floor of the courtyard (Saḥn) were covered with mosaics until the fire of 1069, There was no tile and the level of the mosque land was less than half a meter of what it is now, the original land of the mosque was found in the mosque when they were restoring the inner wall, it was covered with mosaics, but with larger lobes than the one on the walls. (Altantaawii, 1990).



Figure 4.10: Dome of the great mosque of Damascus (Taylor, 2004)



Figure 4.11: Dome of the great mosque of Damascus from inside of the mosque (Construction week, 2011)

The eastern minaret or the minaret of Isa (Jesus) is located in the southeastern corner of the Umayyad Mosque, the longest of the three minarets with a height of 77 m, the western minaret or minaret of Qaitbay is located in the southwestern corner of the mosque. It was probably built in the reign of al-Walid I on the southwest tower of the ancient temple. It was probably a square tower in the style of the Syrian minaret. Along the top of the Qibla wall, there is a stained-glass window with six windows in the middle of the wall, On the side of the large mihrab, there is a stone platform, and the eagle dome, which is the largest dome in the Umayyad Mosque, rising from the courtyard of the mosque 45 meters and a diameter of 16 meters (Omandaily, 2017).

4.1.2 The great mosque of Cordoba

The Great Mosque of Cordoba is located in Cordoba, Spain in the historic city center, near the Guadalquivir River and next to the Roman Bridge. At around the Alcázar de Los Reyes Cristianos and the Archaeological Museum, the Mosque is the most important symbol of Islamic architecture in Europe. Combines both the Umayyad style as Gothic, Renaissance and Baroque styles of the Christian tradition because of its rich history and evolution over time. The Great Mosque of Córdoba is an important part of the Route of the Caliphate, which gathers Granada and Córdoba cities, across the province of Jaen, connecting land that testified many conflicts to control over it (Grabar, 1978).

According to the expenations that happened in the great mosque of Cordoba which begun in 784, we can recognize a peculiarly asymmetrical which clear contrast to Damascus one which has a balanced and organized fashion.



Figure 4.12: A 3d ideal for the great mosque of Cordoba (La Rédaction, 2017)

As Figure 18 shows, the first mosque was built with 11 tiles from 12 bays each. This mosque was extended twice, in 833 and 965, making in this way the two-thirds-west symmetrical of the current building. In 987-988, an extra third was added to the east. All additions followed the first arrangements of columns and arches in building 784, therefore the entire mosque stays in one striking stylistic unit. Expansions of this kind were common in the mosque.

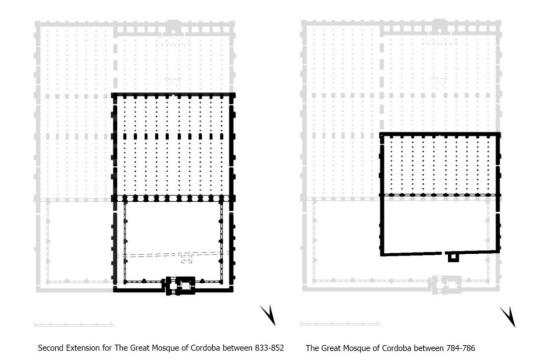
Perhaps the most striking example of this is Al-Aqsa Mosque in Jerusalem, where textual and literary sources document additions, and ultimately also the downturn. In all cases, the justification for the amendments is the same: the population number was increasing (Grabar, 1978).

The expansion of the Second Rule Al-Hakam II has consisted the expansion of eleven lanes to the south, which emphasizes the importance of the three central with three domed ribbed domes at its northern end and three other ribbed domes at its southern end, the culmination of the bay of Maqsura (Souza, 2001).

The city's main mosque remains physically in tune with the demands of culture for one space for the entire society; second, the building was not conceived as a complete physical existence. The structural imbalance in Cordoba does not appear to be an issue. Therefore it can be propped that the mosque in early Islamic times defines a certain social needs and not as an ideal or successful reflection of an ideal formation. This spot may find an additional statement is actually the mosque did not expand an organized facade or even elaborate gates towards the outside until a later time. The doors place or number was defined according to the surrounded area not as an aesthetic perception of the nature of the building. In the mosque of Damascus, the doors were located to the old Romanian building which they did not change their plan but redesigned it, the classical scheme that prevented in Damascus internal changes of the magnitude of Cordoba's (Grabar , 1978).



Figure 4.13: Forest of columns in the great mosque of Cordoba in Spain (Dailysabah, 2015)



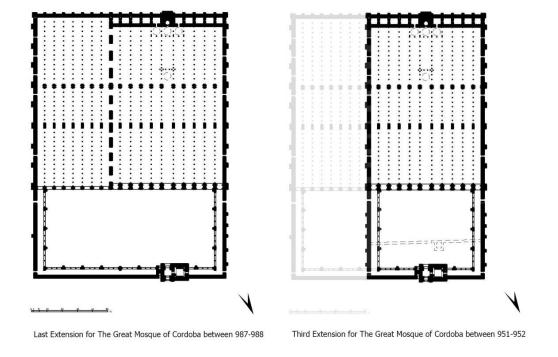


Figure 4.14: The changes of The Great Mosque of Cordoba between 784 and 988(Done by the author, 2019)

The Dome of Cordoba was a type of architectural vacuum that housed the god of the indiscernible, Throne, a jeweled pavilion with star symbols lying between heaven and earth. This space became a symbol not only of the divine presence but also of the ultimate earthly and spiritual power of the Caliph of Caliphate derived from the heavenly throne. Seashell veneer shapes used in the cabin should be interpreted not only as decorative motifs for decoration but also in Mihrab vaulting as a corridor of divine light, as mentioned by the Arab authors (Calvo, 2010).

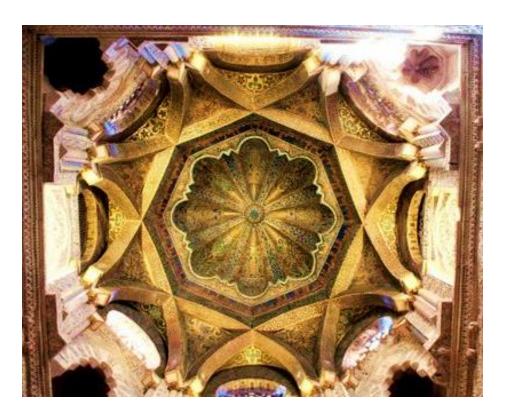


Figure 4.15: The central dome of the Magsurah in Cordoba mosque (Capilla, 2018)

These motifs found in the Umayyad mosques in Damascus and in the first mosque in Cordoba, as has been stated, also uncover the Umayyad willingness in Cordoba to show their ties to their eastern ancestors. The domes in the north side with windows at their base act as a bright gateway to add the novel caliphate and a Maqsura. All these wonderful bays are bound by screens of interwoven arches with polygonal and gravel stones. Once the expansion work started, the first project was redesigned with adding arcades operating parallel to the qibla wall. There is no strictly "Qibla Dish", but this pass indicates a distinct direction to the Qibla (Míguez, 2012).

The basic elements of the mosque are the regularly repeating bays of double arches: the upper ones, which are structural and support the roof, are semi-circular (of Roman origin) and the bottom ones, which act as structural 'ties' are horseshoe-arches (of Visigothic origin). The arches are made of alternating voussoirs of stone (limestone) and brick. There are approximately 1250 columns of varying heights and different stone material. These columns were reused from other structures in the area and they were adapted for this use. The bases and capitals of the columns vary in size and detail, in order to compensate for the necessary heights. Lacking the materials necessary for tall monumental columns, the strategy

of the double arches made it possible to achieve the desired additional height for such a large space by using short columns with additional masonry piers (Cordobamosque, 2009).

4.2 Comparative Analysis of Architectural Typologies

The Umayyad architectural pattern has its own particular style, such as the Byzantine or roman one. This style has moved from the east to the west, from Damascus to Al-Andalus, to coexistence the culture and lifestyle in the Iberian Peninsula. Certain foundations have been laid for this architectural style, as some of these patterns are still used, the mosque design is among the most important influences of that era that can be touch in our time, as they had changed the definition and the structure of the mosque, therefore, analysis and comparative study will be conduct, about two of the most important buildings in the Umayyad period, which built during 661 to 750 and 756 to 1031 AD to identify what were the difference and the caused with the creation of this architectural pattern. The study will allow us to understand the buildings. Moreover, it aids to obviously characterize regional and cultural influences in design the building. This can help advance our understanding of architecture in its historical, cultural, and social contexts. Examine the type and typology can enhance a way of view at the built environment, which not only helps us to identify and discover essential species but also enhances our ability to see the differences as well as similarities between architectural artifacts by identifying the invisible connections between them.

The study going to be about the most important pattern in the mosque and the study will be through:

- 1. Plans: In this section, we will study the effect of the plans and its type of it, what are the main visual elements which can be recognized from the architectural plan, the distribution of rooms, the columns, and the user's circulation for this plan.
- 2. Motifs: In this section we will briefly talk about wall decorations in both mosques

4.2.1 Plans

Among the architectural elements that attract attention and distinguish the Umayyad architecture are horseshoe arches, two-level arcades, hypostyle halls, domes, and Mihrab.

The architectural similarity cannot be confined to the physical similarity only, but rather we must go to the metaphysical similarity. The Umayyad Mosque in Damascus, specifically the prayer hall, is divided into two parts, where the dome is centered in between those two-part each section contains 5 rows of columns. It is not a coincidence that the great mosque of Cordoba in the first appearance contains 5 rows of columns as well.

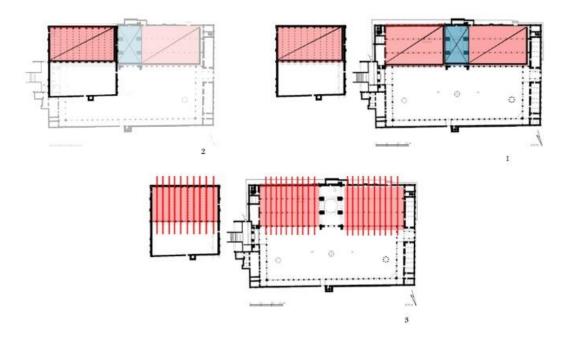


Figure 4.16: The metaphysical similarity in the great mosque of Damascus & Cordoba (Done by the author, 2020)

Umayyad's construction largely followed the Byzantine Roman tradition in their use of stone construction and continued their technical development to achieve impressive results. Quarry methods have remained almost unchanged, and still involve the use of metal wedges, stoppers, blades, and wide metal chisels. In the Syria and Palestine region, limestone has been used mainly, although it can be combined with basalt for heavily loaded elements such as lintel jambs and thresholds. Basalt can also be used on its own, but only when there is no material easy to sculpt. The Umayyad's basaltic constructions were usually rougher and could be distinguished more easily than later Roman buildings, which had more subtle joints, rounds, and more regular faces.

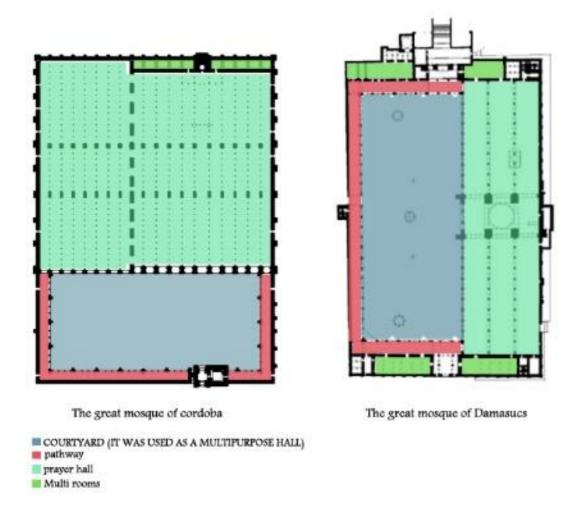


Figure 4.17: The division of the two mosques according to the architectural function (Done by the author, 2020)

Both mosques belong to an established functional type, the hypostyle mosque which can be considered as a semi open buildings. Typologically, the Cordoba mosque's tenth-century expansion belongs to the category of urban mosques built by the Syrian Caliph al-Walid between 705 and 715. These mosques are distributed in the main cities of the ancient Umayyad caliphate, including Damascus, Medina, Jerusalem, etc., and individual differences emerge but they form one group that plays an important role in the dynamics of its Andalusian descendants. This architectural heritage appears in the minaret of the Mosque of Cordoba, in the composition of the facades of its tiles, the lateral disposition of its paths, the hierarchical arrangement of its architectural elements, the use of mosaics as a primary decorative medium for its most important areas, features that occur in one or the other, and in some cases, all of its predecessors, but are preserved Better at the Great Mosque of

Damascus. The cultural heritage of the Mosque of Cordoba is equally evident in historical and legendary accounts that serve as a reminder of the Umayyad past, and more specifically to the mosque's past itself as it was written in the tenth century.

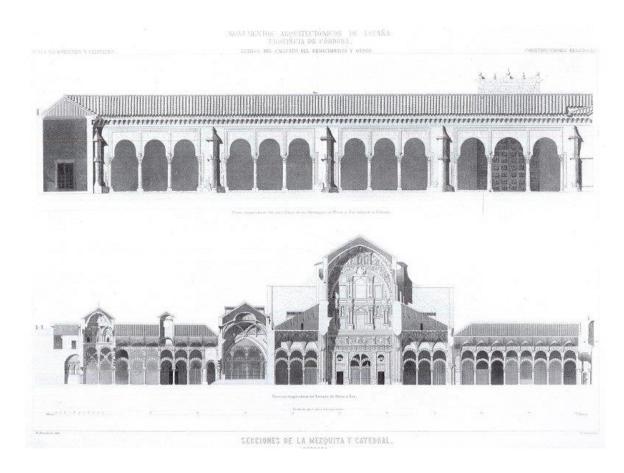


Figure 4.18: Section for the great mosque of Cordoba (El Islam, 2017)

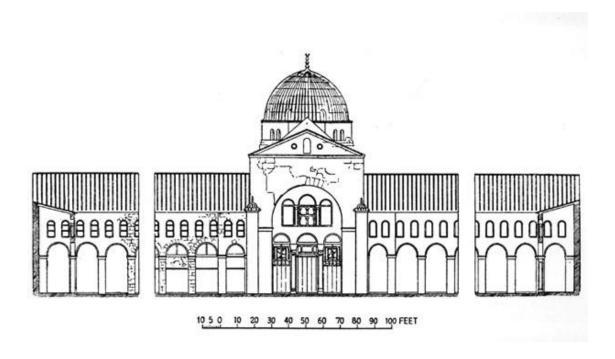


Figure 4.19: Section for the great mosque of Damascus (Croswell, 1969)

The Great Mosque of Damascus has an area of 15,229m2, while The Great Mosque of Cordoba is 23,400 m². The Great Mosque of Damascus was built to prove the caliphate power and to create their first monument and that is why the Umayyad has to choose the location of the temple to build a mosque. Therefore, many types of researches and studies on the early Islamic period have mentioned this building and the amount of the money that Al-Walid spends on this building The Great Mosque of Damascus. While the Great Mosque of Cordoba was built to simulate The Great Mosque of Damascus and not to prove the power of Al- Andalus, which Umayyad's did not have it at the beginning of their second caliphate, in spite of that, and after they regained their strength while they were in Cordoba, they keep Expansion the Great Mosque of Cordoba to present their power (Grabar, 1978) and (flood, 2001).

In the Great Mosque in Damascus we can recognize from the mosque plan that, the mosque has four main entrances, each entrance has its own function and its own name, while in Great Mosque of Cordoba there is only one main entrance and four secondary entrances, in both plans, the entrance leads to Courtyard Pathways, and then to prayer hall, the place of the Great Mosque of Damascus used to be a great temple than a Great church, and the main

entrances where the same as the Great Mosque of Damascus, and that could be the first reason behind the four main entrances.

Second according to some medieval authors, during Al-Walid regain the caliph Al-Walid prevent people from building or use the area around the mosque.

Third, from the mosque plan, we can see that in the Great Mosque of Damascus, tow of the main entrances can lead you to a small hall and in these halls; there are two rooms, which used for a different function (Flood, 2001).

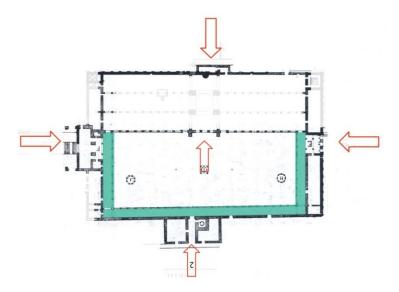


Figure 4.20: The entrances in the Great Mosque of Damascus (Edited by the author, 2019)

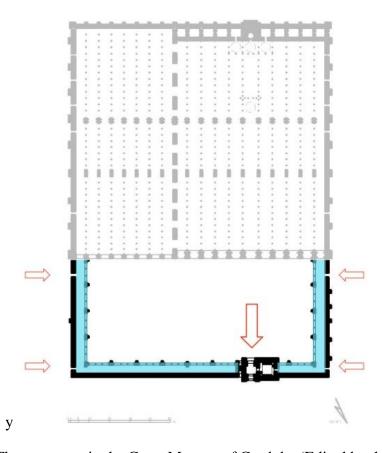


Figure 4.21: The entrances in the Great Mosque of Cordoba (Edited by the author, 2019)

Both mosques have several rooms, which has been built for a different function. In the Great Mosque of Damascus, the rooms are located near the main entrances according to their functions where the users are not required to entire to the prayer hall. Two of these rooms were used as a small masjid, another one was used as storage for the mosque and the fourth one was used for a different function. While in the Great Mosque of Cordoba, the rooms were located behind the mihrab to prevent the full privacy to these rooms, which their functions were not for public use as in the Great Mosque of Damascus.

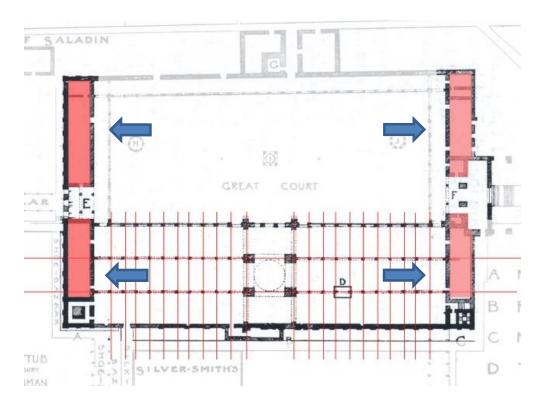


Figure 4.22: The several rooms for the Great Mosque of Damascus (Edited by the author, 2019)

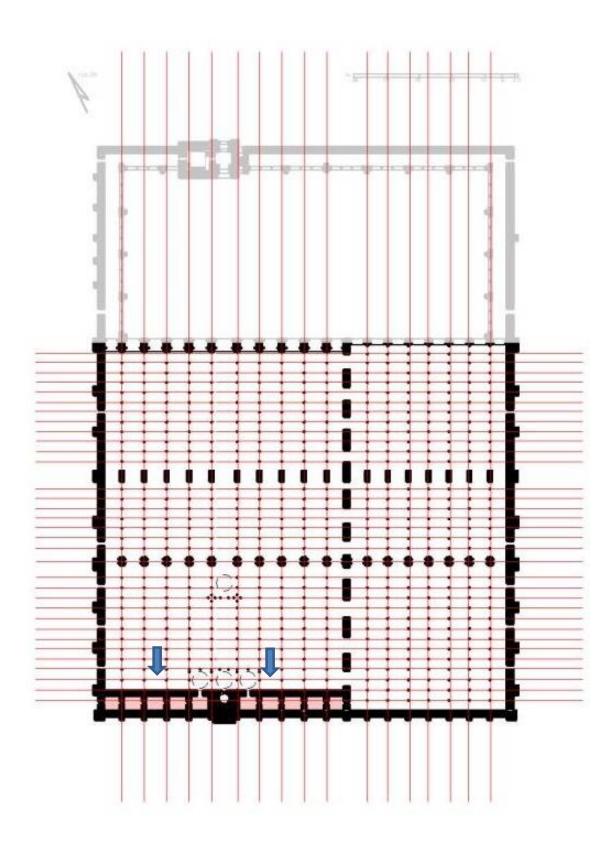


Figure 4.23: The several rooms for The Great Mosque of Cordoba (Edited by the author, 2019)

■Domes

The Great Mosque of Damascus now days have one dome, which called Eagle Dome. According to Ibn Jubayr in The Great Mosque of Damascus and under Dome of the Eagle there was a dome with the exact dimension of the Eagle dome with 10 windows, well, this dome were between two domes first one is connected to the wall of the courtyard which has 6 windows and the other one is connected to the Mihrab wall with 14 windows at the same study Dr.Afif Bahnassi saying that according to what Ibn Jubayr mentioned about the domes, The gable was not in existence during the reign of Al-Walid, but the whole roof was flat as in the Kairouan Mosque (Atasoy et al., 1990).

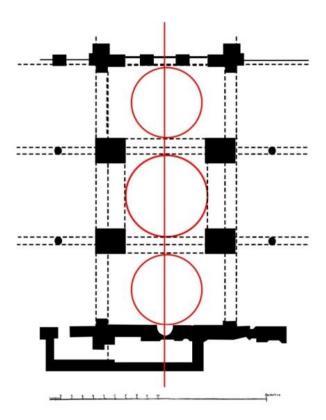


Figure 4.24: Great mosque of Damascus domes according to what Ibn Jubayr explanted in his book (Done by the author, 2019)

Most of the mosaic in The Great Mosque of Damascus represent buildings drawing, and this building has gable, the question would be, does the Umayyad's show the gable in their mosaic while it is not excitant in their mosque as it shown in Figure 4.25.



Figure 4.25: The mosaic in The Great Mosque of Damascus representing buildings has gable (Edited by the author, 2019)

The eagle dome in great mosque of Damascus is one of the accomplishments of the Umayyad caliph Al-Walid bin Abd Almalik. The Eagle Dome is 45 meters above the grounds of the Umayyad Mosque and 16 meters in diameter, and Ibn Jubayr describes it on his journey. A great structure is a garnet for it, connected from the mihrab to the courtyard, and under it are three domes: a dome connected to the wall that is to the courtyard, and a dome connected to the mihrab, and a dome under the dome of the lead between them. Step, they know the position from the mosque with the eagle for this analogy that is placed on it, and from which side it received the country you see the dome in the air blowing at all altitudes as if hanging from the air, Ibn Jubayr's saying: "These people received her. I saw a wonderful sight, and a huge vision, which people resemble it with a flying eagle as if the dome is its head, and half the wall of the tiles to the right, and the second half to the north, its wings (Ibn Jubayr, 1852).

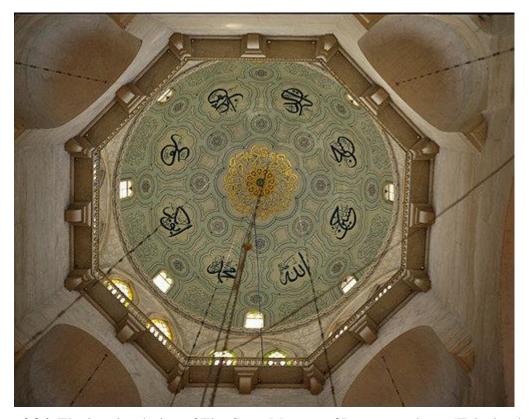


Figure 4.26: The interior design of The Great Mosque of Damascus dome (Take by the author, 2019)

However, the interpretation of Creswell came out differently, as he sees that the Greek word "Aitos", which means its literal translation with an eagle was nothing more than a delicate architectural technical term in the sense of the triangular roof and was used by the Syrian architecture during the reign of al-Walid, but the literal translation is that which remained instead of the truss dome or Triangle roof dome (Creswell, 1969).

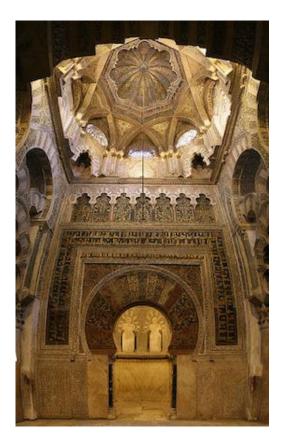


Figure 4.27: Mihrab dome, Great Mosque at Cordoba (Vongo, 2007)

While in the great mosque of Cordoba and above the Mihrab there is a magnificent dome. It is built of intersecting ribs that create pointed arches covered lavishly with golden mosaic in a radial pattern where the Grand Mosque in Cordoba is a prime example of the ability of the Islamic world to develop architectural styles brilliantly based on pre-existing regional traditions. Moreover it is an unusual mixture of familiar, innovative, and formal vocabulary that can be recognized as "Islamic" to this day (khan, 2015).

The first known examples appear in the extension of the second rule of the Great Mosque of Cordoba, between 961 and 965. Four domes were built during these years, three of them were close to the Mihrab, while the fourth was built in the place where the ancient Mihrab of the Abd al-Rahman II mosque, there is a lot of theories about the origin of these domes. The first known domes are those in the Great Mosque of Cordoba, the level of sophistication and completeness achieved in these domes is sufficient to consider that previous examples should be present, there is a lot of theories about the origin of these domes. The first known domes are those in the Great Mosque of Cordoba, the level of sophistication and

completeness achieved in these domes is sufficient to consider that previous examples should be present (Fuentes, 2010).

■ The Minaret

Minaret, from which top the muezzin calls Muslims to prayer, is the mosque most prominent sign. Traditional minaret in Syria is a stone square tower.

There are two theories about the origin of the minaret in mosques, the first suggests that the idea of minarets is spat from the towers of the Syrian churches, which were camps. As for the second theory, it is likely to look at the meaning of the minaret in the Arabic language, which means the house of light or the place of light, in a philosophical sense that it is a sign of spreading the light of Islam.



Figure 4.28: Square towers in St. John's Church (Croswell, 1969)

In fact, among the earliest minarets were those in the Damascus Mosque, where the ancient Tynose pillars, or holy area, were working to proclaim the victorious new faith of the occupied Christian town. Soon the letter was sent home, as these square towers rose dramatically. It is a contentious point about whether the intention behind it is in fact insisting on the subject of victory, but it must be recognized that no urgent need imaginable requires a set of minarets. From time to time in subsequent centuries the long minarets located in remote or commanding positions raised by rulers in the aftermath of a great victory may again call into doubt that the motivation for their erection was political rather than religious,

especially when it was so high that the call to prayer from their crowns Inaudible (Hillenbrand, 1985). We see in the history of Islam when the Prophet Muhammad asked Bilal Al-Habashi to go up on the roof in order for people to be authorized to come to prayer. This story confirmed that the mosque needed a minaret in the early ages in Islam to reach the call to prayer as far as possible that is that is the reason behind the height, well both theories were correct the minaret as a concept It was inspired by the towers of the Syrian churches, where the plan of St. John's Church in Damascus contain the bases of square towers. The name of the minaret was chosen to indicate that it is the place where the light of Islam is spread to the people.

According to the previous researches we understood that the great mosque of Damascus had 3 minaret while the great mosque of Cordoba has only one, as we looked to the plans and after we had analyzed it the study has proved that the Umayyad's focused on the center of the mosques, and we can understand that from the place of the Mihrab, the dome and main minaret. Considering Mihrab, we notice that there is an axis start from Mihrab, connected with the dome, and continues until the entrance from the courtyard to the prayer hall until the entrance with a minaret and this clearly seen in The Great Mosque in Damascus, The Great Mosque in Cordoba, and which lead us to say the main minaret in the great mosque of Damascus is the middle one which contacted to the courtyard.

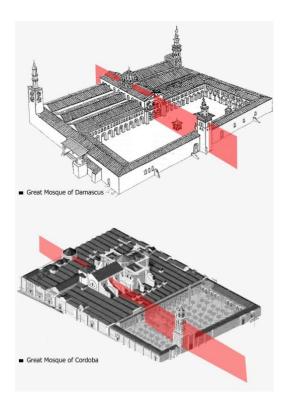


Figure 4.29: The hidden axis, which connect the Mihrab, Dome until the entrance with a minaret (Done by the anther, 2019)

■ Miḥrāb

It is a niche in the mosque telling the qibla direction or the direction in which prayer should be done the niche has been the topic of many studies by renowned academics. Whelan, following suggestions first made by K. A. C. Creswell, has proved convincingly that the concave Mihrab was first founded by the Umayyad caliph al-Walid I Ibn Abd al-Malik (r. 705–15) through his renovations of the mosque of Medina, and was then immediately used or required in other mosques, great and small; earlier mosques, as Creswell pointed out, have no niche marking the qibla. In Medina, the concave Mihrab was located where the prophet himself prayed, and therefore commemorated the prophet's prayers toward Mecca, whereas elsewhere, while symbolically reminding worshippers of the prophet's behavior, it served also a liturgical function as facilitating a focus on the imam leading prayer and on the sacred "prayer area" (sutra). This decision should have been given by the Amir al-Mu'minin al-Walid seems, under the circumstances, probably. One is tempted to conclude that the Umayyad's in this case, especially al-Walid, who reconstructed the Umayyad Mosque in Damascus, the Great Mosque of Medina, and other mosques, were engaged in an effort to

clarify and systematize the prayer ritual so as to unequivocally direct it towards Mecca, the city of the prophet, as is of course now the norm (Borrut et al., 2010).



Figure 4.30: The great mosque of Damascus Mihrab (taken by the author, 2019)

The mihrab of great mosque of Cordoba is surrounded by two cells that correspond to the treasury room in the east and the door of the seven in the west 2. This huge triple façade in Cordoba: the doors of the mihrab, the treasury and the spa, decorated with glass mosaics and preceded by domed bays, was an innovation that soon became a model, although simplified, for the great mosques in the west Islam. Likewise, the alcove in Cordoba became exceptionally large - 3.77 m wide x 3.57 m deep, which can only be compared to the mihrab in the Abbasid mosque. Shortly after the completion of the mosaic of Bab al-Sibaa (between 970 and 973), a new opening had to be made in the qibla wall to house the portable minbar ordered by the second ruler.



Figure 4.31: The great mosque of Cordoba Mihrab (Art and Architecture of the Islamic World, 2017)

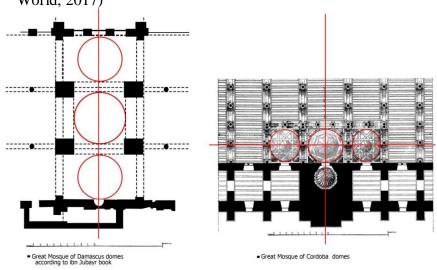


Figure 4.32: The connection between Mihrab and the domes in the great mosque of Damascus and Cordoba (Done by the author, 2019)

■Column

In the beginnings of Byzantine Syria, column was a powerful and important symbol, which is the Syrian phenomenon of saints, who were famous for standing on vertical column for

years. Christianization, or the absence of columns or columns, is a complex issue that has been extensively trained in recent scholarships. It is important to note here, however, that it is generally agreed that the column was a particularly influential physical representation in Syria, with an echo in both pagan traditions and Christian Islamic hermit (Frankfurter, 1990). By the 7th century, the combination of columns was a symbol of imperial power. On various media such as high-end embossed panels to simple Hajji Ampoules, pairing of crosses with image of columns was ubiquitous. The large cross topped by the head of Christ in a medallion was a common decoration, for example, on the ampoules of the Palestinian pilgrimage in the early middle Ages (Janin, 1950). The final transformation of the crossed column as shown in the iconography of baptism is a clear introduction of the image of imperial victory in a representation of spiritual victory. The ascending column (as a memorial, or as a symbol in subsequent icons) is associated with God's appearance in the baptism of Christ, creating a dual image of imperial authority and Christian belief, representing the victory of Christ over death, the victory of the church over sin, and the victory of the empire over its competitors. The composite column was more than one symbol. By the sixth century, it was a common element in the urban landscape of late antique cities (Khalek, 2011). Islamic architecture, like any other architectural system, it needs recognizable patterns. The horseshoe arches are one of the typical patterns e Islamic architecture. Different to the semi-circular arch of the Western tradition, the horseshoe arches have the center higher than its foot, and, therefore, seems to rise and open up. Hence, it loses its structural quality and becomes an ornamental form, combining repose and radiating lightness. In general, the horseshoe arch shows how a motif may become a distinctive "sign", represents a completely architectural system. This is possible because it unifies the basic properties of the system in a simple form (Schulz, 1986).

The impact of the pillars on the Umayyad's was very significant, which led them to think about including them as a basic element in building mosques and in Islamic architecture in general, also palaces. In order to receive the same welcome from the Syrian society and not to be far from what is striking in Damascus, the city of columns at that time, this is why the columns were developed using a certain engineering system in order to carry the high ceilings instead of tall columns, they used two levels of the columns, the first part is the horseshoe columns On top of it semicircular columns that were distributed over the lanes to draw the boundaries of walking and to be the dominant movement of the users.

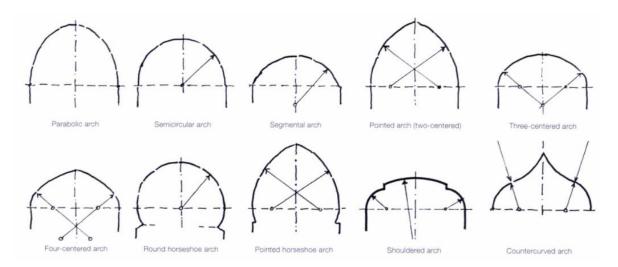


Figure 4.33: The types of arcs, with the center of the circle determined by each type (Ragette, 2003)

Given the scarcity of wood for the centering of arches, methods were found to reuse centering and to eliminate temporary supports from the ground. Frequently the Romans provided brackets below the springing of arches to support the formwork. Similarly, the horseshoe shape could be derived from such narrowing of the arch. Centering planks were prepared by soaking thin planks in water and drying them in a bent shape. If used for half an arch segment they could repeatedly serve for a variety of pointed arches, Reed- or palm reinforced gypsum arch shapes were widely used as centering and the bending of the reeds or palm stacks could have introduced the four-centered shape Stilting of arches would help the removal of formwork, as it could be lowered without obstruction. Thus, they did not copy but and modified it according to their preferences. When faced with the sober Roman arch they either turned it into the exotic horseshoe shape by a minute extension below the springing line, or they elaborated the pointed arch.

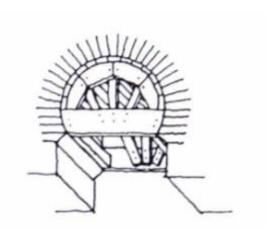


Figure 4.34: the formwork in horseshoe arches (Ragette, 2003)

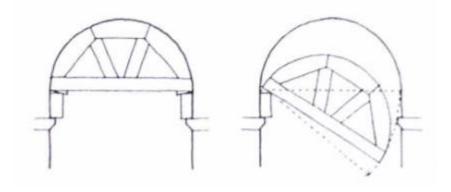


Figure 4.35: the formwork removal from stilted arches (Ragette, 2003)

They found that superposed Roman arches, produced exciting pointed patterns and delighted in adverse shapes. Instead of emphasizing trie flow of forces by suppressing the voussoirs in favor of an appropriate arch molding, they did the opposite: they marked the individual voussoirs by color changes and decorative features, eliminated moldings, and often isolated the arch within a rectangular frame. Looking at arches the English term pointed refers to the appearance. As is logical with such an important visual element, but the thoroughly rational French call it [arc brisé] or broken arch, expressing their opinion that the protection of the circle has been lost. Arch shapes are among the most important stylistic elements in architecture, they mark whole periods of the art. They can be divided into three groups Genuinej adverse and decorative arches. (Ragette, 2003).

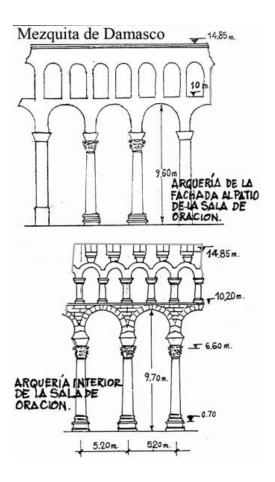


Figure 4.36: Dimension of the horseshoe arches in The Great Mosque of Damascus (Reflexiones, 2011)

Horseshoe arch first employed in The Great Mosque of Damascus (706-715), it was often mounted onto front doors, which gives a height greater than semicircular arches in addition to a better aesthetic, as it was first used for structural and functional purposes but gradually it is used for decorative purposes (Saoud, 2002).



Figure 4.37: Horseshoe in the courtyard in The Great Mosque of Damascus (Taken by the author, 2019)

The columns of the Great Mosque of Cordoba contain a system of double-level arches with crossed horseshoe arches supported by graceful columns on marble columns, and the originality of their overall complex influence are all factors that enhance their value in the history of Western Islamic architecture in particular and Mediterranean architecture in general.

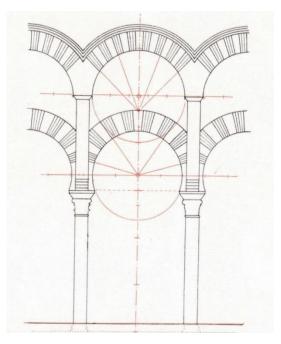


Figure 4.38: The center of the horseshoe arches in The Great Mosque of Cordoba (The Cordoba Mosque-Cathedral, 2016)

4.2. 2 Motifs

The principles behind the relationship between structure and decoration in the eastern and western traditions can help us better understand the specific characteristics of Umayyad decoration techniques. Two main attributes can be clearly distinguished: mosaic and frescoes from the classical world; Eastern plaster.

The Levant had a long history of mosaics Production, especially during the fifth and sixth centuries, during this period (7th–8th c. A.D.), this technique disappeared from the rest of the Mediterranean. Meanwhile, it blossomed in the Islamic Levant. The tradition was revived in the Umayyad period after the Sassanid conquest. It was adopted by the new rulers to decorate the luxurious sidewalks that were designed as status symbols, this tradition would also be kept alive by Christian communities until the 9th century.

Examples include mosaic murals on the Dome of the Rock and other monuments. Mosaic was one of the few decorative techniques used by the Umayyad's in which no Parthian Sassanid influence could be identified. Indeed, even the decorative patterns they used are predominantly Byzantine. Only a few features of Sassanian origin can be recognized at the Dome of the Rock, However, the Umayyad's seem to have increasingly favored purely geometric patterns that correspond to the Islamic prohibition of symbolic representation.

To a large extent. The transition from two-color mosaics in the Hellenistic period to Byzantine and Umayyad mosaics, which included cutting glass and gold leaf, was accompanied by the development and improvement of the mosaic family.

The most important achievements and creations of the Umayyad's revolve around motifs that tell a rich history by depicting cities or through religious or Qur'anic writings while geometric ones narrate the Umayyad intelligence and their dependence on mathematics whether in terms of form or in terms of construction. (Arce, 2008).

Mosaic was used for the floor at the begins, it was well known in the Greeks, fin Athena city, black, and white was the only color which used in mosaic, black color was for background while the white was for symbols and characters, by the time they start to use a different color (Allen, 2017). According to some medieval authors, the great mosque of Damascus was damaged several times, and it is still remains as a masterpiece of Islamic architecture. Their completely walled surfaces were once decorated with gilded mosaics.

Only fragments still remain of these decorations. Many studies have suggested that the complete composition largely included plant themes and scenes consisting of picturesque buildings, suburbs, and villages in fictional landscapes. These were interpreted as ascends of Heaven or Damascus back in the time.



Figure 4.39: The mosaic in the back wall of the courtyard (Worldwide Elevation Map Finder, 2005)

The destruction of the early Islamic decoration of the mosque made it difficult to discern the influence that it might have on later religious architecture, thereby obscuring the relationship between the original model and the copy. The Damascus mosque is characterized by two types of decoration, mosaics, and karma. A portion of the mosaic was survived in the courtyard of the mosque, while the karma did not survive after the fire that broke out in the mosque. One of the most important things mentioned in the literary references about karma is its location as it is located between the marble Dado and the upper part of the Qibla wall, and it was golden in color, at a huge cost, it was inlaid with agate, pearls and other precious stones, as the Mihrab was at the time.

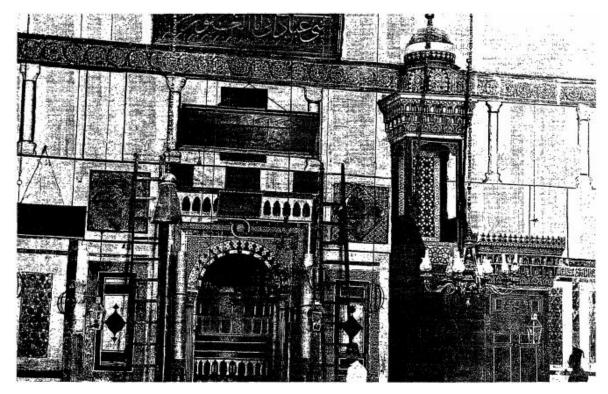


Figure 4.40: Damascus. Great Mosque. Qibla wall before 1893 (Creswell, 1969)

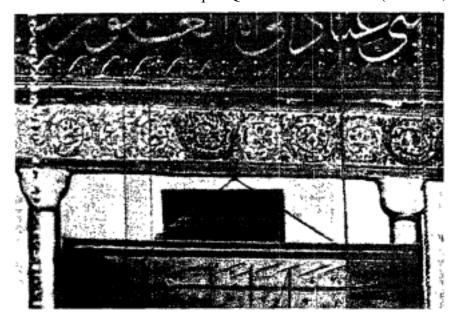


Figure 4.41: Damascus. Great Mosque. Detail of vine frieze from a digital enhancement (Creswell, 1969)



Figure 4.42: Damascus. Great Mosque. Detail of vine frieze from a digital enhancement (Creswell, 1969)

From the previous observations and the available information about the vine or karma, can be summarized as follows. The karma was a narrow marble frieze surrounding the inner walls of the nave in the Umayyad Mosque. Not just a vine, the frieze is carved with a passable acanthus in which grape leaves or fruits such as grapes and pomegranates appeared at intervals. The surface of the inscription was gilded, giving the vine its golden appearance. (Flood, 1997).

The karma in the Damascus Mosque is somewhat similar to one of the sculpted decoration found in the Khirbet al-Minya Palace in Jordan, with a difference in materials



Figure 4.43: Decoration at Umayyad Palace at Khirbat Ul-Minya (Mahmoud, 2010)

As Al-Tabari explains in his book, we can see that there is a lot of theory about the mosaic in the Great Mosque of Damascus, about who makes it, and the meaning of it. However, we can see that the Umayyad were more concentrated on the plant mosaic more than the Quranic or geometrical mosaic, we can see that through the back wall of the courtyard it called Al-Barda, has an area of 7.15m X 34.5m. The mosaic in the great mosque of Damascus was small cubes made out of colored glasses or colored rocks. The walls can be separated into marble ad mosaic, the marble was around 170 cm and after the marble part, mosaic part start (Altantaawii, 1990).

Mosaic, it tells the story of a place in a certain time, it contains houses with gabled roofs, as were the houses of Damascus in that time, tall towers and huge trees on the Barada River in the countryside of Damascus as Criswell mentioned (Creswell, 1969). Mosaics arouse great interest in architectural details, but with a lack of depth, especially in architectural elements, the artist ignored the laws of perspective, in an attempt to illustrate the opulence of villages and palaces in the Umayyad cities. The design of the house is almost repeated, and the houses stand on top of each other, topped by a gable board, each with entrance and windows on the first floor. Sharp shades that are frequently seen on rooftops are important to separate each house from another house, and this method can also be traced back to early Christian mosaics. This style was used in mosaic in Roman mosaic such in Santa Maria Maggiore church (Ibraheem, 2016).



Figure 4.44: Mosaic at the great mosque of Damascus (Wikimedia, 2017)



Figure 4.45: Mosaic at the great mosque of Damascus in the left side and Santa Maria Maggiore church in the right side (Ibraheem, 2016)

The Great Mosque of Cordoba is worldwide known for its harmony, balance, and dramatic use of decoration, its overall unity, and aesthetic sensitivity, it has the same about the plant mosaic but we can see that the Quranic mosaic more improved as we can see in the coming figures. To decorate this gate, the sage asked the Byzantine Emperor, Nikphorus II Focus, to send him a mosaic capable of imitating the magnificent mosaics of the Great Mosque of Damascus, one of the great Umayyad buildings of the eighth century. The Christian Emperor, the Muslim caliph, sent not only mosaic but also a gift of 1,600 kg of gold mosaic cubes. These sparkling cubes, formed in motifs and inscriptions of the Qur'an, are adorned with the entire sphere, the area/room in front of the Mihrab (Battuta, 2013).

The mosaic around the Mihrab is made of gold thread with a blue background, it is a Quranic motif that contains specific verses indicating the relationship of the believer to God and his caliph and supports the Umayyad caliphate in Cordoba. The meaning and the iconic identity of the caliphate in the Mosque of Cordoba are highlighted through the terms and terminology of its written program. The inscriptions do not refer anywhere to a mosque, but rather to a house of worship that fulfills a series of prophecies and completes the last cycle of Umayyad history. Historical inscriptions, which express gratitude for their choice as a tool through which the temple was built and completed, follow a protocol that belongs to the language of shrines, and is evident in the inscriptions in Mecca and Medina (Khoury, 1996).

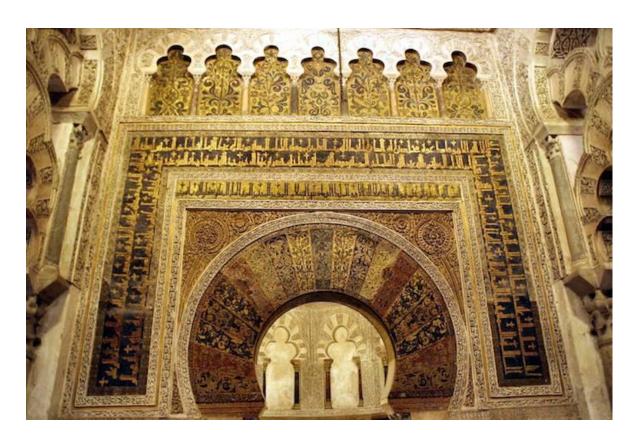


Figure 4.46: Mihrab, Great Mosque at Cordoba, Spain (Khan, 2015)

The written program of the Mosque of Cordoba combines its legendary and historical dimensions to display the monument one step further, making it a counterpart to the mosque shrine founded by the Prophet. The Cordoba Mosque, like the exile, is built after exile and immigration. It is the mosque of conquest and renewal that nullifies its predecessors, and the mosque announces the rise of the new world order and the establishment of the caliphate of God on earth.



Figure 4.47: Mihrab, Great Mosque at Cordoba, Spain (Following the trail of ibn battuta, 2013)

There is no doubt that the decoration has a central importance in the architecture of the Islamic world. The global use of the word "Arabesque" attests to its superiority and importance, at least in the minds of Western scholars. Moreover, some scholars consider decor to be the dominant aspect of architecture in the Islamic world. For example, Alexander Papadopoulos believed that "in Muslim opinion, architecture was an art only because of its surfaces, its skin of mosaics, plaster, ceramics, marble, or verses of the Qur'an to be read on its walls, and its temptation from abstract Arabesque decoration. A more interesting view is that Oleg Grabar explains in detail on the basis of the concept of ornament at the conclusion of his formation of Islamic art. Draws a line to distinguish between ornament and ornament on it. Grabar calls this type of ornament and compares it with classical ornamentation, which has intentional meaning. Moreover, this decorative characteristic of the first part of The Islamic world, in fact, is intertwined with another value: the value of ambiguity and contradiction, as it gives rise to a specific feature of two concurrently and partially contradictory interpretations, one precise iconic and decorative interpretation. This is the case in some of the ruins of Khirbet al-Mafjar as well as the Spanish ivory. The question is whether this conclusion is the result of the will the original content creator or interpretation criteria are not sufficiently developed. If the first is, we face a very modern type of artistic

creation where the primary burden of interpretation is a remarkably contemporary aesthetic procedure, and an old interpretation. This state of decoration, with its ambiguity and ambivalence, is what I call a poetic approach to decoration. Paul Valerie describes the long hesitation between form and meaning of hair (Ettinghausen et al., 2003).

CHAPTER 5

CONCLUSION AND RESULTS

The Umayyad caliphate was the first dynasty that has ruled the Islamic world, they have chosen Damascus as their caliphate capital, they had been impressed from the pre-Islamic Syrian architecture, therefore, they decided to show their empire power by architecture and the care about it too much such as paying the government budget for one building so they can impress their enemies and show them how peaceful is their religion. Damascus has been known as the city of columns and that was the first inspiration about the columns but made a huge change in the columns definition to be more than functional structure support, moreover, they took care of the structure form as much as the construction while they did not neglect or give it less value as we saw through their construction and through the horseshoe arches, they did not follow the theory: structure follows form or the opposite, but they had it equally. If we look at the Creswell and the mosaic of the great mosque of Damascus and compeer them with the great mosque of Cordoba that could let us say that the Umayyad used the truss roof in the great mosque of Damascus and the roof wasn't flat. Minaret, from which top the muezzin calls Muslims to prayer, is the mosque's most prominent sign. The Syrian traditional minaret is a stone square tower. The Umayyad's focused on the center of the mosques, and we can understand that from the plans of mosques. Considering Mihrab, we notice that there is an axis start from Mihrab, connected with the dome, and continues until the entrance from the courtyard to the prayer hall until the entrance with a minaret and this clearly seen in The Great Mosque in Damascus, The Great Mosque in Cordoba. Umayyad's has invented the Mihrab and they had engaged in an effort to clarify and systematize the prayer ritual so as to unequivocally direct it towards Mecca not as it is the city of the prophet as many authors has mentioned, but because it has been mentioned in the Quran that all the Muslims should towards while they are doing their prayer, but when they built the great mosque of Cordoba they towards the prayer direction to Damascus In order to put a historical imprint on this building is illumination to the continuing of the great mosque of Damascus, The Umayyad's took care of the structure form as much as the

construction while they did not neglect or give it less value as we saw through their construction and through the horseshoe arches, they did not follow the theory: structure follow form or the opposite, but they had it equally. The Umayyad architecture was influenced and inspired by several different types of architectures, thus we see that when Damascus was the capital of their caliphate, they got inspired the of using the mosaics from the Byzantines, but they had developed it to be used according to Islamic principles, and when their caliphate was transferred to Andalusia, they did not want to impose their architectural pattern, but they attempted to take inspiration from Gothic architecture which was in the Iberian peninsula to develop their patterns in order to receive more acceptance from the local inhabitants, and that is one of the reasons behind the different materials used in each building. The multi-columns method has been applied to provide easy extension, for Muslims who accepted the new religion, it has been preferred in early mosques. In that period, Muslims moved to strive in the way of God and many new people accepted to the religion. As a result, the Umayyad has taken the definition of the mosque from a worship place with four walls to other levels as a well-designed building has its own architectural patter

REFERENCES

- Al-Watan newspaper. (2018). Reflections with decorations of the Umayyad Mosque.

 Retrieved March 23, 2019 from www.alwatan.sy
- Altantaawii, p. (1990). The Umayyad Mosque in Damascus. Jeddah: Dar Al-Manara.
- Almagro, A. (2001). La arquitectura en al-Andalus en torno al año 1000. Madinat al-Zahra.
- Allen, R.M. (2017). Greek and Roman Art, *Utah Museum of Fine Arts Evening for Educators*.
- Alami, M. H. (2013). Art and architecture in the Islamic tradition: Aesthetics, politics, and desire in early Islam. IB Tauris.
- Aponte, J. F., & Johnson, L. R. (2000). The impact of culture on the intervention And treatment of ethnic populations.
- Arce, I. (2008). Umayyad building Techniques and the Merging of Roman-Byzantine and Partho-Sassanian traditions: *Continuity and change. Late Antique Archaeology*, 4(1), 491-537.
- Atasoy, N., Bahnassi, A., & Rogers, M. (1990). The art of Islam. Flammarion.
- Battuta, I. (2013). The Travels of Ibn Battuta: in the Near East, Asia and Africa, 1325-1354. Courier Corporation.
- Borrut, a., & paul m. cobb. (2010). Umayyad legacies medieval memories from Syria to Spain. Koninklijke Brill NV, Leiden, The Netherlands: LEIDEN BOSTON.
- Bourhis, R. Y., Moïse, C., Perreault, S., & Senéca, S. (1997). Toward an interactive acculturation model: A social psychological approach. International Journal of Psychology, 32, 369-386.
- Bourhis, R. Y., Sioufi, R., & Sachdev, I. (2012). Ethnolinguistic interaction and multilingual communication. The handbook of intergroup communication, 100-115.
- Burckhardt, T. (2009). Art of Islam: language and meaning. World Wisdom, Inc.
- Biren bonnerj, R. R. (1939). MEMORANDUM FOR THE STUDY OF ACCULTURATION. Herskovits: UNIVERSITY OF BUDAPEST.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In Acculturation: Theory, models and some new findings (pp. 9, 25.).

- Bourhis, R. Y., Moise, L. C., Perreault, S., & Senecal, S. (1997). Towards an interactive acculturation model: A social psychological approach. International journal of psychology, 32(6), 369-386.
- Berry, J. W. (2003). Conceptual approaches to acculturation. American Psychological Association.
- Cachia, P. (2017). A history of Islamic Spain. Routledge.
- Capilla, S. (2018). The Visual Construction of the Umayyad Caliphate in Al-Andalus through the Great Mosque of Cordoba. In Arts (Vol. 7, No. 3, p. 36).

 Multidisciplinary Digital Publishing Institute.Capilla, S. C. (2018, September).

 The Visual Construction of the Umayyad Caliphate in Al-Andalus through the Great Mosque of Cordoba. In Arts (Vol. 7, No. 3, p. 36). Multidisciplinary Digital Publishing Institute.
- Creswell, K. A. C. (1969). Early Muslim Architecture. Umayyads. AD 622-750, 1/2.
- Cutler, Anthony, Jean-Michel Spieser, and Arietta Papaconstantinou. 1996. Byzance Médiévale 700–1204.
- Construction week, (2011), Grohe helps Umayyad Mosque to go green, by CW Staff05
 Oct 2011, Retrieved may 19 2019, from
 https://www.constructionweekonline.com/article-14186-grohe-helps-umayyad-mosque-to-go-green/#.UzoQgV79r0s.
- Chehab, M. (1963). The Umayyad Palace at'Anjar. Ars Orientalis, 17-25.
- Dana krystle. (2015). Building analysis-The Umayyad mosque Retrieved february 25, 2019: www.islamicarchitecturebydxx.blogspot.com/2015/08/building-analysis-umayyad-mosque.html.
- Dailysabah, (2015), Academics slam Catholic Church owning Mosque-Church of Cordoba, by By Anadolu agncy. Retrived May 23, 2019 from https://www.dailysabah.com/religion/2015/11/06/academics-slam-catholic-church-owning-mosque-church-of-cordoba?gallery image=undefined#big
- Demirhan, M. (2013, 05 26). Great mosque of Damascus. p. 07.
- Donner, F. M. (2010). Umayyad Efforts at Legitimation: The Umayyads' Silent Heritage. In Umayyad Legacies (pp. 185-211). Brill.
- El Islam: desde Bagdad hasta Córdoba. (2017). III. La gran Mezquita de los Omeyas en Damasco, La gran Mezquita de los Omeyas en Damasco. Retrieved February 19,

- 2019 from https://www.almendron.com/artehistoria/arte/arquitectura/el-islam-desde-bagdad-hasta-cordoba/iii-la-gran-mezquita-de-los-omeyas-en-damasco/
- Ettinghausen, R., Grabar, O., & Jenkins, M. (2003). Islamic art and architecture 650-1250 (Vol. 59). Yale University Press.
- Europeanunion. (2016). Andalusia. Umayyad Route. Granada: Fundación Pública Andaluza El legado andalusí.
- Flood, F. B. (1997). UMAWAD SURVIVALS AND MAMLUK REVIVALS:

 QAIAWUNID ARCHITECTURE AND THE GREAT MOSQUE OF
 DAMASCUS. Mugarnas Online, 14(1), 57-79.
- Flood, F. .. (2001). The Great Mosque of Damascus: Studies on the makings of an Ummayyad visual culture (Vol. 33). Brill.
- Flickr, (2007). Cordoba Mezquita Mihrab panorama, by: Bongo Vongo, Retrieved May 23, 2020 from https://www.flickr.com/photos/jabbarman/976009181/
- FSTC-Limited. (n.d.). great mosque of damascus. Retrieved March 01, 2019, from http://www.muslimheritage.com
- FSTC-limted. (2018). The Great Ummayad Mosque. Retrieved March 15, 2019, from http://muslimheritage.com
- Frankfurter, D. T. (1990). Stylites and Phallobates: Pillar Religions in Late Antique Syria1. Vigiliae Christianae, 44(2), 168-198.
- Fuentes, P., & Huerta, S. (2010, October). Islamic domes of crossed-arches: Origin, geometry and structural behavior. In Arch'10.6 th International Conference on Arch Bridges (pp. 346-353).
- Garaudy, R. (1985). Mosquée, miroir de l'islam: the mosque, mirror of islam. Editions du Jaguar.
- Grabar, O. (1978). The Formation of Islamic Art. New Haven, Connecticut: Yale University Press.
- Grabar, O. (2006). The Dome of the Rock. london, England: Harvard College.
- Gordon, M. (1978). Human nature, class, and ethnicity. New York: Oxford University Press.
- Grabar, O., The Formation of Islamic Art, New Haven / Londres: Yale University Press, 1987.

- Hawting, G. R. (2002). The first dynasty of Islam: the Umayyad caliphate AD 661-750. Routledge.
- Hillenbrand, R. (1985). The mosque in the medieval Islamic world. Architecture in Continuity.
- Ibraheem, F. M. M. (2016). The aesthetical analysis of mural decorative elements in the Great Mosque of Damascus. Journal of Applied Arts & Sciences, 2(1).
- Janin, R. (1950). Constantinople byzantine: développement urbain et répertoire topographique. Archives de l'Orient chrétien.
- Jubayr, I. (1852). Rilat Ibn Jubayr. EJ Brill.
- Jubayr, I., & Broadhurst, R. (2001). The Travels of Ibn Jubayr. Translated by RJC Broadhurst. London: Jonathan.
- Jayyusi, S. K., & Marín, M. (Eds.). (1992). The Legacy of Muslim Spain (Vol. 12). Brill.
- Khalek, N. (2011). Damascus after the Muslim conquest: text and image in early Islam. Oxford University Press.
- khanacademy. (2015). the Great Mosque of Cordoba. By Shadieh Mirmobiny. Retrivered May 23, 2020 from https://www.khanacademy.org/humanities/ap-art-history/early-europe-and-colonial-americas/ap-art-islamic-world-medieval/a/the-great-mosque-of-cordoba.
- Khoury, N. N. (1996). The meaning of the Great Mosque of Cordoba in the tenth century. Muqarnas Online, 13(1), 80-98.
- Kennedy, H. (2015). THE PROPHET AND THE AGE OF THE CALIPHATES: the islamic near east from the sixth to the ekeventh century. great brittin.
- Lapidus, I. M. (1996). The Cambridge illustrated history of the Islamic world. Cambridge University Press.
- Mohammad Adil. (2008). Rais-Rashidun Caliphate-different phases(photograph).

 Retrieved
 from:https://en.wikipedia.org/wiki/File:Mohammad_adil_raisRashidun_Caliphate
 -different_phases.gif.
- Nachoseli, Amit6. (2010). Family tree of the Umayyad caliphs of Damascus, both as the emirs and caliphs of Cordoba (photograph). Retrieved from: https://upload.wikimedia.org/wikipedia/commons/3/3b/Umayads.svg

- Necipoğlu, G., & Bailey, J. (Eds.). (2005). Muqarnas: An Annual on the Visual Culture of the Islamic World (Vol. 22). Brill.
- Nicki Lisa Cole, P. (2018, September 26). Understanding Acculturation. Retrieved March 16, 2019, from thought: http://www.thoughtco.com
- Peter Sluglett, A. C. (2014). Atlas of Islamic history. NewYork: Routledge.
- Petersen, A. (1996). Dictionary of Islamic architecture.
- Persky, I., & Birman, D. (2005). Ethnic identity in acculturation research: A study of multiple identities of Jewish refugees from the former Soviet Union. Journal of Cross-Cultural Psychology, 36(5), 557-572.
- Qader, R. A. (1979). Arabic Islamic Architecture in Syria. Damascus: Ministry of Culture and National Heritage.
- Ragette, F. (2003). Traditional domestic architecture of the Arab region. Edition Axel Menges.
- Rachmayanti, S., Rusli, C., & Wulandari, A. A. A. (2017). Cultural Acculturation in Interior and Architecture of Old Straits-Born Chinese Lasem House. Humaniora, 8(3), 279-290.
- Reflexiones sobre un clasicismo contemporáneo. (2011). Typologies in Islamic Architecture (I): Mosques. Retrieved Jun 15, 2019 from http://otraarquitecturaesposible.blogspot.com/2011/03/typologies-in-islamic-architecture-i.html
- Saoud, R. (2002). The arch that never sleeps. Manchester: Foundation for Science Technology & Civilization.
- Sonia halliday photo library. (2004). The Great mosque or Ummayad Mosque, 8th century, interior of dome, SY1-8-15JT by SHP/Jane Taylor, Retrieved may 22, 2020, from http://www.soniahalliday.com/category-view3.php?pri=SY1-8-15JT.jpg.
- Szapocznik, J., Scopetta, M. A., Kurtines, W., & Aranalde, M. D. (1978). Theory and measurement of acculturation. Revista Interamericana de Psicologia.
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: implications for theory and research. American Psychologist, 65(4), 237.
- Triandafyllidou, A. (2012). Addressing Cultural, Ethnic & Religious Diversity Challenges in Europe. A comparative overview of, 15.

- Utaberta, N., Asif, N., Rasdi, M. T. M., Yunos, M. Y. M., Ismail, N. A., & Ismail, S. (2015). The Concept of Mosque Based on Islamic Philosophy: A Review Based on Early Islamic Texts and Practices of the Early Generation of the Muslims. Advances in Environmental Biology, 9(5), 371-375.
- Worldwide Elevation Map Finder. (2005). Elevation of Old Damascus, Damascus, Syria.

 Retrieved Jun 16, 2019 from https://elevation.maplogs.com/poi/old_damascus_damascus_syria.195143.html.

APPENDIX 1

SIMILARITY REPORT

OR.Ci	OR. Cigdem NBOX NOW VIEWING: NEW PAPERS •							
Submit File	E.				Online (Grading Report	Online Grading Report Edit assignment settings Email non-submitters	mail non-submitters
	AUTHOR	THE	SIMILARITY	GRADE	RESPONSE	븯	PAPERID	DATE
	Majd Abdulhadi	CHAPTER 4	15%	ı	ı	U	1351488212	29-Jun-2020
	Majd Abdulhadi	ALL THESIS	15%		ı		1351486438	29-Jun-2020
	Majd Abdulhadi	CHAPTER 3	13%	ı	ı		1351487567	29-Jun-2020
	Majd Abdulhadi	CHAPTER 2	13%	ı	ı	_	1351487118	29-Jun-2020
	Majd Abdulhadi	CHAPTER 1	9%6	·	ı		1351486859	29-Jun-2020
	Majd Abdulhadi	CHAPTER 5	%0	·	ı		1351488406	29-Jun-2020
	Majd Abdulhadi	ABSTRACT	%0		ı		1351486652	29-Jun-2020



APPENDIX 2

ETHICAL APPROVAL LETTER



ETHICAL APROVAL DOCUMENT

Date: 30/06/2020

To the Graduate School of Applied Sciences

The thesis titled "Extrapolation of architectural pattern in Umayyad architecture, Al-Andalus case study" has been evaluated. Since the researcher will not collect primary data from humans, animals, plants or earth, this project does not need to go through the ethics committee.

Title: Prof. Dr.

Name Surname: Zeynep Onur

Signature:

Role in the Thesis: Supervisor