

ARCHITECTURAL HISTORY IN VIRTUAL SPACE: A LOOK INTO MODERN
VIDEO GAMES

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

CEM BULUÇ

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN
THE DEPARTMENT OF HISTORY OF ARCHITECTURE

JUNE 2022

Approval of the thesis:

**ARCHITECTURAL HISTORY IN VIRTUAL SPACE: A LOOK INTO
MODERN VIDEO GAMES**

submitted by **CEM BULUÇ** in partial fulfillment of the requirements for the degree
of **Master of Arts in History of Architecture, the Graduate School of Social
Sciences of Middle East Technical University** by,

Prof. Dr. Yaşar KONDAKÇI
Dean
Graduate School of Social Sciences

Prof. Dr. Cânâ BİLSEL
Head of Department
Department of Architecture

Prof. Dr. Ali Uzay PEKER
Supervisor
Department of History of Architecture

Examining Committee Members:

Asst. Prof. Dr. Aktan ACAR (Head of the Examining Committee)
TOBB University of Economics and Technology
Department of Architecture

Prof. Dr. Ali Uzay PEKER (Supervisor)
Middle East Technical University
Department of History of Architecture

Asst. Prof. Dr. Ekin PINAR (Supervisor)
Middle East Technical University
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: Cem BULUÇ

Signature:

ABSTRACT

ARCHITECTURAL HISTORY IN VIRTUAL SPACE: A LOOK INTO MODERN VIDEO GAMES

BULUÇ, Cem

M.A., The Department of History of Architecture

Supervisor: Prof. Dr. Ali Uzay PEKER

June 2022, 143 pages

Video game industry is on the rise as well as virtual applications in everyday life. There appears a lack of documentation regarding architectural components of virtual spaces in the scholarly field. Aim of the research is to look at these virtual spaces, record their content and check whether historical facts presented are true to history. The method is to compare different applications along with their real life versions. The study shows a narrative that could be formed in architectural history relived in the virtual realm. Role of architecture in games based on history plays out essential as they relate to people's memory, subconscious, offering brand new experiences examined in contrast to their real life counterparts. Subject material is 'Assassin's Creed: Revelations', which highlights 16th century Istanbul. Further research on other games could reveal the emergence of video games as a new medium for artistic expression and conveying of message, giving them a place in virtual recreations of the real world that would be trendy even more than now.

Keywords: Video games, history of architecture, Assassin's Creed, Istanbul, Melchior Lorck

ÖZ

SANAL ALANDA MİMARLIK TARİHİ: MODERN VİDEO OYUNLARINA BİR BAKIŞ

BULUÇ, Cem

Yüksek Lisans, Mimarlık Tarihi Bölümü

Tez Yöneticisi: Prof. Dr. Ali Uzay PEKER

Haziran 2022, 143 sayfa

Gündelik hayatımıza giren teknoloji uygulamaları gibi video oyunları da revaçta. Akademik alanda sanal mekanların mimari özelliklerinin belgelenmesinde bir eksiklik görülmekte. Bu araştırmanın amacı, sanal mekanlara bakarak içeriğini kayıt altına almak ve tarihi gerçek olarak sunulanın mimarlık tarihi ile bağdaşıp bağdaşmadığını göstermek. Yöntem gerçek halleri ile dijital uygulamaların karşılaştırılması. Çalışma, sanal alemde yeniden canlanan bir mimarlık tarihi anlatısı oluşabileceğini gösteriyor. Tarihi temel alan oyunlarda mimarlığın rolü insanların hafıza ve bilinçaltı ile ilişki kurarak gerçek hayattaki eşleriyle tezat yepyeni inceleme deneyimleri sunması ile önem arz ediyor. Tezde çalışma örneği olarak 16. yüzyıl İstanbul'una dikkat çeken 'Assassin's Creed: Revelations' alınmıştır. Başka oyunlar üzerine daha sonra yapılacak çalışmalar, video oyunlarının yeni bir sanatsal ifade ve mesaj iletme ortamı olarak ortaya çıkışını gözler önüne sererek, bu oyunların ileride daha da yükselişe geçebilecek gerçek dünyanın sanal rekreasyonu alanında bir yer edinmesini sağlayabilir.

Anahtar Kelimeler: Video oyunları, mimarlık tarihi, Assassin's Creed, İstanbul,
Melchior Lorck

To my father and to the discovery of lost architecture...

ACKNOWLEDGMENTS

First of all, I would like to thank Prof. Dr. Ali Uzay Peker for his initial excitement that I still remember to this day which inspired me and made me think of this as a genuine possibility, and for his continuous belief in me. I would also like to thank Asst. Prof. Dr. Aktan Acar and Asst. Prof. Dr. Ekin Pınar for their very valuable insights that set my thesis on a right path. My special thanks go to Prof. Dr. Suna Güven, for being the perfect role model. I hope to carry one of the torches that she alighted many.

I would like to thank my oldest friend Barış Köksalan, for showing me the way of things, my medieval companion Emre Yazıcıoğlu who, years ago, gave me all the encouragement that still carried me to this day, and my love Vildan Uzun, who deserves her name on this thesis just as much as me, if not more.

I would like to thank my brother Efe, who introduced me to our mutual friend Ezio and for providing me with the subject of this thesis unbeknown. Thank you my friend! My deepest gratitudes go to my sister Elfe, for being a lovely companion all these years who was following in my steps that I now follow. I could not imagine a better sibling in the fairiest of tales. My biggest thanks have to go to my rebellious mom Oya, for always being my driving force and specially finding me this very entertaining department where I grew so much. I owe everything to you.

Lastly, I thank my architect Ragıp and his fountain of knowledge, for instilling a love of architecture into an engineer, in our time together, carrying and showing us wherever there is great art and architecture.

To my family, for never turning down the opportunity to play games with me and never belittling its value.

TABLE OF CONTENTS

PLAGIARISM	iii
ABSTRACT.....	iv
ÖZ	vi
DEDICATION.....	viii
ACKNOWLEDGMENTS	ix
TABLE OF CONTENTS.....	x
LIST OF FIGURES	xii
CHAPTERS	
1. INTRODUCTION	1
1.1 Context.....	2
1.2 Gaming & Academia	2
1.3 Critics.....	6
2. TOTAL WAR SERIES.....	9
2.1 Medieval II: Total War, Medieval II: TW Kingdoms & Empire Total War	9
2.2 User Modifications.....	10
3. ASSASSIN’S CREED SERIES.....	13
3.1 Relevancy & Flaunership.....	13
3.2 Assassin’s Creed: Revelations	13
3.3. Istanbul.....	14
3.3.1 Fatih Mosque	19
3.3.2 Forum of Ox.....	33
3.3.3 Valens Aqueduct.....	35
3.3.4 Column of Marcian	37
3.3.5 Forum of Arcadius	39
3.3.6 Sancaktar Hayrettin Mosque.....	42
3.3.7 Fenari Isa Mosque.....	46
3.3.8 River Lycus	48
3.3.9 Bayezid Mosque.....	49
3.3.10 Kalenderhane Mosque	58
3.3.11 Gül Mosque.....	59
3.3.12 Zeyrek Mosque	61
3.3.13 Great Nymphaeum.....	62
3.3.14 Myrelaion Church	63
3.3.15 Little Hagia Sophia	67
3.3.16 Hagia Sophia.....	73

3.3.17 Grand Bazaar	78
3.3.18 Hippodrome	85
3.3.19 Forum of Constantine	94
3.3.20 Galata District	99
3.3.21 Topkapı Palace.....	107
3.3.22 Hagia Eirene	112
3.3.23 Yerebatan Cistern	116
3.4 Other Features.....	118
3.5 Future of Assassin’s Creed	120
4. CONCLUSION.....	123
REFERENCES	126
APPENDICES	
A. TURKISH SUMMARY / TÜRKÇE ÖZET	131
B. THESIS PERMISSION FORM / TEZ İZİN FORMU.....	143

LIST OF FIGURES

Figure 1: Old city from Pera, engraving by Meling	1
Figure 2: Old city from top of the Galata Tower, AC: Revelations	1
Figure 3: Constantinople, Medieval II: Total War, ‘Love of Sultans’ mod	10
Figure 4: In game map of mainland Istanbul, AC: Revelations	17
Figure 5: In game map of mainland Istanbul, ACR, with landmark locations	18
Figure 6: In game map of Galata District, AC: Revelations.....	18
Figure 7: In game map of Galata District, ACR, with landmark locations	19
Figure 8: Engraving by Pieter Coeck Van Aelst, 1553.....	19
Figure 9: View of Fatih Mosque from North Den in Constantine District, ACR.....	21
Figure 10: Domes of Fatih Mosque, while standing on domes of courtyard, ACR ..	21
Figure 11: Fatih Complex, mid 16th century engraving by Lorichs	22
Figure 12: Towards the central dome, while standing on Fatih Mosque, ACR.....	23
Figure 13: Look towards the courtyard, from top of dome of Fatih Mosque, ACR.	23
Figure 14: Muqarnas at the main entrance of Fatih Mosque, AC: Revelations.....	24
Figure 15: Window on Fatih Mosque, Istanbul	25
Figure 16: Blind arches and windows on Fatih Mosque facade, AC: Revelations ..	26
Figure 17: Door of the minaret on the exterior of Fatih Mosque, AC: Revelations.	27
Figure 18: Minaret of Fatih Mosque, AC: Revelations	28
Figure 19: Details of Fatih Minaret, while hanging from it, AC: Revelations	28
Figure 20: Details of the balcony of Fatih Minaret, while climbing, ACR	29
Figure 21: View of the Fatih Mosque from top of its Minaret, AC: Revelations.....	30
Figure 22: Ground plan of the Fatih Complex.....	30
Figure 23: View of the city, from Minaret of Fatih Mosque, AC: Revelations.....	31
Figure 24: View of the Bosphorus, from Minaret of Fatih Mosque, ACR.....	32
Figure 25: Fountain, outside of Fatih Mosque, AC: Revelations	33
Figure 26: Monument outside Fatih Mosque, AC: Revelations	33
Figure 27: Forum of Ox, from top of the platform, AC: Revelations.....	34
Figure 28: Forum of Ox at night, from top of a column nearby, AC: Revelations ..	35
Figure 29: Forum of Ox from ground up, at night, AC: Revelations	35

Figure 30: Valens Aqueduct at night, from ground up, AC: Revelation.....	36
Figure 31: Top of the Valens Aqueduct, AC: Revelations.....	37
Figure 32: Column of Marcian, AC: Revelations.....	38
Figure 33: Capital of the Marcian Column.....	38
Figure 34: Column at Forum of Arcadius at night, from roof of house, ACR.....	39
Figure 35: Column of Arcadius, Freshfield Album.....	40
Figure 36: 16th century manuscript, Column of Arcadius	41
Figure 37: Column of Arcadius, Melchior Lorichs	42
Figure 38: Sancaktar Mosque, from dusk, AC: Revelations	43
Figure 39: Minaret of Sancaktar Mosque, from top of the mosque itself, ACR	43
Figure 40: Dome of Sancaktar Mosque, from its minaret	44
Figure 41: Sancaktar Complex, from the mosque, AC: Revelations.....	44
Figure 42: Standing on top of Sancaktar Mosque, AC: Revelations.....	45
Figure 43: Sancaktar Hayrettin Mosque at night, with moon, AC: Revelations	46
Figure 44: Fenari Isa Mosque, AC: Revelations	47
Figure 45: Fenari Isa Mosque, facade, AC: Revelations	47
Figure 46: Fenari Isa Mosque, detail, AC: Revelations	48
Figure 47: Bayezid Mosque entrance, AC: Revelations.....	50
Figure 48: Bayezid Mosque, muqarnas at the entrance, AC: Revelations	50
Figure 49: Bayezid Mosque courtyard, from ground up, AC: Revelations.....	51
Figure 50: Bayezid Mosque, from top of fountain at courtyard, AC: Revelations ..	51
Figure 51: Details in the courtyard of Bayezid Mosque, AC: Revelations	52
Figure 52: Bayezid Mosque, from top of courtyard standing on its domes, ACR...	53
Figure 53: Domes and chimneys of Beyazid Mosque kitchens.....	54
Figure 54: Courtyard of Bayezid Mosque, from top of its dome, AC: Revelations.	54
Figure 55: Top of the Bayezid Mosque and its domes, from its Minaret, ACR.....	55
Figure 56: Beyazid Mosque, Melchior Lorichs.....	56
Figure 57: Bayezid Mosque, from top of its Minaret, AC: Revelations	57
Figure 58: View of Bayezid Complex, from Minaret, AC: Revelations	57
Figure 59: A view of the gardens of Bayezid Complex, AC: Revelations.....	58
Figure 60: Kalenderhane Mosque, AC: Revelations	59
Figure 61: Gül Mosque, AC: Revelations	60

Figure 62: Gül Mosque, AC: Revelations	61
Figure 63: Gül Mosque, at night, AC: Revelations	61
Figure 64: Zeyrek Mosque, from the Bosphorus, AC: Revelations	62
Figure 65: Great Nymphaeum, AC: Revelations.....	63
Figure 66: Myrelaion Church, AC: Revelations	64
Figure 67: Myrelaion Church, AC: Revelations.....	64
Figure 68: Myrelaion Church roof and dome, AC: Revelations.....	65
Figure 69: Myrelaion Church, supportive arches, AC: Revelations.....	65
Figure 70: Myrelaion Church, view towards sky, AC: Revelations.....	66
Figure 71: Myrelaion Church, fountain, AC: Revelations.....	67
Figure 72: View of the streets, from minaret of Myrelaion Church, ACR.....	67
Figure 73: Little Hagia Sophia, AC: Revelations	68
Figure 74: Little Hagia Sophia, AC: Revelations	68
Figure 75: Little Hagia Sophia, from ground up, AC: Revelations.....	69
Figure 76: Little Hagia Sophia, archway, AC: Revelations	69
Figure 77: Little Hagia Sophia, dome on archway, AC: Revelations.....	70
Figure 78: Little Hagia Sophia, fountain, AC: Revelations.....	70
Figure 79: Little Hagia Sophia, fountain detail, AC: Revelations.....	71
Figure 80: Little Hagia Sophia, from fountain, AC: Revelations.....	71
Figure 81: Minaret of Little Hagia Sophia, AC: Revelations	72
Figure 82: View of the city, from minaret of Little Hagia Sophia, ACR.....	72
Figure 83: Real life on the left, video game on the right, Hagia Sophia	73
Figure 84: Real life on the left, video game on the right, Hagia Sophia	74
Figure 85: View of Hagia Sophia, AC: Revelations.....	74
Figure 86: 17th century engraving of Hagia Sophia, Istanbul.....	75
Figure 87: Hagia Sophia, from ground up, AC: Revelations.....	75
Figure 88: View of the city, from minaret of Hagia Sophia, AC: Revelations	76
Figure 89: View of the Golden Horn, from Hagia Sophia dome, AC: Revelations	76
Figure 90: Hagia Sophia, Melchior Lorichs	77
Figure 91: Grand Bazaar entrance, AC: Revelations.....	79
Figure 92: Grand Bazaar entrance, AC: Revelations.....	79
Figure 93: Grand Bazaar small entrance, AC: Revelations	80

Figure 94: Grand Bazaar interior, AC: Revelations	80
Figure 95: Grand Bazaar engraving, 19th century, Istanbul.....	81
Figure 96: Grand Bazaar interior, AC: Revelations	82
Figure 97: Grand Bazaar interior, AC: Revelations	82
Figure 98: Grand Bazaar interior, AC: Revelations	83
Figure 99: Grand Bazaar interior, AC: Revelations	84
Figure 100: Grand Bazaar, interior dome, AC: Revelations	84
Figure 101: Piri Reis' office, Grand Bazaar, AC: Revelations	85
Figure 102: Hippodrome, at night, AC: Revelations.....	86
Figure 103: Two citizens discussing architecture in front of Hippodrome, ACR....	87
Figure 104: Two obelisks of the Hippodrome, AC: Revelations	87
Figure 105: Obelisks at the Hippodrome, Istanbul.....	88
Figure 106: Obelisk of Theodosius, details at night, AC: Revelations	89
Figure 107: Details in Obelisk of Theodosius, AC: Revelations	89
Figure 108: Walled Obelisk at night, from the Hippodrome, AC: Revelations	90
Figure 109: Steps of Hippodrome, from Walled Obelisk, AC: Revelations	91
Figure 110: Steps of Hippodrome, at night, AC: Revelations.....	91
Figure 111: Shisha smoking at Hippodrome, AC: Revelations.....	92
Figure 112: Hagia Sophia and Hippodrome, from Freshfield Album	92
Figure 113: View of Theodosius and Hagia S., from top of Walled Obe., ACR.....	93
Figure 114: Hünername, Topkapı Museum.....	94
Figure 115: Column of Constantine, from street, AC: Revelations	95
Figure 116: Column of Constantine, Melchior Lorichs	96
Figure 117: View of Hagia Sophia, from Column of Constantine, ACR.....	97
Figure 118: Arcade on Forum of Constantine, AC: Revelations	98
Figure 119: Inside the arcade on Constantine Forum, AC: Revelations	98
Figure 120: Interior of Assassin's HQ, Galata District, AC: Revelations.....	99
Figure 121: Interior of Assassin's HQ, Galata District, AC: Revelations.....	100
Figure 122: Interior of Assassin's HQ, Galata District, AC: Revelations.....	101
Figure 123: Interior of Assassin's HQ, Galata District, AC: Revelations.....	101
Figure 124: A street in Smyrna, Thomas Allom.....	103
Figure 125: A street in Bayezid District of Istanbul, AC: Revelations	104

Figure 126: Mosque in Galata District, AC: Revelations	104
Figure 127: Mosque and Galata Tower, in the Galata District, AC: Revelations ..	105
Figure 128: Galata Tower, AC: Revelations	106
Figure 129: A building inside the Topkapı complex, AC: Revelations.....	108
Figure 130: Architecture in Topkapı, AC: Revelations	108
Figure 131: Arcades of the Enderun court, Topkapı Palace	109
Figure 132: Architecture in Topkapı, AC: Revelations	109
Figure 133: Arcade of the Chamber of Sacred Mantle, Topkapı Palace	110
Figure 134: Architecture in Topkapı, AC: Revelations	111
Figure 135: View of the open area at Topkapı, AC: Revelations.....	111
Figure 136: View of Hagia Eirene & Hagia Sophia at night, from Topkapı, ACR	112
Figure 137: Hagia Eirene, AC: Revelations	113
Figure 138: Topkapı Palace, from Hagia Eirene, AC: Revelations.....	113
Figure 139: Gate on the Topkapı Palace, AC: Revelations	114
Figure 140: Hünername, Topkapı Museum	115
Figure 141: Deavi Kasrı location, AC: Revelations	115
Figure 142: Inside the Yerebatan Cistern, AC: Revelations.....	117
Figure 143: Ceiling inside Yerebatan Cistern, AC: Revelations	117
Figure 144: Statue inside the Yerebatan Cistern, AC: Revelations	118
Figure 145: A portion of the timeline of Assassin’s Creed games	122

CHAPTER 1

INTRODUCTION



Figure 1: Old city from Pera, engraving by Meling¹



Figure 2: Old city from top of the Galata Tower, AC: Revelations

¹ Ertuğ, 6.

1.1 Context

The world is constantly changing, evolving and moving forward. As the public and private spheres change, rules and norms we are used to for so long get affected consequently. With the improvement of technology, where does the virtual sphere, if any, sit in relation to public and private domains of our everyday life? The needs of the current state of the world are pushing for inclusion of virtual applications even more. The rise of the concept of Metaverse also pushes many real life organizations to get involved in virtual space. When the people are stuck in their homes, technology offers a way out, to the outside world or to realms of fantasy and fiction. From their comforts of home, people get to experience virtual exhibitions, trips offered by countries, cities, museums,² etc... One domain that provides such a journey is much overlooked video games. Their potential of reaching millions of people, from every age group and different cultural backgrounds make the field relevant. This thesis will focus on video games with historical content and look at their architectural components, mainly cities and buildings. These games in focus take historical facts and build their own story around it. With this in mind, game developers are regarded as designers, making their own interpretations of history. The video game series which will be included in this thesis Assassins Creed, along with Total War, are branded as examples to show how a “scholarly video game” could take shape.³

1.2 Gaming & Academia

There are newly established institutions that appear to connect gaming with research, such as ‘Value Foundation’. As a collective made up of researchers, professors and gamers who are passionate about the subject, their goal is to combine gaming with academic research. From their website;

The VALUE Foundation aims to design, facilitate and conduct worldwide research, development, and outreach on the crossroads of gaming and academia.⁴

² Mausoleum of Augustus, accessed at <http://experience.mausoleodiaugusto.it/en/chapter-02>.

³ Spring, “Gaming History: Computer and Video Games as Historical Scholarship”. 209.

⁴ The VALUE Foundation, accessed at <https://value-foundation.org/>.

They regularly post articles, studies and stream games in an effort to use video gaming as a platform for further learning. Pedagogical aspects of gaming are also touched upon by the institution behind the main content of this thesis. The developers of Assassin's Creed games, Ubisoft, also partakes in projects mainly focused on learning. One recent enterprise is called 'Discovery Tour'. From their website, it is defined as:

The Discovery Tour series is made of dedicated games that let visitors freely roam Ancient Greece, Ancient Egypt and the Viking Age to learn more about their history and daily life. Students, teachers, non-gamers, and players can discover these eras at their own pace, or embark on guided tours and stories curated by historians and experts.⁵

This means that they are also open to use the platform they created and the recreations in other means, which leaves the door open for the video gaming industry to explore alternative areas, which could include architectural history in future. Regarding pedagogy and architectural history, Hannah Rice's "Exploring the Pedagogical Possibilities of Applying Gaming Theory & Technologies to Historic Architectural Visualisation" is a valuable further reading. Dated in 2014, the main concern of the study was that there were not many interactive architecture engagements in heritage sites and museums that promote effective learning experiences. The role of video games comes as a type of media that could help alter or shape general perception of architecture. To give an example, castles have a romanticized view associated with the medieval era in the public eye but according to Rice, a video game, 'Stronghold 3', could be important in teaching roles of castles in a more historically accurate way.⁶ It is also mentioned that it will be dangerous to assume the architecture as historically accurate because it looks identical to its real world counterpart, but for heritage purposes it is important in inspiring further research. Rice points out that the interest cultivated through Assassin's Creed games led people to online forums for additional learning, instead of scholarly research⁷. Capitalizing on this interest garnered by the

⁵ Ubisoft, "Discovery Tour", accessed at <https://www.ubisoft.com/en-gb/game/assassins-creed/discovery-tour#5NJV7EibkDuphxBCK5bCOo>.

⁶ Rice, 33.

⁷ Rice, 42.

masses and directing them towards the right material for learning and research could be a step in the right direction for creating awareness.

The main point echoed through multiple sources is the benefits of active engagement in learning, as opposed to passive observation. This also draws a parallel with architecture as an art form and how it plays out and experienced by people through their daily lives, as opposed to other forms of art such as painting, sculpture that involve more passive viewing as a result of the nature of those hand craft art forms. Alexander Galloway, on differentiating the various types of media, describes video games as “actions”, as opposed to photographs as images, and films as moving images. Active participation [by players and machines] is what separates video games from being static computer codes.⁸

It appears developers also work together with universities to enrich and broaden the learning experience. One example is Ubisoft partnering with McGill University to create curriculum guides for Discovery Tour. It is said to be possible to create your own lesson plan to use the Discovery Tour in an educational context.⁹

The biggest difference at first glance between video games and recreations used for academic purposes seems to be leaving sections empty when there is no historical data available to support the ‘claim’ inadvertently made by recreation. This results in blank spaces in academic recreations. If the section is not supported by any data or sources, academics tend to leave it unfilled not to delve into speculation.¹⁰ In video games, imagination likely takes the space to create the living world for players to enjoy fully as a whole and experience thoroughly. One of the digital reconstruction works related with the topic covered here is Westbrook and Van Meeuwen’s “Reconstructing 16th Century Istanbul: The Use Digital Modelling as Heuristic Tool in Architectural History Research”, where the authors propose a digital analysis of sources to extract

⁸ Galloway, “Gaming: Essays on Algorithmic Culture”. 2.

⁹ Ubisoft & McGill, “Discovery Tour: Ancient Greece Curriculum Guide”, accessed at <https://www.ubisoft.com/en-us/game/ancient-greece/curriculum-guide>.

¹⁰ Favro, “In the eyes of the beholder: Virtual Reality re-creations and academia”.

more historical data. It ponders on the question Alois Riegl pointed out as values of historic buildings: “How can reconstructions convey the age value of monuments?” According to this, architecture can not be separated from the time it existed in without losing its originality. Games could be an answer to this age old question of authenticity, because of their world building. The solution offered in the paper aligns with this line of thinking, as the need for “immersive experience of historic environments” was highlighted.¹¹ This requires the help from multiple disciplines, namely architectural history, anthropology and archeology. The risk of this approach is creating a visuality in which speculation is melded into truth. In this way, video games and solutions offered by academics share much more similarities than what it appears. One important, may be the biggest, difference appears to be differentiating what is speculative and what is based on concrete evidence. In the same paper, qualifications of a scientific 3D model are defined as being authored by qualified experts of the subject and providing transparency to users on which components are theoretical. In video games, one of these two conditions could be met. Developers could work together with experts of the subject, evidenced by Ubisoft working together with architectural history professors.¹² The amount of research done for big scaled projects is evident. However, communication with users about the nature of the data and whether it is factual does not appear to be a realistic goal expected to be met, as the priority is conveying a full story to the users. Developers may see any element threatening the completeness of the virtual space created and the story related to it, a risk for the user experience that is intended to be pleasurable. In one of the reconstruction examples given in the paper, colour coding technique was used to distinguish the historical data that is verifiable and speculative. As the technology improves, making these distinctions could be way more seamless for the user than before. In the Assassin's Creed series, the boundaries of the map in game that players can not cross are shown as transparent lines. Visually, this gives the message to the user “do not cross here”. This has been a constant element from the first game to the

¹¹ Westbrook and Van Meeuwen, “Reconstructing Sixteenth-Century Istanbul: The Use of Digital Modeling as an Heuristic Tool in Architectural History Research.”, 64.

¹² Manuel Saga, “What It’s Like to Be an Architectural Consultant for Assassin’s Creed II”.

last, which helps building a common language through visuals where users can recognize by optical senses. Thanks to technology, a similar application could be conducted to denote what was based on available historical evidence and what is more likely to be speculation. A suggestion here would be to incorporate this into the games through an additional feature such as a ‘realism mode’ or to include in educational applications. Considering it could be more costly to build something from the ground up, the technology offered by the game and the virtual platform could be utilized by non game developers and academicians worldwide.

In regards to the examples chosen for the study, Assassin’s Creed and Total War series both appear in top 3 of a survey in 2014 as most referenced games by people taking the survey when asked to cite any “historical games” they know.¹³ It has to be said that despite the claim of these specific subset of games to be “historically accurate”, the main purpose of games in general is accuracy of the visuality presented to the users, rather than exact historical factualness.

1.3 Critics

Famous movie critic, Roger Ebert said this on video games as form of art in 2005 as a response to a fan who voiced his disappointment over Ebert’s opinion that video games can never be art:

There is a structural reason for [why videogames are inferior]: Video games by their nature require player choices, which is the opposite of the strategy of serious film and literature, which requires authorial control. I am prepared to believe that video games can be elegant, subtle, sophisticated, challenging and visually wonderful. But I believe the nature of the medium prevents it from moving beyond craftsmanship to the stature of art. To my knowledge, no one in or out of the field has ever been able to cite a game worthy of comparison with the great dramatists, poets, filmmakers, novelists and composers. That a game can aspire to artistic importance as a visual experience, I accept. But for most gamers, video games represent a loss of those precious hours we have available to make ourselves more cultured, civilised and empathetic.¹⁴

Even though Ebert acknowledged qualities of video games such as their impressive visuality (which will hopefully be demonstrated to the readers of this paper later,

¹³ Rice, 57.

¹⁴ Archontides, “Press X to Feel: On The Current State of Videogames”, 20.

doing justice to the game in question), he deems video games as a waste of time. His argument that people can use the time instead to become more cultured, could potentially be challenged by this question: “What if the video game in subject, was full of cultural details that sheds light on civilizations, their artistic style and diversity?” Ebert must have realized the flaw in his viewpoint later that (or a statement made due to fan backlash, reasons unknown) he said his error was:

to think I could make a convincing argument on purely theoretical grounds. What I was saying is that video games could not in principle be Art. That was a foolish position to take, particularly as it seemed to apply to the entire unseen future of games. This was pointed out to me maybe hundreds of times. How could I disagree? It is quite possible a game could someday be great Art.

I was a fool for mentioning video games in the first place, I would never express an opinion on a movie I hadn't seen. Yet I declared as an axiom that video games can never be Art.¹⁵

The counterpoint that games could have cultural content mentioned above will create another question though: “How accurate would those depictions be in regard to their own culture, and not be a production of some other culture's interpretation of the source material?”. Most of the time, video game companies are based on Western countries, while the source in question of this thesis is an Eastern culture. Perhaps thinking in a similar fashion, Ubisoft's opening statement in their games are quite striking:

Inspired by historical events and characters, this work of fiction was designed, developed, and produced by a multicultural team of various beliefs, sexual orientations and gender identities.

Changed from the previous version that said:

Inspired by historical events and characters, this work of fiction was designed, developed, and produced by a multicultural team of various religious faiths and beliefs.¹⁶

Even though it will likely be true that employees of the company would have many different backgrounds and be hailing from different parts of the world, how much this idealized view was put to practice would be tested here or in future works. This thesis

¹⁵ Ebert, 2010.

¹⁶ Accessed at <https://kotaku.com/new-assassins-creed-changes-series-signature-message-ab-1738263702>.

expects to challenge Ebert's argument, while looking into whether the games stated to have the cultural substance can be classified as accurate depictions of a local culture despite being a product that is subject of a more global dialect.

CHAPTER 2

TOTAL WAR SERIES

2.1 Medieval II: Total War, Medieval II: Total War Kingdoms & Empire Total War

Released in 2006, Medieval II: Total War is a turn-based strategy game developed by The Creative Assembly under the wings of prominent video game developer company SEGA. Being a strategy game, their platform was/is PC as most of the entries of the same genre. It was one of the first modern video games of the generation to incorporate real life history in itself. With the help of online communities, today people still play against each other in competitive settings. Despite being strictly a single player game in official capacity, this new and creative ways of enthusiasts of the series that make it playable as multiplayer and as a shared experience add to the shell life of games that always carry the risk of losing playability due to technological advancements. In Medieval II, 'The Turks' are one of the 22 playable factions. In a poll among gamers, it ranks as the fifth most popular.¹⁷ Its culture is listed as Middle-Eastern and religion is Islam. The game starts in the summer of year 1080 and runs until 1530 winter, constituting one campaign of a single player. At the starting point, year 1080, Turks are given 4 regions. In an expansion pack released in 2007, Medieval II: Total War Kingdoms adds four new maps to the campaign map of the original game. In the 'Crusades Campaign', focused on the crusades and including real life figures such as Saladin and Richard I the Lionheart 'Turks' are again a playable faction. Starting year is now 1174. Empire: Total War was published in 2009 and was developed by The Creative Assembly under SEGA, similar to Medieval II. It was again a turn based strategy game designed specifically for PC users. The aim was to enrich the series by offering some brand new gameplay enhancements along a new time period. Here we

¹⁷ Accessed at https://wiki.totalwar.com/w/Factions_in_Medieval_II:_Total_War.html

see the faction previously labeled as Turks appear as ‘Ottoman Empire’, with a Middle-Eastern culture and Islam religion. Starting year is 1700, which could be why the faction was branded as the Ottoman Empire, with Seljuks out of the picture.

2.2 User Modifications

Further additions, modifications developed by enthusiastic gamers themselves, called ‘mods’, such as ‘Broken Crescent’ and ‘Stainless Steel’ in the case of ‘Total War’ series deserve inspection as well. Their goal is to make the game more realistic in relation to historical facts. For instance, in one of the mods named ‘Love of Sultans’, a building with a likening to Hagia Sophia can be observed:



Figure 3: Constantinople, Medieval II: Total War, ‘Love of Sultans’ mod

This rendition of Constantinople appears to mimic miniatures. For further study on mods, Erik Champion’s edited 2012 work is a valuable source.¹⁸ Modding is an interesting topic because it lets any user add to the game or create their own version. It could especially be a useful tool in combining gaming with academia. In one example, Eric Fassbender of Darwin University details how he developed a history

¹⁸ Champion et al, “Game Mods: Design, Theory and Criticism”.

lesson as game mod. Below table shows the steps he took in creating history lesson of the “Macquarie Lighthouse”:¹⁹

Table 1: Steps in Creating Lesson with Mod

Preparation of stage	1. Decide on a suitable “construction set”, such as Elder Scrolls
	2. Create 3D model from original blueprints
	3. Transfer model into the set
	4. Create surrounding landscape (height model in 3D studio, from survey maps provided)
	5. Import landscape into set
Narrative	6. Creation of virtual character to present history of lighthouse (from construction set)
	7. Develop dialog (text + audio) -> includes the history lesson

In deciding construction set²⁰, to put the models into and revolve the story around, author says Elder Scrolls platform made the most sense as it offered “first person view”, a sophisticated dialog system and support to import 3D models²¹. The method and tools used by the artist/developer for 3D models could obviously differ by personal preference. Original blueprints and the maps that show the landscape were both provided by the same source. After creating a virtual environment that teaches

¹⁹ Fassbender, “Use of ‘The Elder Scrolls Construction Set’ To Create a Virtual History Lesson”, 69-84.

²⁰ ‘The Elder Scrolls Construction Set’ is a game modding tool from the popular game series ‘Elder Scrolls’

²¹ Fassbender, 70.

history, the author concludes that thanks to the addition of custom 3D models into these game's construction sets, "options are limitless in locations/sites that can be built and stories that can be developed".²² In this manner, custom game mods could be a viable way to combine virtual space with academics. Galloway, in a similar fashion, views that potential of video games as an art form and bearers of cultural values would only be truly fulfilled once 'countergaming' (the term he uses for mods) takes over the gaming world as a movement, as did Godard in cinema, Deleuze in philosophy and Duchamp in art object.²³ This would only be realized through "artist made game mods". In counter-gaming, aesthetic experimentation is celebrated over interactive gameplay, where artists could play with space, visuality and physics. Conventional games are limited in their need to be coherent.

²² Ibid, 82.

²³ Galloway, 126.

CHAPTER 3

ASSASSIN'S CREED SERIES

3.1 Relevancy & Flanership

What makes Assassins Creed games unique is the fact players get to interact with buildings, in a way sometimes would not even be possible to do in real life. City exploration, free roam and parkour like movement are vital to the game, as well as blending in with the crowd, in movement through the city. This enables unique experiences of real life locations and different vantage points, in depicting architecture. In making parallel between flaneurship and Assassin's Creed Victorian London, Jack Gann documents the lengths developers went to make locations as detailed and accurate as possible, working over 2000 closely observed sketches, to offer an upgraded version of panoramic view with video games²⁴. In this vein, could video games be seen as modern day flaneurship (either present or future)? Offering exploration and wandering opportunities for people from the comfort of their couches? While Victorian London would certainly have differences with Revelations' Istanbul, the terms used by Gann; 'History from Above' and 'History from Below' could apply similarly. 'History from Above' as in the panoramic view from top of the buildings, with bird-like view whilst 'History from Below' is used for interaction with historical characters present in the game, experiencing the city on a human scale.

3.2 Assassin's Creed: Revelations

Assassin's Creed: Revelations is the final and concluding chapter of the story of Ezio Auditore da Firenze, main protagonist of the game. Player follows Ezio's story from birth as it takes them from Florence, Venice (Assassin's Creed: II) to Rome

²⁴ Gann, "Walking in the Virtual City: Assassin's Creed and the Armchair Flaneur".

(Assassin's Creed: Brotherhood) to finally Constantinople (Assassin's Creed: Revelations). Released in 2011, Revelations' genre could be described as historic action-adventure. First published for PC, Playstation 3 and Xbox 360, later it got a remastered edition for Playstation 4 and Xbox One. This makes Revelations the game covering the most platforms, from the ones explored in this thesis. Player first arrives in Constantinople in May, 1511. The main story of the series revolves around Desmond Miles, a modern day person reliving his ancestors' memories through history by technology. This means that Istanbul in 1511 is meant to represent real life Istanbul of its time, experienced through memories of a person who was there at the time. To get an insight on how the developers of the game chose to recreate the Istanbul of the time, browsing through the interviews conducted with the art directors could always be helpful. Allegedly, the team took a trip to Istanbul to collect images with the objective to turn them into computer graphics. Galata Tower and Hagia Sophia are two of the landmarks mentioned to be documented. To increase the level of detail, building materials, textures, vegetation and lightning were also recorded. To discover Istanbul of 1511 and how it would have been experienced by the game's protagonist, the team supposedly looked at "old books" for dimensions [of the architecture].²⁵ Part of the team is also said to head to the "architectural college" to recreate the 16th century version of the building by breaking it down to its architectural elements. Small sketches of buildings from a larger drawing were used as a basis in reimagining how the full sized version of it would look.²⁶

3.3. Istanbul

The city itself consists of four main districts, branded as:

- Constantine
- Bayezid
- Imperial
- Galata

²⁵ Smith, "History in the making: How Constantinople was built for Assassin's Creed".

²⁶ Smith.

In addition, two smaller districts also make their way into the game, Topkapı District and Arsenal District. Arsenal is closed to access at the start of the game and can be reached only through story progression. Players arrive in Istanbul from the Golden Horn at Galata district, with an exact date of May 1511 as mentioned before. Some of the monumental landmarks included in the game are: Galata Tower, Topkapi Palace, Hagia Sophia, Grand Bazaar... These would be illustrated in this thesis in more detail. Since most of their interiors are not accessible, they would be looked into mainly through the exterior, from the outside, city itself.

A list of the monumental landmarks that can be found on each district:

- Constantine
 - Fatih Mosque
 - Forum of Ox
 - Valens Aqueduct
 - Column of Marcian
 - Forum of Arcadius
 - Sancaktar Hayrettin Mosque
 - River Lycus
- Bayezid
 - Bayezid Mosque
 - Kalenderhane Mosque
 - Gül Mosque
 - Zeyrek Mosque
 - Myrelaion Church
 - Little Hagia Sophia
- Imperial
 - Hagia Sophia
 - Grand Bazaar
 - Hippodrome
 - Forum of Constantine
- Galata
 - Galata Tower

- Topkapı
 - Topkapı Palace
 - Hagia Eirene

In addition to the locations above, Yerebatan Cistern can also be found. Since it is an underground tomb and players are led to it by a mission through the story, it was not associated with a particular district (can not reach while roaming the city itself, unlike other locations listed). Ubisoft's rendition of Yerebatan would also be depicted via screenshots taken inside the game, as the other sites. Some of the landmarks can also be "bought" by the player, using in-game currency. Icon for the currency is 'A' with a slash on it, which could either be A for Assassin or for 'akçe'. Assuming it is akçe but 'in game currency' would also be an appropriate term. While owning these locations as property should not have any historical background, it may be significant in that relative to each other it could shed a light on how much developers valued them.

A list for how much some of the locations would cost the player in in game currency, sorted by highest to lowest:

- Hagia Sophia: 60000 akçe
- Valens Aqueduct: 49750 akçe
- Hippodrome: 46200 akçe
- Myrelaion Church: 45600 akçe
- Grand Bazaar: 42350 akçe
- Hagia Eirene: 40000 akçe
- Gül Mosque: 38100 akçe
- Bayezid Mosque: 37250 akçe
- Fatih Mosque: 35000 akçe
- Column of Marcian: 28700 akçe
- Galata Tower: 27000 akçe

Grand Bazaar making its way near the top seems appropriate considering its trade market status. Galata Tower being the cheapest is interesting since it is one of the most well known landmarks, but maybe just being solely a tower affected the decision

(although it is still a lower amount than column). Myrelaion Church as one of the most expensive landmarks seems surprising, maybe a look into its video game version or its location would reveal further about what was behind the decision.

The interactive maps for the locations in game (Istanbul and Cappadocia) can be found in mapgenie.io website²⁷. The map for the mainland Istanbul of the four major districts, along with Topkapı and Arsenal and with landmark locations highlighted are shown in Figures 4 and 5. North of those mainland maps illustrated, is the Galata District which is shown in Figures 6 and 7.

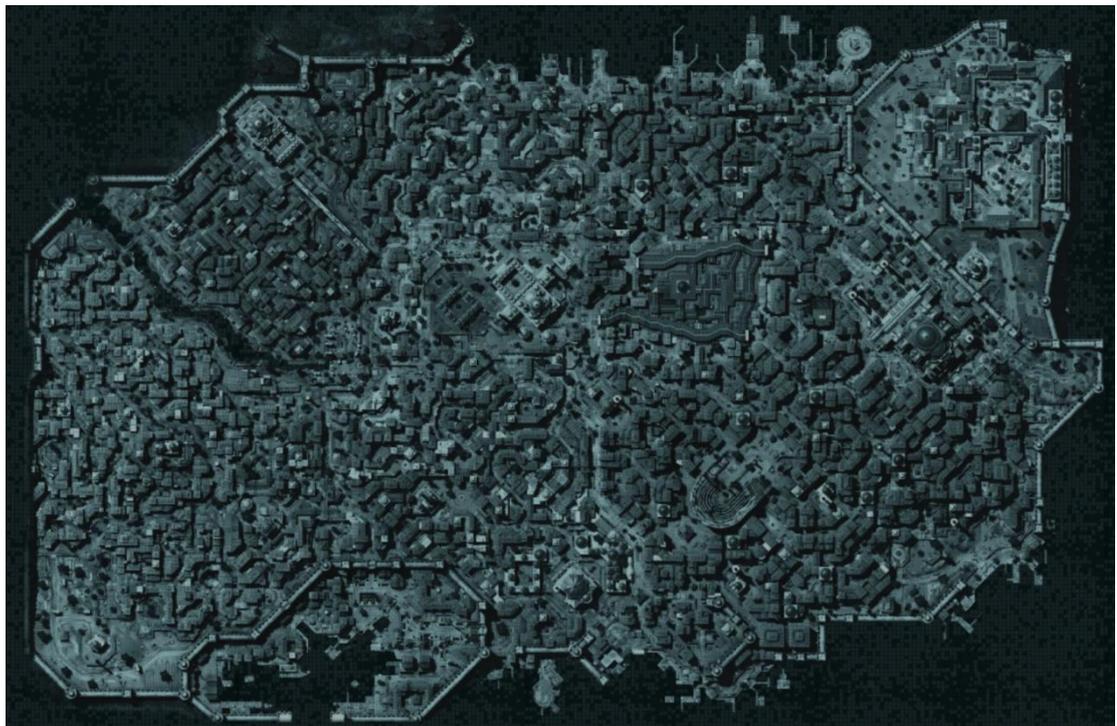


Figure 4: In game map of mainland Istanbul, AC: Revelations

²⁷ Accessed at <https://mapgenie.io/assassins-creed-revelations/maps/constantinople>.



Figure 5: In game map of mainland Istanbul, AC: Revelations, with landmark locations

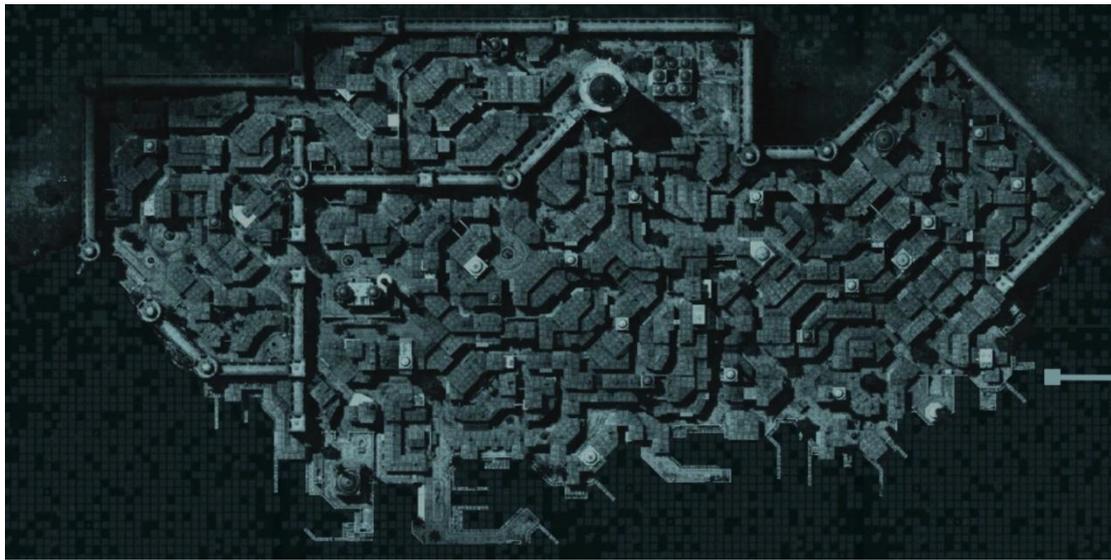


Figure 6: In game map of Galata District, AC: Revelations



Figure 7: In game map of Galata District, AC: Revelations, with landmark locations

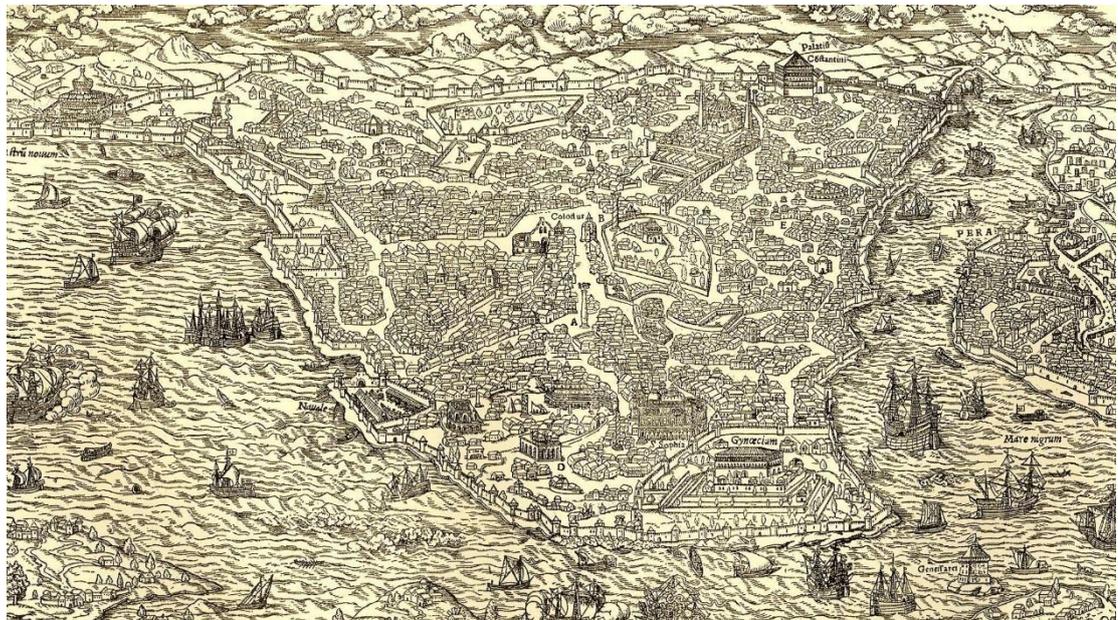


Figure 8: Engraving by Pieter Coeck Van Aelst, 1553²⁸

3.3.1 Fatih Mosque

According to the database in game, Fatih or “Faith” Mosque was built by the Turks right after the conquest of Constantinople. What is significant is, it is labeled as the “first mosque of Ottoman origin” in the city. A funny story is, when Sultan Mehmet

²⁸ Accessed online at <https://sehirplanlama.ibb.istanbul/beyoglu-arsivi-haritalar/>

(likely Mehmet II) realizes the dome of the mosque was smaller than Hagia Sophia's, he has the architect's arm cut off for lack of ambition. But the story does not end here, after the architect heals, he goes to the Ottoman judiciary and asks for legal counsel. Surprisingly, the judge sides with the architect and rules Sultan's arm to be cut off in retribution. This does not happen (for obvious reasons), but the fact the judge sides with the architect over Sultan is noteworthy.²⁹

Sumner-Boyd mentions this far-fetched story in her book referencing Evliya Çelebi in *Seyahatname*, as "Fatih ordered the architects' hands to be cut off on the grounds that the mosque did not have as great height as Hagia Sophia".³⁰ Omitted from the game's information section, Fatih Cami was built at the site of the destroyed church of holy apostles and it followed the Ottoman tradition established at Anatolia, Doğan Kuban, acclaimed architectural historian, states³¹. In addition to the Fatih Mosque and its components, city walls (Surlar) and the Galata Tower (as it does unsurprisingly in many instances) also make their way into the view - picture:

²⁹ Ubisoft, "AC: Revelations".

³⁰ Sumner-Boyd, "Strolling Through Istanbul: A Guide to the City", 254.

³¹ Kuban, 218.



Figure 9: View of Fatih Mosque from North Den in Constantinian District³², AC: Revelations

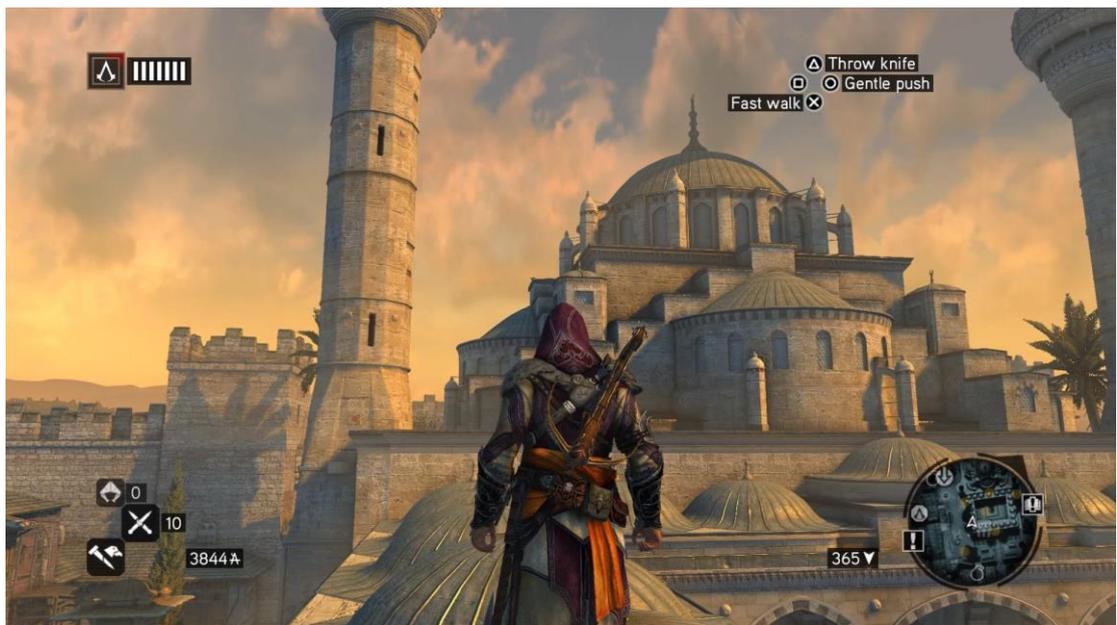


Figure 10: Domes of Fatih Mosque, while standing on small domes of courtyard section, AC: Revelations

In the Fatih Age of Istanbul, Ottoman architecture reached a certain level of building typology in most of the buildings that would not show any major changes until the Kanuni Era. Bursa-Edirne style was prevalent in Istanbul in buildings such as

³² Can refer to map on previous pages for location

madrassa, bath, inn, tomb... using a common schema³³. Classical Ottoman mosque had no true drum on its dome, but the Lorichs engraving signifies a true drum that is carrying a lipped dome.³⁴



Figure 11: Fatih Complex, mid 16th century engraving by Lorichs³⁵

Melchior Lorichs' 16th century panorama of Istanbul has been regarded as one of the most important visual documents of its time. It is significant in that it puts architecture in an urban context. In the game's version, the main dome is flanked on four sides by semi-domes on each side. There are eight buttresses that support the main dome, and each semi-dome is supported by two buttresses. At the four corners there are other circular shapes that appear to support the other domes:

³³ Kuban, 173.

³⁴ Goodwin, 127.

³⁵ Goodwin, 127.



Figure 12: Towards the stepped central dome, while standing on top of the Fatih Mosque, AC: Revelations



Figure 13: A look towards the courtyard section, from top of the central dome of Fatih Mosque, AC: Revelations

Completed in 1470, Fatih Mosque has been described by Godfrey Goodwin as the “first great social unit of Istanbul”.³⁶ In the database of the game, there was no mention of its complex-like properties, where it was described as the first mosque of Ottoman origin in the city. Whether it was done intentionally or not, the birdlike view above shows a setting reminiscent of a building complex. Citizens can be seen in close proximity of the mosque hanging out in groups and the buildings towards the right appear intertwined with the area surrounding the mosque, with no distinct borders. Compared to the Lorichs drawing, the courtyard section correctly has six small domes at the side. Plantation is also abundant in the drawing. In the above example from the game, palm trees make up of the %60 trees in shot. It may be true that one or two could be seen in Istanbul but that number seems excessive.

3.3.1.1 Details

This muqarnas in particular is a great example of intricate details about the architecture, and perhaps shows developers did not proceed to put up buildings on a surface level. The windows on this facade individually look identical to their real world counterparts:



Figure 14: Muqarnas at the main entrance of Fatih Mosque, AC: Revelations

³⁶ Goodwin, “A History of Ottoman Architecture”. 121.

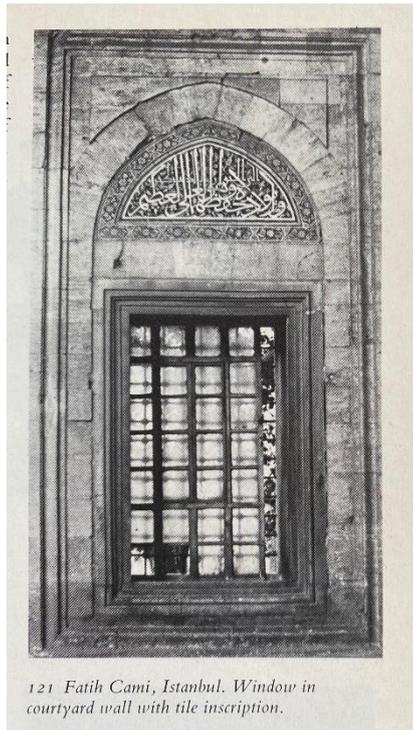


Figure 15: Window on Fatih Mosque, Istanbul³⁷

While the inscription has not been integrated into the game, the overall shape and style of the window panel are really alike. It is also notable that the section where the inscription was, has been put just next to a janissary banner with apparent Arabic letters. It is interesting that the entrance to the courtyard is guarded by janissaries and entrance is barred. Stepping into the courtyard requires fighting or entry by other means (such as from the above through climbing, which still requires fighting due to patrolling guards at the courtyard section). In the courtyard section, there is a small hexagonal fountain at the center. Muqarnas adorn the entrance to the mosque (mosque can not be entered) with a similar styled domed vault above. It has two smaller muqarnas engravings at its sides. A similar application was seen on the entrance from outside to the courtyard. Courtyard has 18 white columns in total, with corinth capitals. Four at corners, four are at the mosque entrance and its opposite, with three on other sides. There are five arches on the mosque entrance and its opposite, with the longer one anointing the entrance. At the sides, there are four. Here, the material seems to be marble. Colours of the arches are either black or a shade of dark blue, combined

³⁷ Goodwin, 131.

with white. What is of note is entrances at sides are not symmetrical, which are not centrally positioned. At the mosque entrance and its opposite, there are six windows flanking the three by three. There are five windows at sides which are positioned four and one, due to the entrance not being positioned centrally. Windows' shutters are shut and above them they have coloured glass with a design that appears to be floral. Every window has a blind arch on it that has another slim elongated window. Building material seems to be stone from the outside, which could be checked through historical sources. In Istanbul, not many buildings were made of stone, except mosques and the palace of the Sultan, as Metin And recollects traveler Jean Chesneau in his book³⁸.

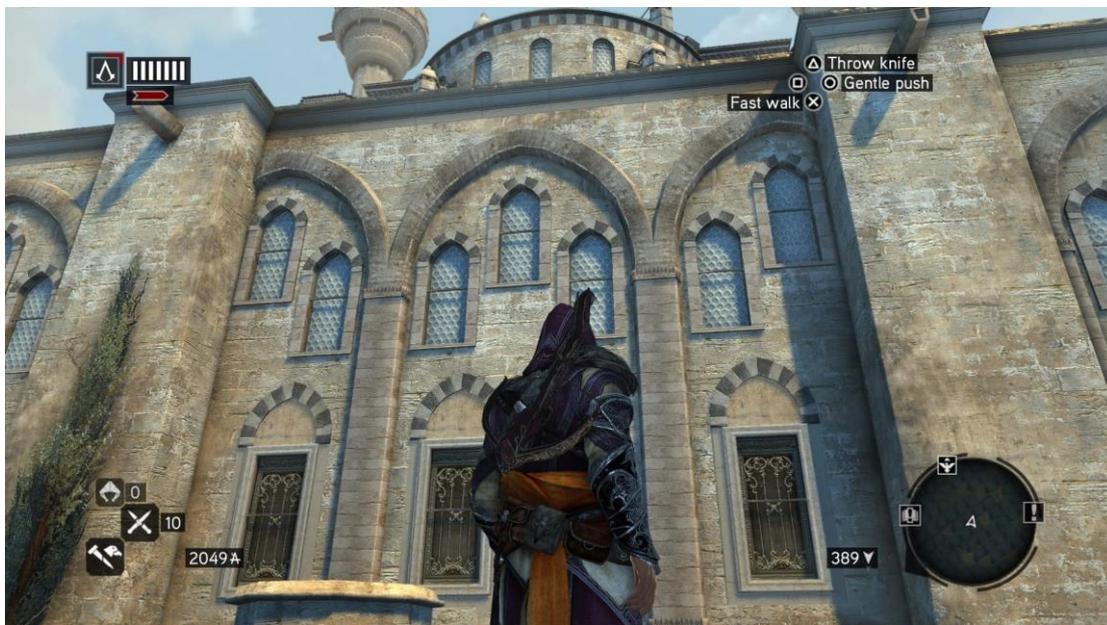


Figure 16: Blind arches and windows on Fatih Mosque facade, AC: Revelations

³⁸ Metin And, "16. Yüzyılda İstanbul: Kent - Saray - Günlük Yaşam". 51.



Figure 17: Door of the minaret on the exterior of Fatih Mosque, AC: Revelations

3.3.1.2 Minaret

Minarets in Assassin's Creed would be expected to have a particular significance because of how vital climbing is for the game and the high vantage point minarets offer (likely to be highest point for a specific building). As in the Lorichs depiction, Fatih Mosque has 2 minarets. Figure 20 at the bottom exemplifies many of the duality that can be experienced throughout the game, parallel in characteristic to real world Istanbul, with the Ottoman style ornaments in balcony fence in view together with the Roman city walls.



Figure 18: Minaret of Fatih Mosque, AC: Revelations

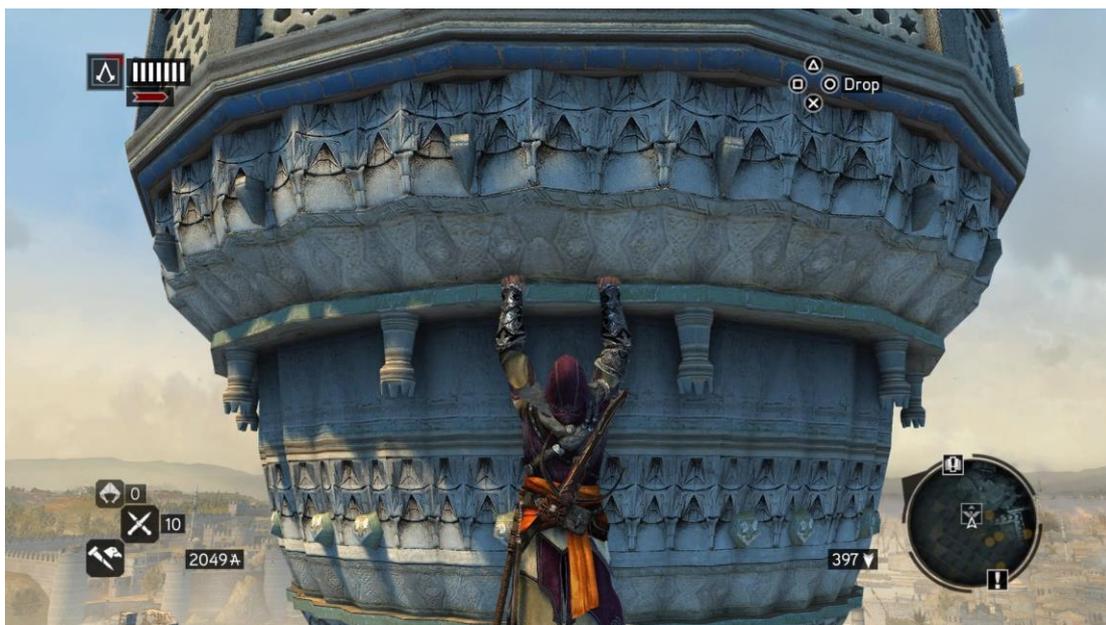


Figure 19: Details of Fatih Minaret, while hanging from it, AC: Revelations



Figure 20: Details of the balcony (Şerefe) of Fatih Minaret, while climbing on it, AC: Revelations

3.3.1.3 Views from Minaret

The 'History from Above' comes into play here, with a birdlike view that is probably only possible in real life to people with the use of drones. In this manner, video game platforms can act as drones of the medieval age, bringing present day technology to the past with unique vantage points. For it to be of use in academic studies though, reconstructions, distances to be used for study has to be verified by experts and there should be more transparency (than what is available on games normally).



Figure 21: View of the Fatih Mosque from top of its Minaret, AC: Revelations

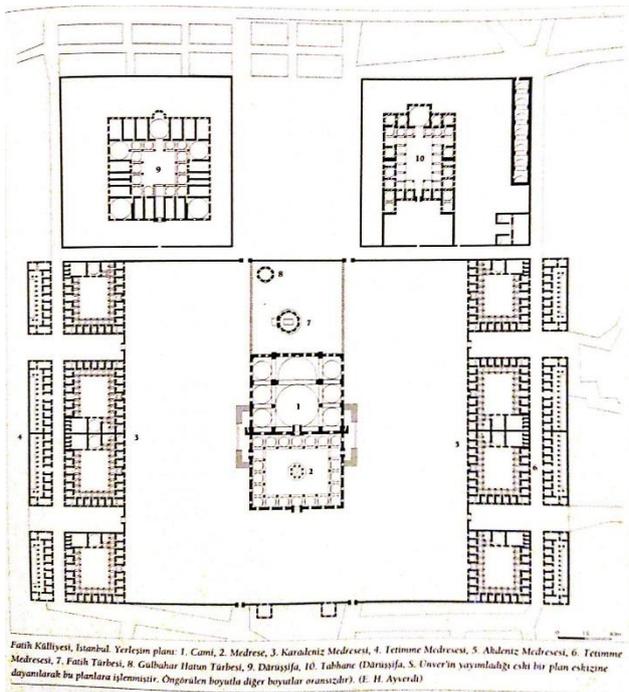


Figure 22: Ground plan of the Fatih Complex



Figure 23: View of the city, from Minaret of Fatih Mosque, AC: Revelations

Valens Aqueduct, Column of Marcian and Forum of the Ox can all be recognized from the picture above. Even though it was not mentioned in the game, the location lends credence to the ancient site of the Byzantine church of holy apostles. Compared to the Lorichs depiction, the distance between the mosque and city walls is shorter. This could be understood as the city of Istanbul in the game is smaller in scale than its real life counterpart, like a miniature. The fact of the matter Valens Aqueduct starts right at the Fatih Mosque, like a road, could also be due to the same reason as the Lorichs' panorama puts more distance between the two landmarks.



Figure 24: View of the Bosphorus, from Minaret of Fatih Mosque, AC: Revelations

3.3.1.4 Outside

Unnamed fountain outside of Fatih Mosque bears a semblance to the Sultan Abdulhamid II fountain situated at current day Maçka in its form, but with differences in its detail. Fatih Complex did not offer a brand new typology, but displayed the effort of reestablishing an expanded area of the city for social use. It expressed a vision of the city that will only be observed in Süleymaniye Complex thereafter³⁹. There is also a strange monument outside of the Fatih Mosque [towards right of the aqueduct on Figure 26] which can not be interacted with by players. Any idea or guess on what this could mean is uncertain. It could be placed in to have a role in the story later in the game. Valens Aqueduct can be seen here in the background, making it look like a road/bridge leading up to the complex.

³⁹ Kuban, 173.



Figure 25: Fountain, outside of Fatih Mosque, AC: Revelations



Figure 26: Monument outside Fatih Mosque, AC: Revelations

3.3.2 Forum of Ox

The database entry of Ox Forum reads it is located near the western walls of early Roman Constantinople and is also called “Forum Bovis”. Most common activity was “pompous parades” thrown by Emperors. It is said to be one of the many forums built by early Emperors of Roma Nova and gradually added over time by subsequent

generations. As with Fatih Mosque, there is one interesting claim that Ox Forum fell to the same fate as many public spaces; people see an open land and can not stop themselves from filling it up.⁴⁰ Today, the location in Istanbul is called ‘Aksaray Meydanı’ and is being used as a public square.



Figure 27: Forum of Ox, from top of the platform, AC: Revelations

To reach the platform above, players can jump from one column to another. There is also a collectible item, which encourages players to participate in such movement among buildings, architectural components. As can be seen beneath, night time changes the view from when it can be observed at day, the light offers a dynamic environment through a day where architecture can be perceived. In this particular example, darkness adds to the feel of ruins that are centuries old:

⁴⁰ Ubisoft, “AC: Revelations”.



Figure 28: Forum of Ox at night, from top of a column nearby, AC: Revelations



Figure 29: Forum of Ox from ground up, at night, AC: Revelations

3.3.3 Valens Aqueduct

Another huge claim about a landmark, this time for Valens Aqueduct, can be found in the game. From the game's own database, Valens Aqueduct is said to be "likely the

most successful architectural project in the history of Constantinople”⁴¹. These outrageous remarks may reveal a pattern in that developers aimed to catch attention of the playerbase. With this in mind, would the creations also be designed with the goal of catching people’s attention, rather than historical accuracy? Reason for the claim might be revealed through the next sentence, as Valens is said to provide the city with fresh water continuously through 1600 years. It was said to be built in 375 by Emperor Valens and used - repaired by Byzantine, Latin, Ottoman dynasties until final major restoration of Sultan Mustafa at 1679. Aqueduct is said to bring tiny bits of fresh water until late 19th century, where it was “mercifully” replaced by a more modern method, pipes. Now, Aqueduct is said to be 600 meters in length, about half of its original size.



Figure 30: Valens Aqueduct at night, from ground up, AC: Revelation

The material used on the aqueduct can easily be seen on the above picture, with stones relating to the pavement leading up to the waterway. Panorama of the city reveals itself from top of the aqueduct, where players can climb. Again, movement through the landmark is encouraged by game development through items collected in game:

⁴¹ Ubisoft, “AC: Revelations”.



Figure 31: Top of the Valens Aqueduct, AC: Revelations

3.3.4 Column of Marcian

Column of Marcian is described by the game as another column dedicated to a forgotten Emperor (that goes by the name Marcian), around 455. Labeled as a “fine example of Corinthian column” it is mentioned as one of the few remaining columns still standing today and in good shape.⁴² Called ‘Kıztaşı’ today (translates as ‘Girl Stone’), it is situated just right of the ‘Bozdoğan Kemeri’ (Valens Aqueduct) in the Fatih district. In the Ottoman times, it was also called ‘Kıztaşı’ because of the depictions of Greek goddess Nike on its base.⁴³ In the game, the huge base of it was plain, and there appeared a stonemason working on the base. The below image, as does the map in game shared in section 3.3, shows the close proximity of the Column with Valens Aqueduct. While looking at the column, the aqueduct can be seen in the background. Capital of the column in fact shares similarities in shape and style, but this could also be due to the common language of the corinth style. The eagle motif on the frieze atop of the capital appears to be missing on the plain version of the game's rendition of the column.

⁴² Ubisoft, “AC: Revelations”.

⁴³ Çetinkaya, “İstanbul’un Bizans Dönemi Mimarisi”. 39.



Figure 32: Column of Marcian, AC: Revelations



Figure 33: Capital of the Marcian Column⁴⁴

⁴⁴ “Büyük İstanbul Tarihi”, 39.

3.3.5 Forum of Arcadius

Built by and dedicated to 5th century Byzantine Emperor Arcadius, this forum lay east of the city walls built by Emperor Constantine the Great. Like other Byzantine and Roman forums, it contained a column in the name of its founder. It only has a few remaining stones standing today. According to the database in game, located in one of the poorest districts of Istanbul, this forum was eventually converted into a Bazaar and used for auctioning slaves⁴⁵.



Figure 34: Column at Forum of Arcadius at night, from roof of nearby house, AC: Revelations

There appears not much in the shape of a forum around the location of Arcadius, which could be due to the date in game. The one column where the location in the game is based, looks quite similar to the Column of Marcian. Based solely on these two examples, this look of stones stacked on top of each other, with a corinth capital to cap it off, appears to be a generic image used. Were these columns looked identical to each other in their real world counterparts? Pelin Yoncaci, in her digital modeling of the Roman and Byzantine columns, shows both of these columns side by side.⁴⁶ According to those digital reconstructions, the columns were quite distinct, especially

⁴⁵ Ubisoft, "AC: Revelations".

⁴⁶ Yoncaci, "Towards a New Honorific Column". 124.

in size and scale. Based on the illustrations of Freshfield Album, this appears also not to be the case and both columns look quite different:



Figure 35: Column of Arcadius, Freshfield Album⁴⁷

Freshfield drawings, by an unnamed artist, are one of the few significant visual evidence of the time documenting the topographic relationship between structures. One instance this can be observed is the relationship between Hagia Sophia and obelisks at the Hippodrome. The illustrations also depict the Column of Arcadius, now

⁴⁷ The Freshfield Album, accessed at <https://mss-cat.trin.cam.ac.uk/Manuscript/O.17.2/UV#?c=0&m=0&s=0&cv=0&r=0&xywh=-2983%2C-279%2C9427%2C5576>.

lying in ruins. According to this work, Arcadius Column does not even have a corinth capital or look anything close to the corinthian style seen in Marcian.



Figure 36: 16th century manuscript, Column of Arcadius⁴⁸

Perhaps this 16th century manuscript sheds light on the market activity around the column and confirms what was stated in game as far as eventually functioning as a bazaar goes. Due to the column in the above image, the open market was identified as ‘Avrat Pazarı’ (translates as ‘Women’s Market’). The area was an open commercial street, used mostly by women, both as traders and customers. According to Özgüven, the slave market was not directly related with the area surrounding the column.⁴⁹ This challenges the claim in game that bazaar was used for auctioning slaves. Even after the conversion from Roman forum to Ottoman bazaar, the column is said to still dominate the surroundings as the main figure. Whether the lack of lively market

⁴⁸ Museo Correr, Venice

⁴⁹ Özgüven, “A Market Place in the Ottoman Empire: Avrat Pazarı and its Surroundings”, 72.

activity around the column in the game hints at an underlying message is up for debate. Surprisingly, there was market activity, stands that were set up around the Column of Marcian instead.



Figure 37: Column of Arcadius, Melchior Lorichs⁵⁰

Panorama of Lorichs also shows nothing close to a corinth capital. Consistent with all the other images, it appears this corinth capital replaced the small stone sitting at the top of the column, which has been missing in game. Arcadius Column is positioned behind the Valens Aqueduct. While the map drawn in game and shared on section 3.3 (page 17) seems to indicate this positioning could be possible, recreating it in game has not been achievable, due to the smaller size of the column not being visible from afar. While the Galata Tower could offer such a viewing proposition, the column is not at the scale to be recognized clearly, whilst Valens Aqueduct is [from Galata].

3.3.6 Sancaktar Hayrettin Mosque

As stated in the game's database, Sancaktar Mosque was part of a currently demolished complex. Today it is said to be known as a “Mescidi”, in other words a small mosque. Date of build is unknown to the game, but the style is claimed to be “late Byzantine”, possibly from the 14th century at the height of the Palaiologian

⁵⁰ Lorichs, “Prospect of Constantinople”. Part 12.

dynasty. It is described as a “very simple structure” that does not wow tourists, but has an “humble elegance” to its construction that is worth seeing.⁵¹



Figure 38: Sancaktar Mosque, from dusk, AC: Revelations



Figure 39: Minaret of Sancaktar Mosque, from top of the mosque itself, AC: Revelations

⁵¹ Ubisoft, “AC: Revelations”.

Compared with the minaret of Fatih Mosque, this one looks much simpler, as in line with the building itself. Looking at this rotunda dome of Sancaktar Mosque, remnants of something ancient Roman are also revealed in the background where the complex lies. Dome similarity with Eski İmaret Camii, Fethiye Camii and likely many more again catches the eye:



Figure 40: Dome of Sancaktar Mosque, from its minaret



Figure 41: Sancaktar Complex, from the mosque, AC: Revelations



Figure 42: Standing on top of Sancaktar Mosque, AC: Revelations

As can be seen, there is a carpet and books stacked up on top of the mosque. This is not random placement, a “memoir page” (which is another collectible in game) could be obtained here. This means that the game, by design, encourages players to climb and in turn “interact” with this building that has somewhat historical significance. While observing the image below, the moon was moving (maybe faster than it should have been since it was visible to the eye) and was not static. Also the scaffolding next to the building could hint to renovations or the ongoing conversion at its date. Muslims of the Ottoman Empire were not confined to only praying in Turkish made mosques. Following an Islamic tradition, Christian churches were converted into mosques and used by adding a mihrab and minaret. What mattered was not the place for praying, but the act of praying⁵².

⁵² Kuban, 217.



Figure 43: Saccatar Hayrettin Mosque at night, with moon, AC: Revelations

3.3.7 Fenari Isa Mosque

Fenari Isa Mosque's database entry reads it was built in 908 CE, from the remnants of a shrine. It was first served as a nunnery, installed by Byzantine admiral Constantine Lips. Therefore, it was referred to as Lips Monastery and was "one of the largest of its kind in Constantinople"⁵³. After the restoration of the Palaiologian dynasty in 1261, Emperor Michael Palaiologos' widow built a church just south of the monastery. Over the next few centuries, renovations and gradual construction has resulted in two buildings becoming one.

⁵³ Ubisoft, "AC: Revelations".



Figure 44: Fenari Isa Mosque, AC: Revelations



Figure 45: Fenari Isa Mosque, facade, AC: Revelations



Figure 46: Fenari Isa Mosque, detail, AC: Revelations

As can be seen, the style of dome is quite similar to the one that was observed in Sancaktar Hayrettin Mosque. From the above picture, roman arches attached to the building can be seen towards the right. According to Gyllius, in his description of the 16th century, Turks did not destroy churches and other standing buildings. They embraced the city they tried to conquer for so long⁵⁴. The number of mosque turned churches present in the game's city would suggest this was the case.

3.3.8 River Lycus

An interesting sight found in Istanbul (Constantine district to be exact) was a small river on the mainland, named river Lycus. According to the database, it flowed through the southeast of Constantinople's main peninsula. It cut a straight valley between the first six hills to the east and the large seventh hill to the west. It is said to be "notable" for its 2000 meters long end that flowed underground before reaching to Harbor of Theodosius, southern edge of the city⁵⁵.

⁵⁴ Kuban, 172.

⁵⁵ Ubisoft, "AC: Revelations".

3.3.9 Bayezid Mosque

What is written in the database of the game about Bayezid Mosque is that Emperor Bayezid II was the second Sultan to call Constantinople his home and second to build a commemorative mosque in his name. The larger complex surrounding the “Bayezid Camii” was mentioned as “Beyazediye”. Being smaller than Hagia Sophia to the east, it is described as a “charming structure with unique features” that set itself apart from other mosques of the period⁵⁶. Notably the enclosed peristyle out in front and its ornate columns and a tranquil courtyard. The mention of “enclosed peristyle” in particular could be an indication that the game worked with architects or at least with people familiar with architectural terms. It is also mentioned that despite being more recent than “Faith” Mosque of Mehmet II (Fatih Camii) Bayezid Mosque stands today as the “oldest and best example” of early Ottoman architecture in the city, with credit to extensive restorations needed after an earthquake hit in 1766.

Namık Erkal, in his work of early Ottoman architecture in Istanbul, describes Beyazid Mosque as the earliest example of a sultan mosque in Istanbul still standing today, due to Fatih mosque being rebuilt.⁵⁷ In his analysis of the style of architecture, he highlights the characteristics that make the architecture an “ode to old traditions”.⁵⁸

⁵⁶ Ubisoft, “AC: Revelations”.

⁵⁷ Namık Erkal, “İstanbul Erken Dönem Osmanlı Mimarisi”. 133.

⁵⁸ Ibid, 136.



Figure 47: Bayezid Mosque entrance, AC: Revelations



Figure 48: Bayezid Mosque, muqarnas at the entrance, AC: Revelations

Muqarnas section has two smaller muqarnas engravings under the big one, at sides situated inside. Stepping into the courtyard, a fountain where people gather around it on benches reveals itself, as does the architectural details on backdrop. The movements available in game, such as climbing, lets people observe architecture even

more closely, as does in the picture below when the player “decides” to climb on the fountain (Figure 50).



Figure 49: Bayezid Mosque courtyard, from ground up, AC: Revelations

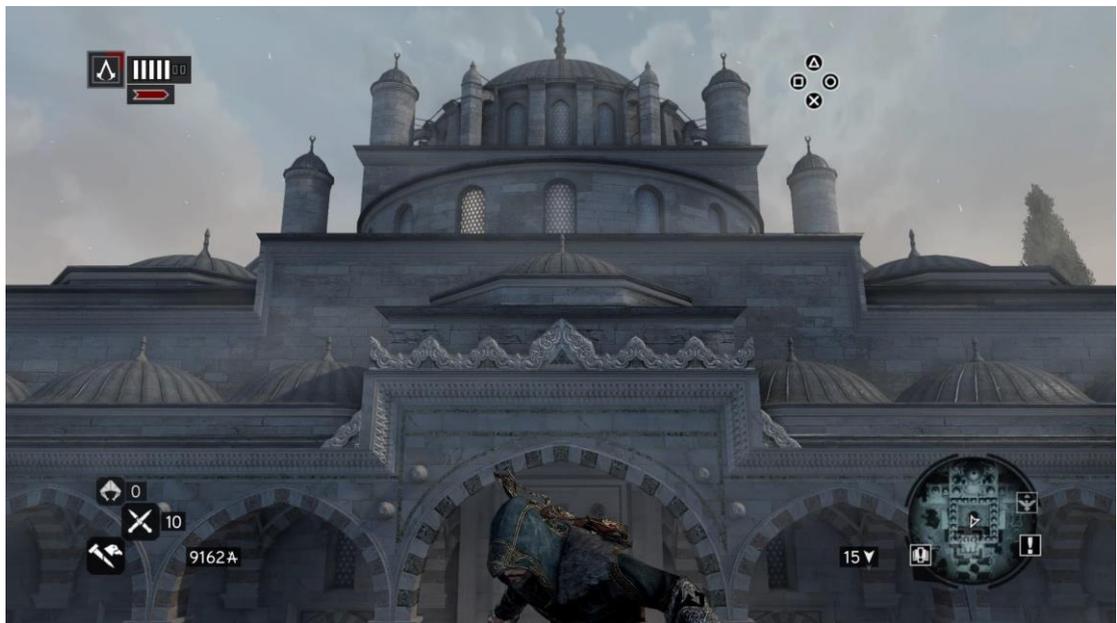


Figure 50: Bayezid Mosque, from top of fountain at courtyard, AC: Revelations



Figure 51: Details in the courtyard of Bayezid Mosque, AC: Revelations

When a player steps into the architecture closer, more details unravel themselves, such as arches and domed vaults displayed here, as well as columns with ornamented capitals. There are 20 columns in total at the courtyard section, with four red ones that adorn the entrance to the mosque and the opposite side, and 16 green ones. With four columns at the corners, there are four others at each side. Material of the courtyard walls appears to be marble. The use of marble in the architecture could also be found in academic texts.⁵⁹ There are six windows at each side, three flanking the entrances. Their shutters are down, adorned with detail that appears to mimic iznik tiles. Two muqarnas replace the windows centrally at the side of the mosque entrance. There are five arches at each side. Mosque entrance and its opposite have a bigger central arch that has green stones combined with white ones, as opposed to the other orange looking ones. There are seven blind arches at each side, same as the domes of the courtyard, except the mosque entrance with muqarnas. There still exists a blind arch atop the entrance to the courtyard from outside. Below the blind arches, there are small windows with arches atop the other windows, except the muqarnas section and its opposite. These small windows with arches have thick engravings. Interior of the four domes at top of the entrances have muqarnas like ornaments. Besides the mosque

⁵⁹ Erkal, 133.

entrance (which can not be entered), there are three entrances to the courtyard from outside. From the courtyard, one can observe these are adorned with double arches (not on top of each other but following) that are thicker than the ones connecting the columns of the courtyard. These are coloured green (combined with white) with a green stone adorned on top.



Figure 52: Bayezid Mosque, from top of the courtyard standing on its domes, AC: Revelations

Standing on top of the domes at the courtyard strikes an eerie visual similarity to the one in Fatih Mosque, which was shown previously in section 3.3.1. Before Sinan, the dome was the dominant feature of Ottoman architecture. While this could be integrated in small scale structures with ease, accomplishing it on complex formations was the achievement of Sinan school. If this passion for dome was not experienced in such diversity, Ottoman architecture could have been criticized for its monotony. Sinan's creativity had a crucial role in this manner⁶⁰.

⁶⁰ Kuban, "Sinan'ın Sanatına Sahip Çıkmak", 109.

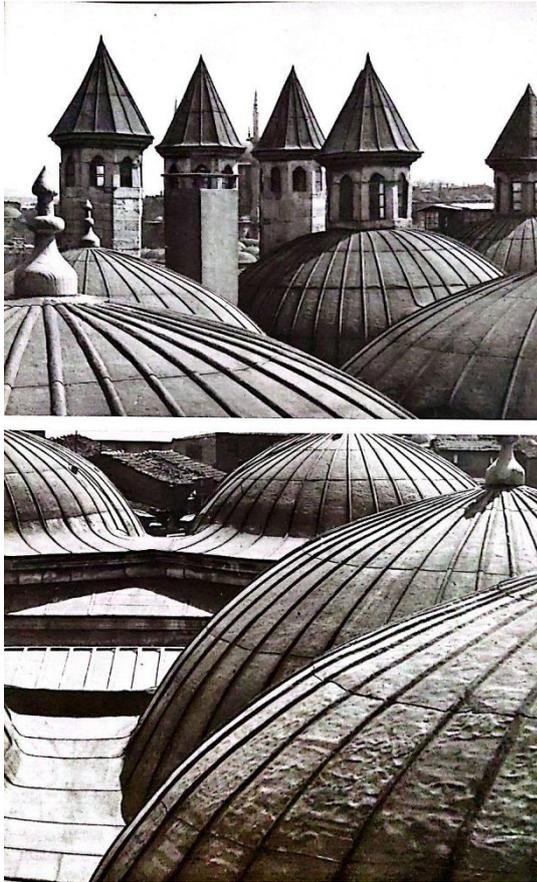


Figure 53: Domes and chimneys of Beyazid Mosque kitchens⁶¹

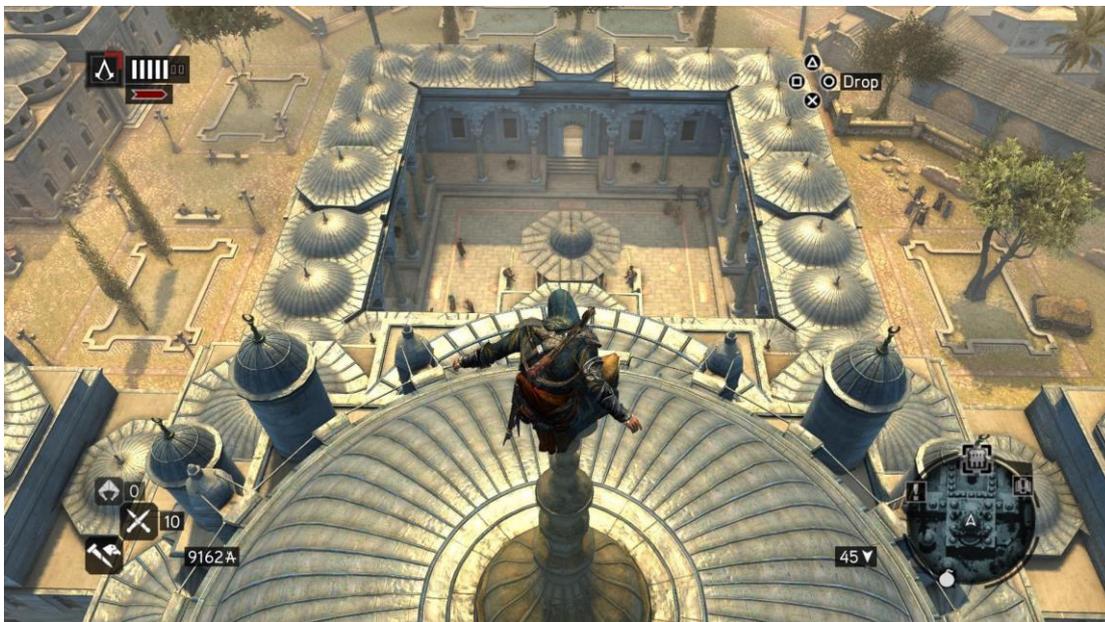


Figure 54: Courtyard of Bayezid Mosque, from top of its dome, AC: Revelations

⁶¹ Eldem, "Türk Mimari Eserleri", 94.

Observing the courtyard was not just possible from inward, climbing to the top of the mosque's dome also offers a different eagle-like view, as do many other vantage points. Courtyard section had 7 small domes on each 4 side. 3 of those domes flank central ones, where they sit on an extra platform to stand slightly above others. While discussing the elaborations of Ottoman mosques in later periods, Goodwin mentions Bayezid Mosque having a characteristic of “puritanical, uncompromising squareness”.⁶² Square plans of the courtyard and harem sections were also highlighted by Erkal.⁶³ Looking at the Bayezid Mosque and its domes from the minaret, Hagia Sophia can also be seen in the background. The dome sits on a section that has elongated windows, supported by buttresses:



Figure 55: Top of the Bayezid Mosque and its domes, from its Minaret, AC: Revelations

⁶² Goodwin, 185.

⁶³ Erkal, 133.



Figure 57: Bayezid Mosque, from top of its Minaret, AC: Revelations

Under the main dome, there are two semi domes. At the other two sides, 4 smaller domes are positioned in line, with a panel that has windows in place of semi domes. Looking at the outer complex from the minaret of Bayezid Mosque, an enclosed open air space can be seen next to the mosque itself, with likely to be a fountain at its center. What this enclosure could mean can be further studied on real life sources.



Figure 58: View of Bayezid Complex, from Minaret, AC: Revelations



Figure 59: A view of the gardens of Bayezid Complex, AC: Revelations

3.3.10 Kalenderhane Mosque

From the game database, Kalenderhane Mosque was constructed in the 6th century at the site of an old Roman bath and was originally an Orthodox church. Together with Hagia Sophia and Zeyrek Mosque, it is said to be one of the best surviving examples of Byzantine architecture⁶⁶. Referring back to the map drawn on section 3.3, the location's close proximity to other Roman landmarks such as Column of Marcian, Forum of Ox and especially Valens Aqueduct for water carriage makes the claim of the old site of a Roman bath seem plausible. The circular dome appears here as well, as in Fenari Isa Mosque. This seems either a generic image used or a common theme in style belonging to church converted mosques. Semi arches attached to the side section appear here as well. Kalenderhane, named by Mehmet II after the heroic Kalender dervishes of the conquest, was used as zawiya until the 18th century and then converted into a mosque by adding a minaret⁶⁷. It was from the Middle Byzantine period and was a cross-planned church with a central dome. According to this information, the minaret apparent in the game could be mistimed.

⁶⁶ Ubisoft, "AC: Revelations".

⁶⁷ Kuban, 219.



Figure 60: Kalenderhane Mosque, AC: Revelations

3.3.11 Gül Mosque

In the game, the original name of the Gül or Rose Mosque is given as Hagia Theodosia, named after a woman martyr from a brief violent period of Orthodox iconoclasm in the 8th century. Tragic but poetic set of events that led to the new name is told through a legend. On the eve of the conclusion of the Ottoman siege of Constantinople, Orthodox Patriarch was holding a prayer here asking for a miracle to save them from certain death. When the time came for the Emperor's final defense, hundreds of people remained here praying and decorated it with rose petals. As soon as Sultan Mehmet II reached the Hagia Theodosia, they found the place full of rose petals and sad citizens. All who remained were taken as prisoners and the church was converted for general military purposes. Two decades later when Ottomans repaired the building to use for worship, they renamed it 'Rose' Mosque in honour of those last days⁶⁸.

⁶⁸ Ubisoft, "AC: Revelations".



Figure 61: Gül Mosque, AC: Revelations

The roof of the dome, which was seen in many of the Byzantine buildings sampled up to now, could actually be said to resemble the petals of a rose flower, which creates a nice connection with the Gül Mosque albeit with a high dose of imagination. Looking at the Gül Mosque from the angle at the below image, the section attached to the main body of the building could be the apse, due to its form. Minaret attached to the building itself could be a sign which indicates the fact that the church was converted into a mosque by the date of the game.



Figure 62: Gül Mosque, AC: Revelations

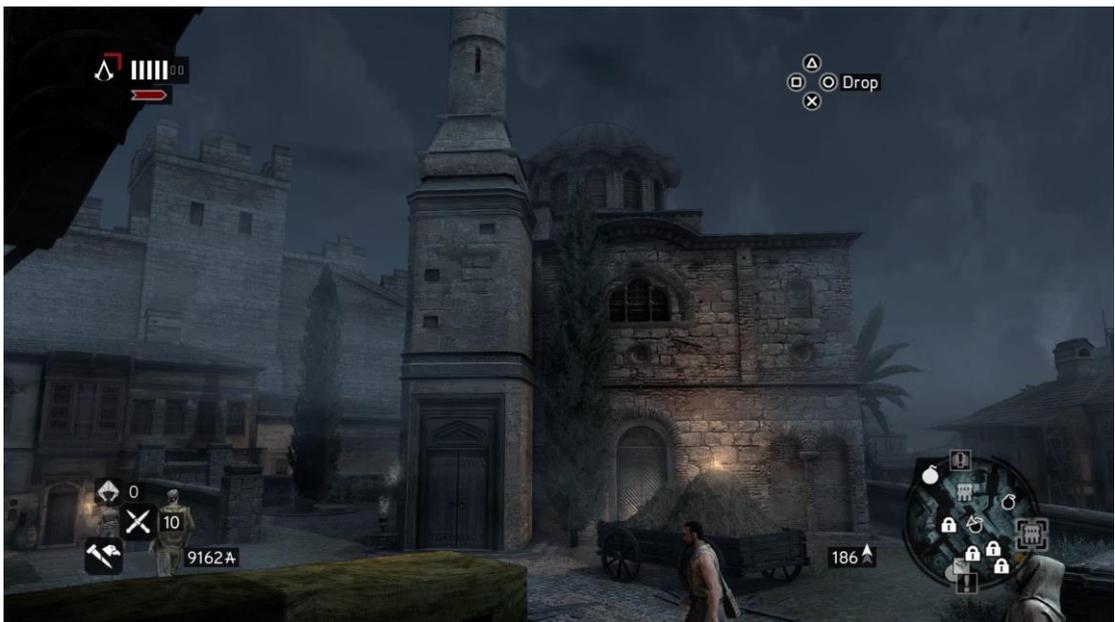


Figure 63: Gül Mosque, at night, AC: Revelations

3.3.12 Zeyrek Mosque

Described by the game as one of the “largest and best” examples of Byzantine architecture, Zeyrek Mosque is said to have been established as Eastern Orthodox monastery in the 12th century. It is also claimed to have grown exponentially, gaining

a second church, a courtyard, hospital, library and a tomb, all in less than 100 years⁶⁹. In the Latin occupation of the city, the complex was at the use of the Vatican's clergy until the rise of the Palaiologos dynasty reinstated the monks of Orthodox church. Once Ottoman's took over, the whole complex is said to take on a “multifaceted, multi-cultural role”. While Muslims used one of the buildings as a madrasa, Christians were still permitted to worship in the church section. This sentence might be the first instance of Ottoman's characteristic of cultural synthesis celebrated through the game.

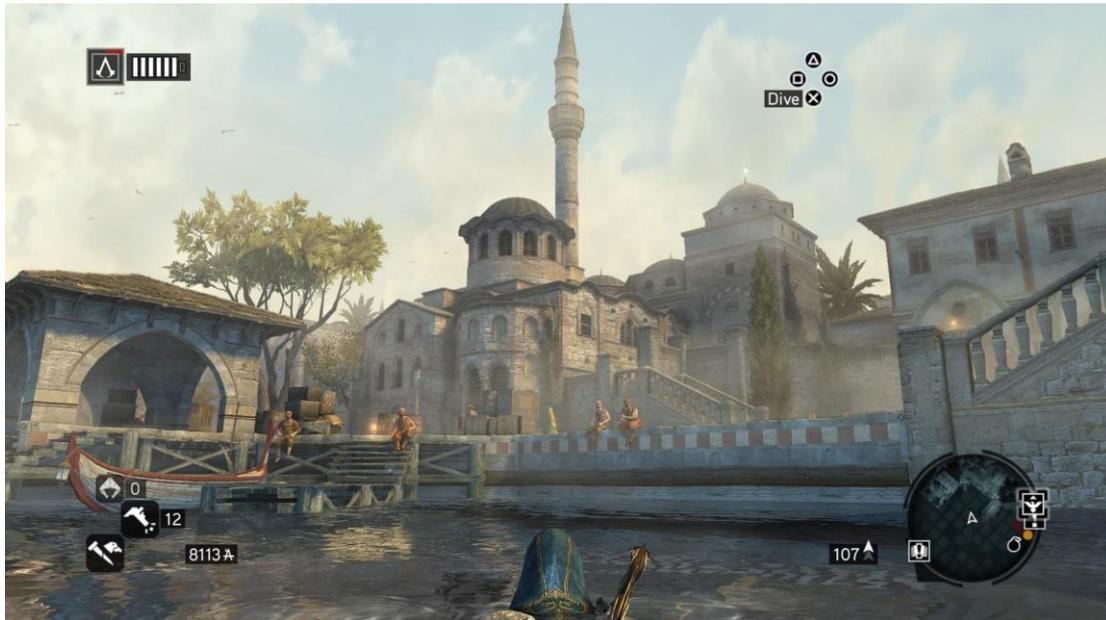


Figure 64: Zeyrek Mosque, from the Bosphorus, AC: Revelations

3.3.13 Great Nymphaeum

Just right of the Zeyrek Mosque in the Bayezid District, there appeared a Roman shrine dedicated to nymphs. This location was not marked anywhere on the map and the discovery was thanks to pure exploration of the city. The database information says The Great Nymphaeum was a public sanctuary built by early Romans to commemorate pagan spirits called Nymphs, centralized around a large ornate fountain. Nymphaeums are noted as common features of Roman cities, which served as not just small reservoirs or gardens, but for all manner of public functions by citizens from weddings, parties to general assembly. In later centuries, it is said that

⁶⁹ Ubisoft, “AC: Revelations”.

the term ‘nymphaeum’ was also started to use to denote brothels, or bordellos, described by the game as an “unfortunate semantic evolution” that likely caused “unfortunate misunderstandings” during summer months of Constantinople.⁷⁰



Figure 65: Great Nymphaeum, AC: Revelations

Shrine in the game appears attached to the wall and is climbable. It is flanked on two sides by Roman ruins, two columns at each side. The image above shows the relationship between the sanctuary and the fountain ahead of it. Information stated that the shrine was centralized around a fountain but the fountain looks Ottoman in style, which makes it a later addition to the site. Nevertheless, the mutual existence of the Roman shrine and Ottoman looking fountain exemplify the synthesis of two cultures in the city.

3.3.14 Myrelaion Church

According to the game, this place, once an Eastern Orthodox Church called Myrelaion, served two purposes simultaneously over the years. Functions being; “house of worship above, and a crypt below”, built by Romanus as a funerary chapel for his wife⁷¹. Database says it was later converted into a mosque, named “Bodrum

⁷⁰ Ubisoft, “AC: Revelations”.

⁷¹ Ubisoft, “AC: Revelations”.

Camii” after the man who restored it. It was later said to be abandoned and sat in ruins until restoration in the 20th century.

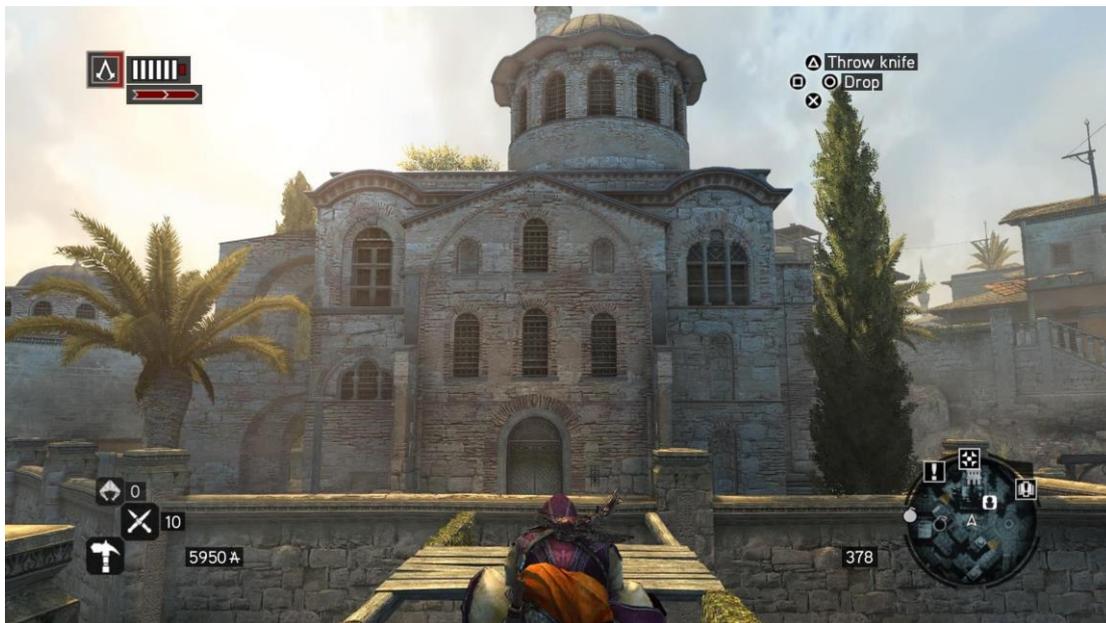


Figure 66: Myrelaion Church, AC: Revelations

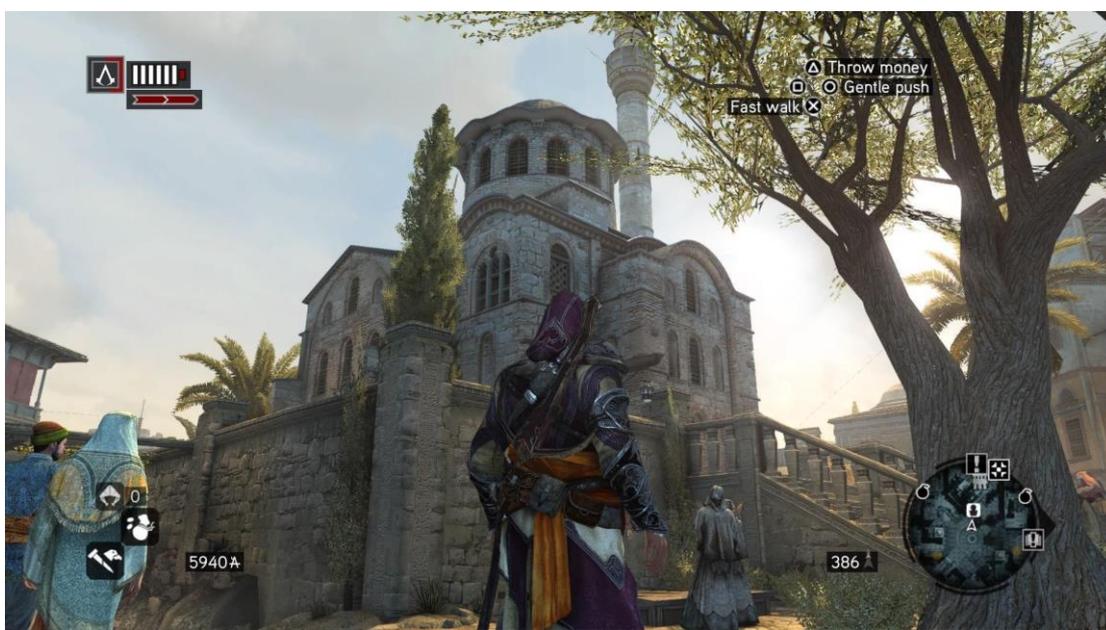


Figure 67: Myrelaion Church, AC: Revelations



Figure 68: Myrelaion Church roof and dome, AC: Revelations



Figure 69: Myrelaion Church, supportive arches, AC: Revelations



Figure 70: Myrelaion Church, view towards sky, AC: Revelations

The characteristic dome used in many examples of the Byzantine architecture can be observed here in Myrelaion once again. The picture above (Figure 70), looking towards the minaret of the Myrelaion Church, shows the interaction between roman arches and the minaret rising up to the sky. Other details looking around the church include a small working fountain attached to the side of the building. Its placement and accuracy can be further checked from historical sources. Looking below towards the city from top of the minaret of Myrelaion Church reveals a circular public square below. Other significant medieval Byzantine structures that were converted into a mosque during the Fatih Era include Zeyrek, and in Bayezid II period; Myrelaion, Fenari İsa and Gül. There were 22 churches that were either converted into a mosque or given to a sect in the Fatih and Bayezid II periods⁷².

⁷² Kuban, 219.



Figure 71: Myrelaion Church, fountain, AC: Revelations

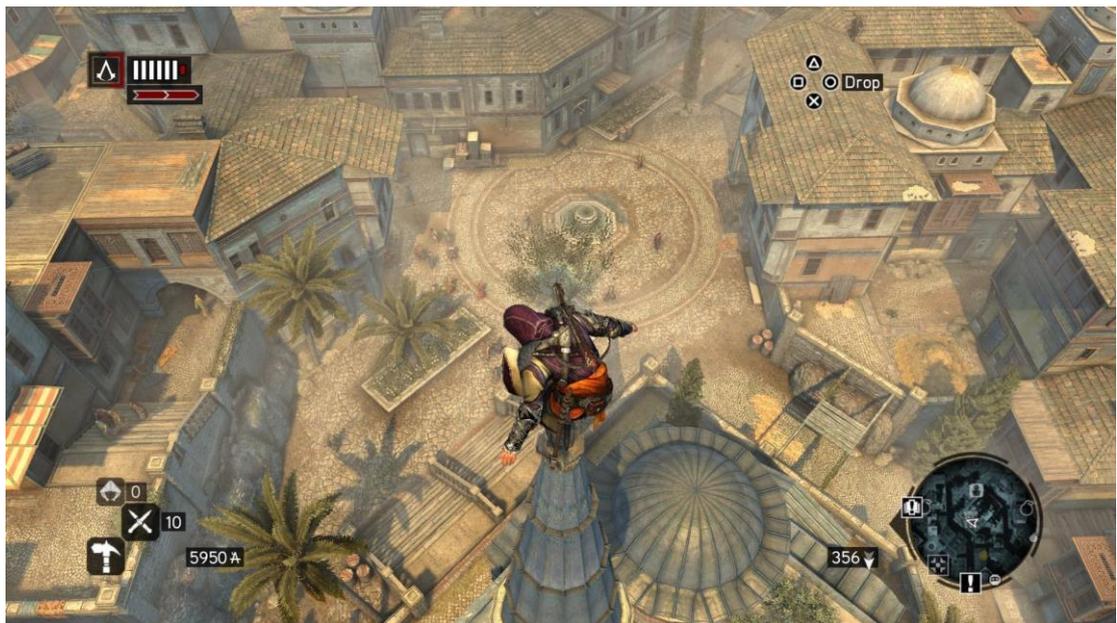


Figure 72: View of the streets, from minaret of Myrelaion Church, AC: Revelations

3.3.15 Little Hagia Sophia

The game says the Ottomans called here Little Hagia Sophia or “Küçük Ayasofya”, which was initially a Byzantine church built in around 500. It is said many think this served as a prototype for the larger Hagia Sophia cathedral that was going to be built a few decades later. Interesting statement here is that the narrator (of the database

entry) has “doubts” about the above claim, and thinks despite the two buildings sharing some of the noticeable aesthetic features, their structural elements are “vastly different” and this is “quite obvious”⁷³.

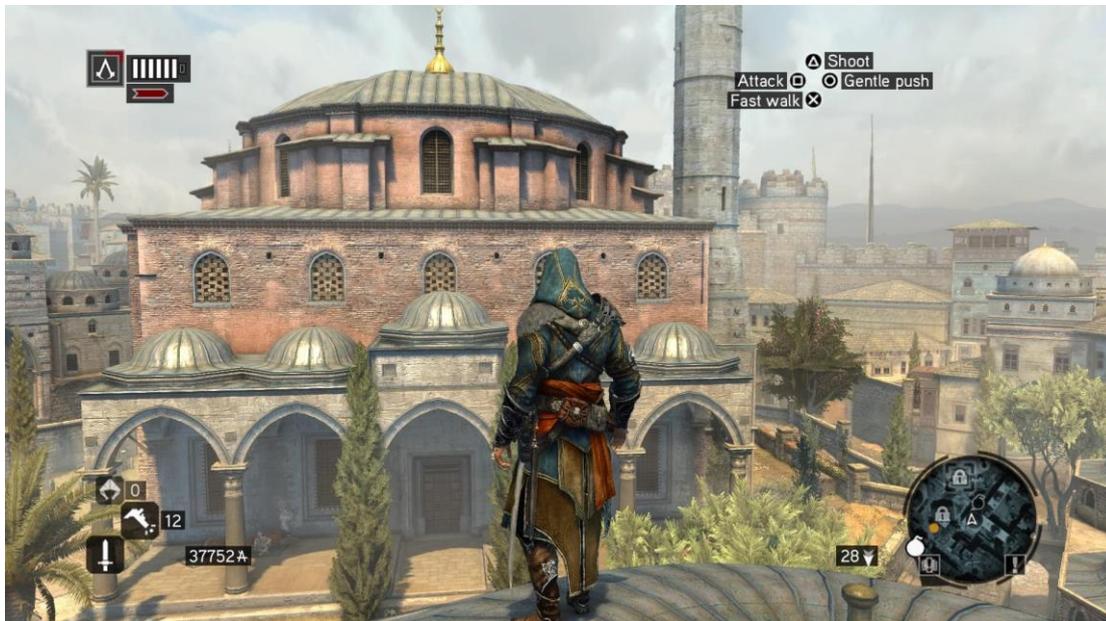


Figure 73: Little Hagia Sophia, AC: Revelations

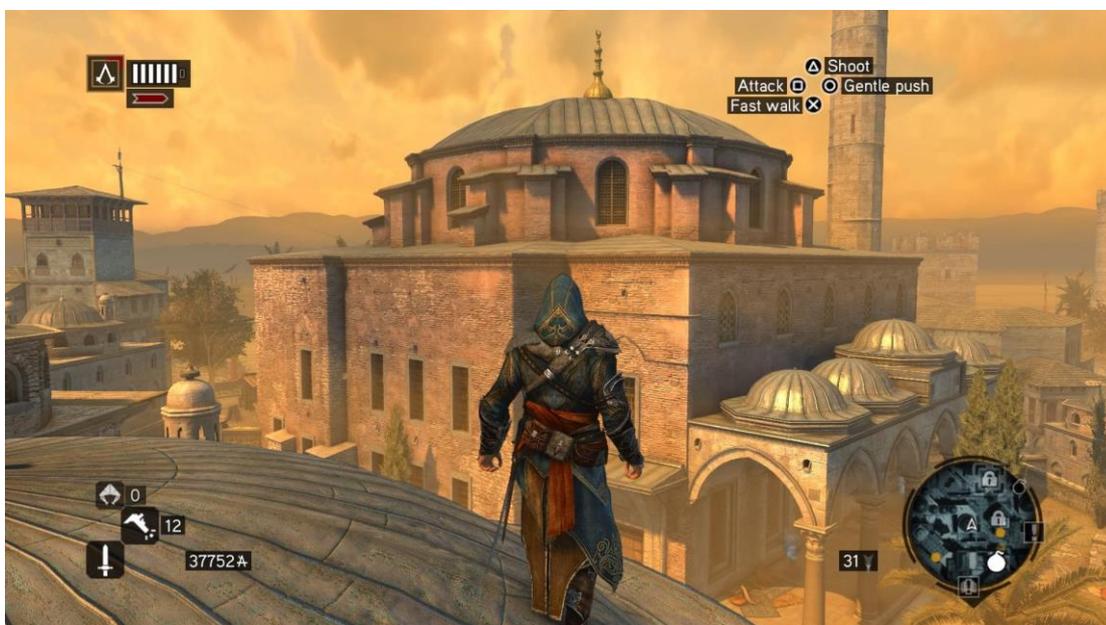


Figure 74: Little Hagia Sophia, AC: Revelations

⁷³ Ubisoft, “AC: Revelations”.



Figure 75: Little Hagia Sophia, from ground up, AC: Revelations



Figure 76: Little Hagia Sophia, archway, AC: Revelations

One advantage of inspecting the architecture from ground up is the ability to compare it with human scale, thanks to the citizens roaming around, and also with natural life such as plants. Stepping up into the archway, more details of the architecture greet the player, such as domes illustrated beneath:



Figure 77: Little Hagia Sophia, dome on archway, AC: Revelations



Figure 78: Little Hagia Sophia, fountain, AC: Revelations

There was also a monumental fountain nearby the Little Hagia Sophia which was unnamed and had no database entry attached to it. This fountain appears to be a generic image used in different parts of the city. For instance, it was also observed on the Topkapı Palace grounds. Due to that specific location, it could be speculated that the 18th century Fountain of Ahmed III, located right next to the Topkapı Palace in current

day Istanbul, could be a source of inspiration. Stepping up to the fountain, details and muqarnas disclose themselves:



Figure 79: Little Hagia Sophia, fountain detail, AC: Revelations

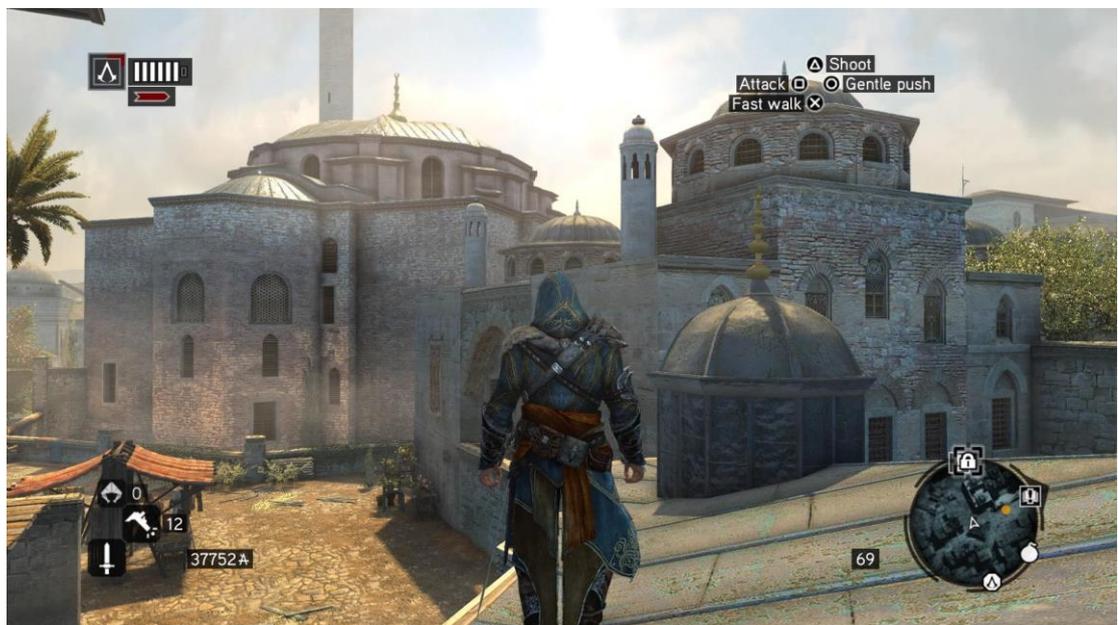


Figure 80: Little Hagia Sophia, from fountain, AC: Revelations

Standing on top of the fountain, one can observe the Little Hagia Sophia and the building in between the fountain and Little Sophia together. Looking at the minaret of

Little Hagia Sophia, details and the ornaments show a similarity with the previous very detailed minaret of the Fatih Mosque. Seeing the city from top of the minaret of Little Hagia Sophia, it is possible to observe the bigger Hagia Sophia from a straight line, and the Hippodrome in between as can be seen in the image below the minaret (Figure 82):



Figure 81: Minaret of Little Hagia Sophia, AC: Revelations



Figure 82: View of the city, from minaret of Little Hagia Sophia, AC: Revelations

3.3.16 Hagia Sophia

Game’s information on Hagia Sophia mentions that there were two other churches on the grounds of Hagia Sophia. Both were destroyed hundred years apart from each other but the third one, Hagia Sophia, was built to last. “A masterpiece” built by Emperor Justinian in 6th century CE, it stood as the largest cathedral in all Christendom, East and West. After the Ottoman conquest in 1453, Sultan Mehmet quickly converted the church into a mosque, dubbed “Ayasofya Camii”. Game here mentions that the reason Fatih kept the structure “virtually unchanged” was because he admired the building and its history. The four minarets surrounding the building are also said to be added gradually over time in the next century following the conquest. Lastly, it was mentioned that Hagia Sophia currently stands as a museum, rather than as a place of worship.⁷⁴ Rice uses Hagia Sophia as an example to the architectural features that are vital to the realism presented in game. She uses a side by side comparison of the exterior and interior of the game’s design with its current day version to make her point:⁷⁵



Figure 83: Real life on the left, video game on the right, Hagia Sophia

⁷⁴ Ubisoft, “AC: Revelations”.

⁷⁵ Rice, 40.



Figure 84: Real life on the left, video game on the right, Hagia Sophia

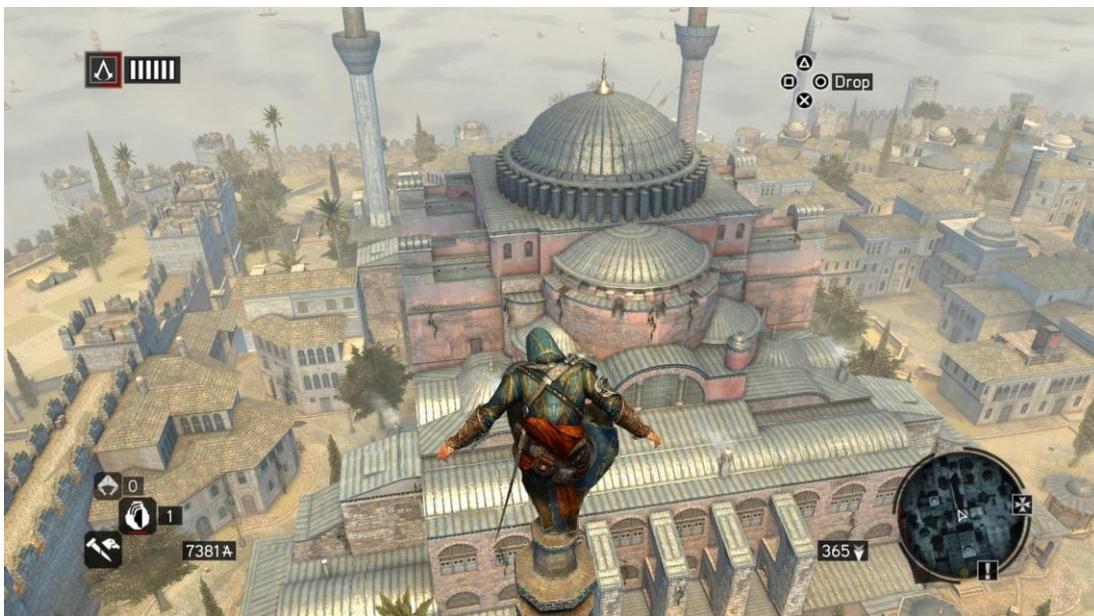


Figure 85: View of Hagia Sophia, AC: Revelations

What appears to be cracks on Hagia Sophia at first sight reveal themselves as ivies upon close inspection. Whether these are “planted” on purpose to add to the age of Hagia Sophia visually remains to be seen.



Figure 86: 17th century engraving of Hagia Sophia, Istanbul⁷⁶



Figure 87: Hagia Sophia, from ground up, AC: Revelations

The red section on the wall with scaffolding is interesting as it could hint to some renovations going on at the time. There is also a crack on the right on the above picture which could either suggest more elements put by the game willingly to increase the

⁷⁶ Goodwin, 280.

old feel of Hagia Sophia or maybe collateral damage done due to the conquest of Istanbul being recent. Standing on top of the minaret of Hagia Sophia, there appears an axis on the city below, from Hippodrome at most left on the picture that runs to Bayezid Mosque - Valens Aqueduct and Fatih Mosque, in that order. The two obelisks on the Hippodrome can be observed facing each other. Between the Hippodrome and Arsenal, Little Hagia Sophia can also be seen:



Figure 88: View of the city, from minaret of Hagia Sophia, AC: Revelations



Figure 89: View of the Golden Horn, from Hagia Sophia dome, AC: Revelations

Looking at the Golden Horn from top of the Hagia Sophia's dome, due to the positioning, minarets of Hagia Sophia could be perceived as slender likewise forms of Galata Tower that is looming at the back. Sinan had added two minarets and a buttress to the structure, but the first minaret, made of wood, was added as soon as the conquest took place. Fatih has added a brick minaret overlooking Topkapı and later Beyazıt II added another made of stone to make it a pair.⁷⁷ According to this, there should be two minarets at the time of the game (or three depending on the state of the initial wooden one at the exact date), rather than the four that can be seen today. Assassin's Creed's Hagia Sophia has four minarets, but one of them actually looks separated from the others with its use of material that looks like brick due to reddish colour. It also overlooks Topkapı (a clear view of Topkapı grounds can be seen on it) although it is not the closest minaret to Topkapı. The reddish one is closest to the Constantine Column.



Figure 90: Hagia Sophia, Melchior Lorichs⁷⁸

⁷⁷ Goodwin, 279.

⁷⁸ Lorichs, part 6.

Lorichs' illustration also shows two minarets, one of them being red. The position of the red one appears to match the one in game as it overlooks the Column of Constantine. There are two buttresses supporting the main dome, which were missing in the game. These could be the Sinan additions mentioned in the above paragraph. Lorichs' portrayal of Hagia Sophia was praised for showing Hagia Sophia in an urban context in some detail for the first time.⁷⁹ It is believed that Hagia Sophia must have been perceived very differently back then. Today, some professors argue it stands more in isolation, separated from the city, due to preservation concerns.⁸⁰ It may be true functionally, as back then it could have a more central role in the city as a place of worship. However, a visitor to current day Istanbul would tell you that symbolically, Hagia Sophia still represents an important characteristic figure embedded in the city's culture, that is still recognizable due to its distinct image.

3.3.17 Grand Bazaar

Database in game talks up Grand Bazaar as "one of the earliest and most important projects" undertaken by Sultan Mehmet following the conquest. Called 'Grand' or 'Covered Bazaar', it was a huge enclosed hub of commercial trade. Interesting attention to detail here was that its close location to the Golden Horn waterfront gave merchants easy access to ships coming from all around the world, while the centralized location mainland ensured citizens had good access to its "bustling corridors". At the center of the complex, a fortified enclosure built by Mehmet II, called "Old Bedesten", provided traders storage of valuable material and luxury wares overnight. It is also mentioned that today Bazaar houses more than three thousand shops, with more than twenty thousand workers.⁸¹

⁷⁹ Westbrook et al, "Constructing Melchior Lorichs's Panorama of Constantinople". 71.

⁸⁰ Ibid, 65.

⁸¹ Ubisoft, "AC: Revelations".



Figure 91: Grand Bazaar entrance, AC: Revelations

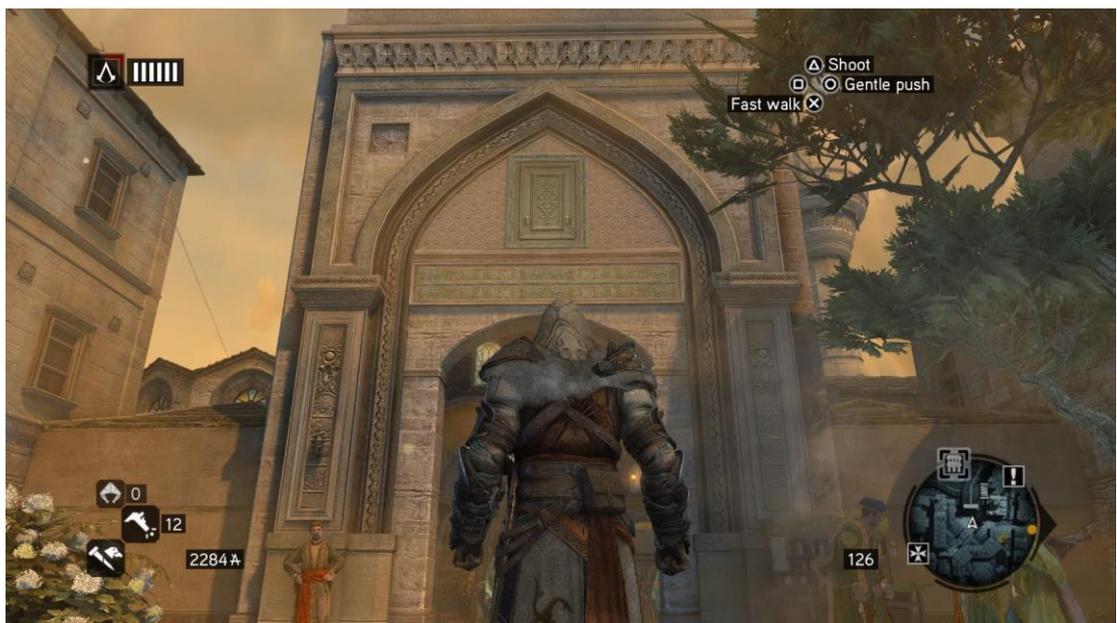


Figure 92: Grand Bazaar entrance, AC: Revelations

Looking at two different entrances to the Grand Bazaar, the only difference appears to be the plants that cover part of the sides on the uppermost picture. The game appears to use two different generic images as the entrances for Grand Bazaar. Ones illustrated above, which appear bigger and more monumental, were seen in three different places. A smaller one with a coloured window on it was seen at plenty more locations. Three

of those smaller entrances even appeared together at the same spot at a certain location, from an area that looked like an open courtyard, where players could re-enter the bazaar. The image below (Figure 93) shows one of the small entrances that lets players in the bustling marketplace. With its characteristic stained glass window above the arch, the small gate appears to be a generic entrance used by the game in many sections of the Bazaar.

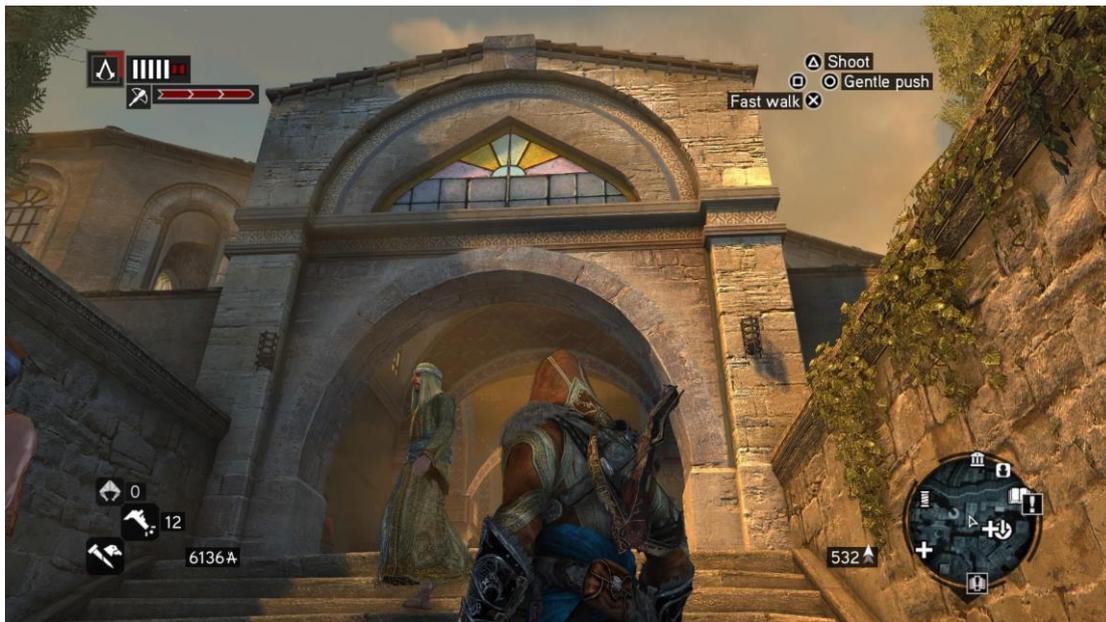


Figure 93: Grand Bazaar small entrance, AC: Revelations

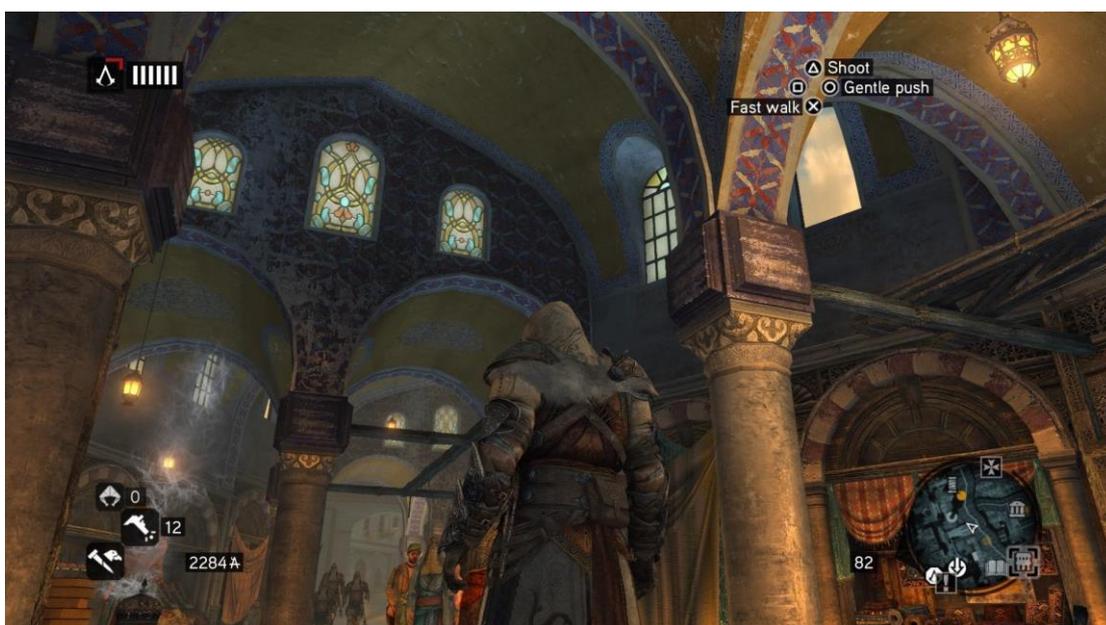


Figure 94: Grand Bazaar interior, AC: Revelations

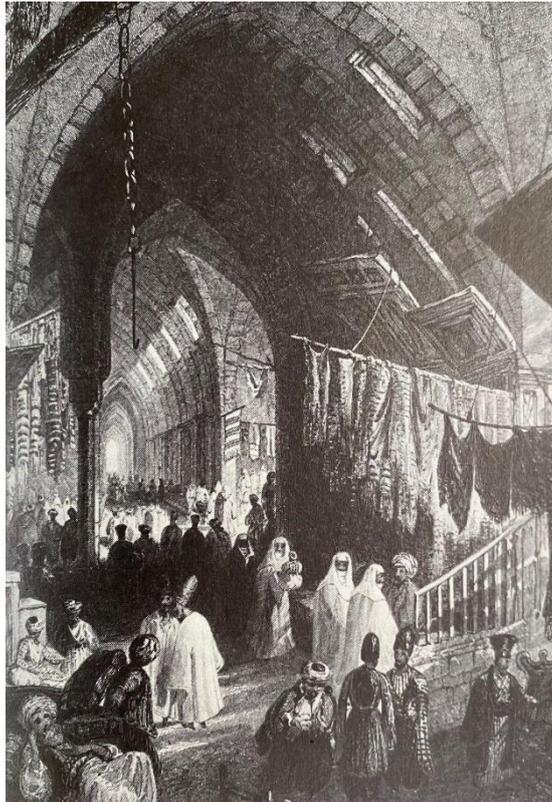


Figure 95: Grand Bazaar engraving, 19th century, Istanbul⁸²

Stepping into the Bazaar, the multi coloured architectural details such as vaults, arches welcome players into the dynamic and lively world of the famous trade market. During the Ottoman Era, bedesten was a unique architectural component of urban life. In the market district, bedesten was at the core of the commercial city life of an Ottoman town. Like in Bursa and Edirne, this was no different for Istanbul. A typical town had one bedesten, but in Istanbul, there were two which were seen as exceptional. The second one was added to cope with the increasing demands of fine fabric trade.⁸³ Use of carpets and spices adds to the realism of the representation of the bazaar in game:

⁸² Goodwin, 331

⁸³ Ibid.



Figure 96: Grand Bazaar interior, AC: Revelations



Figure 97: Grand Bazaar interior, AC: Revelations

Due to architecture preventing movements such as climbing (which is very uncharacteristic of the game) players find themselves mostly on foot, walking and following crowds in the Grand Bazaar which makes it very realistic in the sense that how one finds themselves in the hassle of human traffic visiting the bazaar today. Although some parts of it are still climbable, such as rails where players can slip in

and out by some of the windows left open, from the outside through the rooftops of the bazaar.

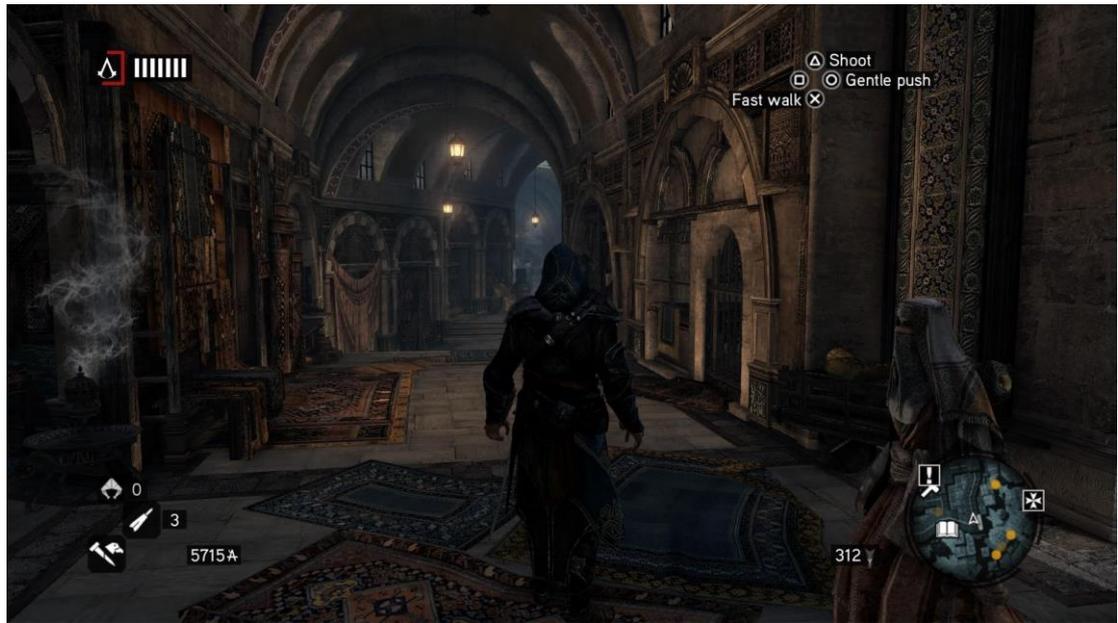


Figure 98: Grand Bazaar interior, AC: Revelations

Not every part of the interior of Grand Bazaar is bright and polychrome. This echoes the Bazaar's real world nature of having been made of different sections. Advancing inside the Bazaar, one can arrive at more tranquil and secluded parts. Place shown below resembles and speaks to a more Roman style, solid and permanent, exhibiting differences to dynamic, progressive multicolored leadways.



Figure 99: Grand Bazaar interior, AC: Revelations



Figure 100: Grand Bazaar, interior dome, AC: Revelations

Standing right below the domes to observe their details is also possible on the Bazaar. One of the gameplay aspects in Assassin's Creed Revelations, renovating shops for income, comes into play in Grand Bazaar more as “opening shops” and changing from their closed state seems to inject more life to the Bazaar, which elevates its overall makeup even more. One particular fictional element which seemed interesting was

inserting Piri Reis shop inside the Grand Bazaar. According to developers, putting most of the relevant historical characters in the same location (Istanbul in this case) is by design, despite its historical inaccuracy. Even so, despite being pure fiction, the decision to locate Piri Reis on the Bazaar could give us an insight into how makers of the game see things in a certain light, as they thought it would be appropriate to relate Piri Reis with Grand Bazaar.



Figure 101: Piri Reis' office, Grand Bazaar, AC: Revelations

3.3.18 Hippodrome

The game claims that Hippodrome was “one of the purest examples” of Constantinople’s classical Greek origins. Original structure dates back to pre Roman times, when the city was called Byzantium. Hippodrome was expanded and enhanced by Constantine the Great and was used for nearly 800 years. After 1200, it was on the brink of collapse when the 4th Crusade sacked the city on their way to holy land. When Byzantine Emperor Michael Palaoloigos recaptured the city in 1261, Hippodrome was in a poor state and no efforts were made on restoration. When Ottomans took over in 1453, all hope of renovation was lost due to “chariot racing not being amongst Turkish hobbies”⁸⁴.

⁸⁴ Ubisoft, “AC: Revelations”.



Figure 102: Hippodrome, at night, AC: Revelations

There is more than one way to reach Hippodrome on foot, the above picture example one route where the street leads to the location as Obelisk of Theodosius greets players standing tall. Upon the arrival of Hippodrome, two citizens can be seen reveling in the architecture and can be heard discussing, wandering the architecture, which was an interesting touch. Taking a correct position allows one to observe two obelisks of the Hippodrome at the same time:



Figure 103: Two citizens discussing architecture in front of Hippodrome, AC: Revelations



Figure 104: Two obelisks of the Hippodrome, AC: Revelations

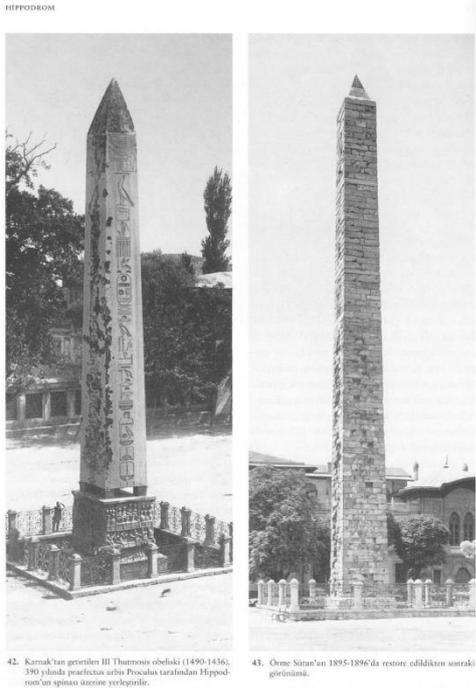


Figure 105: Obelisks at the Hippodrome, Istanbul⁸⁵

The game database talks about both of the obelisks, in addition to the Hippodrome itself. Obelisk of Theodosius is described as an authentic Egyptian obelisk commissioned by Pharaoh Thutmose III, which held a prominent position outside of the temple of Karnak in Egypt. Carved from an exquisite red granite, hieroglyphs on four sides are said to describe military victories of the Pharaoh. In 357 CE, obelisk was purloined by Roman Emperor Constantinus II and was taken to Alexandria in celebration of the 20th year of his reign. It remained there for 40 years until Emperor Theodosius removed it and moved to Constantinople in front of the Hippodrome where it stands on an ornate base specifically carved for this purpose⁸⁶

⁸⁵ Müller, Wiener, “İstanbul’un Tarihsel Topografyası”, 66.

⁸⁶ Ubisoft, “AC: Revelations”.



Figure 106: Obelisk of Theodosius, details at night, AC: Revelations

Getting close to the Theodosius Obelisk, one can see the details on it. It is also interesting that it is not climbable, which is quite a rare instance for the game. Below the human figures on the details of obelisk, there is also an inscription which could require further research:



Figure 107: Details in Obelisk of Theodosius, AC: Revelations

For the Walled Obelisk, the game states it was also called “Walled Column” or “Constantine’s Column”, which stood proudly at the center of Hippodrome. Despite fitting the “style of the Hippodrome”, it was actually built around 500 years later. Constantine VII repaired and added to the structure which gave its current name. After the conquest of Ottomans, Hippodrome was fully deserted and thus the obelisk became a go to spot for janissaries to train and compete in climbing contests⁸⁷.



Figure 108: Walled Obelisk at night, from the Hippodrome, AC: Revelations

Looking at the Walled Obelisk from inside the stepped section of Hippodrome, it could be seen as rising towards the sky as a continuation of the Hippodrome which could support the statement in game that the obelisk fits the style of its surroundings, with its stepped stones. Unlike the Theodosius Obelisk, Walled Obelisk is climbable which could be seen as support to the claim of janissary climbing activity at the location. Standing on top of the Walled Column, steps of the Hippodrome lay bare ahead of the player:

⁸⁷ Ubisoft, “AC: Revelations”.



Figure 109: Steps of Hippodrome, from Walled Obelisk, AC: Revelations



Figure 110: Steps of Hippodrome, at night, AC: Revelations

Standing on steps of the Hippodrome, the site is also navigable through as a spectator. Columns scattered around the top of the steps are also climbable, which sets one apart from a common spectator. While quite dark at night due to lack of illumination, inside sections are also reachable through archways, as in a dungeon. One activity observed

at the location was a citizen, laying on carpets and pillows, was seen smoking a shisha. Whether this was a common occurrence or leisure pastime around the particular area could be checked from historical records or witness reports.



Figure 111: Shisha smoking at Hippodrome, AC: Revelations



Figure 112: Hagia Sophia and Hippodrome, from Freshfield Album⁸⁸

⁸⁸ Freshfield Album.

While the Freshfield view of the Hagia Sophia and the Hippodrome was blocked in the game due to the buildings standing in between the two monumental landmarks, it was possible to view Hagia Sophia from Hippodrome taking a stand at an high point, such as standing on top of the Walled Obelisk:



Figure 113: View of the Theodosius Obelisk and Hagia Sophia, from top of the Walled Obelisk, AC: Revelations

From this location, the Column of Constantine also comes into view towards the right. It was also possible to see both the obelisks and the Hagia Sophia together from the top section of the stands at the Hippodrome. The Serpent Column in between the obelisks at the Freshfield view appeared to be missing at the Hippodrome in game. ‘Sultanahmet Meydanı’ of today, which is one of the liveliest public squares in the city, Hippodrome was called ‘Atmeydanı’ at the time of the Ottomans and appeared to be still in use. In the Hünername miniatures from the Topkapı Museum, Fatih can be seen together with his archers shooting arrows at the Serpent Column:



Figure 114: Hünername, Topkapı Museum

3.3.19 Forum of Constantine

An interesting parallel made inside the game about what the Forum of Constantine represents and the city of Istanbul. The forum is said to be built on the Second Hill of the city to commemorate Constantine the Great's ascendance to the Roman throne. Along with the Column of Constantine at its center, it is likened to the birth of a new city from the ashes of another. Why this monument is said to symbolize the "birth of a new city from the ashes of another" remains to be seen. The continuing sentences may shed some light; on May 11th 330 BCE⁸⁹, the city of Byzantium became Constantinople, Constantinopolis, or the "City of Constantine" after being introduced to christendom. Originally, the column has claimed to have been crowned by a statue of god Apollo but has weathered down over the years and endured many hardships which meant a high number of renovations. By the time of the Ottomans, both forum and the original forum are claimed to have shrunk considerably, whilst still being "treasured part of the city's history and character⁹⁰."

⁸⁹ Falls during the reign of Constantine the Great (306-337)

⁹⁰ Ubisoft, "AC: Revelations".



Figure 115: Column of Constantine, from street, AC: Revelations

In describing a route to Topkapı Palace, an account in Thomas Allom’s illustration book mentions a ‘Forum Augusti’ (unknown at this point of time) under the Greek Empire which was not entirely “choked up in narrow lanes” by Turks⁹¹. One can see these Byzantine and Roman structures surrounded by disorganized, chaotic narrow streets in the game influenced by sources similar to the one referenced above. Discussing how Istanbul might have been experienced differently back in time, academicians mention the Byzantine textual sources that describe the city as “densely juxtaposed, with narrow streets that framed the monuments, such as honorific columns”.⁹² One example supporting this view was shown above in the image presenting the Column of Constantine, from an opening across a street.

⁹¹ Allom, “Constantinople and The Scenery of Seven Churches in Asia Minor”, 6.

⁹² Westbrook et al, 65.



Figure 116: Column of Constantine, Melchior Lorichs⁹³

Lorichs' account shows a close distance between the Column and Hagia Sophia, as does in game. The column on the image above was also identified as Constantine Column by others. It was thought the height was exaggerated for drawing.⁹⁴ Towards the sea walls on Golden Horn below, the city is also said to be densely clustered, by looking at the Lorichs' drawing.

⁹³ Lorichs, part 8

⁹⁴ Westbrook et al, 72.



Figure 117: View of Hagia Sophia, from Column of Constantine, AC: Revelations

A nice view of Hagia Sophia while hanging from the Column of Constantine presents itself, with roofs of other buildings standing in between. It must be said that this postcard-like image was made possible while hanging from the column and rotating the point of view. This point and comparison with default spectacle in game would be elaborated further in section 3.5. An unnamed arcade exists around the area of Forum of Constantine, which connects different buildings and helps citizens walking around (and the player itself) navigate through:



Figure 118: Arcade on Forum of Constantine, AC: Revelations

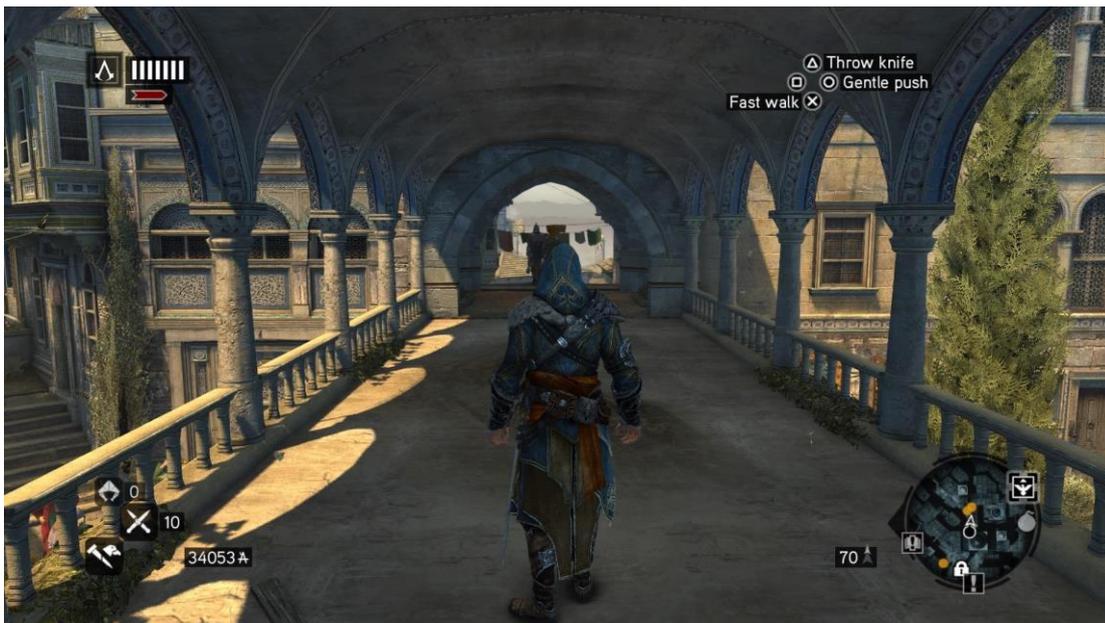


Figure 119: Inside the arcade on Constantine Forum, AC: Revelations

3.3.20 Galata District

As the game starts in the Galata District, it is designed so that it becomes like a base for the guild of assassins. According to Metin And, Galata had three districts⁹⁵, which on the surface of the game could not be observed as only the city itself had districts named. Inside the headquarters of Assassin's guild in Istanbul, finely erected columns and vaults give the underground location a crypt-like feel, which was probably done on purpose by designers to fit the secrecy theme of assassins as they work in the shadows:



Figure 120: Interior of Assassin's HQ, Galata District, AC: Revelations

⁹⁵ And, 91.



Figure 121: Interior of Assassin's HQ, Galata District, AC: Revelations

It could be said that there is an excessive amount of carpets used for decoration, some even hanging from the rafters, which seems an odd choice at first sight. By pure speculation, this might be done to counter the roman style architecture elements used to add more 'Turkish' feel as the assassins of the guild had Turkish origin. In addition to carpets, pillows and smokes can be seen as part of the establishment. Going deeper into the headquarters, a library greets players inside a vault. The use of shades of brown might have been done to add to the 'old' feel of the books and the library:



Figure 122: Interior of Assassin's HQ, Galata District, AC: Revelations



Figure 123: Interior of Assassin's HQ, Galata District, AC: Revelations

Upper floor of the assassin's headquarters' example use of the wooden material could be seen as incorporating different styles into the same building, when combined with the 'Roman' style crypt at the lower floor. From his collection of many witness reports, Metin And says that "Turks do not know how to build houses in the German and Greek style. For them, sheltering from weather such as rain and snow was enough.

They did not expect more.”⁹⁶ According to Wratislaw, city streets were narrow and houses were “poor”. At the same time, it was evident Turks put a lot of resources into building mosques, baths, hospitals, caravanserai and were capable of producing magnificent buildings.⁹⁷

A Russian traveler in Constantinople, 15th century, reports an hall in which “the sun, the moon, and the stars succeeded each other as in heaven”⁹⁸. While this could be a hall inside Topkapı Palace, or any other private residence, location being unknown, it is still significant in interior description. Sedat Hakkı Eldem says that because there were no surviving Turkish houses from the 15th century, interior decoration of houses and palaces of the period can not be known for certain⁹⁹. Ertuğ also mentions that except for the living quarters of Topkapı Palace, little remains of the pre-18th century vernacular heritage of Ottoman Istanbul¹⁰⁰.

⁹⁶ And, 51.

⁹⁷ Ibid, 51.

⁹⁸ Grabar, “From Dome of Heaven to Pleasure Dome”, 234.

⁹⁹ Eldem.

¹⁰⁰ Ertuğ, 194.

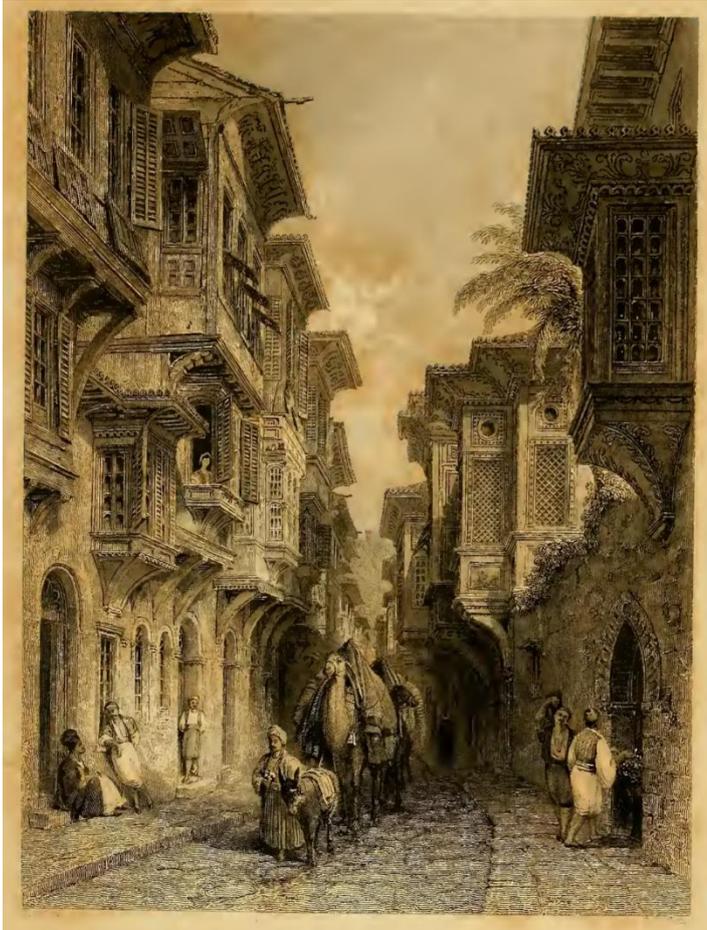


Figure 124: A street in Smyrna, Thomas Allom¹⁰¹

¹⁰¹ Allom, 5.



Figure 125: A street in Bayezid District of Istanbul, AC: Revelations

While not specifically Istanbul, the illustration by Thomas Allom could very well be mistaken as artwork done for the game itself, as it encapsulates the streets and houses, with even a touch of palm tree. This, or other similar drawings could very well be a source of inspiration for developers in their recreation of 16th century Istanbul.

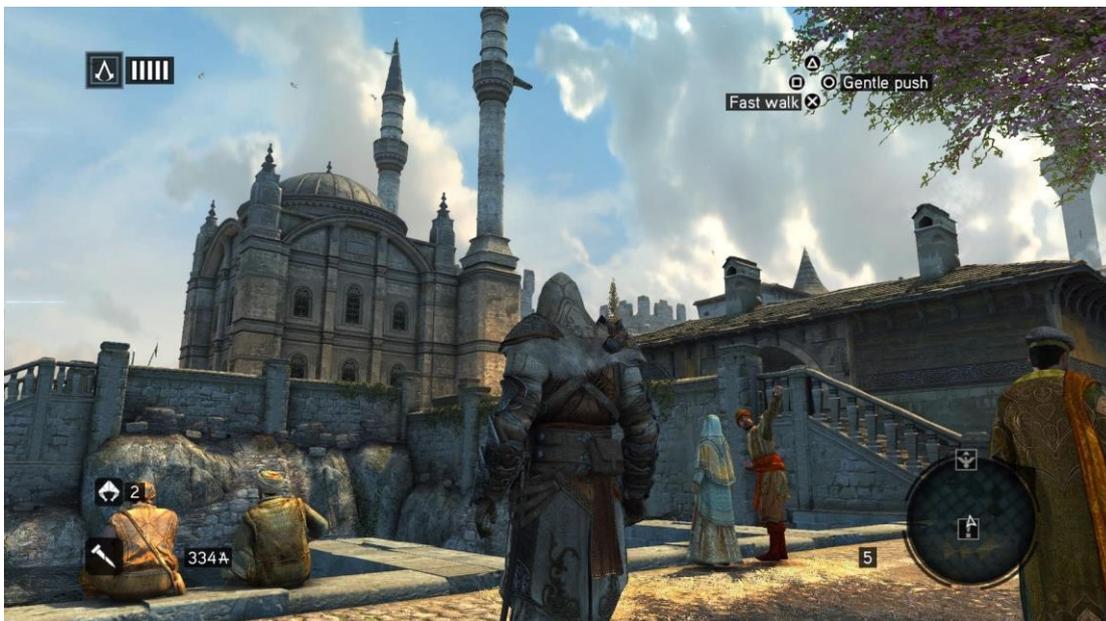


Figure 126: Mosque in Galata District, AC: Revelations

A mosque dubbed ‘Galata Mosque’ with a particular, elaborated style catches the player’s eye on the Galata District. The location of the mosque can be found in the map of Galata district shared in section 3.3. What has influenced game developers’ decision to put a mosque in this area, with this style, could be further investigated in other studies.



Figure 127: Mosque and Galata Tower, in the Galata District, AC: Revelations

In “Constructing Lorichs’ Panorama of Constantinople”, academics, through their digital modeling concluded that first viewing point of Lorichs on his drawing was “15 meters above sea level, close to water line of Golden Horn and opposite a point between Hagia Sophia and Constantine’s Column.”¹⁰² This suggests that Lorichs drew by standing on walls of Galata (not the tower) overlooking the Golden Horn. The potential to recreate this initial viewing point in game was an exciting proposition. Although this has not been managed to be recreated successfully, which probably speaks to the limitations of the game regarding accuracy.

¹⁰² Westbrook et al. “Constructing Lorichs’ Panorama of Constantinople”. 82.

3.3.20.1 Galata Tower

Information in the game about the Galata Tower reads it was built by Genoese settlers in 1348, as an expansion of their colony on the north shore of the city. The tower was a key component to a bigger defensive fortification, most of which had been dismantled by the time of Ottomans. Allegedly the tower witnessed one of the earliest unpowered attempts at human flight in the 17th century. The reports from a traveling historian stated Hezarfen Ahmet Çelebi (written as Herzafen Ahmet Chelebi in game) strapped himself into a home made glider on a fine day in 1632 and threw himself off the tower's cornice. The one and only eyewitness saw the flight take over Galata and across the Bosphorus, with Hezarfen landing on shores of Asian continent safe and sound. Amazed by this supernatural show of abilities, Sultan Murad paid Hezarfen handsomely and then banished him to Algeria where he died some years later. In the 18th century, Ottomans started to use the tower to spot fires in and around the city. The information here gets interesting as by the 20th century, only fires to be put out are at the dancefloors top of the tower.¹⁰³ Mention of the dinner and dancing activities could be evidence that the game went on to combine modern with the past.



Figure 128: Galata Tower, AC: Revelations

¹⁰³ Ubisoft, "AC: Revelations".

Standing on top of the tower, it is possible to observe the skyline of Istanbul in a panoramic view. One of these viewpoints was shared on the first page. There is also an in game achievement that requires players to jump from Galata Tower with a parachute straight into the Golden Horn. This may be why the story about Hezarfen was shared on the database.

3.3.21 Topkapı Palace

The game starts by describing the Topkapı Palace from the state of previous palaces of the Byzantine Era. In the last years of the Byzantine Empire, many once great imperial palaces were lying in ruins due to years of fighting and economic struggle. After the conquest of the Ottomans, Sultan Mehmet II chose a strategic spot top of the First Hill at the tip of the peninsula, over all previously developed imperial sites. Dubbed ‘Yeni Sarayı’ or ‘New Palace’ at first, construction for the new palace of the Sultan began in 1459. While it was completed around 10 years, every Sultan who came afterwards added something new to the complex. The biggest expansion the palace saw was during the 50 year reign of Sultan Suleiman the Magnificent. For many centuries, Topkapı Palace is said to serve as the center of the Sultan's power. It is claimed to have everything the Sultan needed in order to oversee the Empire; Harem for raising and educating wives of future royalty, Divan for meetings with Sublime Porte - the barrack of janissaries - and a personal residence. The game ends its entry for Topkapı with saying some Sultans preferred other places, such as Edirne where Bayezid II relocated himself for a brief period of time at the end of his reign, which gave the assassins “more freedom in wandering the palace grounds, without attracting as much attention”¹⁰⁴.

¹⁰⁴ Ubisoft, “AC: Revelations”.



Figure 129: A building inside the Topkapı complex, AC: Revelations

The particular building may show a glimpse of the style used in depicting Topkapı. It evokes the current day “Arz Odası”. The building below, with an arcade, illustrates some of the architecture used in Topkapı complex:



Figure 130: Architecture in Topkapı, AC: Revelations



41. Arcades of the Enderun court, Topkapı Palace (classical period)

Figure 131: Arcades of the Enderun court, Topkapı Palace¹⁰⁵



Figure 132: Architecture in Topkapı, AC: Revelations

¹⁰⁵ Ertuğ, 90.

Details about the architecture can also be noticed. From the above, the design might have been created to make it look like Turkish tiles. According to Sedat Hakkı Eldem, tiles were the most precious element of interior design and Topkapı Palace housed some of the examples from as early as the 15th century. This style of decoration was prevalent until the 17th century¹⁰⁶. From them, the distinguished İznik tiles of the 16th century, with their unique flower motifs, spring life to one of the richest and most famous wall ornaments. Maybe their lack of inclusion in the game is a signal how hard it is to replicate to give justice.



42-43. Arcade of the Chamber of the Sacred Mantle—Hırkası Saati, Topkapı Palace

Figure 133: Arcade of the Chamber of Sacred Mantle, Topkapı Palace¹⁰⁷

¹⁰⁶ Eldem.

¹⁰⁷ Ertuğ, 91.



Figure 134: Architecture in Topkapi, AC: Revelations



Figure 135: View of the open area at Topkapi, AC: Revelations

Looking down to the open area in Topkapi complex from top of one of the buildings, reveals mosaic tiles on the open ground. With their rectangular shape and possibly abstract geometric designs on it, can these be interpreted as carpets carved on the floor? Whether Topkapi complex had mosaics on its outer court or these are pure fiction of the game could be further checked through historical sources. From the top

of the tower at Topkapı complex, it is possible to view Hagia Eirene and Hagia Sophia on the same screen:



Figure 136: View of Hagia Eirene and Hagia Sophia at night, from Topkapı, AC: Revelations

3.3.22 Hagia Eirene

In the game, Hagia Eirene, or the “Holy Place” is noted as the second largest Byzantine church in Constantinople. Sitting just inside the walls of Topkapı Palace on First Hill, it was restored from a near ruined state by Justinian in the 6th century. For nearly one thousand years, it served as an Orthodox church. Due to its close location to the new royal seat, it is claimed janissaries of the Sultan used this building as armory after the Ottoman capture of the city. Meanwhile, today it is used for neither purposes and main use is as a music hall¹⁰⁸. Hagia Eirene’s use as an arsenal was confirmed through multiple sources.¹⁰⁹

¹⁰⁸ Ubisoft, “AC: Revelations”.

¹⁰⁹ Kuban, 185. Erkal, 129.



Figure 137: Hagia Eirene, AC: Revelations



Figure 138: Topkapı Palace, from Hagia Eirene, AC: Revelations

Standing on top of the Hagia Eirene's dome, one can see Topkapı Palace clearly thanks to its proximity. Tower of the 'Adalet Kasrı' is also visible on the inside of the palace., which was also built during the Fatih Era.¹¹⁰ Based on the position of Hagia

¹¹⁰ Kuban, 418.

Eirene, the gate in front of the character on the image above would be ‘Bab-üs Selam’ or ‘The Gate of Salutations’. Kuban argues that the two towers of the gate were built in the Fatih Era, which would mean their inclusion at the time of the game would be valid. With these towers, the gate is a reference to a ‘castle’¹¹¹. Based on the established positioning of the gate, the entrance embedded on the city walls that leads to the opening which includes Hagia Eirene and the Babüsselam would be ‘Bab-1 Hümayun’:



Figure 139: Gate on the Topkapı Palace, AC: Revelations

The huge stone wall gate has no inscription, but has floral design patterns. In the above image, one can notice the street lamps on the side of the pavement that leads to Topkapı Palace, which seem rather out of place. Built in 1478-79 during the Fatih period, Bab-1 Hümayun connected the outer courtyard of the palace with Hagia Sophia square. This connection was also true in the game. However, the kiosk on top of the gate, for the residence of post guardians¹¹², appears to be missing, as the castle-like battlements crown the structure. With the established positions of Hagia Eirene and the two gates in between, a miniature painting from Hünername hints at the location of ‘Deavi Kasrı’ which today only has remains of it:

¹¹¹ Ibid, 187.

¹¹² Kuban, 187.

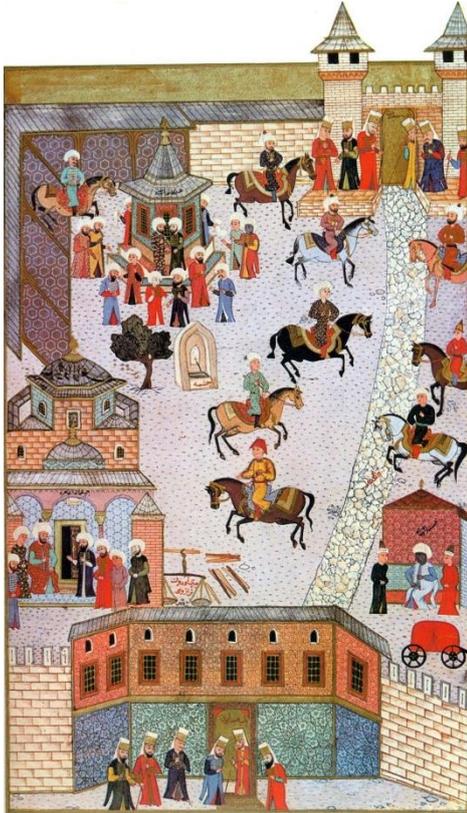


Figure 140: Hünername, Topkapı Museum



Figure 141: Deavi Kasrı location, AC: Revelations

Left of the Babüselam, next to Hagia Eirene, there appears a structure somewhat of a similar form shown in the miniature in game. The fountain-like structure, however, does not appear to be unique, as the exact image was also observed right outside the outermost gate that was identified as Bab-1 Hümayun. This area, the first open

courtyard after entering from the Bab-ı Hümayun was called ‘Alay Meydanı’. In game, Topkapı Palace, including this section, was highly restricted and heavily guarded. The last sentence in the database information, that “assassins could roam freely when the sultan was in Edirne” was likely a reference for the fact players are restricted in their movement inside the grounds, without alerting the guards.

3.3.23 Yerebatan Cistern

To be exact, players of the game reach through Yerebatan Cistern from the Galata District, as a secret passageway from a bookstore of one of the main fictional characters (Sofia) leads to the underground ‘tomb’. They are led by story progression and can not avoid encountering the location. They can not reach from the map during their travels of the city, which is why it was not put in a district on this thesis. According to the game, the cistern fell out of use and was forgotten by most of the residents of the city after the fall of the Latin dynasty and the reestablishment of Palaiologi. By the time Ottomans took over the city in 1453, all common knowledge of the site was lost. Only the rumours of the existence of the cistern remained in the minds of the imaginative and hopeful, supported by the stories of the people who claimed to have “fishing holes in the basement of their houses”. To the amusement and fascination of Suleiman the Magnificent, Cistern's entrance was rediscovered during the latter stages of Sultan’s reign by a visiting diplomat who passed on his findings¹¹³.

¹¹³ Ubisoft, “AC: Revelations”.



Figure 142: Inside the Yerebatan Cistern, AC: Revelations

Yerebatan is designed as an underground tomb where players have to go through a platform style mini game to progress the story. In the picture above, huge colons with vaults await the player, inviting them to embark on a pathway. A low level of water can also be seen.



Figure 143: Ceiling inside Yerebatan Cistern, AC: Revelations

A ceiling inside the cistern combines mosses with many vaults next to each other. A light beam from which is likely the city above illuminates the underground underwater location. At the end of the Cistern, a statue holding a key (what players collect throughout the story) awaits players:



Figure 144: Statue inside the Yerebatan Cistern, AC: Revelations

3.4 Other Features

There are other elements used in world building purposes. The use of palm trees catches the eye at first glance, which seems dubious initially considering the current day state of Istanbul. There is a possibility that they have been placed by the developers to give the city an ‘exotic’ feel. One could assume this as a stereotypical view sometimes associated with Arabic cultures in Western representations of the East. Yet, going to Istanbul today, it is possible to observe the palm trees outside of the Hagia Sophia. Furthermore, maybe prejudice in this case is expecting a bias towards a particular direction. Whether there are any other stereotypical applications found in Assassin’s Creed’s Istanbul could be further investigated. Another world building element which can be encountered quite frequently by the player is the use of Turkish language. Turkish sentences can be heard by the player when they are experiencing the city. The language used in the game, either by main character Ezio or through citizens, maybe gives a hint on where the game stands between the East vs

West debate. After throwing coins to the ground, folk can be heard saying “para everywhere” (para: money in turkish). While recruiting a fellow assassin, Ezio can be heard saying “fight for an honorable cause, arkadaşım” (arkadaşım: my friend in turkish). These funny English and Turkish mixtures may give a clue on where developers stand in the Orientalist debate in a subconscious way, a clumsy mixture of East and West. Location of the places also come to play in what you can hear in the game, adding a layer in experiencing the city. For instance, from the minaret of Sancaktar Mosque (which has close proximity to water), one can hear the sound of sailors. In the future, this also provides another area where architectural history studies can focus on, with use of software.

In a game and series in general that incorporates many of the important historical figures, the lack of Mimar Sinan or at least an interpretation of it was at best disappointing and could be noteworthy. In 1513, historical records show Mimar Sinan got admitted to janissary, which is around the time Assassin's Creed Revelations take place (1511-1514)¹¹⁴. Doğan Kuban, describing Mimar Sinan's importance for Ottoman architecture, criticizes the Western world for being a prisoner of their own culture so much that blocks them from appreciating works such as Selimiye¹¹⁵. In this light, it could be said that developers did not see Selimiye at the same level of the likes of Pantheon, Colosseum, where they went out of their way to develop a story and game around it. While being encapsulated by Islamic culture, Ottomans were progressing simultaneously along the classic Mediterranean realm and the West. This unique multifaceted nature of Turkish civilization and art is what separated itself from other Eastern Islamic countries. In this vein, Turkish architecture including Sinan, fed by a diverse source but manages to make its own mark, is part of the shared universal culture¹¹⁶. In 1543, besides the converted Hagia Sophia, there were 3 major mosques in Istanbul. Through Goodwin's own words while discussing Sinan's first major work, Selim was mentioned to be merely a grand room, Fatih Mosque was stiff and out of

¹¹⁴ Barrie, “Sacred In-Between”, 179.

¹¹⁵ Kuban, 113.

¹¹⁶ Kuban, 113.

date and similarly Beyazit II Mosque also lacked suppleness.¹¹⁷ Istanbul is not the only location player visits in the game, although it is where they spend the majority of their time. Masyaf (in North Syria) and Cappadocia also make their way into the story. Clearly inspired by the real world Derinkuyu, Cappadocia, developers' interpretation of the location seems mostly fictional, as the player accesses the secret underground location by sea. Thus, more focus was given to Istanbul shown in the game.

3.5 Future of Assassin's Creed

The relationship between a human and the dome is said to be crucial in understanding the development of Ottoman architecture¹¹⁸. Seeing yourself from outside in relation to architecture, due to the game's genre being "3rd person roleplay", could be helpful in this regard to experience Ottoman architecture. However, this view also creates a problem. As evidenced through most of the thesis, usually the figure of the character blocks some part of the view. This is mainly due to the genre of the game as mentioned, the image on section 3.3.19, the view of the Hagia Sophia while hanging from the Column of Constantine, however echoes games that are "first person". While likely not apparent to the casual gamer, for a one who goes on a touristic tour inside the game the character blocking the view¹¹⁹ could get annoying and the workaround shown in the image referenced at the section is likely to be missed. In later games (by a different developer) that did not support first person view and also took part in real life cities, this was solved by a "snapshot mode", where players can switch to a photograph mode to take "snaps"¹²⁰. However, the date in game having the technology of photography and in the case of Spiderman, who is an undercover photographer, camera being part of the lore must certainly fit the game better. 'The Matrix' like technology and current day elements of Assassin's Creed lore would have enabled a

¹¹⁷ Goodwin, 207.

¹¹⁸ Kuban, 110.

¹¹⁹ One instance of this can be observed on the image shared in Sancaktar Hayrettin Mosque (Figure 38), where the figure of the character blocks a huge portion of the building.

¹²⁰ Insomniac Games, Marvel's Spiderman.

convenient route to add a feature like this and must certainly be a welcoming addition for people interested in sightseeing inside these games. Whether something similar will be added to future games remains to be seen.

Looking at a possible direction the franchise is heading to, a project called Assassin's Creed: Infinity stands out and could have some implications¹²¹. It aims to encapsulate multiple time periods and evolve over time, where every game with different time periods connects to each other in some way. This vision follows a similar trend in other mediums such as cinema. Marvel Studios, currently owned by the Walt Disney Company, has been one of the most consistently successful box office earners. Marvel Cinematic Universe, where every movie and TV series connect with each other in some way to create a shared universe has especially been very successful at the box office. Following this trend, Ubisoft might have a similar vision for their franchise that creates a timeline of history to be experienced by players in a similar way. A very small portion of the timeline of the entire series is shared below¹²²:

¹²¹ Mol, "AC: Infinity", accessed at: <https://interactivepasts.com/blog-posts/stratigraph/assassins-creed-infinity/>.

¹²² "History is Our Playground"

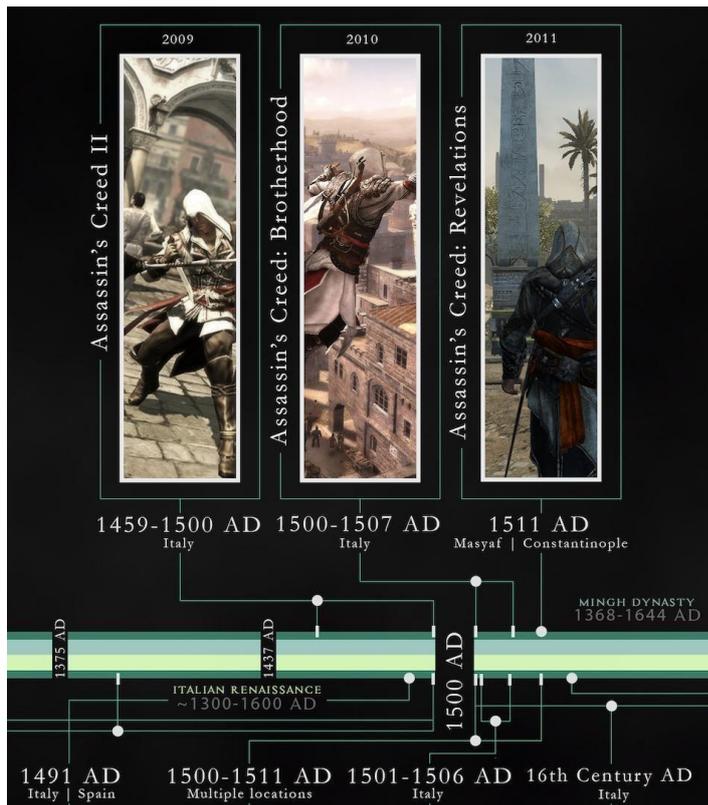


Figure 145: A portion of the timeline of Assassin's Creed games¹²³

This would indicate that observing the progression of architectural history through time in a wide spectrum could be made possible. In this sense, whether Ubisoft or any other developer manages to undertake such a massive scaled project, historical accuracy and a correct representation of a culture or at least one that is reasonable would become even more vital, added by the fact video games gaining more popularity each day and becoming a huge part of the culture of this generation.

¹²³ Entire timeline can be accessed at: https://value-foundation.org/AC_Legacy_SAA.jpg

CHAPTER 4

CONCLUSION

In regards to Melchior Lorichs' 16th century panorama of Istanbul, Lorichs' inclusion of his self portrait¹²⁴ in the view has been interpreted as an "attempt to place himself at the scene of historic engagement between East and the West". The reason Lorichs' work has been seen as groundbreaking is because it avoided earlier symbolic representations and gave equal emphasis on the Ottoman and Byzantine structures.¹²⁵ Findings of this study show that the high number of Byzantine/Roman works compared to the original Ottoman ones present in the Assassin's Creed game makes Assassin's Creed fail in that regard. The date chosen specifically for the game to take place, right after the Ottoman conquest of Istanbul, could mean there would be more Byzantine works rather than Ottoman due to the fact that there hasn't been enough time for Ottomans to build and make their mark on the city. However, the date chosen shows a certain decision made by the developers, over other alternative options. Especially after seeing how loose they can be with real life historical characters, for the sake of story.

In their digital analysis of the two very important historical visual documents, Prospect of Constantinople by Melchior Lorichs and the view of Hippodrome and Hagia Sophia in Freshfield by an unknown artist, Westbrook and the other professors conclude a probabilistic topography of 16th century Istanbul. They advocate for digital works that deal with probabilities and hypotheses, over factual representations. They underline the need to avoid dealing with certainties but work in fields of probability. According

¹²⁴ Lorichs, part 11.

¹²⁵ Westbrook et al, 82.

to them, digital modeling of the historic material should be studied for the ultimate goal of recovering the lost architecture.¹²⁶ To show these fields of probability, technology, with games constituting a huge piece of the cake, could offer an efficient method. Here, the proposal would be to use these games as tools at the first stage, rather than final representation. Games may not have to be the tools themselves, but the technology they are based on. To achieve this, partnership between academicians and developers would be key. Architectural history professors can also use the games to teach elements of past architecture at an elementary level to their students. Due to the high quality visuals, and active modes of participation, they could prove to be an effective method for learning or to instigate further research.

When players are following through a story, or competing against each other, they are being exposed to historical truths, sometimes without even realizing themselves. This is enabled by games such as Total War and Assassin's Creed. Virtual adventures could become a trend of the present and future, which would ask for a virtual rebuild of the world we know or knew. It could be done to preserve what is currently left standing in the outside world, or to recreate something already lost, inaccessible. In addition to creating awareness about real life cities and monuments, making people more knowledgeable without them even realizing, virtual exploration mediums like video games make locations more accessible on a worldwide scale, especially for those who would have no means to travel. The knowledge given to players would most likely be at a surface level, although it could instigate further interest. De Groot describes this as "historical awareness through an active engagement with the representation of a past"¹²⁷. In this regard, the representations shown in video games become important in their responsibility to stay true to facts and historical records. The main topic covered in this thesis was the elements of the game Assassin's Creed: Revelations attributed and related to 'Turks'. Towns and architecture in the game and how designers decided to apply real life locations, historical facts in their own context were studied and deserve more study. In Assassin's Creed, players' own choices have no consequential effect in the world as they are led to follow through a linear story by

¹²⁶ Westbrook et al, 77.

¹²⁷ De Groot, "Consuming History", 133.

design. In a game celebrating ‘freedom’ and ‘free will’, this seems to be achieved through architecture. Within the boundaries of the created world, players are free in their roaming around the city. A deep dive on this ‘sandbox’ space can in fact reveal its true nature and whether players are made to follow a certain pattern. How the recurring themes of the real life world today seen in other mediums play out in game’s story could ask more research, such as possibly a critical discourse analysis to reveal the game’s socio-psychological characteristics.

In the case of Assassin’s Creed, the decision to revolve the story around 1511 seems interesting. Coupled with the data in game and high number of Roman-Byzantine architecture compared to original Ottoman, choosing the date just before Sinan, the explosion of the creativity in Ottoman architecture could be deemed suspicious at best. The explanation that the date was convenient for the story as it concluded the chapter of the main character in the story, Ezio, could be an excuse. However, in a game series where characters show plenty of variety from one game to the next, this shows a decision and a certain path chosen. This is further amplified by the fact that buildings constitute a big part of the game, and not just presented as decoration or have a side role to provide background. This also appears to be not down to a lack of research and ignorance, as shown through the thesis that there is plenty of historical material that proves the amount of work done in this regard. Considering the high number of cultures and uncharted places left aside a revisit to Ottoman and back to Turkish culture seems unlikely in the immediate future. With this in mind, the decision to not cover the period of Sinan could only be restored by other means such as Discovery Tour, but whether Ubisoft or any other similar game developer would put the time and resources in for mainly educational purposes would remain to be seen. Even still, this should not be a deterrent to the potential of video games providing a platform in the future as a purposeful tool in architectural history studies. Regarding architecture, the beauty is that despite all the efforts to create false narratives and to overlook, the art, as in Sinan’s works, Ryōan-ji, Sydney Opera House, and many more... will continue to survive and thrive throughout humanity by presence, live through the lens of the media, or continue to writhe for life on papers.

REFERENCES

Ertug, Ahmet, and Maggie Quigley Pinar. *Istanbul: Gateway to Splendour: A Journey Through Turkish Architecture*. 1986.

“Mausoleum of Augustus.” *Mausoleo Di Augusto*, <http://experience.mausoleodiaugusto.it/en/chapter-02>. Accessed May 06, 2022.

Spring, Dawn. “Gaming History: Computer and Video Games as Historical Scholarship.” *Rethinking History - The Journal of Theory and Practice*, vol. 19, no. 2, 2014, pp. 207–221., <https://doi.org/10.1080/13642529.2014.973714>.

“Knowledge at Play.” *VALUE Foundation*, <https://value-foundation.org/>. Accessed May 06, 2022.

“Discovery Tour by Ubisoft: Teacher Learning Resources: Ubisoft (UK).” *Ubisoft*, <https://www.ubisoft.com/en-gb/game/assassins-creed/discovery-tour#5NJV7EibkDuphxBCK5bCOo>.

Rice, Hannah Elisabeth. “Exploring the Pedagogical Possibilities of Applying Gaming Theory & Technologies to Historic Architectural Visualisation.” *University of York*, 2014.

Galloway, Alexander R. *Gaming: Essays on Algorithmic Culture*. University of Minnesota Press, 2006.

“Discovery Tour: Ancient Greece Curriculum Guide.” *Ubisoft*, McGill University & Ubisoft, <https://www.ubisoft.com/en-us/game/ancient-greece/curriculum-guide>. Accessed May 06, 2022.

Favro, Diane. “In the Eyes of the Beholder: Virtual Reality Re-Creations and Academia.” *Imaging Ancient Rome: Documentation, Visualization, Imagination*;

Proceedings of the Third Williams Symposium on Classical Architecture, 2006, pp. 321–334.

Westbrook, Nigel, and Rene Van Meeuwen. “Reconstructing Sixteenth-Century Istanbul: The Use of Digital Modeling as an Heuristic Tool in Architectural History Research.” *Architectural Theory Review*, vol. 18, no. 1, 2013, pp. 62–82., <https://doi.org/10.1080/13264826.2013.792852>.

Saga, Manuel. “What It's Like to Be an Architectural Consultant for Assassin's Creed II.” *ArchDaily*, ArchDaily, 7 Oct. 2015,

<https://www.archdaily.com/774210/maria-elisa-navarro-the-architectural-consultant-for-assassins-creed-ii>. Accessed May 06, 2022.

Archontides, Adonis. “Press X to Feel: On The Current State of Videogames.” *London College of Communication*, 2014, Chapter 3: The Artistic, pp. 20-25.

Ebert, Roger. “Okay, Kids, Play on My Lawn: Roger Ebert.” *Roger Ebert / Roger Ebert*, 1 July 2010,

<https://www.rogerebert.com/roger-ebert/okay-kids-play-on-my-lawn>.

Accessed May 06, 2022.

Totilo, Stephen. “New Assassin's Creed Changes Series' Signature Message About Diversity.” *Kotaku*, Kotaku, 23 Oct. 2015,

<https://kotaku.com/new-assassins-creed-changes-series-signature-message-ab-1738263702>. Accessed May 06, 2022.

The Creative Assembly. *Medieval II: Total War*. Microsoft Windows, SEGA, Tokyo, Japan, 2006.

The Creative Assembly. *Medieval II: Total War: Kingdoms*. Microsoft Windows, SEGA, Tokyo, Japan, 2007.

Champion, Erik. *Game Mods: Design, Theory and Criticism*. ETC Press, 2012.

Fassbender, Eric. “Use of ‘The Elder Scrolls Construction Set’ To Create a Virtual History Lesson.” *Game Mods: Design, Theory and Criticism*, edited by Erik Champion, pp. 67–87.

The Creative Assembly. *Empire: Total War*. Microsoft Windows, SEGA, Tokyo, Japan 2009.

Gann, Jack. “Walking in the Virtual City: *Assassin’s Creed* and the Armchair Flaneur.”

Ubisoft Entertainment. ”Assassin’s Creed: Revelations”. *Assassin’s Creed: The Ezio Collection*, Playstation 4, Ubisoft: Montreal, 2016.

Smith, Dan. “History in the Making: How Constantinople Was Built for Assassin's Creed.” *WIRED UK*, WIRED UK, 17 Nov. 2011,

<https://www.wired.co.uk/article/history-in-the-making>. Accessed May 06, 2022.

“Assassin's Creed: Revelations Interactive Map.” *Map Genie*,

<https://mapgenie.io/assassins-creed-revelations/maps/constantinople>. Accessed May 06, 2022.

Sumner-Boyd, Hilary, and John Freely. *Strolling Through Istanbul: The Classic Guide to the City*. Redhouse Press, 1972,

<https://archive.org/details/strollingthrough0000sumn/mode/2up>. Accessed May 06, 2022.

Kuban Doğan. *Osmanlı Mimarisi*. Yapı-Endüstri Merkezi, 2007.

Goodwin, Godfrey. *A History of Ottoman Architecture*. Thames and Hudson, 1987.

And, Metin. *16. Yüzyılda istanbul: Kent, Saray, Günlük Yaşam*. Yapı Kredi Yayınları, 2011.

Çetinkaya, Haluk, and Halil İbrahim Düzenli. “İstanbul'un Bizans Dönemi Mimarisi.” *Antikçağ'dan XXI. Yüzyıla - Büyük İstanbul Tarihi*, edited by Coşkun Yılmaz, ISAM, Istanbul, 2015, pp. 24–57.

Yoncacı Arslan, Pelin. “Towards a New Honorific Column: The Column of Constantine in Early Byzantine Urban Landscape.” *METU Journal of the Faculty of Architecture*, vol. 33, no. 1, 2016, pp. 121–145., <https://doi.org/10.4305/metu.jfa.2016.1.5>.

The Freshfield Album, Trinity College, Cambridge,

<https://mss-cat.trin.cam.ac.uk/Manuscript/O.17.2/UV#?c=0&m=0&s=0&cv=0&r=0&xywh=-2983%2C-279%2C9427%2C5576>. Accessed 6 May 2022.

Özgüven, Burcu. “A Market Place in the Ottoman Empire: Avrat Pazarı and Its Surroundings.” *Kadın/Woman 2000 - Journal for Women's Studies*, pp. 67–86., <https://doi.org/10.33831/jws>.

Lorck, Melchior. *Prospect of Constantinople*. 1559, Leiden University Libraries, <https://digitalcollections.universiteitleiden.nl/view/item/2026523>. Accessed 6 May 2022.

Erkal, Namık, and Halil İbrahim Düzenli. “İstanbul Erken Dönem Osmanlı Mimarisi.” *Antikçağ'dan XXI. Yüzyıla - Büyük İstanbul Tarihi*, edited by Coşkun Yılmaz, ISAM, Istanbul, 2015, pp. 80–140.

Kuban Doğan. “Sinan'ın Sanatına Sahip Çıkmak.” *Türk Ve islâm Sanatı Üzerine Denemeler*, Arkeoloji Ve Sanat Yayınları, İstanbul, 1982, pp. 107–114.

Eldem, Sedad Hakkı. *Türk Mimarî Eserleri - Works of Turkish Architecture*. Yapı Kredi Baskısı, 1974.

Westbrook, Nigel, et al. “Constructing Melchior Lorichs's Panorama of Constantinople.” *Journal of the Society of Architectural Historians*, vol. 69, no. 1, 2010, pp. 62–87., <https://doi.org/10.1525/jsah.2010.69.1.62>.

Müller-Wiener Wolfgang, and Sayın Ülker. *İstanbul'Un Tarihsel Topografyası: 17. Yüzyıl Başlarına Kadar Byzantion-Konstantinopolis-istanbul*. Yapı Kredi Yayınları, 2007.

Allom, Thomas, and Robert Walsh. *Constantinople and the Scenery of the Seven Churches of Asia Minor Illustrated*. Fisher, 1838.

Grabar, Oleg. “From Dome of Heaven to Pleasure Dome.” *Journal of the Society of Architectural Historians*, vol. 49, no. 1, 1990, pp. 15–21., <https://doi.org/10.2307/990496>.

Barrie, Thomas. *The Sacred In-Between: The Mediating Roles of Architecture*. Routledge, 2010.

Insomniac Games. *Marvel's Spiderman*. PS4, Sony Interactive Entertainment, 2018.

Mol, Angus. "Assassin's Creed: Infinity." *Interactive Pasts*,

<https://interactivepasts.com/blog-posts/stratigraph/assassins-creed-infinity/>.

Accessed May 06, 2022.

Politopoulos, Aris, et al. "'History Is Our Playground': Action and Authenticity in *Assassin's Creed: Odyssey*." *Advances in Archaeological Practice*, vol. 7, no. 3, 2019, pp. 317–323., <https://doi.org/10.1017/aap.2019.30>.

De Groot, Jerome. *Consuming History: Historians and Heritage In Contemporary Popular Culture*. Routledge, 2008.

APPENDICES

A. TURKISH SUMMARY / TÜRKÇE ÖZET

Dünya sürekli değişiyor, evrim geçiriyor ve ilerliyor. Teknolojinin gelişimi ile beraber sanal katman günlük hayatımızın kamusal ve özel alanlarının neresinde konumlanmış? Günümüzde, Dünya'nın içinde bulunduğu durum sanal uygulamalara olan ihtiyacı daha da önemli kılmaktadır. Metaverse gibi kavramların yükselişi ile beraber bir sürü kuruluş da sanal alanda yer kapma gayesi içindedir. Teknoloji, evlerinden çıkamayan insanlar için dış dünyaya, veya hayal, kurgu dünyalarına bir çıkış yolu sunuyor. İnsanlar, konfor alanlarından çıkmadan ülkeler, şehirler, müzeler ve benzeri kuruluşların sunduğu sanal sergiler ve yolculukları deneyimleme şansına sahip olmaktadır. Gözden kaçırılrsa dahi, benzer bir yolculuk sunan alanlardan biri de video oyunlarıdır. Her yaş grubundan ve kültürel geçmişten insana hitap etmesi video oyunlarını önemli kılmaktadır. Bu tez, tarihi içeriği olan video oyunlarına odaklanarak bu oyunların genelde şehirler ve binalardan oluşan mimari bileşenlerine bakmıştır. Bu oyunlar, tarihi gerçekleri alıp bunun etrafında kendi hikayelerini oluşturmaktadır. Bu göz önüne alınarak, oyun yapımcıları tarihe kendi yorumlarını katan tasarımcılar olarak görülebilir. Bu teze dahil edilen oyun serisi Assassin's Creed, Total War ile birlikte "akademik bir oyun" nasıl olur buna örnek olarak verilmiştir.¹²⁸ Tez, Assassin's Creed'e yoğunlaşarak sunulan 16. yüzyıl İstanbul'unun bir panoramasını kağıda dökmeye çalışmıştır. Paylaşılan ekran görüntüleri bire bir oyundan olmakla birlikte, oyundaki yazılı veriler de çalışmaya dahil edilmiştir. Ele alınan unsurlar mimari olup genelde anıtsal yapılara yer verilmiştir. Buna ek olarak, özelinde sınırlı kalmayıp genel konular üzerine de değinilmiştir.

Oyun ile araştırmayı birleştirmek üzerine çalışan yeni kurulmuş enstitüler bulunmaktadır, bunlardan biri de 'Value Foundation'dır. Araştırmacılar, profesörler

ve konunun tutkulu oyuncularından oluşan bir topluluk olan bu kuruluşun hedefi oyun oynamayı akademik araştırma ile birleştirmektir. İnternet sitelerinden bir alıntıda;

VALUE Foundation oyunların akademiyle kesiştiği noktaları dünya çapında araştırma, geliştirme ve insanlara ulaştırmayı tasarlamak, olanak sağlamak ve yönetmek gayesi gütmektedir.¹²⁹

Düzenli olarak makaleler, çalışmalar paylaşp oyunların yayın akışını sunarak video oyununu bilgi ve öğrenme ortamı olarak kullanma çabası içindedirler. Oyunların pedagojik boyutu aynı zamanda tezin ana kaynağının arkasındaki geliştirici kurum tarafından da ele alınmıştır. Assassin's Creed oyunlarının geliştiricisi Ubisoft da öğrenmeye dayalı projelerin bir parçasıdır. Bunlara yakın zamandan bir örnek, “keşif turu” olarak çevirebileceğimiz ‘Discovery Tour’ girişimidir. Kendi internet sitelerinden tanımlandığı şekilde:

Keşif Turu ziyaretçilerin Antik Yunan, Antik Mısır ve Viking Çağının tarihi ve günlük hayatı ile ilgili daha fazla şey öğrenebilme adına özgürce dolaşabildiği bu dönemlere adanmış oyunlar serisidir. Öğrenciler, öğretmenler, oyuncu olan, olmayanlar bu dönemleri kendi tempolarında keşfedebilir veya rehberli turlara, tarihçiler ve uzmanlar tarafından kürate edilmiş anlatılara çıkabilir.¹³⁰

Bu demek oluyor ki, oyun geliştiricileri yarattıkları bu platformu ve rekreasyonlarını başka alanlarda da kullanmaya açıklardır. Bu durum, video oyunları endüstrisinin ileride mimarlık tarihinin de dahil olabileceği alternatif alanlara yönelebilmesi için açık kapı bırakıyor. Pedagoji ve mimarlık tarihi için Hannah Rice’ın “Exploring the Pedagogical Possibilities of Applying Gaming Theory & Technologies to Historic Architectural Visualisation” çalışması değerli bir kaynaktır. 2014 tarihli bu çalışmanın ana konusu tarihi kalıntılarda ve müzelerde etkili öğrenme deneyimleri sunan yeterince mimarlık etkileşimi olmamasıydı. Video oyunlarının rolü burada genel geçer mimarlık algılarının oluşması ve değişmesinde yardımcı olacak bir medya türü

¹²⁸ Spring, “Gaming History: Computer and Video Games as Historical Scholarship”. 209.

¹²⁹ The VALUE Foundation, accessed at <https://value-foundation.org/>.

¹³⁰ Ubisoft, “Discovery Tour”, accessed at <https://www.ubisoft.com/en-gb/game/assassins-creed/discovery-tour#5NJV7EibkDuphxBCK5bCOo>.

olarak ortaya çıkıyor. Örnek vermek gerekirse, kaleler insanların gözünde ortaçağ ile özdeşleşmiş romantik bir bakış açısıyla görülmektedir. Ancak Rice'a göre, video oyunu 'Stronghold 3' kalelerin rolünü tarihe daha uygun bir şekilde öğretme konusunda önem arz edebilir.¹³¹ Bahsedilen bir diğer nokta da, mimarlığın gerçek dünyadaki eşiyle birebir aynı gözüktüğü için tarihi olarak doğru olduğu varsayımını yapmanın tehlikeli olabileceğidir. Ancak, miras amacı için öte çalışmalara ilham kaynağı olması açısından önemlidir. Rice'ın dikkat çektiği bir diğer nokta da, Assassin's Creed oyunları sayesinde oluşturulması başarılı ilginin insanları daha sonraki araştırmalar için akademik çalışmalar yerine internet forumlarına yönlendirmesidir.¹³² Kitleler tarafından oluşturulan bu ilgiden yararlanmak ve öğrenme, araştırma için insanları doğru malzemelere yönlendirmek farkındalık yaratmak açısından doğru bir adım olabilir. Birçok kaynakta ortak ele alınan konulardan biri de pasif gözleme kıyasla aktif etkileşimin öğrenme açısından faydalarıdır. Bu durum, insanların gündelik hayatında deneyimlediği mimarlık sanatıyla da paralellik göstermektedir. Doğası gereği, resim, heykel gibi daha çok el mahareti içeren sanat türleri daha pasif bir gözlemi gerekli kılıyor. Alexander Galloway, çeşitli medya türlerini ayrıştırırken video oyunlarını "aksiyonlar" olarak tanımlar. Buna kıyasla, fotoğrafları görseller, filmleri de hareket eden görseller olarak tanımlamıştır. Aktif katılım [oyuncular ve makineler tarafından] video oyunlarını statik bilgisayar kodları olmaktan kurtarmaktadır.¹³³ Görünen o ki oyun geliştiricileri ayrıca üniversitelerle birlikte çalışarak öğrenme deneyimini genişletme ve zenginleştirme peşindedir. Buna bir örnek Ubisoft'un 'Discovery Tour' müfredat rehberleri için McGill Üniversitesi ile beraber çalışmasıdır. Bu aracı eğitsel bağlamda kullanabilmek için kendi ders planını yaratmanın mümkün olduğu söylenmektedir.¹³⁴

¹³¹ Rice, 33.

¹³² Rice, 42.

¹³³ Galloway, "Gaming: Essays on Algorithmic Culture". 2.

¹³⁴ Ubisoft & McGill, "Discovery Tour: Ancient Greece Curriculum Guide", accessed at

<https://www.ubisoft.com/en-us/game/ancient-greece/curriculum-guide>.

Enteresan konulardan biri de özellikle günümüz bilgisayar oyunlarında sıkça rastlanabilen ‘mod’lama konusudur. Bu özellik, herhangi bir kullanıcıya oyuna ekleme yapmasını veya kendi versiyonunu yaratmasına olanak sağlar. Özellikle oynama ve akademiye birleştirmede kullanışlı bir araç olabilir. Bunun bir örneği, Darwin Üniversitesi’nden profesör Eric Fassbender bir tarih dersini nasıl oyun mod’u olarak tasarladığını anlatıyor.¹³⁵ Elindeki alternatif seçenekler arasından amacına en uygun olan ‘inşa seti’ni¹³⁶ seçtikten sonra, orjinal taslaklardan binanın üç boyutlu dijital modelini yaratıyor. Bu modeli set’e aktarır, yine üç boyutlu stüdyoları ve haritaları kullanarak etrafına çevreleyen peyzajı yaratıyor. Peyzajı da set’e aktardıktan sonra set’in sunduğu olanakları kullanarak tarihi hikayeyi sunması için sanal karakterler yaratıyor. Son olarak da tarih dersini içinde barındıran yazı ve sesten oluşan diyalogu kuruyor. Bu set’in seçiminde “birinci şahıs” kamera (kullanıcının olayları kendi gözündenmiş gibi görmesi), karmaşık diyalog seçenekleri ve üç boyutlu model ekleyebilme desteği olmasından ötürü ‘Elder Scrolls’ oyun serisinin platformunu seçtiğini söylüyor. Burada bariz bir şekilde yöntem ve kullanılan araçlar kişinin tercihine göre farklılık gösterebilir. Tarih öğretimini sağlayan bu sanal ortamı kurduktan sonra yazar, bu oyunların altyapısına kişinin dışarıdan yapabildiği üç boyut modellerin eklenebilirliğinin sınırsız inşa edilebilecek mekan/yer ve oluşturulabilecek hikaye seçenekleri sunduğu sonucuna varıyor. Bu bağlamda, kişinin kendi yapabildiği oyun mod’ları sanal alanla akademiye birleştiren geçerli bir yol olabilir. Benzer bir şekilde, Galloway de video oyunlarının bir sanat formu ve kültürel değerlerin bayrak taşıyıcıları olarak potansiyeline ulaşabilmesinin ‘kontra-oyun’ (oyun modi’ları için kullandığı terim)’dan geçtiğini savunuyor. Hatta bu akımın Godard’ın sinemada, Deleuze’ün felsefede ve Duchamp’ın sanat objesinde yaptığı gibi tüm oyun dünyasını ele geçirmesi gerektiğini söylüyor.¹³⁷ Bunun sadece sanatçılar tarafından yapılan oyun mod’ları ile gerçekleşebileceğinin altını çiziyor. Kontra-oyunda, etkileşimli oynanış

¹³⁵ Fassbender, “Use of ‘The Elder Scrolls Construction Set’ To Create a Virtual History Lesson”, 69-84.

¹³⁶ Burada inşa seti oyun mod’lama aracı oluyor.

¹³⁷ Galloway, 126.

yerine sanatçıların mekan, görsellik ve fizikle oynayabildiği estetik deneyler yüceltilmektedir. Buna kıyasla, geleneksel oyunlar tutarlı olma ihtiyaçlarından dolayı sınırlı kalmaktadır.

Video oyunları ve akademik amaçlar için kullanılan dijital rekreasyonlar arasında ilk bakışta göze çarpan fark, istemeden de olsa, yapılan iddiaların tarihi verilerle desteklenmiyor ise o alanlarda boş bırakılması olarak karşımıza çıkıyor. Bu durum akademik rekreasyonlarda boş alanlar görülmesine yol açıyor. Eğer bir bölüm herhangi bir veri veya kaynak tarafından desteklenmiyor ise, akademisyenler spekülasyona girmemek için o alanları doldurmaktan kaçınma eğiliminde oluyor.¹³⁸ Video oyunlarında ise, oyuncuların yaşayan dünyayı bir bütün olarak deneyimleyebilmesi ve kesintisiz bir biçimde keyfini çıkarabilmesi için hayal gücü muhtemelen bu boş alanları kaplıyor. Burada bahsi geçen konu ile alakalı dijital rekonstrüksiyon çalışmalarından biri Westbrook ve Van Meeuwen'in "Reconstructing 16th Century Istanbul: The Use Digital Modelling as Heuristic Tool in Architectural History Research" çalışmasıdır. Burada, yazarlar daha çok tarihi veriyi ortaya çıkarmak için kaynakların dijital bir analizini sunmaktadır. Yazı, Alois Reigl'in tarihi binaların değerini anlamak için ortaya attığı "Rekonstrüksiyonlar anıtsal yapıların çağ değerini nasıl nakledebilir?" sorusu üzerinde düşünmektedir. Buna göre, mimarlık var olduğu zamandan koparılıp ele alınır ise orijinalliğini kaybeder. Oyunlar, dünya oluşturma özellikleri ile bu asırlık otantiklik sorusuna bir cevap olabilir. "Kapsayıcı bir tarihi çevre deneyimi"¹³⁹ ihtiyacının altı çizilerek yukarıda bahsedilen çalışmanın önerdiği çözüm de benzer bir düşünce yapısında seyrediyor. Bu durum, birden fazla disiplinin yardımını gerektirir. Bunlar; mimarlık tarihi, antropoloji ve arkeolojidir. Bu yaklaşımın taşıdığı risk, spekülasyonun gerçeklikle harmanlandığı bir görsellik yaratmasıdır. Bu bağlamda, video oyunları ve akademisyenlerin önerdiği çözümler görünenden çok daha fazla benzerlik paylaşır. Bir önemli fark, belki de en önemlisi, nelerin spekülatif ve nelerin somut kaynaklara dayandırılmış olduğunun ayrıştırılması

¹³⁸ Favro, "In the eyes of the beholder: Virtual Reality re-creations and academia".

¹³⁹ Westbrook and Van Meeuwen, "Reconstructing Sixteenth-Century Istanbul: The Use of Digital Modeling as an Heuristic Tool in Architectural History Research.", 64.

olarak görünmektedir. Bahsedilen yazıda, bilimsel üç boyutlu bir modelin tanımı konunun nitelikli uzmanları tarafından tasdiklenmiş olması ve kullanıcılara hangi bileşenlerin teorik olduğunun şeffaf bir şekilde sağlanması olarak yapılmıştır. Video oyunlarında, bu şartlardan biri sağlanabilir. Ubisoft'un mimarlık tarihi profesörleri ile beraber çalışması¹⁴⁰ gibi geliştiriciler, konunun uzmanları ile beraber çalışabilir. Büyük ölçekli projeler için yapılan araştırma miktarı açıktır. Ancak, verilerin doğası ve bunların gerçekçi olup olmadığına kullanıcıya iletiminin sağlanmasını beklemek gerçekçi bir hedef olarak gözükmemektedir. Bunun nedeni de önceliğin kullanıcıya hikayeyi bir bütün olarak aktarmak olmasıdır. Geliştiriciler, yaratılan sanal alanı ve bununla ilgili hikayenin bütünlüğünü tehdit edebilecek her öğeyi keyifli olması amaçlanan kullanıcı deneyimini bozabilecek bir risk olarak görebilir. Bahsedilen yazıda verilen rekonstrüksiyon örneklerinden birinde, hangi tarihi verilerin doğrulanabilir, hangilerinin spekülasyon olduğunu ayırt etmek için renk kodlaması tekniği kullanılmıştır. Teknoloji ilerledikçe, bu ayrımları yapmak kullanıcı açısından geçmişte olduğundan çok daha sorunsuz gerçekleşebilir. Assassin's Creed serisinde, kullanıcıların ötesine geçemediği oyun içindeki dünyanın sınırları şeffaf çizgilerle gösterilmiştir. Görsel olarak bu, kullanıcıya "buradan öteye geçemezsin" mesajını vermektedir. İlk oyundan sonuncusuna sabit bir unsur olarak görülen bu uygulama, görseller üzerinden ortak bir dil yaratmaya yardımcı olarak kullanıcının optik duyuları ile sınırları fark etmesini sağlar. Teknoloji sayesinde, benzer bir uygulama nelerin mevcut tarihi kanıtlara dayanmış olduğunu, nelerin spekülasyon olabileceğinin belirtilmesinde de kullanılabilir. Burada öneri, bunun oyunlara 'gerçeklik modu' benzeri ilave bir özellik olarak dahil edilmesi veya eğitimsel uygulamalara eklenmesidir. Sıfırdan inşa etmenin daha maliyetli olabileceği düşünüldüğünde, oyunun ve sanal platformunun sunduğu teknoloji dünya çapında oyun dışı geliştiriciler ve akademisyenler tarafından faydalanılabilir. Çalışma için seçilen örneklerden, Assassin's Creed, Total War ile beraber 2014'te yapılan bir anket sonucu insanlar tarafından bildikleri bir "tarihi oyun" söylemeleri istendiğinde en çok referans gösterilen oyunlar içinde ilk üçe girmişlerdir.¹⁴¹ Yine de söylenmesi gerekir ki, bu

¹⁴⁰ Manuel Saga, "What It's Like to Be an Architectural Consultant for Assassin's Creed II".

¹⁴¹ Rice, 57.

spesifik alt kümedeki oyunların “tarihi doğruluk” iddiasına rağmen, genel olarak oyunların asıl amacı birebir tarihi doğruluktan çok kullanıcılara sunulan görselliğin doğruluğudur.

Ünlü film kritiği Roger Ebert, bir hayranının, Ebert’in video oyunları asla sanat olamaz düşüncesi üzerine hayal kırıklığını dile getirmesine cevap olarak 2005 yılında sanat formu olarak video oyunları için şunları söylemiştir:

Yapısal bir nedeni vardır [neden video oyunları alt kademedir]: Video oyunları doğası gereği oyuncu seçimleri gerektirir. Bu, yetkili kontrol gerektiren ciddi film ve edebiyatın tersi bir stratejidir. Ben video oyunlarının zarif, ince, sofistike, meydan okuyan ve görsel olarak harika olabileceğine inanmaya hazırım. Ancak, ortamın doğasının onu işçilikten öteye sanat sınıfına sokmaktan alıkoyduğuna inanıyorum. Benim bilgim dahilinde, alanın içinden veya dışından herhangi biri büyük oyun yazarları, şairler, film yapımcıları, roman yazarları ve bestecilerle kıyaslanmaya değer bir oyundan asla bahsetmemiştir. Görsel deneyim olarak bir oyun artistik öneme ulaşmayı arzulayabilir, bunu kabul ederim. Ancak çoğu oyuncu için, video oyunları kendimizi daha kültürel, medeni ve empatik yapabileceğimiz çok değerli saatlerin kaybını temsil eder.¹⁴²

Ebert, etkileyici görsellik gibi video oyunlarının niteliklerinin hakkını verse dahi, video oyunlarını bir zaman kaybı olarak sayıyor. Şu soru belki de Ebert’in insanlar zamanlarını kültürel birikimlerini arttırmak için kullanabilir argümanına meydan okuyor: “Peki tartışmanın odağındaki video oyunu medeniyetlere, onların artistik stiline ve farklılığına ışık tutan kültürel detaylarla dolu olsa idi ne olurdu?” Ebert daha sonra bakış açısındaki kusuru görmüş olacak ki (hayran tepkileri üzerine gelen bir açıklama değil ise) hatasını şöyle söylüyor:

Düşündüm ki yalnızca teorik temeller üzerine ikna edici bir argüman oluşturabilirim. Söylediğim şeydu prensip olarak video oyunları sanat olamaz. Bu ahmakça bir fikir beyan etmektir şöyle ki görülmemiş tüm oyunların geleceğini işaret ediyordu. Bu bana belki yüzlerce kez tekrarlandı. Nasıl karşı çıkabilirdim? Belki bir gün bir oyun harika bir sanat olabilir.

Başta video oyunlarından bahsederek ahmaklık ettim. İzlemediğim bir film üzerine asla görüş belirtmem. Ancak su götürmez bir gerçek olarak video oyunları sanat olamaz dedim.¹⁴³

¹⁴² Archontides, “Press X to Feel: On The Current State of Videogames”, 20.

¹⁴³ Ebert, 2010.

Yukarıda bahsedilen video oyunlarının kültürel içeriği olabileceği karşı görüşü bir başka soruyu da beraberinde getiriyor: “Bahsedilen tasvirler kendi kültürlerini ne kadar yansıtıyor, yoksa sadece başka bir kültürün kaynak malzeme üzerindeki yorumlamaları mı?” Çoğu zaman, video oyunu yapımcıları Batı ülkelerinden oluyor, ancak bu tezin konusu Doğu kültürüdür. Benzer bir şekilde düşünmüş olacaklar ki, Ubisoft’un oyunlarındaki açılış beyanı dikkat çekici:

Tarihi olaylar ve kişilerden esinlenilmiş olup, bu kurgu eseri çeşitli inançlar, cinsel yönelimler ve cinsiyet kimliklerinden oluşan farklı kültürlerden gelen bir takım tarafından tasarlanmış, geliştirilmiş ve üretilmiştir.

Değişmeden önceki hali:

Tarihi olaylar ve kişilerden esinlenilmiş olup, bu kurgu eseri çeşitli dini inançlardan oluşan farklı kültürlerden gelen bir takım tarafından tasarlanmış, geliştirilmiş ve üretilmiştir.

Şirketteki çalışanların ayrı geçmişleri ve dünyanın bir sürü farklı yerinden geldiği muhtemelen doğru olsa dahi bu idealize edilmiş düşüncenin ne ölçüde gerçekleştiği bu ve ileriki çalışmalarda test edilecektir. Bu tez, kültürel içeriğe sahip olduğu söylenen bu oyunlara küresel bir dilin ürünü olsa dahi yerel kültürlerin doğru bir tasviri olup olmadığına bakarak Ebert’in argümanına meydan okumayı beklemektedir.

Melchior Lorichs’in 16. yüzyıl İstanbul panoramasına otoportresini dahil etmesi “doğu ve batı arasındaki tarihsel birliktelik sahnesine kendini yerleştirme çabası” olarak değerlendirilmiştir. Lorichs’in bu çalışmasının çığır açan bir çalışma olarak görülmesinin nedeni kendisinden önceki çalışmaların aksine sembolik betimlemelerden uzak durması ve aynı zamanda Osmanlı ve Bizans yapılarına eşit ölçüde önem vermesidir. Bu çalışmanın bulguları, oyun içinde bulunan Bizans/Roma yapılarının Osmanlı yapılarına kıyasla fazla olması nedeniyle Assassin’s Creed’in bu bakımdan başarısız olduğunu göstermektedir. Oyunun kapsadığı zaman dilimi Osmanlı’nın İstanbul’u fethinin akabinde özellikle seçilmiş olabileceği gibi, Osmanlı’nın şehirde kendi yapılarını inşa etmesi ve izini bırakması için yeterince zamanı olmaması nedeniyle Bizans yapılarının daha çok olduğu dönemde yer edinmiştir. Bununla birlikte alternatif zaman dilimlerine karşı bu zaman diliminin seçilmesi oyunun geliştiricilerinin bu konudaki tutumunu da yansıtmaktadır. Oyunda

hikayenin akışı uğruna gerçekte örtüşmeyen tarihsel kişiliklerin görülmesi de yapımcıların istedikleri zaman ne kadar özgür davranabildiğini göstererek bu sonucu destekler niteliktedir. Oyunun hiç bir kesiminde Mimar Sinan ile ilgili bir ögeye rastlanmaması ayrıca dikkat çekicidir. Oyunun geçtiği tarihler (1511-1514) civarında Sinan'ın yeniçeriye girdiği (1513) tarihi belgelerde gösterilmiştir.¹⁴⁴ Doğan Kuban, Sinan'ın Osmanlı Mimarisi için önemini anlatırken kendi kültüründe hapsolmuş Batı Dünya'sını Selimiye gibi işleri takdir etmemesiyle eleştiriyor. Oyun yapımcıları Selimiye'yi bir Pantheon, Colosseum seviyesinde görmemiş olacak ki onu eklemek için özel bir çabaya girişmemişler. Kuban'a göre, İslam kültüründe sarmalandığı sırada Osmanlı, klasik Akdeniz dünyası ve Batı ile eş zamanlı bir ilerleme sergilemekte idi. Bu Türk medeniyet ve sanatının çok yönlü özgün yapısı onu diğer Doğu İslam toplumlarından ayırmıştır. Bu bağlamda, çeşitli bir kaynaktan beslenen ama aynı zamanda kendi izini de bırakan Sinan'ın da dahil olduğu Türk Mimarisi paylaşılan evrensel kültürün bir parçasıdır.¹⁴⁵ 1543 yılında, Aya Sofya dışında İstanbul'da 3 büyük cami vardı. Goodwin'in kelimeleri ile, Fatih Cami katı ve tarihi geçmiş, Beyazıt Cami de esneklikten uzak olarak betimlenmiştir.¹⁴⁶ Benzer bir eleştiri Kuban tarafından da yapılarak Sinan öncesi Osmanlı yapılarının monotonlukla suçlanabileceği dillendirilmiştir.¹⁴⁷ Fatih ve Beyazıt Cami'lerinin oyunda nadir görülen orjinal Osmanlı yapılarından olması bu açıdan da önem arz edebilir.

Westbrook ve diğer profesörler, çok önemli iki tarihi görsel belge olan Melchior Lorichs'in 'Prospect of Constantinople' adlı panoramasını ve kesin olarak bilinmeyen bir sanatçının Freshfield Albümünde yer alan 'Hippodrome and Hagia Sophia' adlı çiziminin dijital analizini yaparak 16. yüzyıl İstanbul'unun olası topografyasını çıkarmayı başarmışlardır. Bu doğrultuda, olasılıklar ve varsayımları ele alan dijital çalışmaları gerçeklere dayalı betimlemelere karşı savunmuşlar ve kesinlikle

¹⁴⁴ Barrie, "Sacred In-Between", 179.

¹⁴⁵ Kuban, 113.

¹⁴⁶ Goodwin, 207.

¹⁴⁷ Kuban, "Sinan'ın Sanatına Sahip Çıkmak", 109.

uğraşmaktan kaçınıp olasılıklar üzerinde çalışmanın önemini belirtmişlerdir. Onlara göre tarihsel materyallerin dijital modelleri kaybolan mimariyi yeniden keşfetmek amacıyla çalışılmalıdır.¹⁴⁸ Bu olasılıkları göstermek için teknoloji, video oyunları ile birlikte etkin bir yöntem sunmaktadır. Bu durumda öneri, bu oyunların kesin sonuca ulaşmış bir çalışmayı sunması yerine ilk aşamada araç olarak kullanılmasıdır. Oyun kendisi bir araç olmasa bile üzerine kurulu olduğu teknoloji bu görevi üstlenebilmektedir. Bunun gerçekleşebilmesi için akademisyenler ve oyun geliştiricilerin ortak çalışması en önemli noktadır. Aynı zamanda, mimarlık tarihi profesörleri de geçmiş mimarinin elementlerini öğrencilerine basit seviyede öğretebilmek için oyunları kullanabilirler. Yüksek kaliteli görseller içermesi ve etkin katılım sağlaması sayesinde etkili bir öğrenme aracı olabilen oyunlar, kişileri de daha fazla araştırma yapmaya teşvik edebilmektedir.

Oyuncular bir olay örgüsünü takip ettiğinde ya da birbirleriyle rekabet ederken bazen hiç farkında olmadan tarihi gerçekliklere maruz kalmaktadırlar. Bu durum Total War ve Assassin's Creed gibi oyunlar tarafından mümkün kılınmıştır. Sanal maceralar, günümüzde bilinen dünyayı ve geçmişteki gerçekliği yeniden inşa ederek bu zamanın ve geleceğin modası haline gelebilir. Bu yeniden inşa, dış dünyada halihazırda var olanı koruyarak veya kaybedilmiş olanı, ulaşılamayanı yeniden yaratarak gerçekleştirilebilir. Video oyunları gibi sanal keşif araçları, gerçek hayattaki şehirler ve eserler hakkında farkındalık oluşturarak bireyleri onlar farkında bile olmadan bilgilendirmesinin yanı sıra seyahat imkanı olmayanlar için de bu lokasyonları dünya çapında ulaşılabilir kılmaktadır. Oyunculara sunulan bilgiler yüzeysel düzeyde olsa da. De Groot bunu “geçmişin temsiliyle aktif etkileşim sayesinde kazanılan tarihsel farkındalık”¹⁴⁹ olarak tanımlamıştır. Bu bağlamda oyunlarda yer alan betimlemelerin gerçekliğe ve tarihi kayıtlara sadık kalması daha önemli hale gelmektedir. Bu çalışmada daha çok Assassin's Creed: Revelations oyununda Türklere atanmış ve Türklerle ilgili unsurlar ele alınmıştır. Çalışmada oyundaki şehirler, mimari yapılar ve tasarımcıların gerçek hayattaki yerleşimlerle tarihsel olguları ne şekilde oyuna

¹⁴⁸ Westbrook et al, 77.

¹⁴⁹ De Groot, “Consuming History”, 133.

uyguladıkları incelenmiştir ve daha fazla çalışma gerektirmektedir. Assassin's Creed'de oyuncular oyunun tasarımı tarafından lineer bir hikayeyi takip etmeye yönlendirilmektedir ve kendi seçimleri oyunun dünyasında önemli bir etki yaratmamaktadır. Özgürlüğü ve serbest iradeyi öven bir oyunda buna ulaşmanın mimari ile sağlandığı görülmektedir. Yaratılan dünyanın sınırları içerisinde oyuncular, şehirde dolaşmakta özgürlerdir. Bu durum üzerine yapılacak derin bir çalışma oyunun iç yüzünü açığa çıkarabilir ve oyuncuların belirli bir örüntüyü takip etmeye yönlendirilip yönlendirilmediği hakkında bilgi verebilir. Günümüzde gerçek hayatta farklı ortamlarda tekrarlanan konseptlerin oyunun hikayesinde ne derece yer edindiği eleştirel söylem analizi yapılarak çalışılabilir ve oyunun sosyo-psikolojik özellikleri açığa çıkarılabilir.

Assassin's Creed özelinde hikayenin 1511 yılı civarında seyretmesi ilgi çekicidir. Oyunun verisi ve oyunda Osmanlı yapılarına kıyasla çok sayıda yer alan Roma-Bizans yapıları göz önünde bulundurulduğunda Sinan'dan, Osmanlı mimarisindeki sanatsal yaratıcılık patlamasından hemen önceki tarihin seçilmesi en iyi ihtimalle şüpheli olarak görülebilir. Bu tarihin oyunun hikayesine uygun olmasının nedeni, hikayedeki ana karakter olan Ezio'nun bölümünü sonuçlandırması olabilir. Bununla beraber, karakterlerin bir oyundan sonrakine oldukça çeşitlilik gösterdiği bir oyun serisinde seçilen bu tarihin düşünülerek alınmış bir karar olduğu açıktır. Bu görüş, oyundaki mimarinin salt dekorasyon ya da bir arkaplan olarak kenarda kalmadığı ve oyunun büyük bir bölümünü teşkil ettiği gerçeğiyle daha güçlü hale gelmektedir. Bu durumun nedeninin, bu çalışmada da gösterildiği gibi, oyunda kullanılan bol miktarda tarihi materyal olması sebebiyle araştırma yetersizliği ya da bilgi eksikliği olmadığı anlaşılmaktadır. Serinin dünyadaki çok sayıda medeniyeti ve keşfedilmemiş yerleri kapsamı dışında bıraktığı düşünüldüğünde Osmanlı ve Türklerin yeniden incelenmesi yakın gelecekte pek mümkün gözükmemektedir. Bunların ışığında, Sinan döneminin oyuna dahil edilmemesi kararı Discovery Tour gibi araçlarla düzeltilebilir; fakat Ubisoft ya da başka bir oyun geliştiricinin öncelikli olarak eğitsel amaçlar için zaman ve kaynak ayırıp ayırmayacağı belirsizliğini korumaktadır. Yine de bu durum video oyunlarının sağladığı platformu gelecekte mimarlık tarihi çalışmalarında faydalı bir araç olarak kullanılması potansiyeline caydırıcı nitelikte düşünülmemelidir.

Mimarlıđa gelince buradaki gzellik btn yanlış anlatı ve grmezden gelme abalarına rađmen sanat; Sinan'ın alıřmalarında, Ryan-ji'de, Sydney Opera House'da olduđu gibi, insanlıkla birlikte ya varlıđıyla, ya medyanın gznden, veya kađıtlar zerinde hayat bulma abasıyla yařamaya devam edecektir.

B. THESIS PERMISSION FORM / TEZ İZİN FORMU

ENSTİTÜ / INSTITUTE

- Fen Bilimleri Enstitüsü** / Graduate School of Natural and Applied Sciences
- Sosyal Bilimler Enstitüsü** / Graduate School of Social Sciences
- Uygulamalı Matematik Enstitüsü** / Graduate School of Applied Mathematics
- Enformatik Enstitüsü** / Graduate School of Informatics
- Deniz Bilimleri Enstitüsü** / Graduate School of Marine Sciences

YAZARIN / AUTHOR

Soyadı / Surname : BULUÇ
Adı / Name : CEM
Bölümü / Department : Mimarlık Tarihi / History of Architecture

TEZİN ADI / TITLE OF THE THESIS (İngilizce / English):

ARCHITECTURAL HISTORY IN VIRTUAL SPACE: A LOOK INTO MODERN VIDEO GAMES

TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master Doktora / PhD

1. **Tezin tamamı dünya çapında erişime açılacaktır.** / Release the entire work immediately for access worldwide.
2. **Tez iki yıl süreyle erişime kapalı olacaktır.** / Secure the entire work for patent and/or proprietary purposes for a period of **two years**. *
3. **Tez altı ay süreyle erişime kapalı olacaktır.** / Secure the entire work for period of **six months**. *

* Enstitü Yönetim Kurulu kararının basılı kopyası tezle birlikte kütüphaneye teslim edilecektir. / A copy of the decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.

Yazarın imzası / Signature

Tarih / Date

(Kütüphaneye teslim ettiğiniz tarih.
Elle doldurulacaktır.) (Library
submission date. Please fill out by
hand.)

Tezin son sayfasıdır. / This is the last page of the thesis/dissertation.