

An aerial, black and white photograph of the Citadel of Aleppo in Syria. The image shows the massive stone walls and towers of the citadel, which are partially reconstructed. A large, arched gateway is visible in the center. The citadel is situated on a hill, with a city built around it. In the foreground, there is a paved area with palm trees and some modern structures. The overall scene is one of historical significance and reconstruction.

The Destruction and Reconstruction of Aleppo's Citadel

A Historical Analysis





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Abstract

The Citadel of Aleppo is one of the oldest and largest castles in the world, and the greatest landmark of Aleppo. Located on top of a hill in the middle of the city, it stands as a symbol of resilience, having faced many challenges during various historical events through the centuries. This thesis analyses the architectural trajectory of Aleppo's Citadel, uncovering its transformation through seismic events, wars, and cultural transformations with the use of primary and secondary sources, such as archival documents, photographs and architectural drawings. Motivated by the Citadel's enduring and recent challenges, this thesis aims to understand the interplay of historical events and architectural development that shaped the Citadel by contextualizing the transformations within their historical, cultural, and geopolitical contexts.

The thesis covers different historical periods, starting with the Medieval ages, with each shaping the Citadel in different ways. The Medieval Period mainly shaped the structure of the fortress as it is standing today. Being built as a military fortress during battles against Crusaders and Mongols, the Citadel got constantly destructed and reconstructed because of its strategic importance and the continuous seismic activity. As it came under Ottoman rule, the Citadel transitioned to a complex with residential and commercial functions, which reflect the stability and socio-political shift of the time. As the Empire fell after World War I, the French took control and initiated excavations which were continued by the Syrians after the Independence. In the Modern Era, the Citadel got recognized as a World Heritage Site and became a tourist destination and cultural hub of the city. As reconstruction and preservation projects were on the go, the Citadel witnessed a war that destroyed the country and damaged the monument. Before even being reconstructed, another earthquake hit the region and caused, once again, damage to the fortress.

Table of Contents

Introduction	6
Chapter 1: Historical Context	12
1.1 The Citadel throughout History	12
1.2 Timeline Historic Events	22
Chapter 2: Medieval Period [12th – 15th century]	23
2.1 Crusaders and Earthquakes	23
2.2 Aleppo's Citadel in the Ayyubid Era	25
2.3 Aleppo's Citadel during the Mamluk Rule	30
2.4 Impact of the Medieval Period on Aleppo's Citadel	34
Chapter 3: Ottoman Rule [16th – 20th century]	36
3.1 Aleppo's Citadel under the Ottomans	36
3.2 The 1822 Earthquake	40
3.3 Impact of the Ottoman Era on Aleppo's Citadel	42
Chapter 4: Modern Era [20th century – Present]	44
4.1 Aleppo's Citadel under the French	44
4.2 Preservation Efforts	47
4.3 The War	55
4.4 The 2023 Earthquake	67
4.5 Impact of the Modern Era on Aleppo's Citadel	70
Conclusion	72
Bibliography	75
Illustrations	78

Introduction

The subject of this thesis is the Citadel of Aleppo, one of the oldest and largest castles in the world, and the greatest landmark of the city of Aleppo. Located on top of a hill in the middle of the city, it has been used by many civilizations and empires such as the Greeks, Romans, Byzantines, Ayyubids, Mamluks and Ottomans. Although use of the hill dates back to antiquity, 3rd millennium BC, most of the currently visible Citadel structure originates from the 12th to 13th century AD (Gonnella, 2008). Through the time, the Citadel has had many functions; from being a fortress with a defensive function to an urban complex with luxurious palaces. Those reflect the dynamic political and cultural flows of the city.

The fortified palace has faced many challenges during its witness of historical events through the centuries. From wars to earthquakes, each one left its mark on the Citadel. The most recent event affecting the Citadel was the earthquake of February 2023. This last event and the recent war in Syria are also the motive of the subject of this thesis. Especially the war was a turning point, as the Citadel is a UNESCO world heritage site that has also been popular for tourists, but actually turned to one of its original functions during the war; a defensive fortress. This has made me think of the Citadel's enduring, knowing that it has been standing in the middle of the city for centuries. UNESCO (2018) has already made a destruction analysis of Aleppo after the recent war and this was a motivator to look into the cycle of destruction and reconstruction of the Citadel. Through an analysis of its historical trajectory, spanning from the 12th to the 21st century, the goal of this thesis is to explore the impact of the historical events, how they have shaped the Citadel's architectural identity through the time.

The research question of this thesis is: How did historical events, spanning from the 12th to the 21st century, architecturally transform Aleppo's Citadel?

By examining the impact periods and their events have had on the Citadel, the goal is to delve into the relationship between its history and architecture.

This thesis builds upon the foundation of existing studies on Aleppo's Citadel. Previous studies have given valuable insights into the historical significance and architectural transformation of the Citadel. However, there still exists a gap which will be discussed in the next section, the literature review. After this, the methodology of the research will be addressed, followed by the first chapter on the historical context. Then come the main chapters of this thesis, the destruction and reconstruction of the Citadel throughout the time, and lastly there is a conclusion of the thesis.



Literature Review

This literature review aims to provide an overview of the existing research, in secondary sources, related to the architectural history, destruction, and reconstruction of Aleppo's Citadel. It sets the stage for the analysis by putting together the key findings and identifying the research gaps.

Historical Context and Significance of Aleppo's Citadel

Previous studies have highlighted the Citadel's role of shaping the historical and cultural background of the city of Aleppo. Burns (2018) explores the history of Aleppo starting all the way from the Bronze and Iron ages. The book serves as a source for situating the Citadel within the broader historical narrative of the city. Gonnella's Guidebook (2008) also provides a detailed account of the Citadel's significance in the history of its city, and offers an overview of the Citadel's historical evolution through the years. Bianca (2007) gets into the medieval citadels in Syria, including Aleppo's Citadel. It includes valuable and detailed insights into the context of Aleppo's Citadel from Gaube (2007) however, taken into account should be that the chapter on the Citadel (Gonnella, 2007) is written by Gonnella, the author of the Guidebook (Gonnella, 2008), and thus most of the information regarding the Citadel overlaps. Shaat (1996) introduces a detailed study of the Citadel, with a focus on the historical significance and architectural evolution of the Citadel. The Citadel's role as a military fortress is being discussed and the Citadel's origins, its construction, cultural importance, and thus is a significant addition to the literature for this thesis. This is the only piece of literature used in this thesis that is specifically written about the Citadel itself. However, it is written in the Arabic language and for the use in this thesis, it had to be constantly translated. Quoting from the foreword of the book, "The history of the Citadel of Aleppo was and still is an integral part of the history of the city, and therefore the researcher did not find an independent source. He talks about the citadel itself, and therefore the research into the history of the Aleppo Citadel was through research into the history of the city" (Shaat, 1996, p.6).

The Citadel's Architecture

Gonnella (2008) gives a comprehensive understanding of the Citadel's features, layout and historical transformations as it provide a broad overview of the Citadel's construction, evolution, and restoration efforts over various historical periods. Jodidio (2011) in 'The Aga Khan historic cities programme' offers more drawings but serves also a secondary source. Shaat's (1996) study also contributes in here by offering detailed analyses of, for example, the Citadel's defensive structures and palaces.

Destruction and Reconstruction of the Citadel

Several studies have examined the impact of certain historical events, such as the recent war, on the Citadel. UNESCO in its report (2018), uses satellite images for an analysis of damage suffered by cultural heritage sites in the Ancient City of Aleppo. It provides insights into the impact of the recent war on Aleppo's heritage, including the Citadel. Fangi (2019) includes in his analysis some parts of the Citadel walls, the entrance tower of the Citadel, the southern tower, a mosque and the minaret of the Citadel mosque. These sources serve as both a primary and secondary source. Important is the fact that none of these directly show any kind of historical trajectory of the transformations the Citadel has undergone. This will be reviewed in the next paragraph which discusses the gaps.

Gaps and Future Directions

Despite the existing literature that cover transformations of the Citadel, and insights into what led to deconstruction and reconstruction of the Citadel, several gaps remain in the understanding of the historical transformation. First noticed when looking for existing research is, for example, the limited comparative studies, documentation or oral narratives. Furthermore, there is a lack of interdisciplinary approaches that integrate architectural analysis with the findings from other fields such as urban planning, conflict studies or earthquake resiliency. For instance, there are historical studies in the seismic field, like that of Sbeinati et al. (2005) and Ambraseys (2004), but they are not related to the field of architecture and neither do they provide detailed accounts of the destruction to the Citadels. There are narratives that speak of earthquakes of that time, from Michael the Syrian (1899-1910), Kemal al-Din (1884), Ibn al-Qalanisi (1908) and others, but there is not mentioned what got damaged exactly. This last problem is hard to address here, but the other mentioned gaps present opportunities for future research. By bridging such disciplinary cuts, future research could contribute to a more nuanced understanding of the whole history of Aleppo's Citadel's and its architectural transformations. For the research of this history thesis there are more gaps noticed. Indeed, there are studies covering the impact of a historical event on the Citadel, like Fangi's papers (2019), or there is existing literature on the history of Aleppo including the Citadel, like in Burns' book (2018). But in the latter, the Citadel itself is not the main topic, it is part of the city. And in the first, the impact of just one specific event is being addressed.

Shaat's book (1996) takes the Citadel itself as the main topic but there is still a need for research in the field of architecture with a longitudinal approach, going through the historical timeline of the Citadel and addressing the factors that have influenced its transformation. A longitudinal analysis is needed as it provides a comprehensive understanding of the Citadel's architectural transformation over time. It gives a holistic perspective and it enables researchers to identify recurrent patterns, themes, and comprehend interplay of factors that shaped the Citadel's trajectory. This research aims to fill this gap of a historical trajectory. This thesis acknowledges the complexity of this so the methodology of this research will be discussed in the next section.

Methodology

This research relies on diverse primary and secondary sources relevant to the analysis of Aleppo's Citadel. Primary sources include archival documents, architectural drawings, narratives and photographs. Secondary sources such as books and research reports provide the context for the analysis support the primary sources. The Guidebook of Gonnella (2008), for instance, provides both primary and secondary sources for this thesis. Recent photographs can be analyzed as a 'before and after'. That means that with the historic event there can be analyzed how a certain part of the Citadel looked like before it was destroyed and then how it looked like after it got destroyed. For the reconstruction of a part, there can be analyzed how it looked like before it got reconstructed, and then after it got reconstructed. The method of rephotography could also be applied in some cases in chapter 4. For older time periods (before the 18th century) there is not enough archive material of the Citadel, so most of this analysis relies on secondary sources.

Acknowledging the complexity of filling the gap of a historical trajectory, this thesis aims to set a first precedent, inspiring and encouraging researchers to further explore the trajectory. By showing the importance of such a longitudinal analysis for understanding architectural heritage, this study also hopes to encourage researchers from different fields to collaborate and stimulate dialogue.

This research sets a framework spanning from the 12th to the 21st century. The reason the timeframe starts with the 12th century is because in 1138 one of the deadliest earthquakes in the world took place in Aleppo, which took down of what was the Citadel back then. Most of the currently visible Citadel structure originates from the end of that century, built after the deadly earthquake, so this is when the Citadel, as it stands now, started to develop. The reason the timeframe ends with the current century is because two recent key events took place that destroyed part of the Citadel, and these were also the source of inspiration for this thesis. The selected time frame includes diverse historical periods and each historical event covered in this thesis is put into its historical context, that covers socio-political and cultural factors which have influenced the transformation of the Citadel.



Chapter 1: Historical Context

1.1 The Citadel's Background

The city of Aleppo is located in the northwest of Syria and was originally built on the left bank of the Quieq river (Hamida, 2006). Aleppo benefited from its geographical location as its river provided a steady water supply and the Citadel Hill ensured protection from enemies (Gonnella, 2008). The Citadel's hill rises 437 meters above sea level (Burns, 2018). Excavations revealed that there was a temple which was used for centuries, spanning back to 2500 BC, but its surviving elements date mostly from the Late Bronze Age and Iron Age (Burns, 2018). Discovered texts in Ebla show that the origins of Aleppo date back to 3000 BC, however, most of the Citadel as we know it now, originates from the 12th to 13th century AD (Gonnella, 2007).

In the Antiquity Aleppo's strategic importance grew which led to its conquest in 333 BC by Alexander the Great (Gaube, 2007). In the next centuries Aleppo was in the hands of various empires such as the Roman and Byzantine Empire. The construction of the Citadel began during the Hellenistic era and continued through the Roman and Byzantine periods (Burns, 2018). According to Shaat (1996) the first to build the Citadel of Aleppo was Seleucus Nicator, founder of the Seleucid Empire. In 64 BC the last Seleucid ruler was done with and the Roman province of Syria was created. In 363, emperor Julian visited Aleppo's Citadel and worshipped Zeus (Gonnella, 2007), and this is important information as it shows the cultural flow of the Citadel. Where the storm god 'Hadaḏ' used to be worshipped in the old temple, now the Citadel becomes a place for worship of Zeus as well.

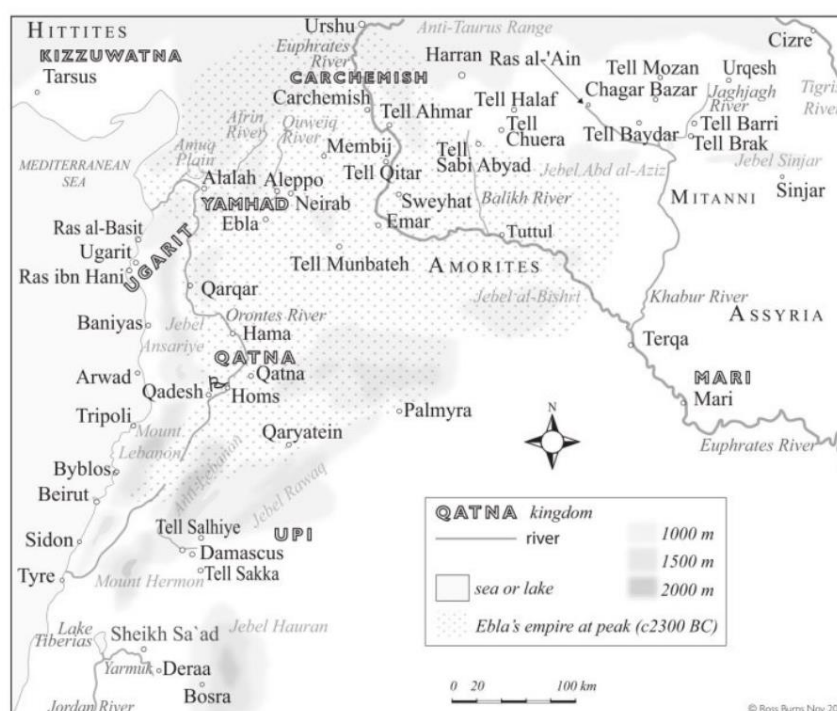


Figure 4: Syria in the Bronze Age, 3600-1200 BC. From *Aleppo: A History* (1st ed., p.8), by Burns, 2018

Only a few traces have been found of the Roman times. In 395 the Byzantium took control over Syria and from that time also few traces are left. The Persian invasion in 540 caused damage to Aleppo. The Citadel withstood the attack, but the city itself was burned down (UNESCO, 2018). Two churches were later converted to mosques during Islamic times after the conquest of 637.

The reason a history until the 12th century is briefly discussed here is because it not only provides crucial context for understanding the fundamental periods of the city's development, and what happened prior to the selected timeframe in this study, but it also shows the huge crossroads of cultures and religions in the Citadel.



Figure 5: Panel with a representation of storm god (left) and king Taita (right). From WMF, by WMF, 2010.



Figure 6: An engraved Byzantine stone block, reused in the masonry of the citadel entrance. From *Medieval Citadels Between East and West* (p.105), by Bianca, 2010.

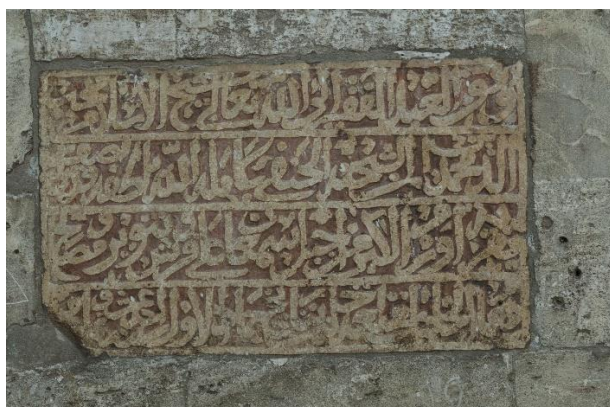


Figure 7: Koranic verse in a courtyard within the Aleppo Citadel. From *Archnet*, by Waugh, 2010.

Middle Ages

The 12th century starts with the Crusades in Syria. Aleppo got attacked in 1100 and 1103 short after the Crusaders' conquest of Antioch (Gonnella, 2007). In the 12th century a sequence of earthquakes hit Syria. The 1138 earthquake killed 230.000 people (IBN TAGRI BIRDI, 1932). This earthquake and all the others of the century are not mentioned in existing literature on the Citadel. The chaos allowed for opportunities for the Crusaders to attack. But Aleppo was not taken, thanks to Nur ad-Din who unified Damascus and Aleppo under one rule (Gonnella, 2007). Lots of Crusaders were held in the Citadel, including Baldwin II. The 1157 earthquake of Homs damaged Aleppo and its Citadel and another devastating earthquake hit along the coast just 13 years later which again damaged Aleppo and the Citadel.

The Ayyubid and Mamluk dynasties fortified the Citadel, transforming it into a great stronghold and a symbol of the city's power (Shaath, 1996). Firstly, Sultan Saladin gave the Citadel to his brother but then to his son, Sultan Ghazi (Shaath, 1996) who fortified the Citadel, this will be mentioned in the next chapter. Ghazi also had a big water reservoir made in the Citadel, he built grain silos and a deep well within the citadel which was probably supposed to be a secret escape route into Aleppo city (Gonnella, 2008). There was also a covered secret passage through which the sultan could reach the court of law located underneath the citadel (Gonnella, 2008).

He also built a house there known as the House of Glory and the House of the Columns (Shaath, 1996). These palaces he built were decorated and luxurious with large gardens and bathrooms but got destroyed by a fire, so he renovated and called it the Dar el Shukhous 'Palace of Pictures' because of the great amount of decoration (Shaath, 1996).

The reason such details are being mentioned is because, like said before, this thesis aims is to understand the interplay of historical events that shaped the Citadel, and here something significant can be noticed. In the antiquity, the Citadel, or its hill, served as a religious function. The practiced religion within the Citadel changed throughout time, and then the Citadel also got a defensive function, which is shown during the Ayyubid Period, but now there is this other new function inside the Citadel that was not there before; a kind of luxury is added, a sign of wealth.



Figure 8: Citadel entrance viaduct. By Cunningham, 2005.

In 1260 the Mongols invaded. They looted all the ammunition and catapults they found in the Citadel, and overthrew the Ayyubid Kingdom of Aleppo (Shaaf, 1996). Aleppo was conquered the same year by the Mamluks that won the battle against the Mongols. When the Mongols were defeated in a battle in Palestine by the Mamluks, they returned to it on their way back and completed its destruction (Shaaf, 1996). The castle remained in ruins until its reconstruction was completed by sultan Al-Ashraf Khalil bin Qala'un. In the Mamluk era, the Citadel had a significant military role, it was a place for the residence of its deputies, even a governor resided there and it was an important focal point for the city.

In 1344 an earthquake hit Manbij, and even though its death toll was around ten times less than the Hatay earthquake of 2023, it caused lots of damage to Aleppo and its Citadel (Sbeinati et al., 2005).

In 1400 the Mongolians again conquered Aleppo led by Timur and devastated the city for a second time and ruled the Citadel until the Mamluks reconquered it right after (Gonnella, 2007). All fortifications were restored, the city walls were extended towards the east, to the north and the south two defense towers were added at the foot of the citadel, and in 1406, the governor had a throne hall built on top of the Ayyubid gateway (Gonnella, 2007). In the Second Royal Era (that of the Circassian Mamluks) the Citadel was the subject of constant strife and wars that took place in order to conquer the Citadel and the city (Shaaf, 1996). The Citadel had to be reconstructed constantly. During the reign of sultan Al-Ashraf Qaytbay, the repair of the walls, the throne hall and some of its buildings were ordered, and so did sultan Qansuh al-Ghuri.

At the end of this Mamluk era, Qansuh al-Ghuri settled in the castle. Before he went to meet the Ottomans in battle, he left his jewels in the Citadel, but he never returned, as he was killed in the battle with the Ottomans in 1516 (Shaaf, 1996).



Figure 9: Mamluk Palace, view of entrance portal to Throne Hall. From *Archnet*, by Waugh, 2010.



Figure 10: Citadel Gate. From *John Henry Haynes - A Photographer and Archaeologist in the Ottoman Empire 1881–1900* (p. 89), by Haynes, 1887

Ottoman Era

During the Ottoman era, the city of Aleppo was no longer a border city, as it fell in the center of the Ottoman Empire. Its importance had decreased and the same was the case of its Citadel. The Citadel still was an important military center where military units resided, with later also the Janissaries (infantry division of the Ottoman army) which again caused interest in its restoration, with some of the restorations ordered by sultan Suleiman the Ottomans still remain (Shaaf 1996).

Leonhart Rauwolff, a traveler who visited the city in 1547, describes the citadel as a sound structure, an anonymous traveler from Venetia mentioned some 2000 people living in the citadel in the year 1556 and in 1679, the French traveler and diplomat Laurent D'Arvieux reports 1400 people there of which 350 were Janissaries (Gonnella, 2007).

In 1822 an earthquake hit Aleppo. The Citadel got damaged and only soldiers remained living there. About 60 per cent of the urban fabric was destroyed (UNESCO, 2018). In 1850, the barracks on top of the hill were restored during the reign of sultan Abdülmecid and a windmill was built east of the barracks (Gonnella, 2007). According to Gonnella, the several Ottoman tombstones suggest that the Aleppo's Citadel had its own cemetery. In 1873 the mosque of Abraham was again restored. This happened most likely after the 1872 Amik earthquake that caused damage to Aleppo and its Citadel.



Figure 11: Print of the city, and Citadel of Aleppo. From *Travels Through Different Cities* (1st ed.), by Drummond, 1754



Figure 11: Citadel artwork. From *meisterdrucke*, by Girault de Prangey, 1843.

Current Times

During the French Mandate, the Citadel's function for the soldiers remained the same; it was used as the headquarters for the French soldiers. The French started archaeological excavations and restoration work in the 1930s and after independence (1946) excavation and restoration works continued.

Aleppo's Citadel became a tourist attraction and it was a site of archaeological digs and studies. This until 2011 when the war in Syria began. The fighting in and around the city led to damage to the Citadel, including its walls and towers, but the Citadel also suffered from looting and vandalism in midst of the chaos.

In February 2023, a devastating earthquake hit the province of Hatay. Aleppo was one of the worst hit cities. It caused many buildings to collapse and resulted into thousands of deaths in Aleppo alone.

On the next page, the historic layers of the Citadel are shown in plan. This image will be referred back to in the following chapters, where this thesis delves into the destruction and reconstruction of the Citadel. This consists of three chapters starting with the medieval period, then the Ottoman era and ending the current period.



Figure 12: Donkey riders in front of the Citadel. From *HelveticArchives*, by A. Schwarzenbach, 1933

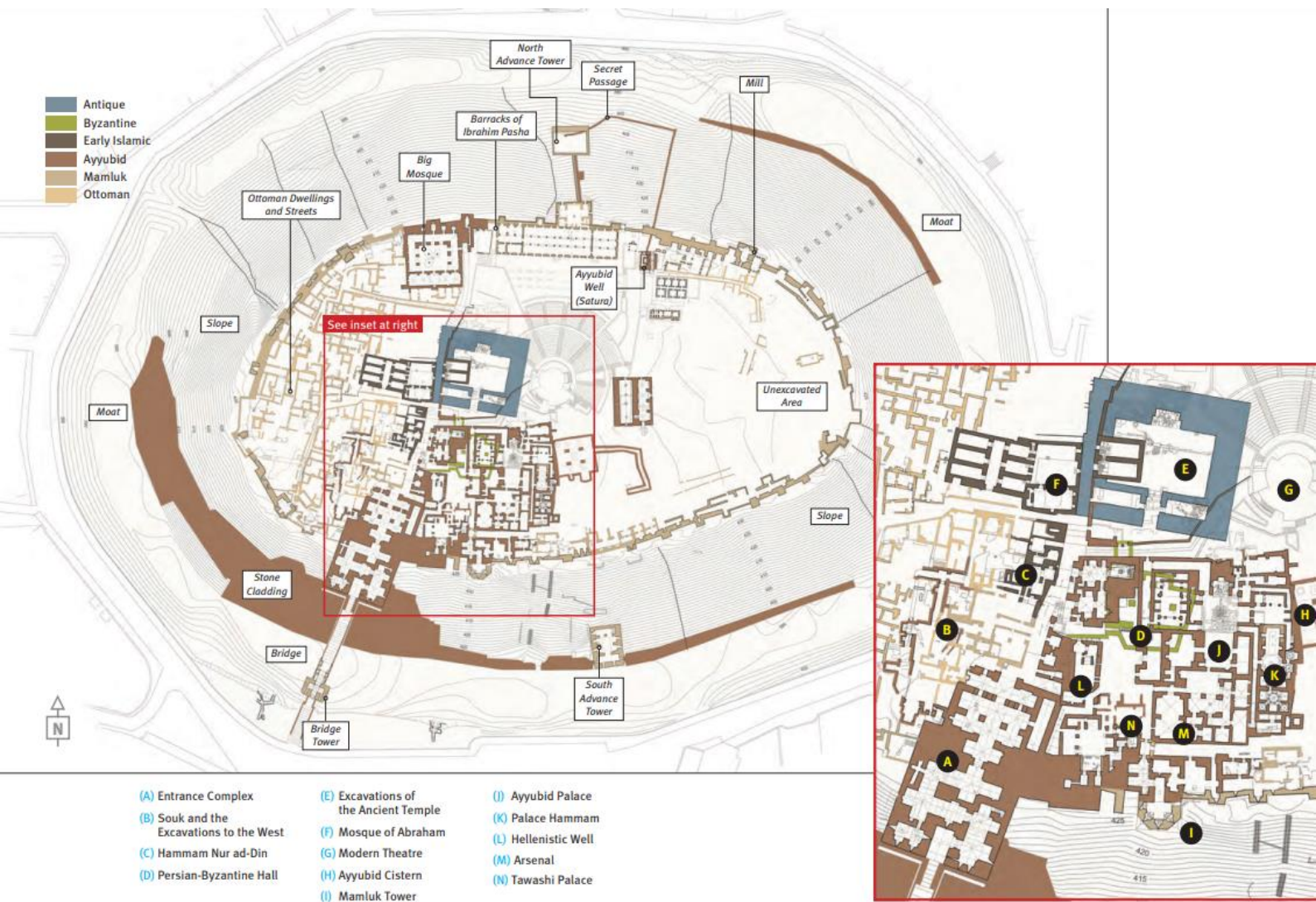
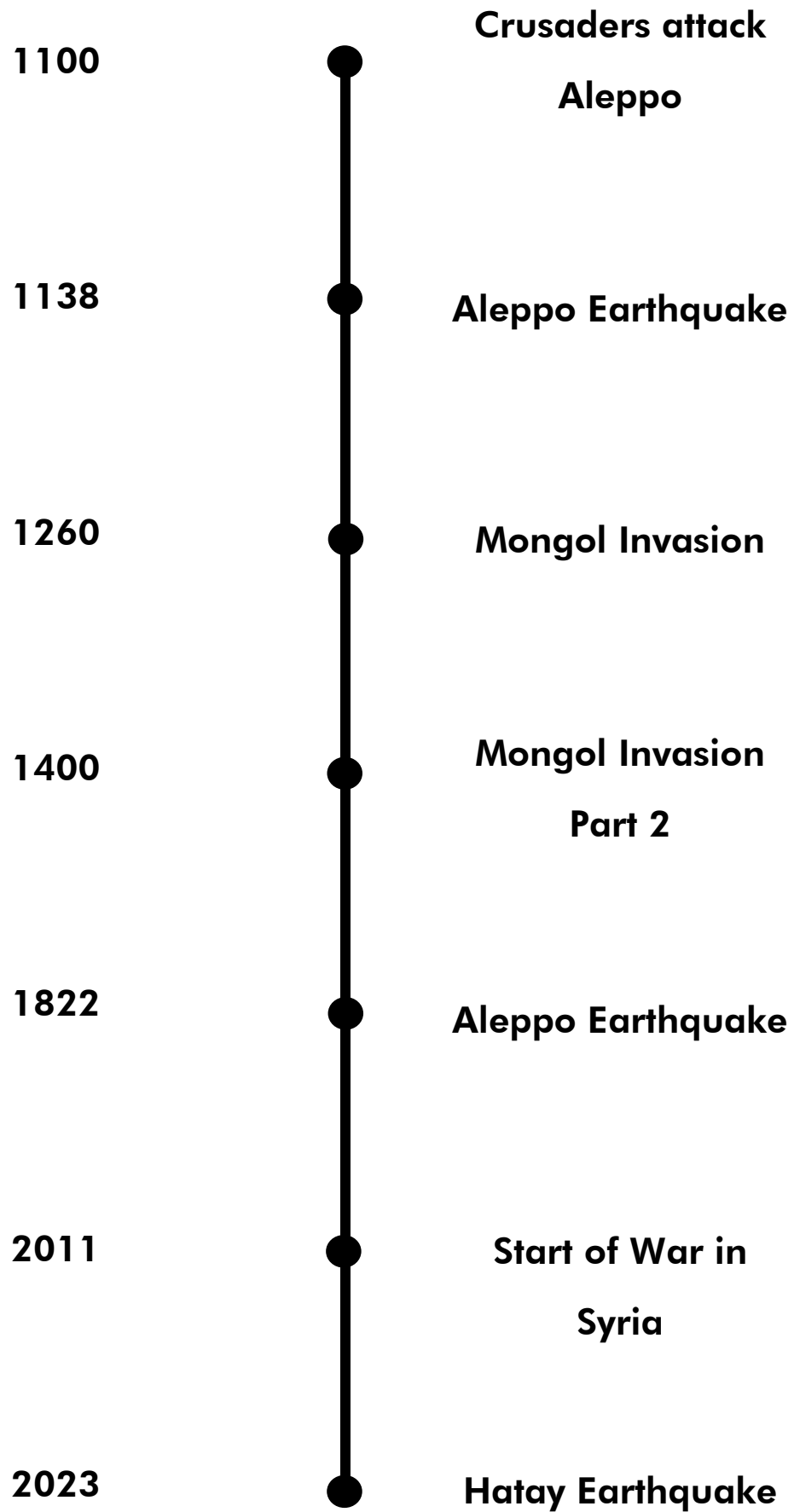


Figure 13: Historic layers of the Citadel in plan. From *The Citadel of Aleppo: Description, History, Site Plan and Visitor Tour* (2nd Ed., p.8) by Gonnella, 2008

1.2 Timeline Historic Events



Chapter 2: Medieval Period [12th – 15th century]

2.1 Crusaders and Earthquakes

Historical documents about the Citadel from the Medieval Period in general are scarce, especially from the first centuries it is difficult to find any documentation on destruction of the Citadel. Most archive material is documented after the 19th century, starting in the modern era. The events in this first paragraph of the Medieval Period chapter happened before the main structure of the Citadel were built by the Ayyubids by the end of the 12th century, so it can be seen as if the earthquakes and battles with the Crusaders were a turning point in the city's history; the start of the building of Aleppo's Citadel as it stands nowadays.

As mentioned in chapter 1, the earthquake of 1138 is not mentioned in most existing literature on the Citadel. The consequence is that it is not precisely known what damage the earthquake caused to the Citadel. Of all the other earthquakes that happened in that same century, there are also no historical records regarding the Citadel. This 'earthquakes during crusades part' of history is chaotic with lots of activity in a short amount of time; much destruction caused in the midst of battles, but not much recorded. The sequence of large earthquakes first started (after the 1114 Marash earthquake) with the third deadliest one on earth; the 1138 Aleppo earthquake. This was followed by the 1157 Hama earthquake, continued with the 1170 earthquake and 1202 earthquake that happened in the southwest of Syria. The 1114 earthquake, prior to the sequence of earthquakes, did not cause much damage in the city of Aleppo (Kemal al-Din, 1884). There are no details regarding the Citadel's destruction in the sequence of earthquakes but there are some more general historic narratives from witnesses regarding the Citadel:

1138

Ibn Al-Aadim (1996, p. 113) said: 'Many houses collapsed in Aleppo, the fence was broken and the walls of the citadel shook.'

Ibn al-Qalanisi (1908) said: 'The ramparts of the city buckled and the walls of the citadel were shattered.'

Kemal al-Din (1884) said: 'The two parts of the walls, east and west of the citadel were breached.'

1157

Michael the Syrian (1899-1910) said: 'Some of the towers of the fortifications collapsed together with some houses.'

Historian Sibṭ ibn al-Jauzī (1951) said: 'The Citadel partially collapsed' and 'Half of the citadel was ruined.'

The earthquakes significantly influenced politics and military affairs. The 1157 earthquake led to an increase in tension between the Crusaders and the Muslims, and more violence between the two in Syria, but the destruction of the 1170 earthquake ended that as they thought they were being punished by God.

The Zengid dynasty ruled Aleppo from 1128 to 1183 so the Zengids suffered most of this earthquake sequence as the Ayyubids took control of the city in 1183. From the crusaders' attacks on Aleppo is known that they failed to capture the Citadel, however, possible damage inflicted on the Citadel is not well documented. Nevertheless, the transformations that were made during the Crusades by the Zengids can still be analyzed. Nur ad-Din rebuilt the city walls, fortified the citadel, built a high brick entrance wall ramp leading up to the citadel, restored two mosques, built a prayer niche, the Golden Palace and a racecourse (Gonnella, 2008). In figure 1 'Hammam Nur ad-Din' is written, so we can assume he built a hammam as well. In figure 15 the fortifications can be seen, compared to the byzantine walls in figure 14.

As the aim of this thesis is not just to sum up the impact of events but to also understand the context of the architectural transformations of the Citadel, it is important to notice here that during these battles, the Zengids not only made transformations that come from military and defensive motives, but also religious and cultural motivations as Nur ad-Din reconstructed the mosques, built a palace, racecourse and a hammam.

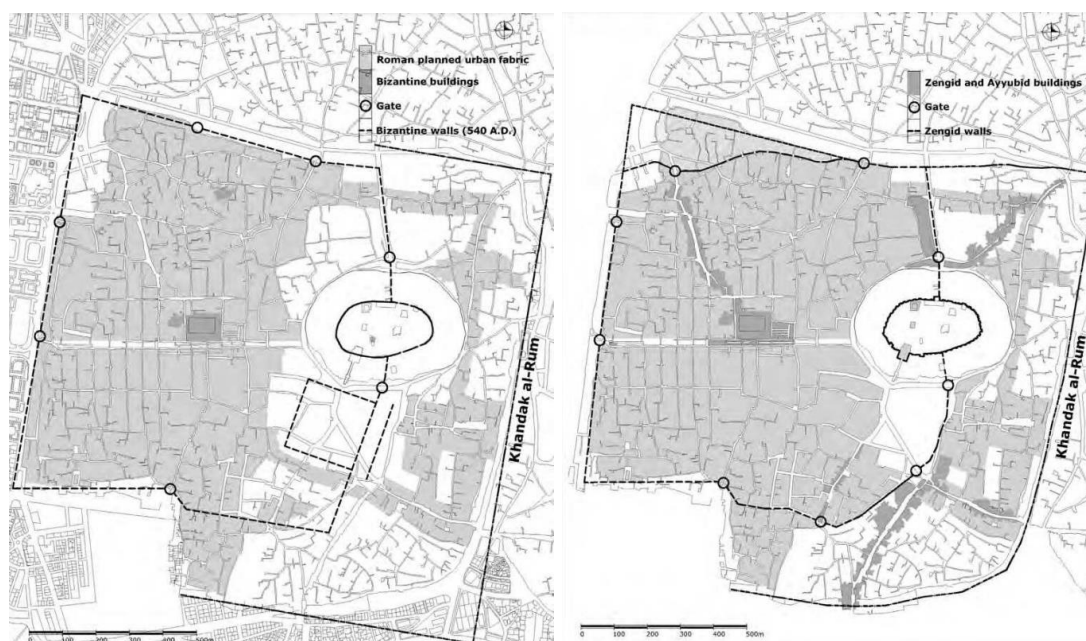


Figure 14, 15: Byzantine fortifications and urban fabric, Zengid and Ayyubid fortifications and urban fabric. From Chapter five: *The forma urbis of Aleppo (Syria) during the Middle Ages* (p.128 and p.139) by Neglia, 2010

2.2 Aleppo's Citadel in the Ayyubid Era

As the Ayyubids took it over from the Zengids, they still had defending to do. Sultan Ghazi had to strengthen the walls, and he then covered the sections of the slopes near the entrance area with stone slabs, increased the moat depth, filled it with water, spanned it by a bridge-viaduct, had a big water reservoir made, built grain silos and a deep well, built the Palace of Glory in the Ayyubid court with multiple palaces, gardens and bath (Gonnella, 2008). See below the entrance to Ghazi's Palace, drawn by Ernst Herzfeld between 1908-1914 with its typical Ayyubid architecture of striped limestone. The Palace of Glory got at first destroyed by a fire that happened at Ghazi's wedding night in 1212 but got rebuilt right after. This destruction and reconstruction part shows how the Citadel not always got destroyed because of defensive and military reasons. Like said in the previous chapter, this shows how the Citadel added a new luxurious function to itself, see figure 17 for the plan of the Ayyubid Palace.

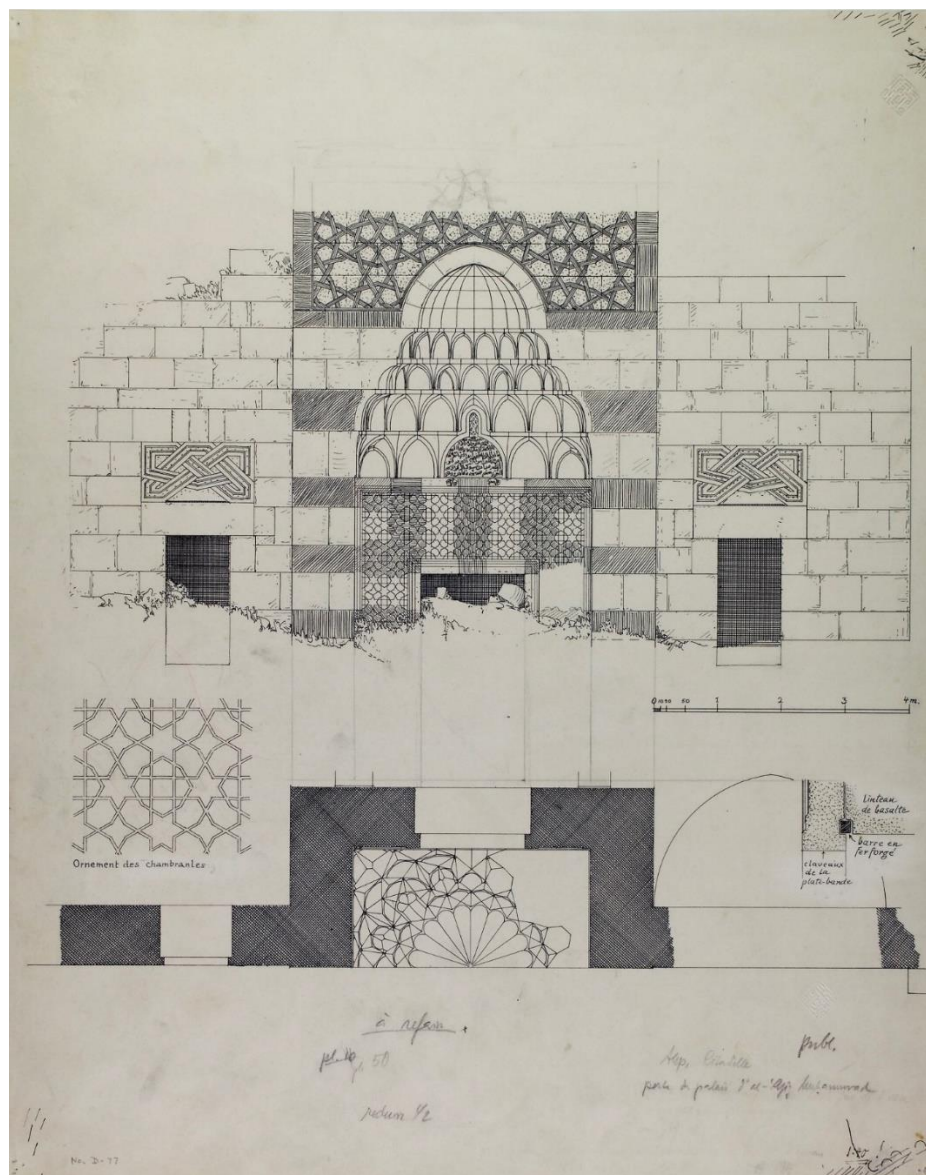


Figure 16: Ayyubid Palace of al-Malik al-Zahir Ghazi, Entrance Portal: Plan and Elevation. From *Smithsonian Institution*, by Herzfeld, 1908-1914

In figure 13 can be seen how most of the Citadel's parts are built during this Ayyubid Era and that includes the Entrance Complex. It is not the entire complex, but this will be addressed next. In figure 18 the entrance plan during Ghazi's reign is shown and in figure 19 the entrance plan is drawn by Herzfeld (1908-1914). This is an important drawing, as Herzfeld has drawn the different modifications/additions from the different rulers starting with Ghazi.

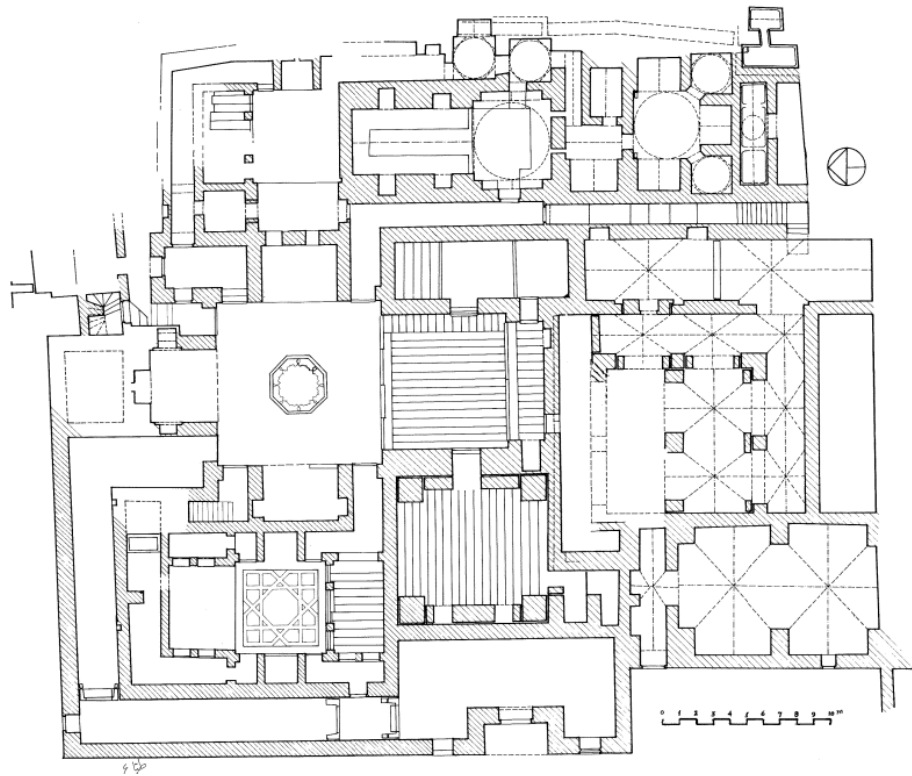


Figure 17: Ayyubid Palace Plan 1190-1230. From *Circle of Power* (p.97) by Tabbaa, 1993

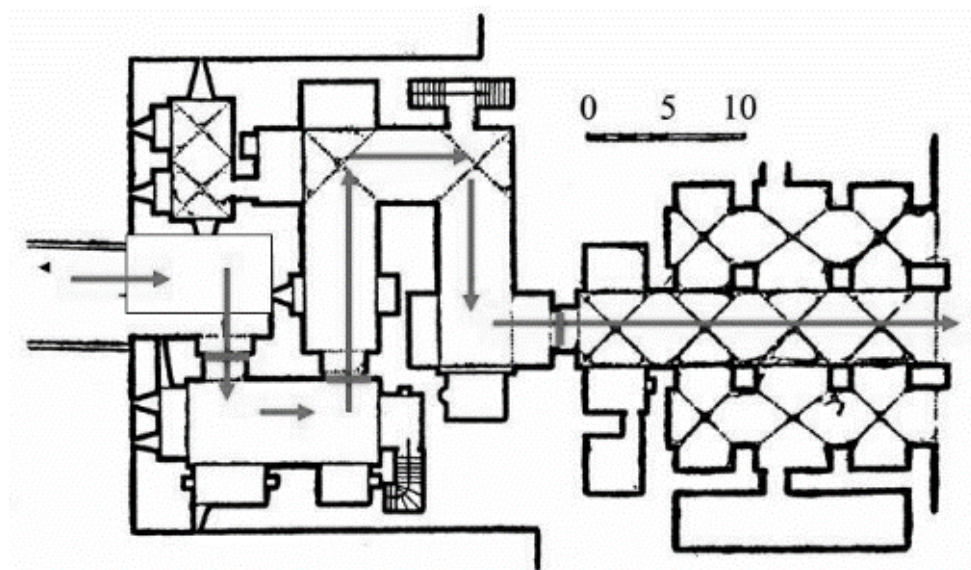
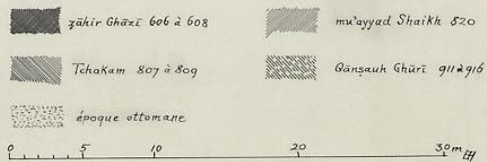
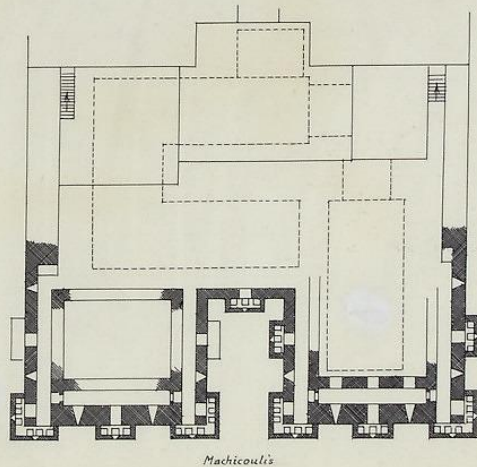
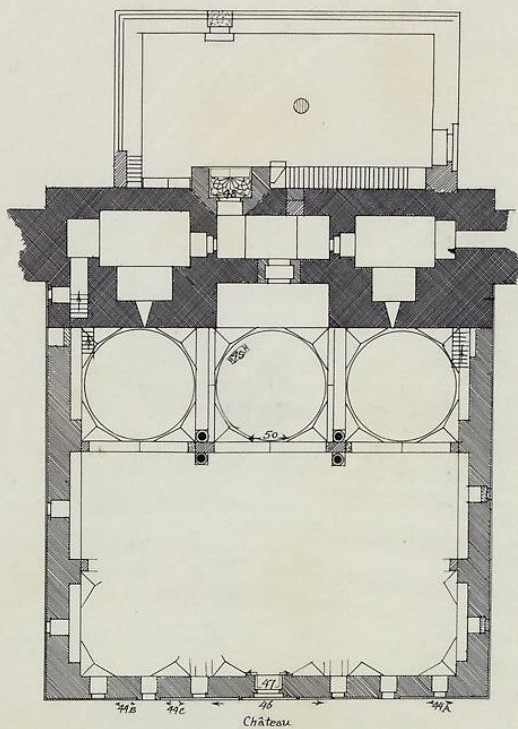
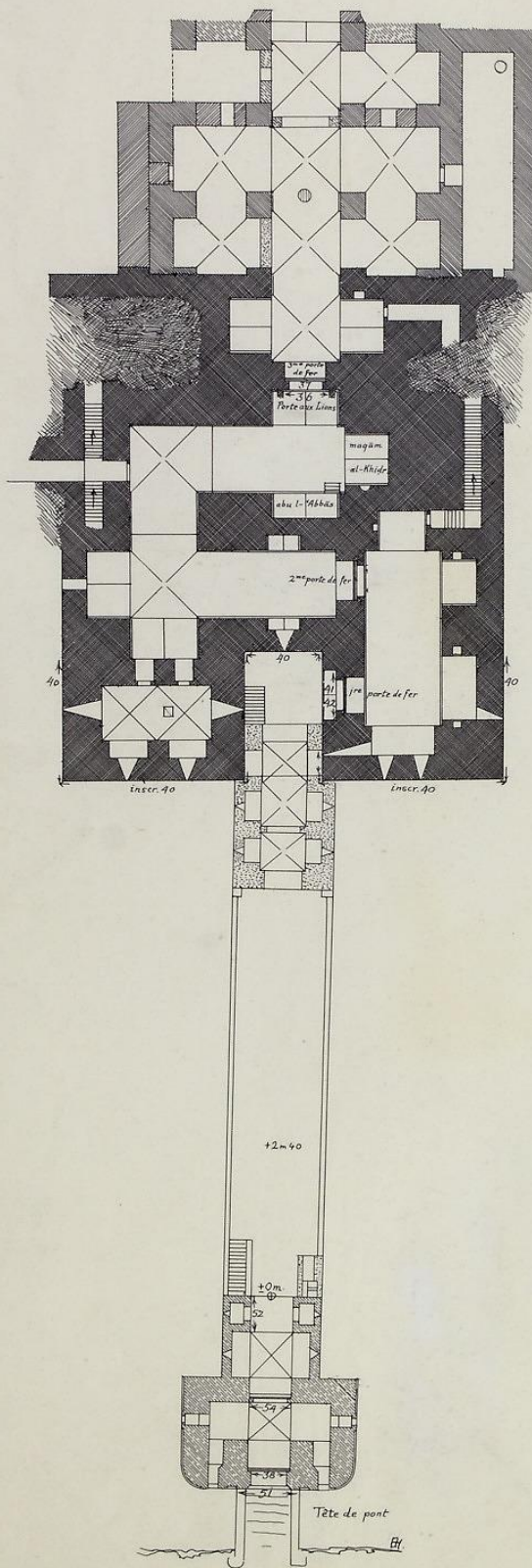


Figure 18: Plan of entrance to Citadel during the reign of Zaher al Ghazi. From *Historical Monuments of Aleppo* by Hadjar, 2000

Figure 19: Plan of entrance to Citadel. From *Smithsonian Institution*, by Herzfeld, 1908-1914

p. 26
 folding plate
 red. 9/8
 1/8



Leop. Friedland,
 Constantinople

Sup. entre 40 et 50 m.
 1/8

To understand what Ghazi did in the Entrance Complex, the building must be put in its historical context. In the drawing of Herzfeld above, Ghazi's part of the entrance complex looks almost like a maze which can be seen in figure 18, the plan of the entrance. The reason why the entrance looks so difficult and is not a straight line, is because this design was meant to keep the enemies from intruding into the Citadel. In the plan can be seen how an intruder would have to go through three doors and change direction six times to enter the Citadel.

Below is an axonometric view of the Ayyubid Palace. Evidence of the wedding night destruction from 800 years ago can actually still be seen till today. There are traces of the fire in the Ayyubid courtyard and on the entrance portal, see figure 22. According to Gonnella (2008), Ghazi's arsenal also got destroyed by the fire but was restored by Ghazi's son. The big mosque in the Citadel also got destroyed by the fire but completely rebuilt by Ghazi according to the inscription on the tympanum of the entrance gate. The Ayyubid Cistern, which is an underground hall, is partly carved out of the limestone stone on which the Citadel is built and has signs of destruction but it is not known which events caused what exactly. The stone cladding on the slope was also applied by Ghazi and for military reasons as it made enemy intrusions harder but it also prevented walls from eroding and it offered protection from new medieval war machines (trebuchet) that could strike up to 300 meters with 90 kilos to catapult.

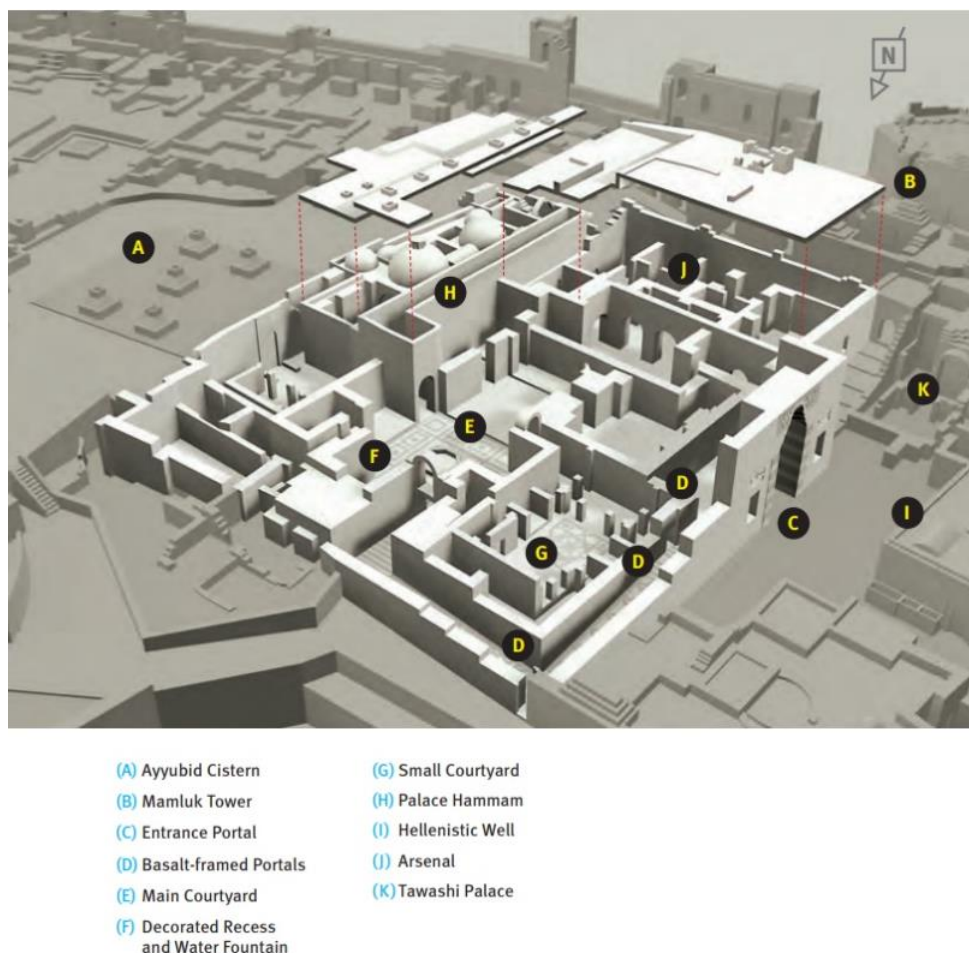


Figure 20: Axonometric view of the Ayyubid Palace. From *The Citadel of Aleppo: Description, History, Site Plan and Visitor Tour* (2nd Ed., p.47), by Gonnella, 2008



Figure 21: Ammunition for bliden stored in the upper gate area. From *Gerda Henkel Stiftung*, by Braune, 2010



Figure 22: Palace of malek al-Zahir Ghazi, entrance portal. From *Archnet*, by Tabbaa, 1990

2.3 Aleppo's Citadel during the Mamluk Rule

The Mongols invaded in 1260 and that is where the Mamluks took over from the Ayyubids. This invasion caused destruction to the Citadel and the Mamluks had much reconstruction to do. At first, the Mamluks did not have much interest in restoring the city of Aleppo, however, Sultan Qala'un started reconstruction on the Citadel after around twenty years (Gonnella, 2007). It is important to understand the reasoning behind why the Mamluks were initially not interested in rebuilding Aleppo. This was because the Mamluks did not rule their empire from anywhere near Aleppo. It was from Cairo, so they ruled Syria from Egypt. This is another important mark, as suddenly Aleppo and its Citadel are viewed by the rulers as less important than before. They started adapting the Citadel to their own needs, so for example, in section 2.1 was discussed how there probably was a hammam in the Citadel, but the Mamluks converted this into a mint.

During the Mamluk rule a big earthquake hit Syria in 1344 and caused destruction to the Citadel. From this historic event, like the earthquakes before, there is not much documentation regarding the destruction caused to the Citadel.

Ibn Kathir (1932-1939) said: 'News came from Aleppo mentioning that many houses were destroyed, a few towers of Aleppo citadel, mosques, monuments and walls fell down.'

Less than 60 years later, the Mongols invaded again and conquered Aleppo in 1400, but the Mamluks got control right after, however, the Citadel and the city got damaged by the Mongols twice now. The Citadel got fortified again and governor Jakam built two defensive towers, see in figure 13 the north and south advance tower, and on the next page a photograph of the north tower from approximately a hundred years ago. He also built the Throne Hall which was added on top of the entrance complex that was built by the Ayyubids, and this became the grandest space inside the Citadel (Shaath, 1996). The Throne Hall was used for official functions and entertainment by the rulers of the city and the sultans that came from Cairo on a visit (Shaath, 1996). Notice here how during the reconstruction after the invasion, the governor decides to add both military and luxury functions to the Citadel.

In figure 19 Jakam's addition of the Throne Hall is shown in plan. It is important to also mark how the Throne Hall was only really completed in 1417 under sultan Shaikh because the Mamluks' plan was to build the ceiling with Baalbek timber but the trunks they had were too short for the span of the ceiling so this had to wait until the longer trunks were brought from Damascus (Gonnella, 2008). This is important for the understanding of the transformations of the Citadel as during this time the Mamluks came with new, innovative design ideas and waited years for the completion of the Hall because of this design of the ceiling.

Figure 23: North advance tower of the Citadel. From *Victoria and Albert Museum*, by Creswell, 1919-1921



2343-1921.
advanced works on north glacis.

The Throne Hall had to be restored again around the end of the century. Part of the facade got rebuilt and the wooden roof that was constructed earlier had collapsed so in 1508 Sultan al Ghuri replaced it with nine stone cupolas (Gonnella, 2008).

The Mamluks also added a tower, the Mamluk Tower, near the Ayyubid Palace. The palace got destroyed during both the first and second invasion of the Mongols. The Mamluks reconstructed the palace during their rule but their alterations are not visible anymore (Gonnella, 2008).

Figure 13 shows that the bridge tower was built during the Mamluk Era, however, prior to that, the Ayyubids had a bridge tower as well, but it got destructed during the Mongol invasion. So even though the bridge and part of the entrance complex of today were built by the Ayyubids, the tower of the bridge that leads to the entrance had to be reconstructed by the Mamluks because of the destruction caused by the Mongols. The Mamluks reconstructed the bridge tower with the aim of restricting access to the Citadel and visually conveying strength (Gonnella, 2008) so the motives here were defensive which is fitting for its historical context.

The Mamluks had found the walls from the Ayyubids in ruins after the invasion and reconstructed it throughout the time of their rule. The ring wall, made out of 40 towers with 900 meters of wall, after the second Mongol invasion got restored under sultan Ghuri (Gonnella, 2008). In figure 13 is shown how the ring wall comes from the time of the Mamluks. The walls are a part of the Citadel that throughout time got destroyed and reconstructed a lot; from the Zengid rule with Nur al Din, to the Ayyubids with Ghazi reconstructing, to now the Mamluks rebuilding, but it does not end here. In 1516 the Ottoman armies took over Syria and ruled over Aleppo and its Citadel, which is the beginning of a new chapter of the Citadel's history and will be discussed in the next chapter.

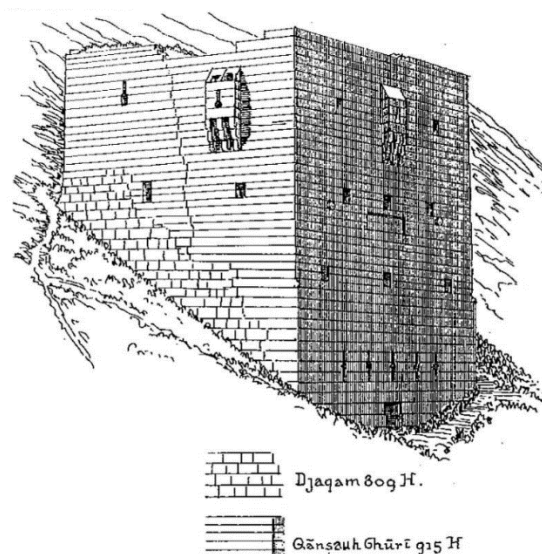


Figure 24: Engineering elevation of the North advance tower. From *Aleppo Citadel: A study of the history of the citadel and its antiquities* (p.286), by Shaat, 1996

Below, the alterations of the Mamluks to the entrance block are shown. The architectural transformations in this façade can be seen. The first thing to note is the huge stone blocks the Ayyubids used, while the Mamluks used smaller stones. These, as can also be noticed, allowed for designs and decorations of the windows of the Mamluk façade part. The Ayyubid part shows strength and force which is typical for its military architecture, while the Mamluk part shows a spark of wealth with architectural detail. In general, decoration in the Citadel was nothing new. Rich ornamentation and detail can already be seen in the Ayyubid Palace (figure 16). But there is a visible transformation; from Islamic design elements such as the decorative motifs and geometric patterns to an adaption of such design elements and addition of Mamluk design innovations such as the use of intersecting vaults in the big mosque or ornamental and multi colored stones.

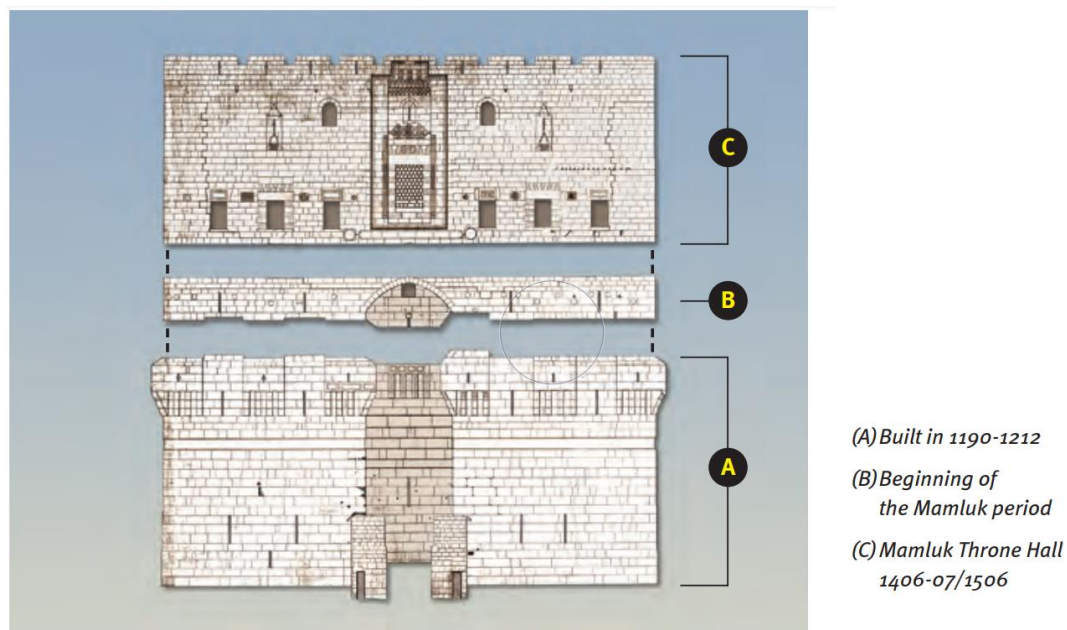


Figure 25: Entrance block alterations from Ayyubid to Mamluk period. From *The Citadel of Aleppo: Description, History, Site Plan and Visitor Tour* (2nd Ed., p.21), by Gonnella, 2008

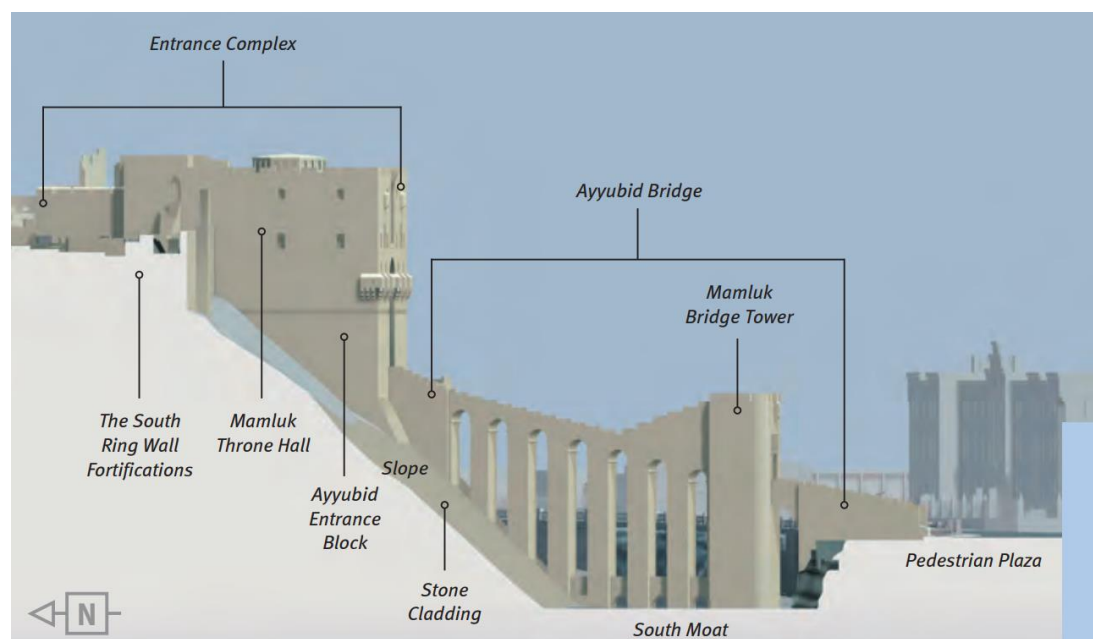


Figure 26: Entrance section. From *The Citadel of Aleppo: Description, History, Site Plan and Visitor Tour* (2nd Ed., p.31), by Gonnella, 2008

2.4 Impact of the Medieval Period on Aleppo's Citadel

The Medieval Period, characterized by sequences of seismic events, military conflicts, and dynastic changes, shaped the Citadel of Aleppo. This period witnesses architectural transformations of the Citadel from the different rulers that undertook fortifications and reconstructions to adapt to military strategies but also cultural and socio-political dynamics.

The earthquakes of the first centuries of this era caused destruction but were also the turning point for the Citadel as this is where the Citadel began to take shape during the battles with the Crusaders. While historical records regarding the damage to the Citadel during these earthquakes are scarce, narratives offer glimpses into the destruction caused but still cannot point out any damage in detail. The earthquakes also significantly influenced the political and military context, which then again led to shifts in power dynamics. The Crusades highlighted the Citadel's strategic importance, as during the battles in this era the fortress became a focal point of conflict between Muslim rulers and Crusaders. Even though the city faced various assaults, the Citadel remained unconquered by the Crusaders. The Zengids and Ayyubids implemented lots of reconstructions and additions to the Citadel. Most of the Citadel's structure of today dates from the time of the Ayyubid dynasty ruling the city.

One significant phase during this era is the transition from Zengid to Ayyubid rule as Nur ad-Din fortified the fortress and Ghazi adapted its fortifications to new military technologies and strategic demands but also added beauty to it in the sense of new functions such as palaces and baths. Thus, this phase not only strengthened the Citadel's defense but also reflected the cultural and religious desires of the Ayyubids. The Mongol invasions and the following reconstructions of the Citadel highlight the Citadel's vulnerability to external threats but at the same time the resilience of the defenders. The Mamluks, while at first hesitant to invest in the Citadel's restoration, eventually put in huge reconstruction efforts, adding new defensive structures but also architectural innovation as to both boost its aesthetic appeal and its defensive capabilities.

In conclusion, the Medieval Period shaped the Citadel and its architectural identity, and marks its historical significance. Despite the various challenges the Citadel has faced, including earthquakes, invasions, and political shifts, it got through a cycle of destruction and reconstruction which can be seen as a symbol of resilience and endurance. The transformations here reflect not only the military motives of the time but also the cultural, religious, and political desires of the rulers of the Citadel. As this exploration will be continued in the next chapter, where the Ottoman rule changed the Citadel's identity, it is important to keep recognizing the interplay of these aspects.



Figure 27: Ayyubid Palace entrance portal: view of muqarnas hood from below with the typical Ayyubid masonry work of striped limestone decorated with geometric patterns. From *Archnet*, by Tabbaa, 1990



Figure 28: Mamluk Palace forecourt, view of ornamental and multi colored doorway in northern wall. From *Archnet*, by Tabbaa, 2000

Chapter 3: Ottoman Rule [16th – 20th century]

3.1 Aleppo's Citadel under the Ottomans

As the Citadel was a focal point of conflict in the Medieval Era, this completely changes with the Ottoman armies taking Syria. It marks a significant phase as the military role of the Citadel as a defense fortress is slowly disappearing because Aleppo is now in the middle of the Ottoman Empire and the city is no longer a threat to external enemies. The city began to grow outside the city walls and was taking the form of a commercial metropolis, so the importance of the Citadel shrank and it became a barracks for Ottoman soldiers (UNESCO, 2018).

Below in section can be seen how a large amount of the Citadel is occupied by the Ottoman dwellings and streets. This can also be seen in the plan of figure 13. The dwellings of the Ottomans are like a residential quarter situated in the west part of the Citadel. The Citadel served as a garrison for the soldiers, but also as living quarters for them and their families. The Ottomans were not fully occupied by their military service and earned extra money through trade (Gonnella, 2007). The French traveler Volney (1825) mocked the 350 Janissaries who were stationed inside the Citadel for being mainly busy with their shops instead of their military job. The English Alexander Russell, who was a physician and had lived in Aleppo from 1740 to 1753, described the Citadel at that time like: 'When you climb up past the fourth gate, there are some shops on your left and, opposite, some cells with iron doors. Further up on the left, there are some large old houses which are sometimes used as a prison. Opposite them are some streets with pretty houses for the garrison' (Russell, 1794). These are important marks, as another new function is being added to the Citadel. It has become a residential quarter while it was supposed to be a garrison for soldiers. It has developed into a more luxurious quarter for soldiers with two jobs, and their families. This is the result of the city being in the middle of a trading network of the empire, becoming a commercial metropolis where the soldiers would have less defending to do.

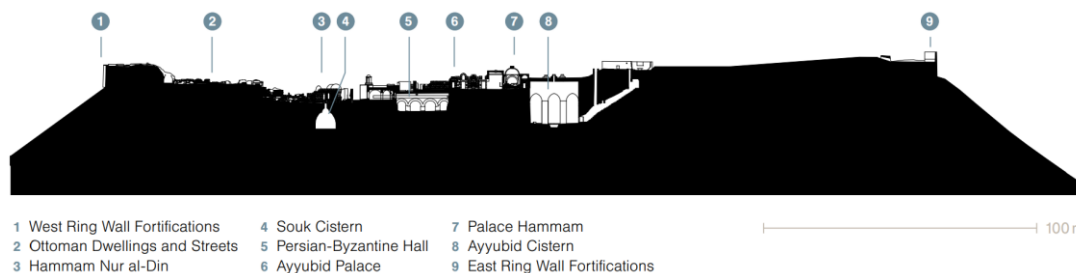


Figure 29: Cross section of the Citadel. From *The Aga Khan historic cities programme : strategies for urban regeneration* (p.257) by Jodidio, 2011



Figure 30: Relation between the traces of pre-Islamic Aleppo and the layout of the Ayyubid and Mamluk urban walls. From *Chapter Five: The forma urbis of Aleppo during the Middle Ages* (p.131) by Neglia, 2010



Figure 31: Main streets and the gates of the city during the Ottoman times. From *Aleppo : a design proposal for a deconstructed city* (p.31) by Martinez and Sozuner, 2018

The Ottoman quarter was uncovered only 20 years ago by excavations in the Citadel (Jodidio, 2011). These revealed different types of courtyard houses of various sizes which have been well built, with tiled and, in some houses, multicolored floors (Gonnella, 2007).

In the figure on the next page a drawing by Herzfeld shows how the western part of the Citadel is empty as the Ottoman dwellings were not excavated yet.

During the Ottoman rule the two mosques of the Citadel were restored. In the early Ottoman period, the Citadel was, like mentioned in chapter 1, likely in good condition, however, the fortifications were neglected. Volney, who stayed in Aleppo in the 1780s said (1825): '...its walls are in ruins, and the old narrow towers do hardly better'.

That the fortifications were neglected are again a result of the city being in the middle of the empire where there is no need for such defensive restorations. This indicates stability; after those centuries of battles and changes, the city and its Citadel now find themselves in a more balanced, secure and steady position.

Figure 32: Aleppo Citadel, Ottoman dwellings. From *Wikimedia Commons*, by Osseman, 2010





Figure 33: Plan of Citadel. From *Smithsonian Institution*, by Herzfeld, 1908-1914

3.2 The 1822 Earthquake

In 1822 the Aleppo earthquake hit and destroyed the city. The damage in the city was so severe that lots of people moved out of Aleppo. The Citadel was badly damaged, deserted, and about 60 per cent of the urban fabric was destroyed (UNESCO, 2018). Most of the old city center was left unrepaired and the moat became filled with rubble from damaged buildings. The earthquake caused another transition in the city's history, it became one of the reasons that Aleppo became less important as a commercial center during this time. This had to do with the economics as most of the city was destroyed (UNESCO, 2018) so it is logical that an unneeded military function would not get reconstructed right after its destruction. After the earthquake only soldiers lived in the Citadel.

The Ottomans' residential quarter got destroyed but the barracks were restored around 30 years later. Around the same time the Ottoman mill was built and another 20 years later the mosque of Abraham was reconstructed (Gonnella, 2008). This happened in 1873 and was probably done so after another earthquake had hit Antakya in 1872. This one had a bigger magnitude than the 1822 earthquake but caused less damage and casualties (Sbeinati et al, 2005). The 1822 earthquake also caused destruction to the ring wall but the Ottomans did not reconstruct it (Gonnella, 2008). This again shows the lack of interest in restoring the defensive parts of the Citadel as a result of the Citadel losing its significance in the empire. The roof consisting of nine cupolas that Ghuri had built during his reign in the Throne Hall, now got destroyed by the earthquake as well. Besides the mosque of Abraham, the big mosque also got damaged, of which its full reconstruction will be mentioned later in chapter 4.

Two parts of the Citadel can be highlighted: the big mosque and the ring wall. The ring wall, like mentioned in 2.3, is a part of the Citadel that continuously has been destroyed and reconstructed through the time. This cycle has not ended in the Medieval Period because history shows that stability does not necessarily mean an end to the destruction and reconstruction cycle of the Citadel. During this period, it is a natural disaster that caused the destruction of the ring wall. The big mosque got destroyed during the Ayyubid rule because of, not battles, but a fire on the wedding night of the ruler. He rebuilt it and it here got destroyed because of seismic activity. It is also significant to note how governor Pasha after the earthquake used the destruction it caused to the Citadel to reconstruct in other parts of the city. He had used stones from the ruins of the Citadel to build other barracks and structures in the city.

Figure 34: Map of Aleppo, from *Menazilname*, by Nasuh, 1535.



3.3 Impact of the Ottoman Era on Aleppo's Citadel

The Ottoman era marked a significant transformation of the role and function of the Citadel, basically transforming from a military fortress to a residential and administrative center within Aleppo. The Ottoman rule reshaped the Citadel's identity and significance. Compared to the medieval ages, the Citadel is not of big military significance anymore. As the Zengid, Ayyubid and Mamluk rulers were constantly battling and fortifying the fortress, such battles are not to speak of under the Ottomans. Aleppo emerged as a commercial hub within the Ottoman empire, which led to urban expansion beyond the city walls of the Ayyubids and Mamluks. Under the Ottomans, the Citadel got adapted to provide for the changing needs of its new rulers. While in the Medieval Ages, this meant religious functions or palaces, with the Ottomans it means residences and shops.

The fortifications fell into disrepair, reflecting the shrinking military threats of the city. The Citadel became occupied by dwellings, transforming a big part of the Citadel into a residential quarter for soldiers and their families with various types of courtyard houses. Despite the neglect of fortifications, religious structures were not neglected and effort was put in its reconstruction. This reflects the religious and cultural importance that did not disappear. The 1822 earthquake brought even further changes, as it destroyed most of the city there was a shift in the city's economic and social dynamics which led to even less interest in reconstructing the Citadel, especially the fortifications as they were not important.

In conclusion, the Ottoman era represents a whole new chapter in the history of Aleppo's Citadel, characterized by societal transformations and geopolitical dynamics compared to the rule of the previous dynasties that had lots of defending to do. After 400 years of Ottoman rule, this came to an end around the first World War in which the Ottoman Empire collapsed and the region came in the hands of the French.



Figure 35: Lithograph of Aleppo with Citadel in the back. From *meisterdrucke*, by Girault de Prangey, 1843.

Chapter 4: Modern Era [20th century – Present]

4.1 Aleppo's Citadel under the French

As World War I ended in 1918, the Ottoman Empire fell and Syria got under French Mandate. This has led to another significant transformation of the Citadel and marks a complete new era.

Like the Ottomans, the French soldiers got stationed in the Citadel. The Citadel got closed to the public and the French started carrying out the first archeological digs (Gonnella, 2007). According to Gonnella, In the 1930s, lots of reconstruction was carried out, especially on the ring wall. This marks the beginning of a cultural interest; architectural digs were happening in the Ancient Temple which shows a spark of interest in the historical significance of the Citadel that was not there before. However, the priorities of the French lay more in political interests rather than cultural preservation, so this time in history could rather be seen as a turning point for the Citadel's cultural significance as after Syria's independence the restoration work got extensive and the Citadel became a tourist attraction and center of culture with archeological digs and studies where its rich historical and cultural significance really started to get unfolded. So, even though reconstruction was carried out by the French, the efforts were more linked with their political agenda in Syria. This can also be seen in the Citadel's closing to the public which reflects a shift in its accessibility but also use, emphasizing its role as a military outpost under control of the French rather than a public monument.

A significant mark during the French Mandate is the disappearance of a part in the Citadel. In chapter 2 was mentioned how Nur ad-Din had built a wooden prayer niche in the mosque of Abraham. This niche disappeared during the French Mandate without a trace (Gonnella, 2007) and whether it was stolen or that something else happened to it, is not known. The lost prayer niche can be seen on the next page in a photograph by Creswell before the Citadel officially got under French Mandate.

Figure 36: The lost carved wooden mihrab in Maqam Ibrahim at the Citadel of Aleppo. From *Victoria and Albert Museum*, by Creswell, 1919-1921



Mihrâb.

2454-1921.



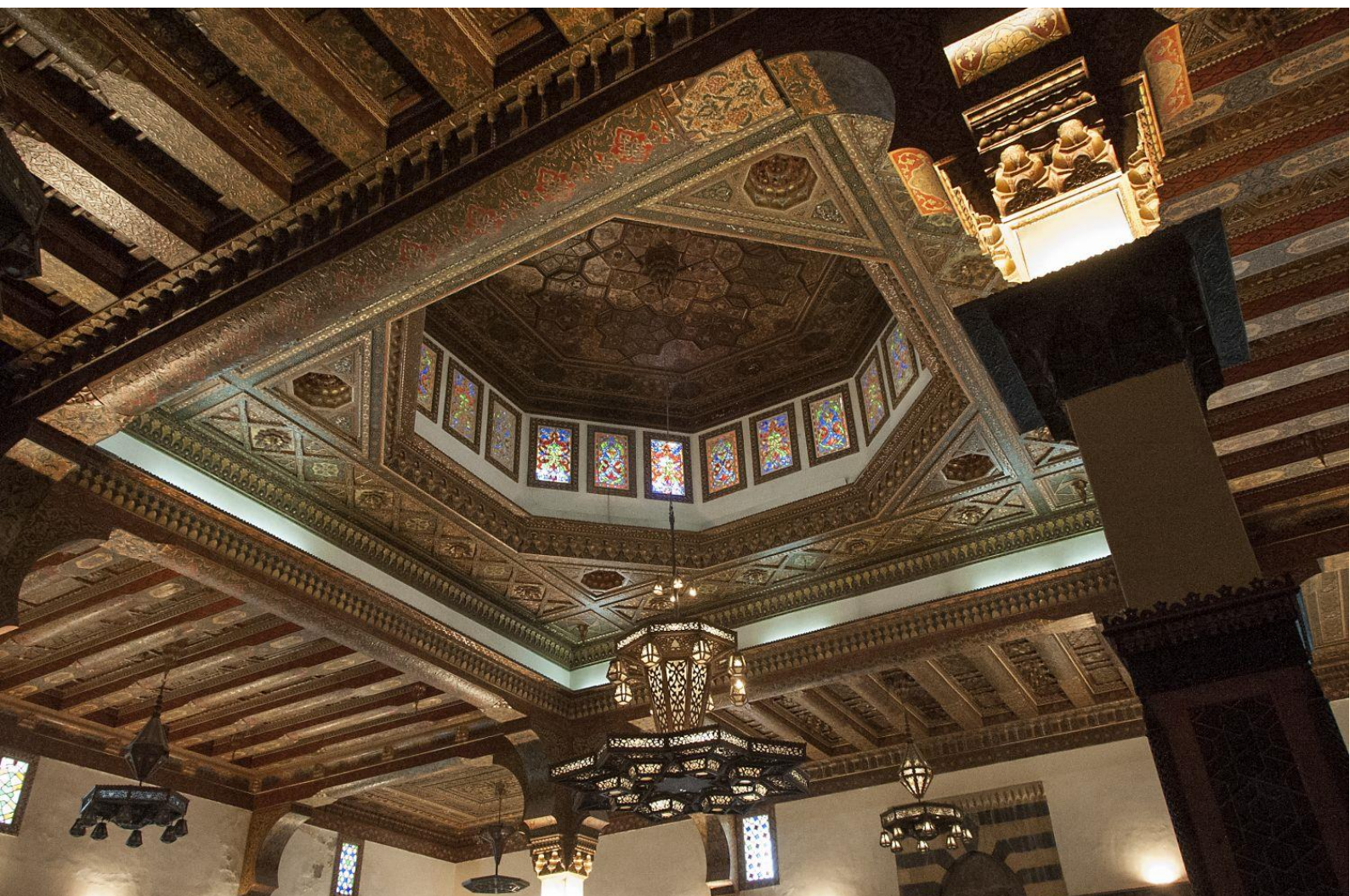
Figure 37: Maqam Ibrahim, view of mihrab. From *Archnet*, by Waugh, 2010.

4.2 Preservation Efforts

Syria gained independence in 1946. The Syrian government began to give attention to the preservation of Syria's cultural heritage, which includes historical sites like the Citadel. Excavation work and reconstruction of the Citadel that was started by the French were continued and it became a popular tourist attraction for both Syrians and international tourists. In 1986, the Citadel was recognized by UNESCO as a World Heritage Site (Jodidio, 2011). This is a point where the Citadel's value got recognized on global level and highlights the cultural and historical significance which then again highlights its need for preservation and restoration works. The reconstruction work is no longer done for any of the previous motives in history, such as military and strategic reasons, but for the preservation of the historical and cultural monument. All the reconstructions done in the last decades of the 20th century revived the Citadel and it became one of the most popular sites in the city of Aleppo. In the rest of this section the reconstructions done in the post-independence period will be explored.

Efforts were made to accommodate visitors and tourists within the complex; in figure 1 can be seen how a visitor center is added in the north of the Citadel. In 1980 an addition was made; the modern theatre was constructed for musical performances, festivals and cultural events. In the 1960s the ceiling of the Throne Hall got partially removed and reconstructed and then covered with a modern roof (Gonnella, 2008).

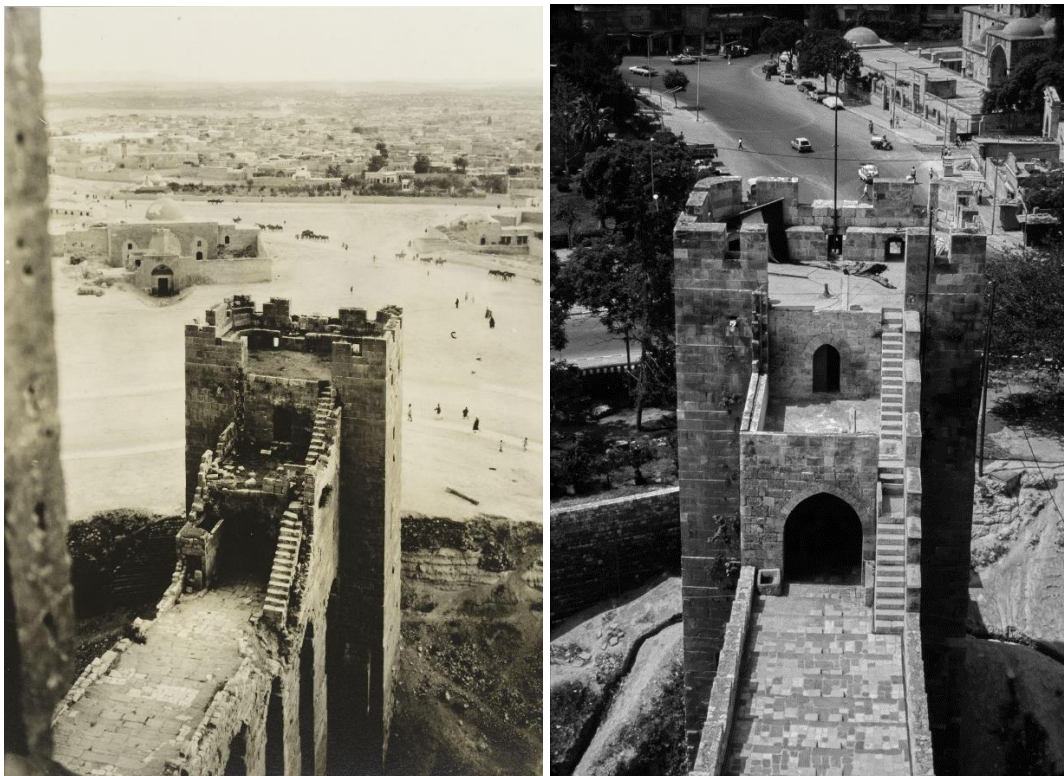
Figure 38: Mamluk Palace, view of wooden ceiling. From *Archnet*, by Waugh, 2010.



The Syrian Directorate-General of Antiquities and Museums (DGAM) in the 1970s further strengthened sections of the ring wall, excavated and reconstructed the Palace Hammam, Hammam Nur ad-Din and the big mosque, and in the last years of the 20th century started restoration on the courtyards of the Ayyubid Palace and excavation of the ancient temple (Gonnella, 2008). According to Gonnella, the DGAM also excavated the Souk in the late 1990s, and also the Mamluk Tower got restored. The ring wall is iconic in this cycle of destruction and reconstruction. As stated before in the thesis, this part of the Citadel keeps getting rebuilt throughout the history of the Citadel. Below on the left is a photograph of the entrance gate and bridge with visible destruction on top of the bridge and on the right is a photograph of the bridge after its reconstruction. In figures 40 and 41 a view of the entrance gate and bridge from the upper entrance block can be compared again with before and after reconstruction.



Figures 40 and 41: On the left: Entrance gate and bridge in Citadel. From *Victoria and Albert Museum*, by Creswell, 1919-1921. On the right: View of entrance block from east. From *Archnet*, by Tabbaa, 1990



Figures 42 and 43: On the left: Main entrance tower and bridge in Citadel. From *Victoria and Albert Museum*, by Creswell, 1919-1921. On the right: View of lower tower from upper tower block. From *Archnet*, by Tabbaa, n.d.

In December 1999, Aga Khan Trust for Culture (AKTC) proposed support in the restoration of the Citadel and started working together with the DGAM on it since 2000.

Below is a rephotograph of parts they had reconstructed, with on the right the 'before' and on the left the 'after'.



Figure 44: Rephotograph of the Ayyubid Palace, before and after reconstruction. From *The Aga Khan historic cities programme* (p.256), by AKTC, 2003 (left), 2001 (right)



Figure 45: Rephotograph of the entrance Ayyubid arsenal, before and after reconstruction. From *The Aga Khan historic cities programme* (p.256), by AKTC, 2005 (left), 2003 (right)

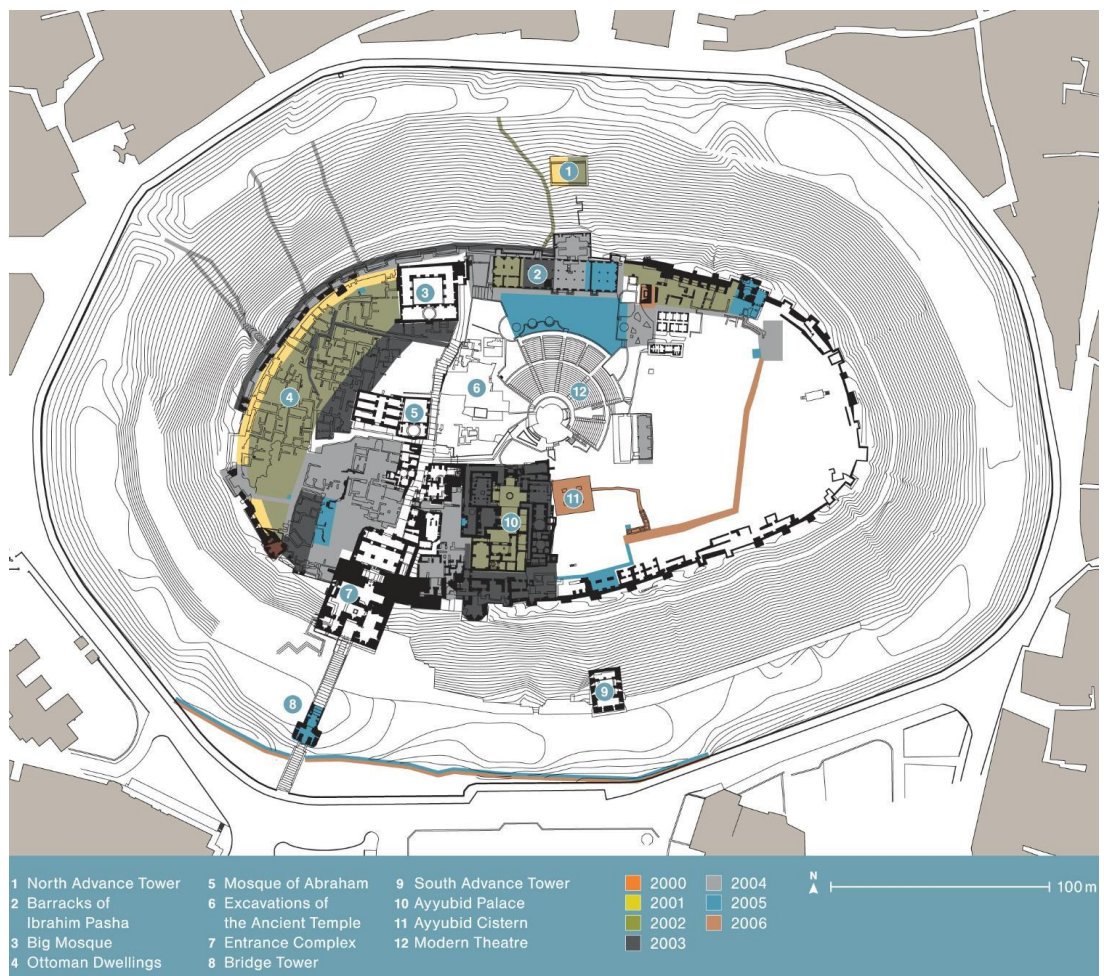


Figure 46: Plan highlights the phases of work accomplished on the restoration of the Citadel. From *The Aga Khan historic cities programme : strategies for urban regeneration* (p.255) by Jodidio, 2011

Figures 47, 48 and 49: Mamluk Palace, Throne Hall before reconstruction. From *Archnet* by Écochard, n.b.







4.3 The War

As the Citadel became a landmark of Aleppo, a monument rich of culture and history, it went under reconstruction with preservation efforts by the DGAM and then also by AKTC. This new millennium started with new efforts and projects aiming to stabilize the Citadel, however, the second decade of this millennium brought once again chaos in the city. After a long period of stability and peace, in 2011 a conflict in Syria started that brought destruction to the country. By summer 2012 it had escalated into a full country scale war and reached Aleppo. This is where the Battle of Aleppo started, which took four years, and resulted in a victory of the Syrian Arab Army in 2016 after which Aleppo was liberated. Despite the efforts of preservation of the DGAM and AKTC in the first decade of the 21st century, the Citadel could not escape the destruction caused by the war.

Besides the humanitarian and economic crisis the war caused and the many lives lost, the war also caused the destruction of the urban fabric and destruction to historic sites (UNESCO, 2018) including damage to the Citadel. Because of the Citadel's strategic position in the city, it could be used for military operations. During the war, Syrian soldiers stayed inside the Citadel, protecting it against opposition forces that wanted to take control over it, just how it was the case earlier in history. This marks an iconic point in the Citadel's history in which the function in this modern era goes back to one of its original functions as a military fortress.

Figure 50: The historic Citadel of Aleppo, several days after the liberation of Aleppo, on a snowy day. From *Wikipedia Commons*, by Maghames, 2016.



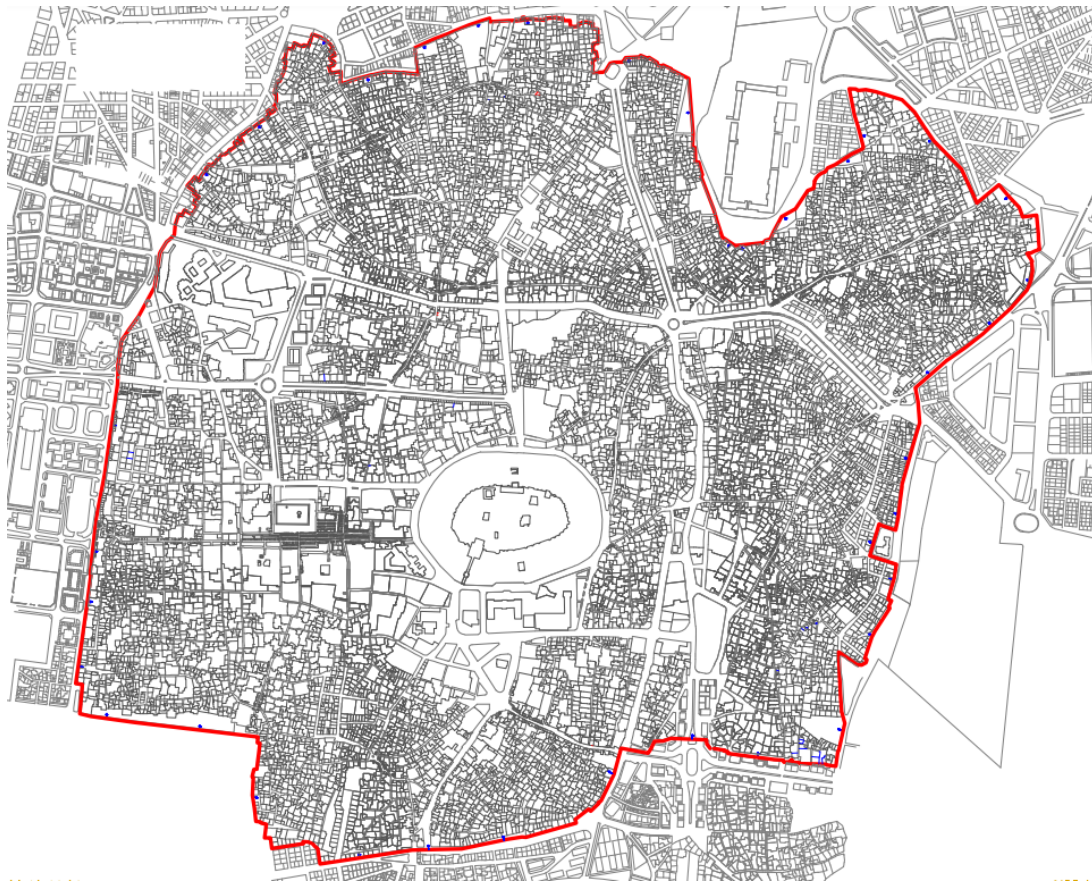


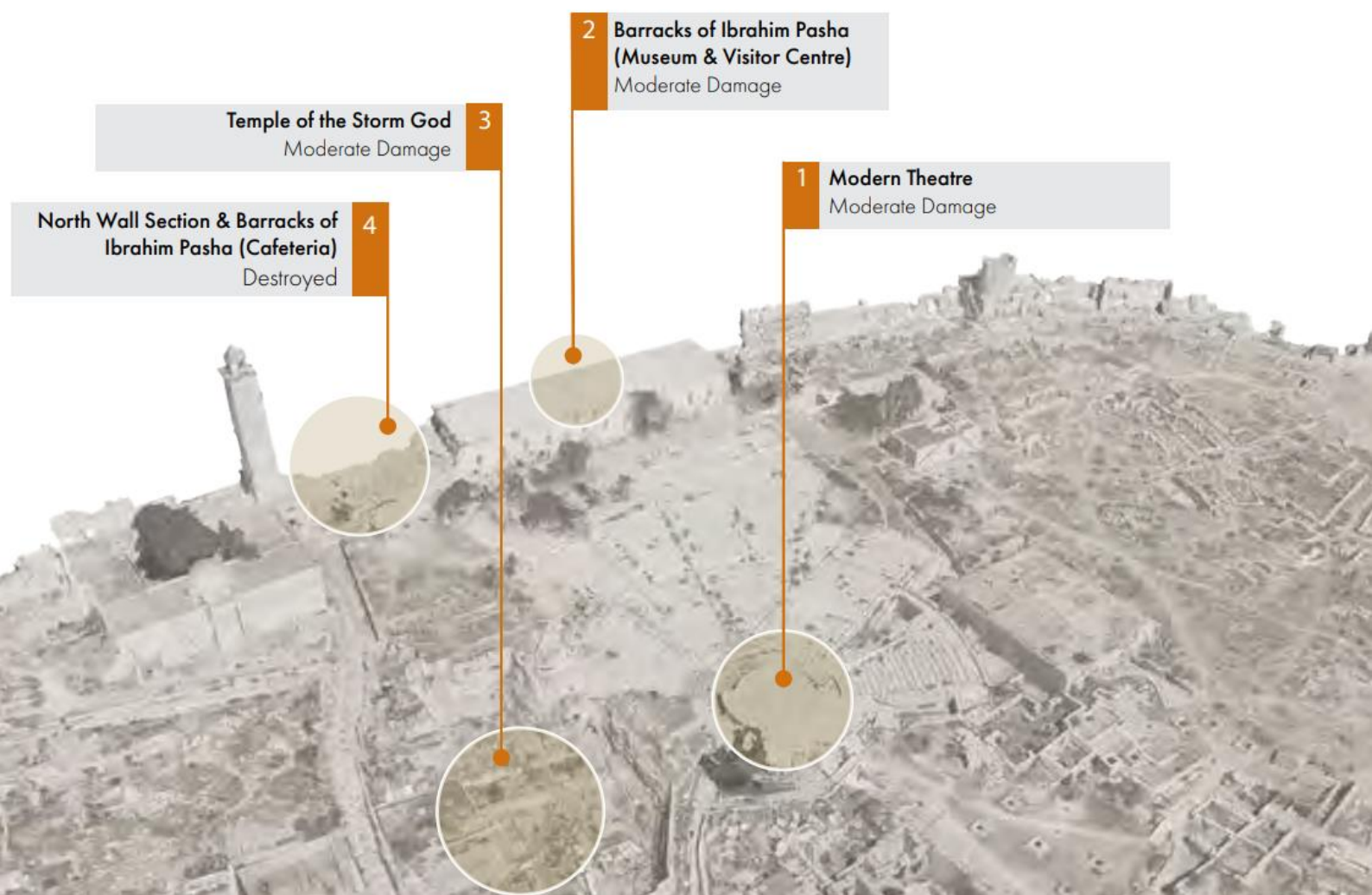
Figure 51: Ancient City of Aleppo - boundaries in 2012. From *Five years of conflict: The state of cultural heritage in the Ancient City of Aleppo* (p.17) by DGAM - UNESCO, 2018

 ENTRANCE COMPLEX/BRIDGE TOWER	 WALL SECTIONS	 MUSEUM IN FORMER ARSENAL
2 Moderately damaged	1 Destroyed 2 Severely damaged 5 Moderately damaged	1 Possibly damaged
 WATCH TOWERS/VIEW POINT	 SUQ	 BARRACKS
4 Moderately damaged 1 Severely damaged	1 Possibly damaged	1 Moderately damaged
 TEMPLE	 DIG HOUSE/RESTROOMS	 CISTERN
1 Moderately damaged	1 Moderately damaged	1 Moderately damaged
 MODERN THEATRE	 PALACE	 STONE CLADDING
1 Moderately damaged	1 Moderately damaged	1 Moderately damaged
 MOSQUES	 BATH HOUSES (HAMMAMS)	 OTTOMAN DWELLINGS
2 Moderately damaged	1 Moderately damaged 1 Possibly damaged	1 Possibly damaged
 AYYUBID ROOMS		
2 Possibly damaged		

Figure 52: Damage assessment inside the Citadel. From *Five years of conflict: The state of cultural heritage in the Ancient City of Aleppo* (p.36) by UNESCO, 2018

According to UNESCO (2018), the war caused damage to 31 sites within the Citadel. UNESCO's damage assessment can be seen in the image above. According to the analysis, 1 site got destroyed, 3 sites got severely damaged, 21 got moderately damaged and 6 got possibly damaged.

The north wall section and the section of the barracks of Ibrahim Pasha that houses the cafeteria got destroyed. According to UNESCO (2018), the theatre got damaged just slightly at the stage area, and the roof that was constructed in 2005 to protect the excavation of the temple of the storm god collapsed by May 2014. In the figure below a 3D map of the damage assessment is shown, from the same UNESCO analysis and on the next page views and 2D maps of the areas are shown. Later in this section more photographs will be looked at and the reconstruction process will also be discussed as this is a very recent event and the Citadel has not completely been reconstructed yet, even though it is now open to the public. A significant note of destruction in this area is how once again the ring wall, like mentioned earlier in the cycle of destruction and reconstruction of the Citadel, could not escape the damage. On the next page is shown how also the big mosque, a religious building, suffered moderate damage.

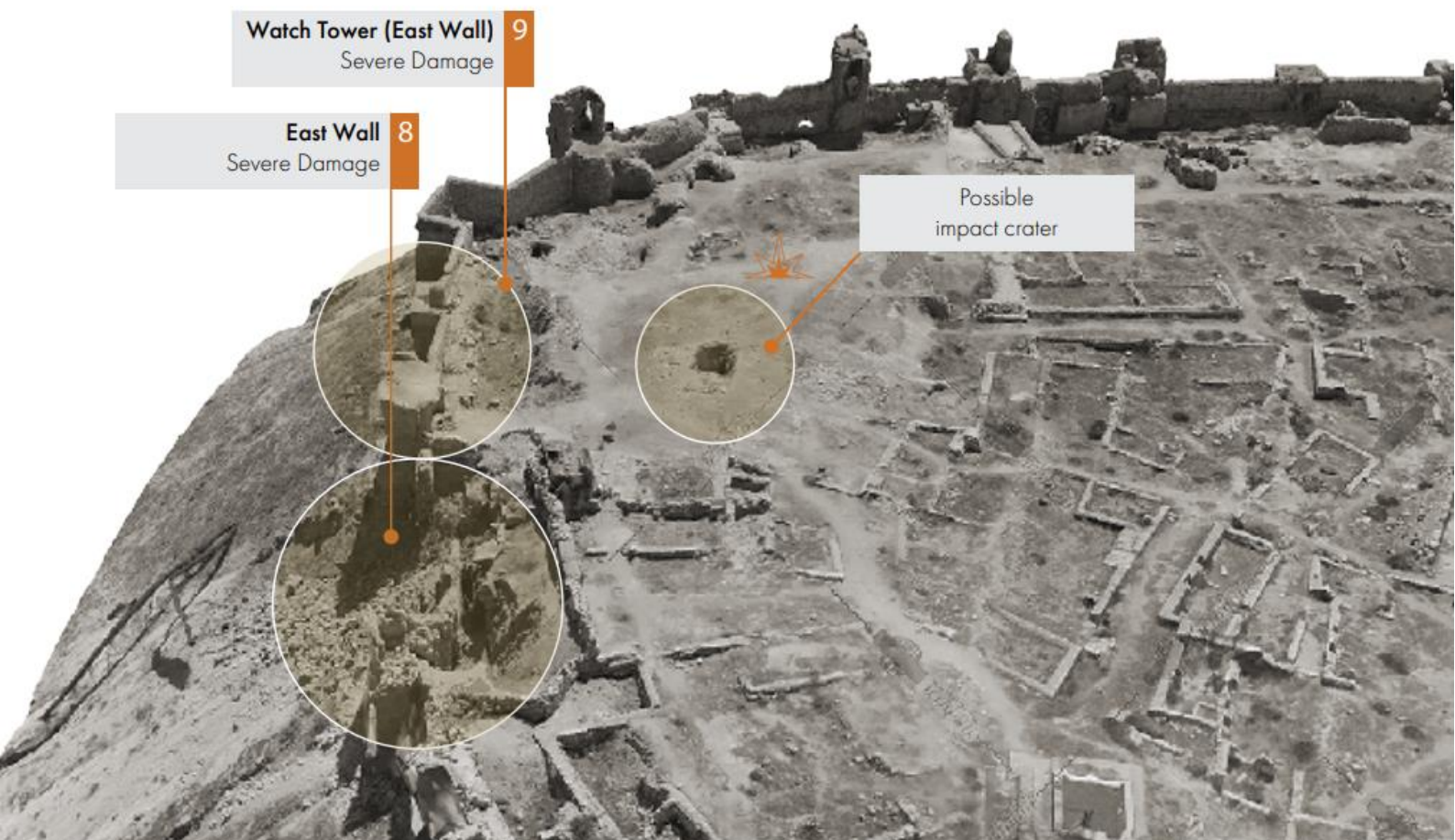




Figures 53, 54, 55 and 56: Image previous page: 3D representation of the Citadel with damage points. Top Image: View of the Barracks of Ibrahim Pasha and the North Wall Section. Middle: Barracks of Ibrahim Pasha (Cafeteria section). Bottom: North Wall before and after image. From *Five years of conflict: The state of cultural heritage in the Ancient City of Aleppo* (p.38, 39, 42 and 43) by UNESCO, 2018

In 2015 a tunnel explosion caused the collapse of part of the ring wall (SANA, 2015). A section of the east wall got severely damaged along with the towers next to it, see figures below. According to UNESCO, a section of ground over the unexcavated area behind the wall has also been severely damaged, it is heavily disturbed and the walls are no longer visible. Mentioned is also that disturbed area covers round 1000 square meters and that there are multiple possible small holes scattered throughout the entire area.

The restrooms in the Citadel have also partially collapsed in the southeast corner and there are holes in the roof (UNESCO, 2018). The opposite building, a dig house for an excavation team in the Citadel, see figure on next page, has also been moderately damaged with holes in the roof and a possible collapse at one end.

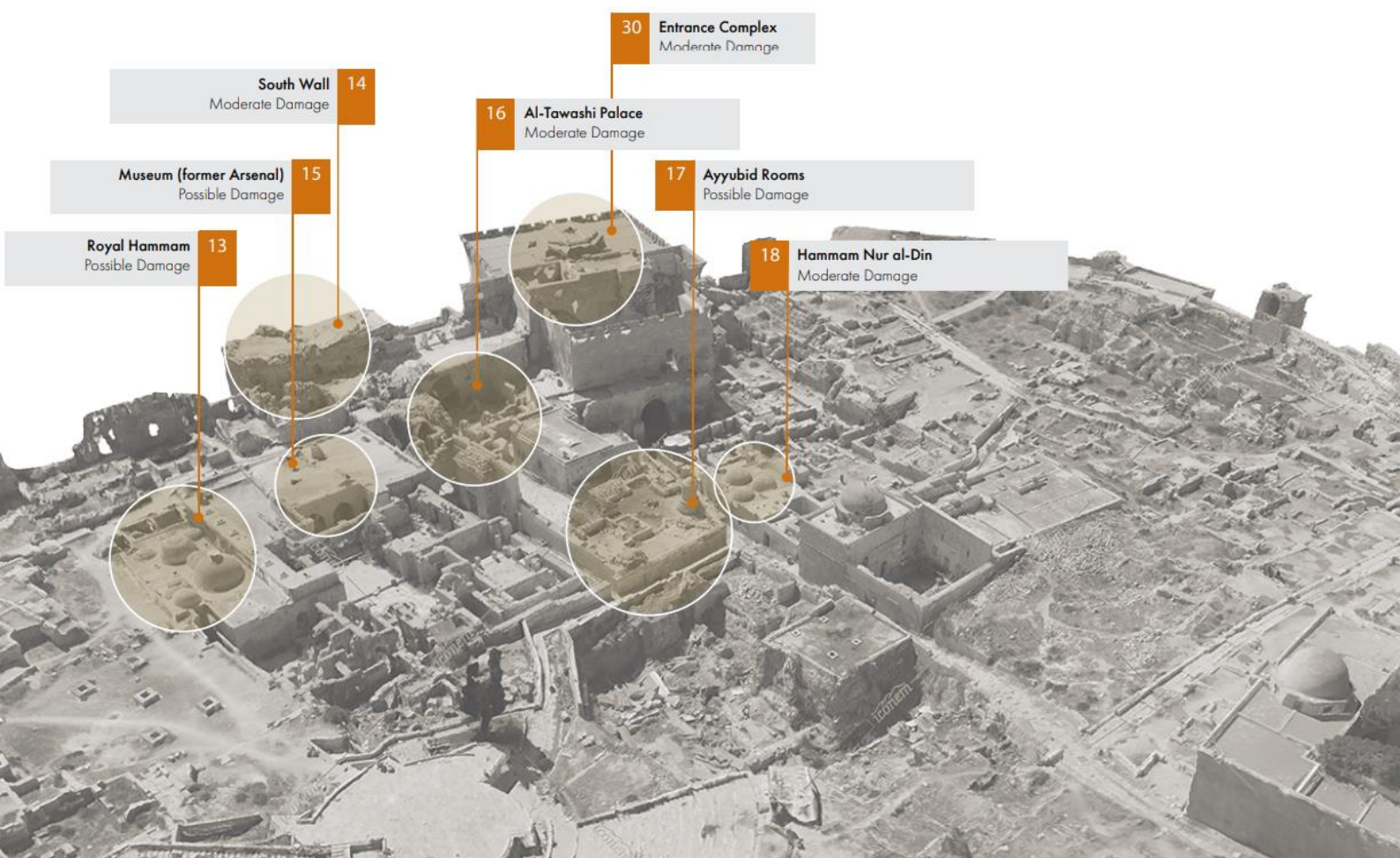


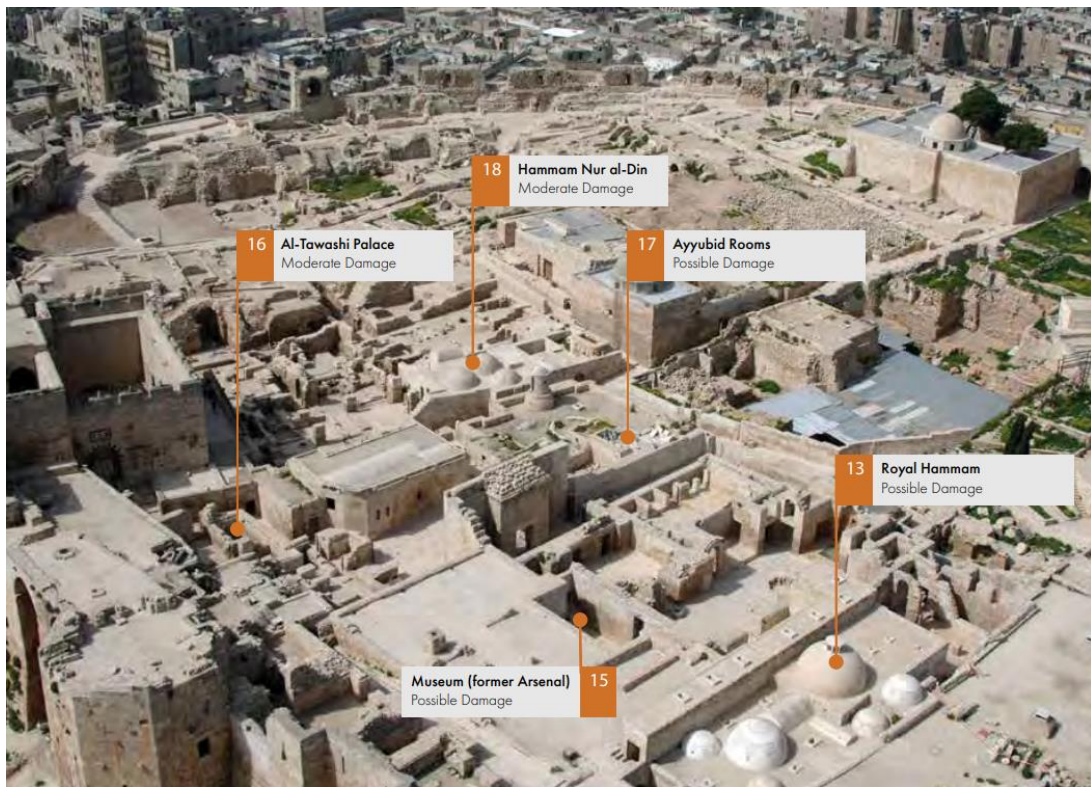
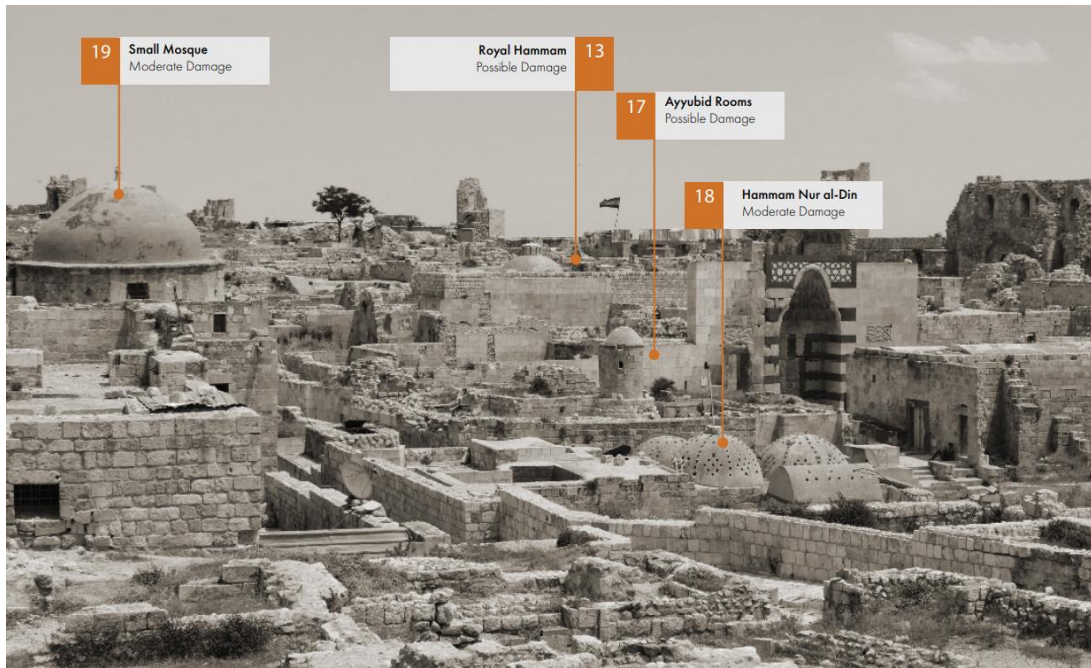


Figures 57, 58 and 59: Image previous page: 3D representation of the Citadel with damage points on the east wall area. Top Image: View from outside the Citadel onto the East Wall. Bottom: View from the North Wall looking onto the dig house and the restrooms. From *Five years of conflict: The state of cultural heritage in the Ancient City of Aleppo* (p.44, 45 and 46) by UNESCO, 2018

According to UNESCO (2018) the al-Tawashi Palace is slightly damaged, there is possible impact damage to the roof of the Museum of the former Arsenal and there is one possible roof impact crater on one of the Ayyubid Rooms. There is also impact damage on the roof of the Ayyubid Cistern, possible impact damage to the roof of the Royal Hammam and possible impact damage to the roof of the building by the Hellenistic Well. In the damage assessment is furthermore mentioned, moderate damage to the Ayyubid Rooms with possible damage to the roof and structural damage to the south wall, including some towers on the wall a pile of debris at the entrance of the Citadel, which will be examined next separately.

To look critically at this damage assessment in a broader context that is being addressed in this thesis, one should notice the recurrence of destruction of the ring wall, which could be seen as a reminder of the Citadel's vulnerability to external threats and its enduring resilience throughout history. In UNESCO's assessment the damage to the Citadel is marked as moderate and the reason for that is because the overall damage to the walls is less than 40 per cent, otherwise it would have been labeled as severe. Also the scale of the Citadel is taken into account; because in the entire Citadel 31 sites got damaged of which 1 completely destroyed and 3 severely damaged, this cannot put the total Citadel's damage into category severe. However, it is important to note the socio-economic context here, as this happened during a war that basically destroyed the country physically together with its economics, and which is going through a humanitarian and economic crisis. So, the damage assessment of the Citadel done by UNESCO, shows the immediate impact of the conflict on Aleppo's cultural heritage but is also calls forth further reflections on the context in which this destruction occurred.





Figures 60, 61 and 62: Image previous page: 3D representation of the Citadel with damage points behind the entrance area. Top Image: View from the souqs and excavation area onto the Ayyubid Royal Complex and its surroundings. Bottom: Aerial view of the Royal Complex. From *Five years of conflict: The state of cultural heritage in the Ancient City of Aleppo* (p.44, 45 and 46) by UNESCO, 2018

In this next part, shortly, photographs showing the impact of this historic event will be examined. Starting with the entrance complex, in the figures below the destruction caused by the war is visible. The two images can be compared. The first thing to be noticed is all the holes in the complex, which is the evidence of use of the various weapons. The second thing to be noticed is how all the windows are destroyed along with the stones surrounding the windows, which again shows how the soldiers inside were targeted as they were behind the windows. Furthermore heavy damage can be noticed at the second from left machicolation. There is also some damage to the top of the complex and to the inscription band. Considering the historical context of the destruction, it is, for example, not likely that the machicolation got destroyed on purpose, as these parts of the Citadel were more of use in the medieval ages in which stones or other things, such as boiling water, quicklime or boiling cooking oil, could be dropped on attackers. In the modern era different kinds of weapons are used so the destruction of the machicolation is historically ironic but not of much gain to the attacker in this era.

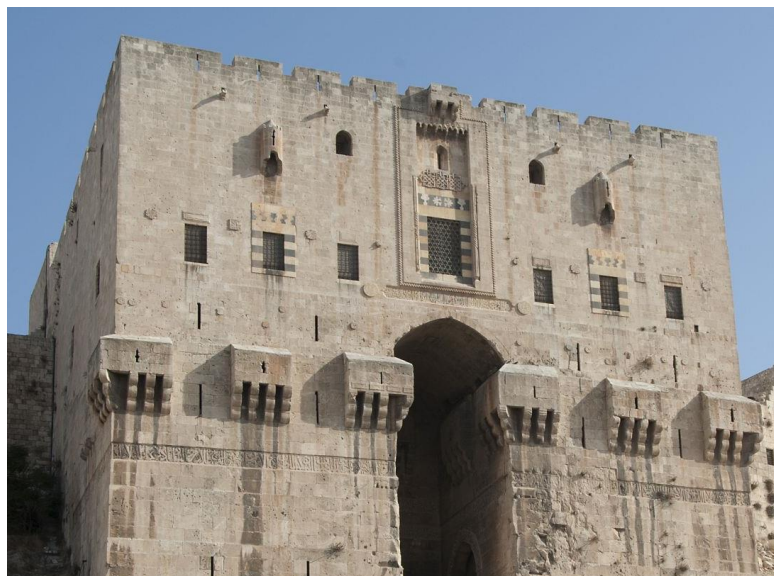


Figure 63: Entrance complex, before the war's destruction. From *Archnet*, by Waugh, 2010

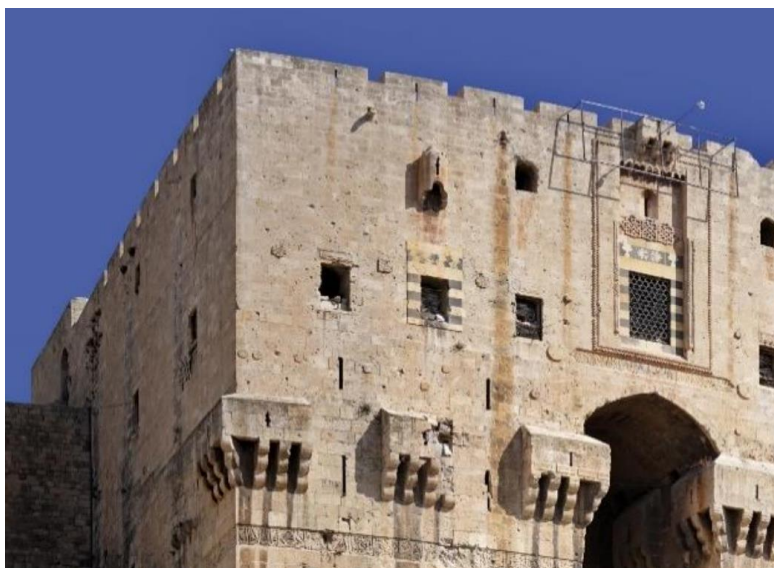


Figure 64: Entrance complex, after destruction. From *ALEPPO BEFORE AND AFTER THE WAR 2010 – 2018*, (p. 452) by Fangi, 2019

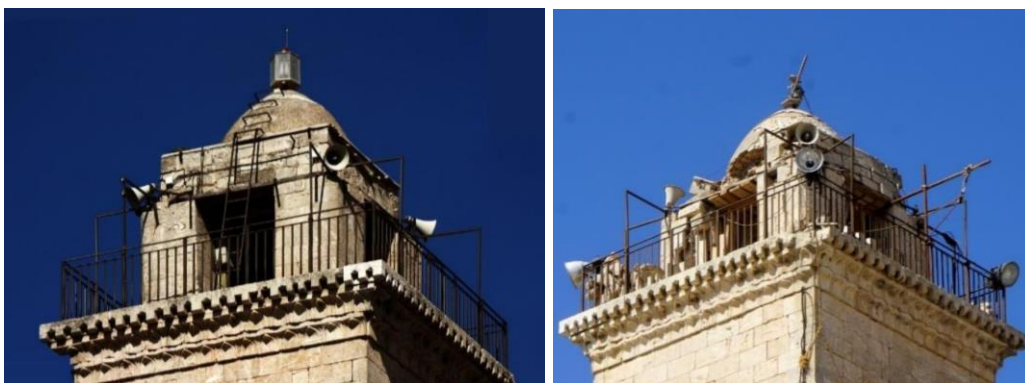
Now, more parts of the Citadel will be analyzed with before and after photographs from Fangi's paper (2019). Below the east wall can be seen, which was also mentioned in the UNESCO damage assessment as destroyed. Then the southern tower is shown, which was not mentioned but suffered some damage on the top part of the tower. The minaret of the big mosque also suffered destruction on the top part, the damage is very visible. Important to note here is how not just towers and walls got destroyed, but also religious buildings suffered damage.



Figure 65a and 65b: Ring wall, before (a) and after destruction (b). From *ALEPPO BEFORE AND AFTER THE WAR 2010 – 2018*, (p. 451) by Fangi, 2019



Figures 66a and 66b: Southern tower, before (a) and after destruction (b). From *ALEPPO BEFORE AND AFTER THE WAR 2010 – 2018*, (p. 452) by Fangi, 2019



Figures 67a and 67b: Minaret of the big mosque, before (a) and after destruction (b). From *ALEPPO BEFORE AND AFTER THE WAR 2010 – 2018*, (p. 452) by Fangi, 2019



Figure 68: Rephotograph of the entrance of the Citadel, before and after the war. From *Reuters* by Auger (left), 2010 and Sanadiki (right), 2016

As for the reconstruction of the Citadel, this is not yet completed. Syria had been reconstructing parts of the Citadel such as the walls, but the full reconstruction of the Citadel will take more time. The DGAM in Aleppo had put the ring wall as one of the priorities of the reconstruction operations (Basmaji, 2020). Now, again must be looked at the historical context. In 2020 the world was subject to the covid pandemic, and this is also mentioned in the article of Jamahir (Basmaji, 2020) which states that covid is the reason for more delay of this reconstruction project. There are also various difficulties regarding the restoration of the walls. DGAM pointed out that securing the limestone blocks of specific sizes, in addition to the transporting of those to the top of the Citadel and securing the labor force, as most of the skilled worker emigrated outside Syria, are such big difficulties (Basmaji, 2020).



Figures 69 and 70: Restoration of the north wall. From *Al-Jamahir*, by Basmaji, 2020

4.4 The 2023 Earthquake

On February 6, 2023, a 7.8 magnitude earthquake caused destruction to Syria and Turkey in which Aleppo was one of the worst hit cities. According to World Bank's rapid damage assessment (2023), damage to the city of Aleppo covers 59.9 percent of the total damage done to Syria with physical damages and losses of Aleppo city alone to be over 400 million dollars.

The damage assessment states that Syrian experts have reported the collapse of parts of the Ottoman mill, and some parts of the walls, which first cracked and then collapsed. Also, the dome of the minaret of the mosque has collapsed and damage is done to the entrances of the fort and the Mamluk tower. One of the towers in the west also fell to the ground, and in the souk are the Citadel suffered collapse. After the earthquake the Citadel got closed, the Ministry of Culture said that this happened due to the seriousness of the cracks that appeared in the structure of the entrance (Qreima, 2024).

Now, parts of the Citadel that got damaged will be analyzed. First, the minaret of the big mosque. Below, the damage is visible. The minaret was already damaged by the war and now can be seen, see figure below, how the whole top including the dome, has collapsed. Also, to be noticed is the vertical crack through the minaret. As it first needed restoration after the war, it now would need total rebuilding.



Figure 71: The minaret of the mosque before and after the earthquake. From *France24*, by AFP, 2023

Another part mentioned is the Ottoman Mill. In the figures below is shown how this looked like before and after the earthquake. A big part has collapsed; the walls that covered the staircase collapsed and the indoor staircase is visible. The rubble from the collapsed building covers the whole ground. It also seems that fences and the outside staircase have collapsed too. This is probably not because of the earthquake directly, but could be because of all the heavy blocks falling, as steel structures are earthquake resistant. This does not work here as the steel is connected to the natural stone of which the structure is not earthquake resistant. Notice how the inside staircase is still intact.



Figure 72: Ottoman mill before the earthquake. From *Wikipedia Commons*, by Osseman, 2009



Figure 73: Ottoman mill after the earthquake. From *Ancient Origins*, by Syria's DGAM, 2023

On February 17, 2024, Ministry of Culture stated that Aleppo Citadel has reopened its doors after the completion of the first and second phase of the restoration of the bridge tower (Qreima, 2024). The ministry also said in that same statement that maintenance and reconstruction work for the rest of the parts inside the Citadel will begin soon.



Figure 74 and 75: Restoration of the bridge tower. From SANA, by SANA, 2023

4.5 Impact of the Modern Era on Aleppo's Citadel

The modern era introduced a completely new chapter to the Citadel's history in which at first, under the French Mandate, it served, like under the Ottomans, as a military outpost. While the French initiated archaeological digs in the Citadel, and also some reconstruction efforts, these initiatives were rather motivated by their political interests.

After Syria's independence in 1946, preservation efforts started on Aleppo's cultural heritage. The excavation and reconstruction work were continued, and the Citadel got recognized as a UNESCO World Heritage Site. This is a turning point in the history of the Citadel and highlights the Citadel's global significance. Throughout this post-independence period, the Citadel got transformed into a tourist destination and cultural hub. The Syrian Directorate-General of Antiquities and Museums (DGAM) took up the reconstruction and preservation projects and later collaborated with AKTC in the 2000s.

However, the Citadel proved once again not able to escape any destruction. The outbreak of the Syrian war in the second decade of the new millennium brought chaos to the country, again causing destruction to Aleppo's Citadel. Here the walls and towers of the ring wall witnessed the worst damage, with as a highlight the destruction caused after a bomb explosion. As the Battle of Aleppo ended four years later and the reconstruction projects also started years after Aleppo got liberated, the Citadel until now has not fully recovered. And before it even had the chance to do so, another recent event caused destruction to the Citadel. Once again, an earthquake brought destruction to the region and caused damage to the Citadel. As, for example, in section 4.3 the damage caused to the minaret got analyzed, it was picked up again in section 4.4 as the earthquake further fully destroyed the top part which was already damaged by the war. The Citadel also got closed for a year because of the dangerous state of the bridge tower. To be noted is that this part of the Citadel got reconstructed right after so that the Citadel could open again for the visitors. The rest of the destructed parts are not yet reconstructed.

Compared to the Ottoman era, the Citadel differs a lot in significance and identity. As under the Ottomans the Citadel became occupied by dwellings and got partly transformed into a residential quarter with shops because of the stability of the region and loss of external threats, here the Citadel becomes a public monument in which the cultural and historical values are recognized and led to preservation. Noteworthy is that this was initiated by the French but that it was rather political, but then got fully picked up by the Syrians, and the reconstruction process was carried out of preservation interests. Regarding the deconstruction, the main destruction event in the 400 years of Ottoman rule was the earthquake of 1822. In the modern era, the Citadel went from being under mandate, to having less than a century time of preservation, to being in a full country scale war, to witnessing another earthquake, which makes this period chaotic.



Figure 76: Aleppo's Citadel. From *Archnet*, by Écochard, n.d.

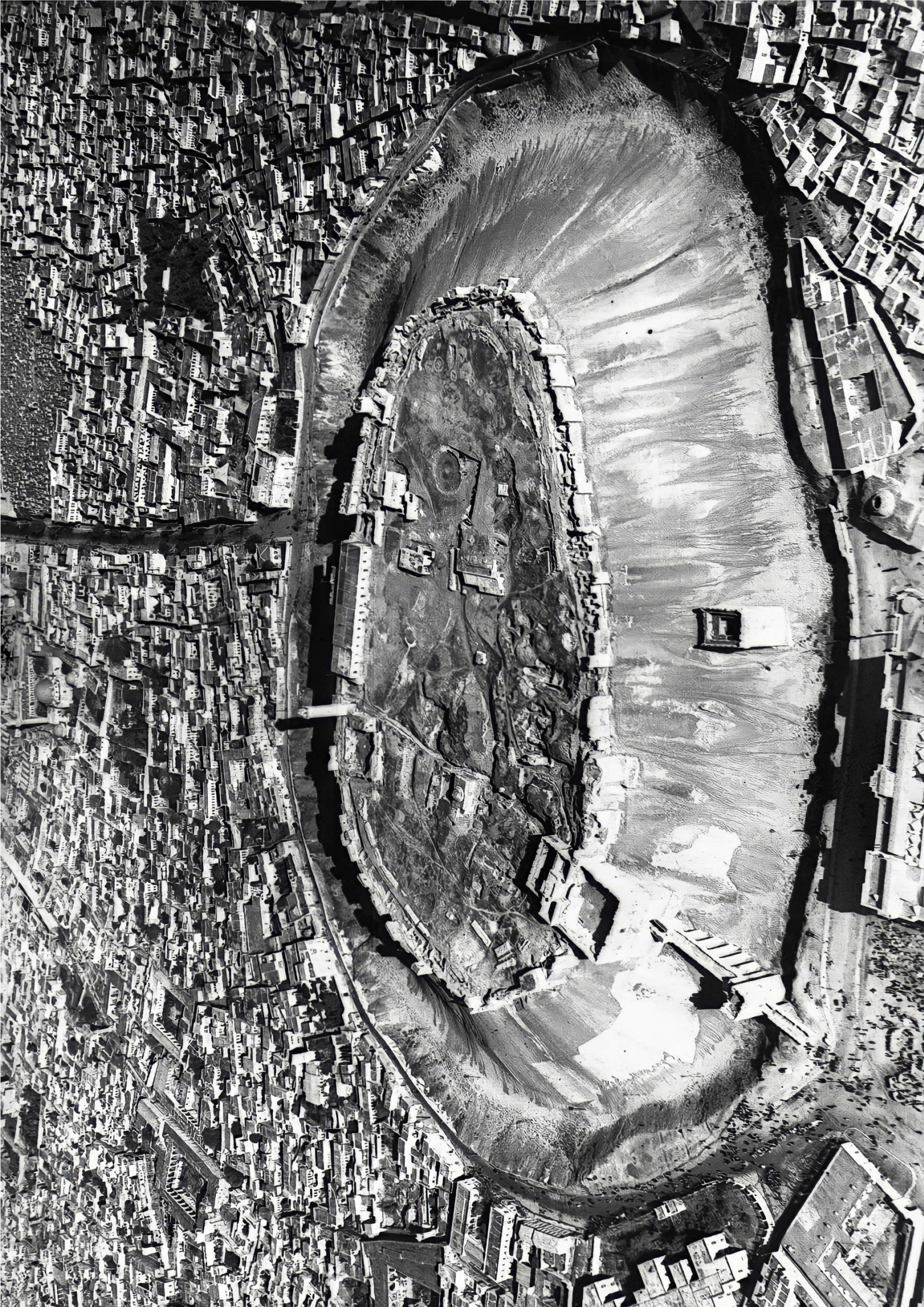
Conclusion

The Citadel of Aleppo stands in the middle of the city as a symbol of resilience throughout the history. Through a longitudinal analysis of the historical trajectory, this thesis has explored the transformative impact of historical events on Aleppo's Citadel, starting from the 12th century with the Citadel functioning as a military fortress, to the 21st century, as a cultural landmark of the city. The thesis emphasizes the interplay of events and architectural development which shaped the Citadel and does so by contextualizing these transformations within their historical, cultural, and geopolitical contexts.

The historical events of the 12th century formed the main structure of Aleppo's Citadel and all the events from this time onwards have architecturally transformed the Citadel. This was continuously done by adapting the Citadel's architecture to the needs of the times in history, thus including its architectural layout, but also facades and program. The Zengids built and fortified the Citadel as they were battling with the Crusaders and these constructions were mainly military-focused, but Nur ad-Din also reconstructed mosques and a hammam which reflect the cultural and religious context of the ruling dynasty. As the Ayyubids took over, the military fortifications continued, but Ghazi also architecturally transformed the Citadel by adding new, luxurious, functions to the Citadel. Multiple palaces, gardens and baths were added to the fortress, and the Citadel got introduced to the typical Ayyubid architecture of striped limestone. The event at Ghazi's wedding night led to destruction of the Citadel and shows how the shift from Zengid to Ayyubid dynasty architecturally impacted the Citadel with a change of context which is still in 'defensive-mode' but with a spark of luxury. At the time, new military technologies were coming up and Ghazi transformed the slope with stone slabs as a defensive measure. The events of battles and threats furthermore impacted the Citadel's layout, which is especially noticeable in the entrance complex which was designed to make it difficult for intruders to enter the Citadel. The Mongol Invasion caused destruction to the Citadel and this event led to the Mamluks taking over which led to shifts in the geopolitical contexts as the Mamluks ruled Syria from Egypt, and this led to an initial disinterest in reconstructing Aleppo and its fortress. An earthquake and another Mongol invasion led to more destruction. The Mamluks reconstructed and added new defensive structures but also architectural innovations as to both boost its aesthetic appeal and its defensive capabilities. Their Throne Hall was a completely new program in the Citadel was used for official functions and entertainment by the rulers of the city and the sultans that came from Cairo on a visit. The events also led to detailed architectural transformations: whereas the Ayyubid architecture showed strength and force which is typical for its military architecture, the Mamluk parts show off wealth with architectural detail. Ornamentation and detail transformed from Islamic design elements such as the decorative motifs and geometric patterns to an adaption of such design elements and addition of Mamluk design innovations such as the use of intersecting vaults in the big mosque or ornamental and multi colored stones.

As these dynasties were constantly fortifying the Citadel, with the takeover of the Ottomans, Aleppo became a commercial hub in a steady position, the Citadel got adapted to provide for the changing needs of its new rulers. While in the Medieval Ages, this meant religious functions or palaces, with the Ottomans new programs were incorporated in the form of houses and shops. Due to the new geopolitical context, the military importance of the Citadel diminished and the earthquake during that time led to even less interest in reconstruction of the Citadel. World War I made an end to the Ottoman Empire and thus brought a huge change in the position of the Citadel. This came under the rule of the French after Syria got under Mandate. However, the function was still a military outpost and this event did not bring much of an architectural transformation to the Citadel. But the Syrian Independence did; the Citadel got transformed into a tourist destination and cultural hub, the function of the entire complex changed and the focus was set on preservation as the historical and cultural value got recognized. Visitor facilities were added and the Citadel became the city's landmark. In the second decade of the 21st century the reconstructions got interrupted by the outbreak of a war and later also an earthquake. During the Battle of Aleppo, Syrian soldiers stayed inside the Citadel. This recent event of the Battle marks an iconic point in the Citadel's history in which the function of the Citadel in this modern era goes back, once again, to one of its original functions as a military fortress.

During this cycle of destruction and reconstruction, the Citadel has been a standing symbol of resilience, having undergone various architectural transformations through and due to the various events it has witnessed. This thesis has provided a broader understanding of how these historical events together have architecturally transformed Aleppo's Citadel, highlighting the interplay and connection between history, architecture, and societal dynamics. Lastly, this thesis underscores the importance of preservation of the architectural heritage. Besides the recognition of the Citadel as a historical monument, it is essential to recognize the fortress as a cultural identity of the city, and its resilience through the cycle of destruction and reconstruction it has undergone. By acknowledging and delving into the relationship between the historical events and architectural transformations, this thesis has paved the way for a deeper understanding, and thus, a deeper appreciation of Aleppo's heritage.



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