

URBAN DEVELOPMENT AND ARCHITECTURE UNDER COLONIAL INFLUENCE

WESTERN TRANSFORMATIONS IN KURDISTAN-IRAQ DURING THE 20TH CENTURY

How did colonial and post-colonial influences shape the urban development and architecture of Erbil since the 20th century?

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Reinoud Rutte

Abstract

This thesis explores how colonial and post-colonial influences have shaped the urban development and architectural identity of Erbil from 1900 to the present. While the Erbil Citadel has represented the historical core of the city, the 20th and 21st centuries marked a shift toward large-scale spatial expansion and architectural transformation. The research focuses on five key periods: the traditional city, the British Mandate period, the Kingdom of Iraq, the Ba'athist regime and the post-2003 modernization era. Each period brought different external powers, policies and planning ideologies that left a lasting impact on Erbil's built environment.

Through historical mapping, spatial analysis on the case study of Erbil, the thesis identifies patterns in the way urban form and architecture evolved over time. The study highlights a relationship between urban expansion and architectural change, showing how new planning models allowed the introduction of different building styles and materials. It also examines how local architectural traditions fade away in response to these changes.

By outlining the shifts in both city planning and building culture, this research offers an understanding of how external forces and local adaptation have shaped the current identity of Erbil. This way the thesis provides insights into the complex relationship between politics, planning and architecture in Erbil.

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Introduction

Erbil (or Hawler, as Kurdish citizens call it) is the capital of Kurdistan and one of the most ancient cities that has been continuously lived in throughout history, with a timeline extending back to 6000 years (UNESCO, sd). Throughout history, it has been shaped by various rulers, empires and external forces. While much has been written about its ancient core and the enduring presence of the Erbil Citadel, less attention has been given to how colonial and post-colonial powers have influenced the city's growth and architectural character. This thesis explores how external influences, political shifts and modernisation have shaped Erbil's built environment, especially in the 20th and 21st centuries.

Although Erbil's history goes back much further, this research focuses on the period from 1900 onwards. While important events took place in the Middle East before the 20th century, it was during this more recent period that the most significant urban changes occurred that transformed Erbil into the city it is today. The study examines five key historical periods: the pre-1900 traditional city, the British mandate period (1918-1932), the Iraqi monarchy (1932-1958), the Ba'athist period (1968-2003) and the post-2003 modernisation era. Each of these periods contributed in different ways to Erbil's urban expansion and architectural identity.

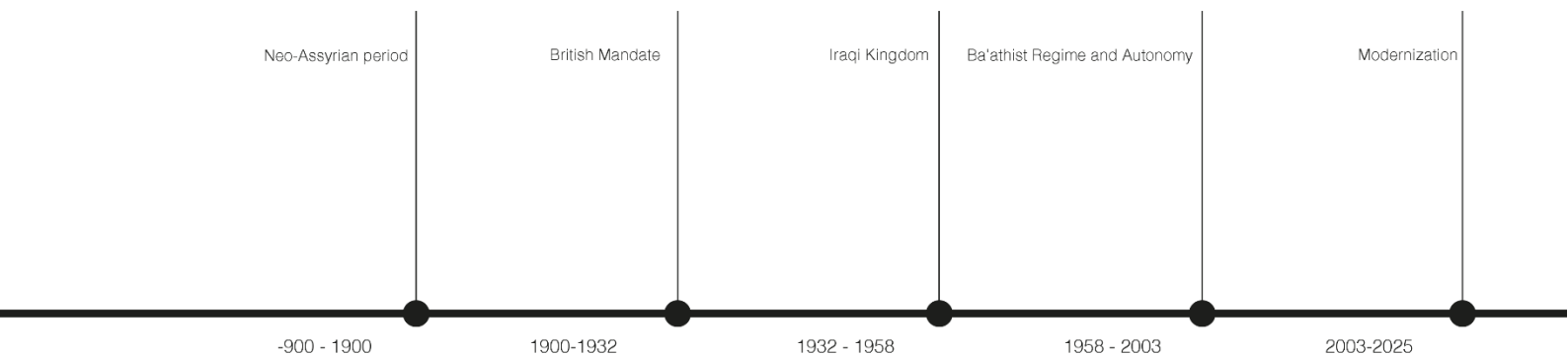


Figure 1 Historical timeline (own work)

The research is structured around the question: **“How did colonial and post-colonial influences shape the urban development and architecture of Erbil since the 20th century?”** To answer this, it looks at how external powers influenced the city's spatial organisation, what architectural styles were introduced and adapted in the city and how these historical changes continue to shape Erbil today.

The main question is explored through 3 sub-questions:

1. Which external powers influenced the city's urban expansion?
2. How did these influences shape the spatial organisation of Erbil across different historical periods?
3. What architectural styles and concepts were introduced and how were they adapted to the local context?

To answer these questions, the thesis uses a combination of historical mapping, spatial analysis and architectural studies, using both cartographic data and

academic research to visualise Erbil's urban expansion. While mapping the city's growth, it became evident that some of the available digital cartographic data was incomplete. This may be because Erbil had such a rapid growth, that it has not been digitised well. As a result, the final map was adjusted manually, based on satellite imagery and interpretations of existing urban structures. These reconstructions are therefore not accurate representations, but rather informed approximations that reflect the most feasible urban shape. By analysing the city's growth through these methods, the study aims to provide both a visual and analytical understanding of its transformation. The analysis focuses on key periods of change. By examining how Erbil evolved under different rulers and political conditions, this research offers a clearer picture of the external forces that have shaped its identity today.

1. External powers and their influence

The Kurdish region in Iraq was a focal point of political, social and cultural complexity throughout the 20th century. The region's history during this period was shaped by a deep-rooted desire for autonomy among the Kurdish population, while simultaneously being influenced by the interests of external powers. The Ottoman Empire, the British, and later the United States each left their mark on the region, with far-reaching consequences for its urban development, architecture and social structures. This chapter focuses on the roles and objectives of these external powers, focusing on their impact on the Kurdish region.

The Ottoman legacy

For centuries, the Ottoman Empire governed Northern Iraq, including the Kurdish regions. The Ottomans relied on a system of indirect rule, committing authority to local Kurdish leaders to maintain order. (Jwaideh, 2006). This approach allowed a degree of autonomy for the Kurdish population but also hindered the development of a centralised state or a cohesive national identity (Klein, 2011).

While the Ottomans introduced some modernisation efforts, such as the construction of infrastructure and the establishment of schools, these initiatives were primarily aimed at strengthening their control rather than fostering genuine development. The Ottoman legacy in Northern Iraq included land possession systems and administrative practices that endured long after their rule ended, influencing the region's socio-economic structure well into the 20th century (Anderson, 1986).

British colonial objectives

After the collapse of the Ottoman Empire after World War 1, the northern part of Iraq became part of the British Mandate in Iraq (**1920-1932**). The British were driven by two primary objectives: securing the region's oil resources and creating a buffer zone against potential threats from neighbouring powers, such as Russia and later the Soviet Union (Sluglett, 2007). The discovery of oil in Kirkuk in **1927** further intensified British interest, leading to investments in infrastructure like railways and roads to facilitate oil exports (Tripp, 2007).

However, the British faced a significant challenge in the Kurdish issue. Initially, they promised the Kurds self-determination in the Treaty of Sèvres (**1920**), but this promise was discarded in the Treaty of Lausanne (**1923**) to maintain a unified Iraq under British influence (Mcdowall, 1996). This decision sparked resistance from Kurdish leaders like Sheikh Mahmud Barzanji, who fought for greater autonomy (Houston, 2009).

British colonial policies also left a lasting imprint on urban development in cities like Erbil and Mosul. In Mosul, the British introduced new urban planning concepts and architectural styles, transforming the city from a traditional Ottoman centre into a modern trade hub (IEREK, 2022). Similarly, in Erbil, British influence led to changes in the city's urban morphology, with new

neighbourhoods emerging and existing structures adapted to meet the needs of colonial administration (Mühlbauer & Shretah, 2022).

The impact of colonial policy on Kurdish nationalism

British colonial policies had a big impact on the development of Kurdish nationalism. By integrating the Kurdish region into the Iraqi state, the British undermined Kurdish aspirations for independence. At the same time, their policies, such as land reforms and the centralisation of governance, created new social and political dynamics that laid the groundwork for later Kurdish uprisings (Esposti, 2022).

The British also introduced educational and administrative reforms, which, while intended to strengthen their control, accidentally contributed to the emergence of a Kurdish intellectual class. This group would later play a crucial role in the nationalist movement, blending traditional Kurdish elements with colonial influences (Sluglett, 2007).

The role of the United States

While the Ottoman and British influences dominated the early 20th century, the United States emerged as a significant external power in Northern Iraq in the latter half of the century. Initially, the U.S. had limited involvement in the region, but its role evolved dramatically in response to shifting geopolitical dynamics, particularly during the Cold War and after the Gulf War in **1991**.

The U.S. first engaged with the Kurdish issue during the Cold War, when it briefly supported Kurdish rebels under Mustafa Barzani in the 1970s as part of a strategic alliance with Iran against Iraq. However, this support was short-lived and they left after the Algiers Agreement in **1975**, leaving the Kurds vulnerable to Saddam Hussein's regime. This early involvement highlighted the Kurds' unstable position as pawns in broader geopolitical games (Mcdowall, 1996).

The U.S. role in Northern Iraq became more pronounced after the Gulf War. In response to Saddam Hussein's brutal suppression of the Kurdish uprising, the U.S. led international efforts to establish no-fly zones over Northern Iraq, trying to create a safe place for the Kurdish population. This intervention marked the beginning of Kurdish autonomy and led to the start of the Kurdistan Regional Government (KRG) in **1992**. The U.S. also led humanitarian operations, such as Operation Provide Comfort, to assist Kurdish refugees fleeing Saddam's forces (McGarry & O'Leary, 2005).

The U.S.-Kurdish partnership deepened significantly after the invasion of Iraq in **2003** (Ghafur, 2016). The Kurds were key allies in the defeat of Saddam Hussein and the U.S. played a crucial role in ensuring that the **2005** Iraqi constitution recognised the KRG's autonomy within a federal Iraq. Furthermore, in this period U.S. invested in the region's economic and military development, including the training and equipping of the Peshmerga forces, which became a critical ally in maintaining regional stability (Esposti, 2022).

The rise of ISIS in **2014** further hardened the U.S.-Kurdish alliance. The Peshmerga played a crucial role in the fight against ISIS and the U.S. provided

essential military support, including airpower, training and weapons. This cooperation not only strengthened the KRG's international standing but also emphasised its role as a stabilising force in a dangerous region. The liberation of key cities like Mosul and Sinjar from ISIS control was a testament to the effectiveness of this partnership (Mühlbauer & Shretah, 2022). However, the relationship has not been without its complexities. The United States opposed the Kurdistan Regional Government's 2017 independence referendum, emphasising its commitment to a unified Iraq rather than supporting an independent Kurdish state. Despite this stance, the U.S. continues to regard the KRG as a strategic partner for their own sake, particularly in matters of counterterrorism and regional security. The legacy of U.S. involvement in Northern Iraq is therefore one of both empowerment and constraint: while the Kurds have achieved significant autonomy and international visibility, they remain dependent on external support to navigate their complicated political landscape.

The influence of external powers in Northern Iraq, first the Ottomans, then the British and later the United States, has shaped the region's political, social and urban development over the past century. The Ottomans laid the foundation for indirect rule and limited modernisation, while the British prioritised economic and geopolitical interests, particularly the control of oil resources. The U.S., though a latecomer, played a firm role in supporting Kurdish autonomy and countering threats like ISIS. Together, these external powers have left a lasting legacy on the Kurdish region, influencing its national identity.

-900 - 1900

1900-1932

1932 - 1958

1958 - 2003

2003-2025

2. Spatial Growth and Urban Expansion

Throughout the 20th and 21st centuries, Erbil expanded beyond its historic core, transforming from a compact settlement around the Citadel into a larger and more structured urban landscape. This growth was shaped by political shifts, modernisation efforts and planning policies introduced by various governing powers. Each period took different attempts to reshape the urban development, influencing the city's layout, infrastructure and spatial organisation. This chapter examines the key factors driving Erbil's expansion, tracing how different planning strategies and external influences have structured its urban growth and reshaped its built environment. The historical characteristics of each period will first be analysed and will then be visualised through maps, illustrating the sequential stages of Erbil's urban transformation.

Pre-1900

Before the 20th century, Erbil's urban landscape was primarily the ancient Citadel, a UNESCO World Heritage Site that has stood for over 6,000 years. The Citadel, which sits on a 32-meter-high mound, is one of the oldest settlements that to this day is being inhabited (World Monuments Fund, sd).

The Citadel's circular layout, with its densely packed houses and narrow, winding streets, reflects its historical role as a fortified settlement. The Citadel served as the political, economic and cultural heart of Erbil, with its elevated position providing both strategic defence and a symbolic representation of power (Mühlbauer & Shretah, 2022).

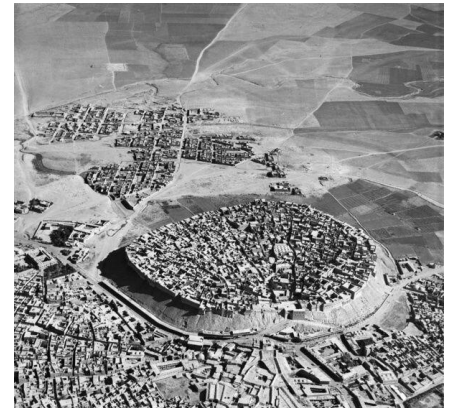



Figure 2 Citadel Erbil in 1950 (The Archaeologist, sd)

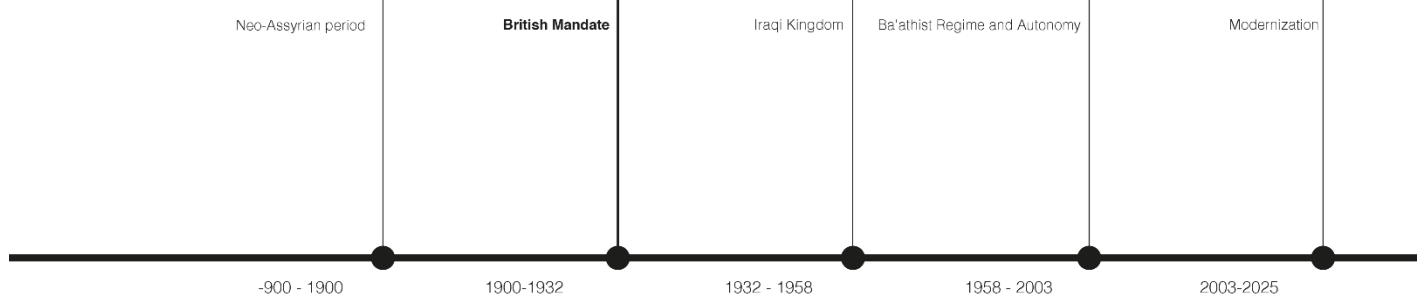
The urban fabric of Erbil during this period was shaped by its Ottoman rulers, who governed the region through a system of indirect rule. The Ottomans relied on local Kurdish leaders, known as Aghas, to maintain order and collect taxes. While the Ottomans introduced limited infrastructure improvements, such as the construction of mosques and public baths, their primary focus was on maintaining control rather than fostering large-scale urban development. As a result, Erbil remained a compact, traditional city until the 20th century, with its architecture and layout reflecting centuries of Ottoman influence (Klein, 2011). The Citadel's unique urban form, characterised by its circular layout and densely packed houses, is a testament to this era (Mahmood, 2019).

Urban Growth of **Erbil** 1900-2025

 900 BC - 1900



1:25000



British Mandate (1918–1932)

The British Mandate period marked the beginning of changes in Erbil’s urban development. As part of their efforts to enhance control over Northern Iraq, the British introduced modern urban planning and infrastructure projects. These initiatives were driven by both economic and strategic interests, particularly the need to facilitate the movement of goods and troops across the region (Sluglett, 2007).

One of the most notable developments during this period was the expansion of Erbil beyond the Citadel. The British initiated the construction of new roads and railways, connecting Erbil to other major cities like Mosul and Kirkuk. These transportation networks not only boosted trade but also laid the groundwork for future urban growth. Additionally, the British introduced grid-based street layouts in newly developed areas, a departure from the organic, winding streets of the old city (IEREK, 2022).

The British also established administrative buildings and military barracks in Erbil, reflecting their colonial presence. These structures were often designed in a hybrid architectural style, blending European influences with local materials and techniques. For example, the use of concrete became more common, marking a shift from traditional building methods. While these developments were primarily functional, they marked the beginning of Erbil’s transformation from a traditional Ottoman city into a modern urban centre (Mühlbauer & Shretah, 2022).

The introduction of new building materials, such as concrete, further facilitated this transformation. The British also encouraged the construction of front gardens, a concept borrowed from Western urban planning. These gardens, often small and ornamental, replaced the traditional courtyards that had been a hallmark of Erbil’s architecture. This shift reflected the influence of Western culture and the changing priorities of urban design (Mahmood, 2019).

The map shows how Erbil began to expand beyond the Citadel during the British Mandate period. In some areas, the traditional organic layout was maintained, but in key locations, wide, straight roads were introduced, cutting through the existing fabric. These interventions reflected broader colonial strategies where infrastructure functioned as both accessibility and control (Sluglett, 2007). As Al-Akkam (2018) notes, the British used urban planning as a political tool, so new roads and administrative buildings were not only part of modernisation efforts but also reinforced their colonial presence. This resulted in a hybrid urban landscape where traditional forms coexisted with imposed colonial planning.

Urban Growth of Erbil 1900-2025

- 900 BC - 1900
- 1918 - 1932



1:25000

Figure 4 Urban Growth of Erbil 1918-1932 (own work)

-900 - 1900

1900-1932

1932 - 1958

1958 - 2003

2003-2025

Kingdom of Iraq (1932–1958)

Following Iraq's independence in 1932, Erbil continued to grow under the Kingdom of Iraq. This period saw the development of new residential districts and governmental buildings, reflecting the city's increasing importance as a regional administrative centre. The Iraqi government, with support from British advisors, implemented urban planning policies that were aimed at modernising Erbil's infrastructure and accommodating its growing population (Tripp, 2007).

One of the key developments during this period was the construction of planned residential neighbourhoods outside the Citadel. These districts featured wider streets, public parks and modern facilities such as electricity and running water, catering to the rising middle class. The architectural style of these buildings often combined modernist elements with traditional Kurdish motifs, creating a unique urban identity for Erbil (Sabr, 2014). The use of reinforced concrete and steel allowed for the construction of larger, more durable buildings (Mahmood, 2019).

The Kingdom of Iraq also invested in the construction of governmental buildings, including schools, hospitals and administrative offices. These structures were often designed in a neoclassical style, symbolising the state's authority and its commitment to modernisation. However, the rapid pace of development also led to the displacement of some communities, particularly those living around the Citadel (Esposti, 2022). The introduction of new urban planning regulations during this period aimed to create a more organised and functional city. Nonetheless, these regulations often prioritised the needs of the growing middle class, which led to the government neglecting the poorer communities.

Despite these difficulties, the Kingdom of Iraq period laid the foundation for Erbil's transformation into a modern city (Tripp, 2007). Looking at the map, it becomes clear that the circular structure of the Citadel remained an important reference point in Erbil's development. During the Kingdom of Iraq period, the city continued to grow outward in a roughly circular pattern, but the areas between these rings were filled in with straight, grid-like streets. This more structured layout allowed for faster development and easier organisation of infrastructure. The map also shows a new suburb 8 kilometres from the old core: Ankawa, a predominantly Christian area. It was originally located at a considerable distance from Erbil's centre, however, as newer maps will illustrate, rapid urban expansion has absorbed Ankawa into the urban fabric of Erbil, making it function more as a suburb than a separate town.

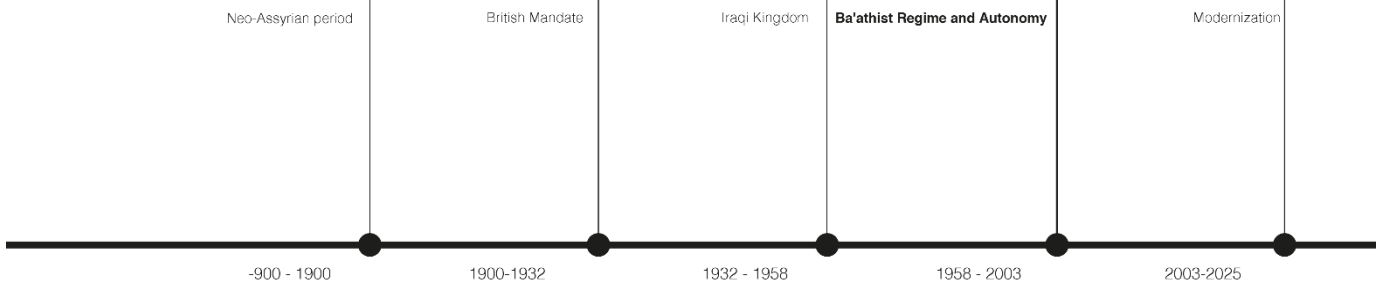
As Tripp (2007) and Sabr (2014) also note, the government aimed to modernise the city while keeping control over how it would grow. This resulted in a mix of old and new planning styles: the traditional core stayed intact, while the new districts followed more modern and regulated forms of urban planning.

Urban Growth of **Erbil** 1900-2025



1:25000

Figure 5 Urban Growth of Erbil 1932-1958 (own work)



Ba'ath Regime (1958–2003)

The Ba'ath Regime period significantly impacted Erbil's urban development through planning, industrialisation and the downgrading of Kurdish identity. The regime's policies prioritised modernization and control, often at the expense of local traditions and cultural heritage (Tripp, 2007). Urban planning in Erbil became highly important, with decisions made by the national government in Baghdad. Between 1980 and 2000, Erbil's population grew significantly from approximately 279,000 to 706,000, marking the biggest demographic expansion of the 20th century (MarcoTrends, sd). The regime focused on industrialisation, leading to the construction of factories, warehouses, which you can see on the map in figure 6, in the south of Erbil. These developments aimed to integrate the Kurdish region into the Iraqi state and reduce its autonomy (Esposti, 2022).

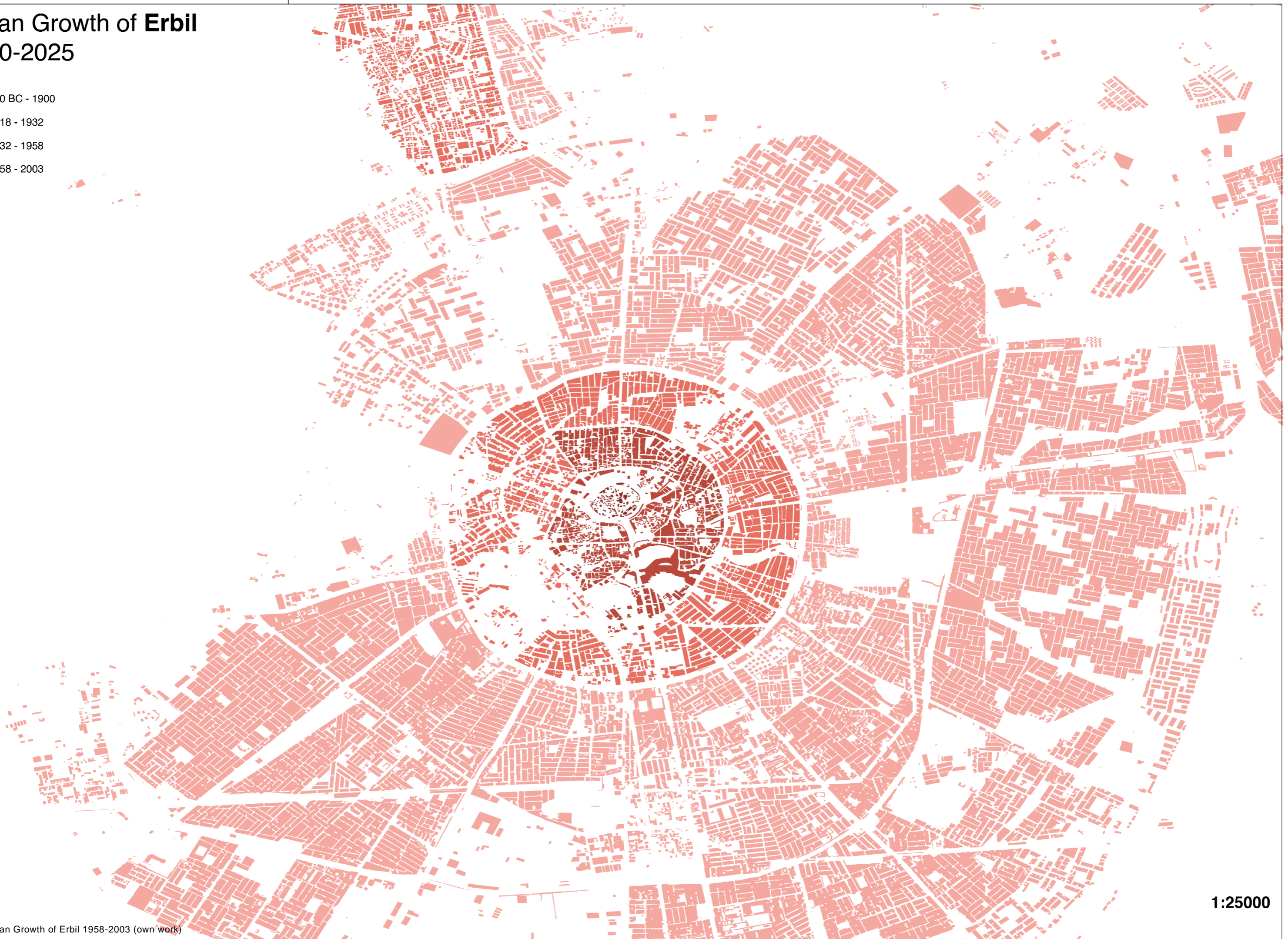
The rapid urbanisation led to the worsening of Erbil's historic neighbourhoods. Many traditional courtyard houses in the Citadel and the Arab District were abandoned or demolished to make way for new developments. The regime's focus on modernisation often came at the expense of cultural heritage, as historic buildings were replaced with modern structures (IEREK, 2022). The Arabization policy further transformed Erbil's urban landscape. The regime encouraged Arab families to settle in the city, leading to a demographic change in Erbil and the displacement of many Kurdish families. This policy also contributed to the fragmented urban fabric, where new residential areas were developed without consideration for the city's historic core (Esposti, 2022).

The Iran-Iraq War (1980–1988) and the Gulf War (1990–1991) drained Iraq's resources, leading to a decline in public investment in urban development. Many housing projects and infrastructure plans were left unfinished, and historic areas deteriorated due to neglect (Tripp, 2007). The economic sanctions imposed on Iraq in the 90s further worsened the situation. The lack of funding for public services and infrastructure maintenance led to the weakening of the city's built environment. Many historic buildings were abandoned and the city's water supply systems and sewage networks were weakened (IEREK, 2022).

The map shows that Erbil experienced a period of rapid expansion. Large areas around the city were developed in a relatively short time, reflecting the regime's push for modernisation and industrial integration. This strong growth was not only driven by national planning goals from Baghdad but also by political motives to strengthen control over the Kurdish region (Esposti, 2022). While much was built, the fast pace of development often ignored local needs and heritage. Traditional areas were neglected or cleared and the city expanded outward with little connection to its historic core. Also, the map clearly shows that large, straight roads visibly disrupt the formerly circular pattern of urban expansion, which was historically oriented around the city's core. This period marked one of the most intense phases of urban growth in Erbil, but also one where Kurdish cultural identity was increasingly marginalised (Tripp, 2007).

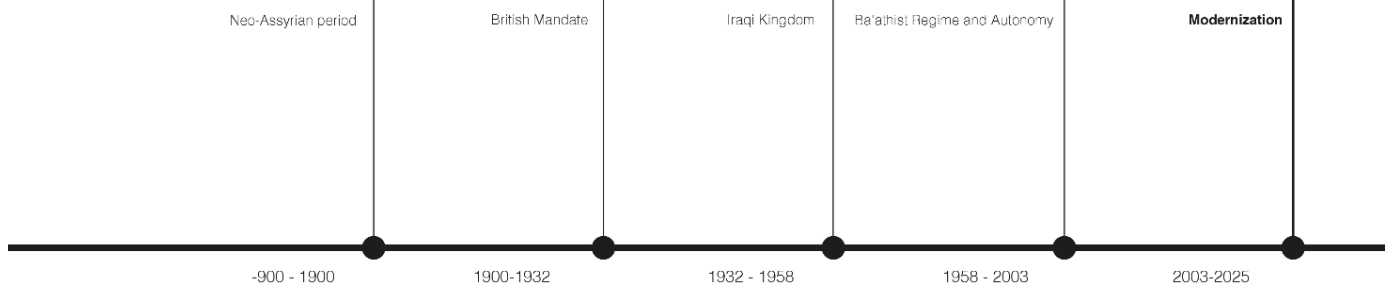
Urban Growth of Erbil 1900-2025

- 900 BC - 1900
- 1918 - 1932
- 1932 - 1958
- 1958 - 2003



1:25000

Figure 6 Urban Growth of Erbil 1958-2003 (own work)



Modernity Period (After 2003)

The modernity period began after Saddam Hussein's regime ended in 2003 and marked a new era of economic growth and urban development in Erbil (Ghafur, 2016). The city became the capital of the Kurdistan Regional Government (KRG), attracting significant investment from both local and international sources. This period saw the rapid expansion of Erbil's urban area, with the construction of high-rise buildings, shopping malls and modern residential complexes (Sabr, 2014).

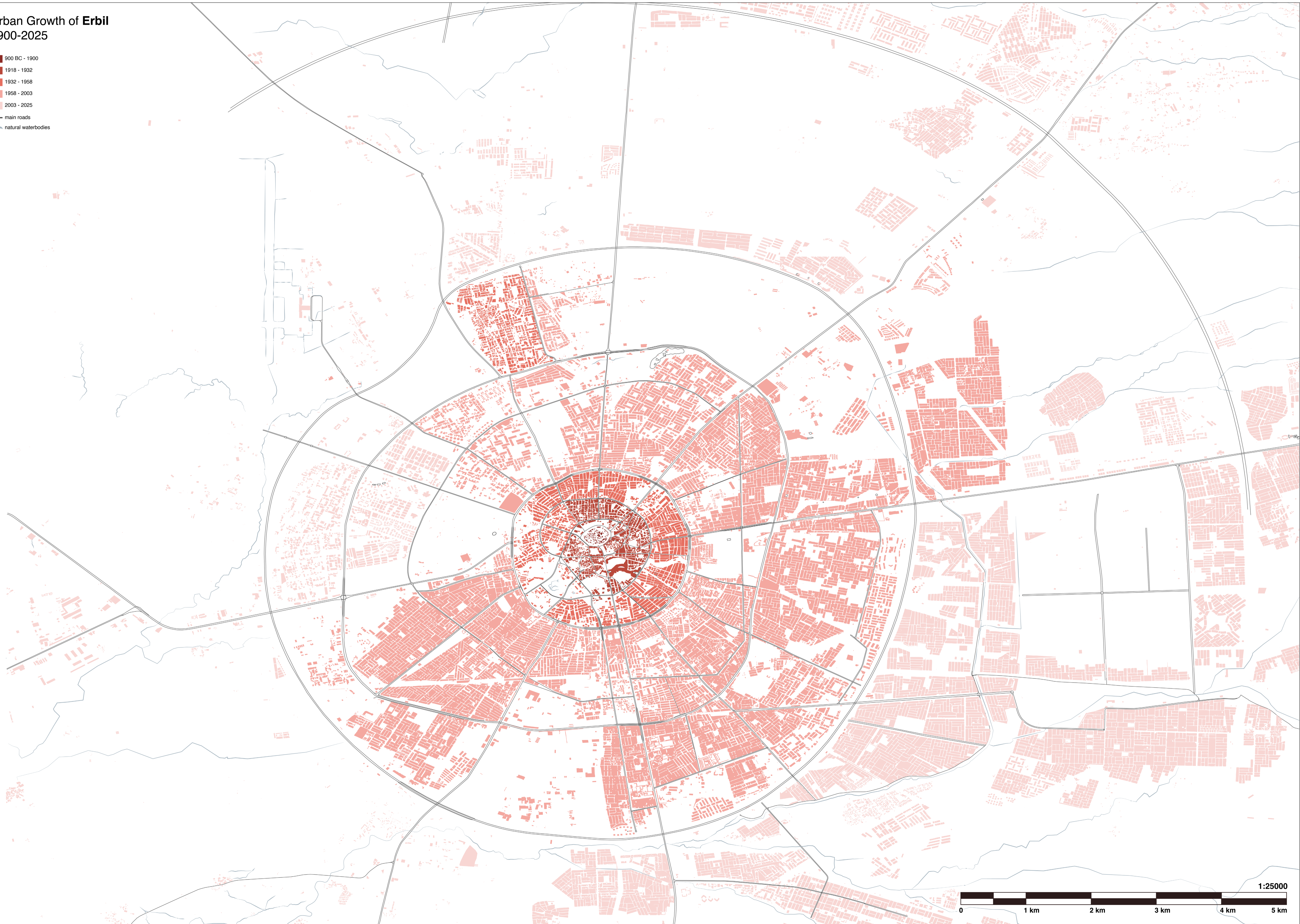
One of the developments during this period was the transformation of Erbil's city centre. The Citadel, which had been in a state of decay for decades, was designated a UNESCO World Heritage Site in 2014, leading to renewed efforts to restore and preserve its historic architecture. The surrounding areas, like the Arab District, also saw significant investment in urban renovation projects to revitalise the city's historic core (Mühlbauer & Shretah, 2022). The modernity period also saw the introduction of modern architectural styles and construction techniques in Erbil. Many of the new buildings constructed during this period were designed in a contemporary style, with glass facades, steel frames and innovative structural systems. This rapid modernisation also led to the loss of traditional architectural elements and the disappearance of gardens in many residential areas (Mühlbauer & Shretah, 2022).

The urban planning efforts during this period were focused on accommodating the city's growing population and attracting foreign investment. The construction of new highways, bridges and public transportation systems improved connectivity within the city and facilitated economic growth. Then again, these developments led to even more fragmentation of the urban fabric, with many historic neighbourhoods being replaced by modern developments (Esposti, 2022).

Erbil's urban structure is notably influenced by a series of concentric ring roads that outline the city's expansion. These highways, increasing in scale and capacity with each outer ring, reflect a hierarchical planning approach aimed at facilitating mobility and guiding urban growth. The most recent ring road, currently under construction, signifies the city's ongoing outward expansion. Observations from the map indicate that new residential and commercial districts are being built along this developing highway, suggesting a continued decentralisation of the urban core. While the overall structure is organised around circular expansion, significant distortions are visible, particularly through the introduction of straight roads and layouts that cut through existing patterns. These interventions disrupt the radial logic of the city as it used to be, disconnecting it from the historical or infrastructural context. Nevertheless, the radial pattern where the main highroads do align with the goals outlined in the Erbil Master Plan. The master plan envisions structured growth through infrastructural development and zoning regulations (Erbil 2050, sd).

Urban Growth of Erbil 1900-2025

- 900 BC - 1900
- 1918 - 1932
- 1932 - 1958
- 1958 - 2003
- 2003 - 2025
- main roads
- natural waterbodies



3. Architectural Transformations and Local Adaptation

Erbil's architectural identity has undergone significant transformations throughout the 20th and 21st centuries, shaped by foreign intervention, state-led planning and shifting political ideologies. While the city's architecture before 1900 remained consistent for centuries, the arrival of colonial powers, followed by nationalist and global influences, introduced new materials, techniques and styles. This chapter explores the major periods of architectural change in Erbil and how these external influences were adapted, often selectively, within the local context.

Vernacular Continuity

Before modern interventions, architecture in Erbil was largely defined by traditional Kurdish and Mesopotamian building methods. The dominant residential form was the courtyard house, constructed with thick mudbrick walls, wooden beams and inward-facing layouts that provided shade, privacy and natural ventilation in a hot, arid climate. These homes typically surrounded a central courtyard, serving as a private outdoor space that brought light and airflow into the interior (IEREK, 2022).

The Citadel of Erbil shows this architectural tradition. Densely built with narrow alleyways and compact housing blocks, the Citadel featured elements such as 'mashrabiya' screens and wooden roofing systems that limited span sizes. Monumental architecture from earlier centuries, such as the 12th-13th century Mudhafaria Minaret, further reflects the longstanding continuity of Islamic architectural forms within the region (IEREK, 2022).

Key features:

- Courtyard houses with thick mudbrick walls and timber beams
- Organic, inward-facing layouts for climate control
- Mashrabiya screens and shaded alleys
- The Citadel as the architectural core of the city

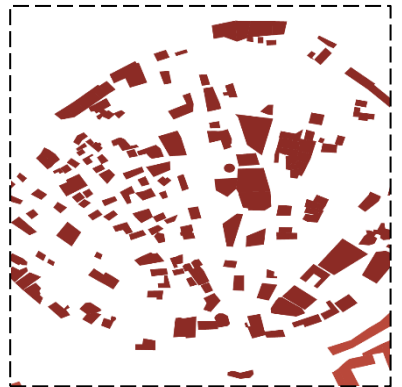


Figure 9 Zoomed in urban form of the citadel (own work)

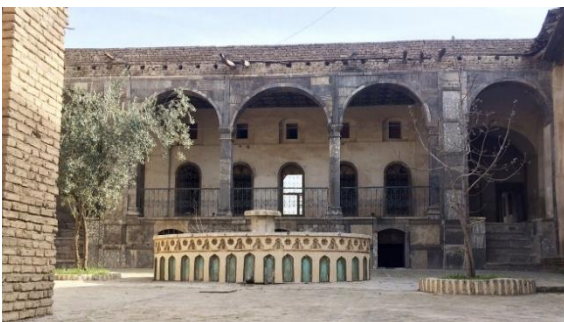


Figure 7 Aerial view of the Citadel of Erbil (UNESCO, sd)



Figure 8 Mudhafaria Minaret in Erbil (Wikimedia, 2021)

Colonial Interventions

During the British Mandate, modern planning and new construction technologies were introduced into Erbil's urban landscape. The British colonial administration prioritized accessibility, visibility and control, which led to direct interventions in the historic city fabric. In the 1920s and 1930s, the Ahmadi Gate in the Citadel wall was opened and in the late 1950s, the Grand Gate was demolished to make space for infrastructure decisions that disrupted the historical integrity of the Citadel (Almukhtar, 2020).

The British introduced functional administrative buildings and military facilities built in simplified neoclassical or colonial styles. These structures incorporated new materials such as reinforced concrete, which enabled greater scale and durability than traditional mudbrick buildings. A significant innovation during this time was the adoption of jack-arching with steel joists for roofs and cantilevered balconies, these construction methods were largely unknown in Iraq before the 1920s (Al-Akkam, 2018). These new techniques marked a transition from vernacular methods to modern building practices, while still being adapted to the local climate and material availability.

Key features:

- Neoclassical and colonial administrative buildings
- Introduction of concrete and steel joists (jack-arching)
- Shift from inward to outward planning logic
- Infrastructure-led alterations of historical fabric



Figure 10 Exterior arcade of the bazaar (Kurdistan24, 2015)



Figure 11 Administrative building right in the city centre (Kurdistan24, 2015)



Figure 12 Zoomed in urban form of Mustawi district (own work)

Planning and Modernization

Following Iraq's independence in 1932, the monarchy continued to modernize Erbil's built environment, supported in part by British advisors. The city expanded through planned residential districts built outside the Citadel, often organized in grid layouts with wider roads and access to infrastructure such as electricity and running water (Tripp, 2007).

Architecturally, this period introduced modernist forms into public buildings such as schools, hospitals and administrative offices. These structures reflected a simplified version of international modernism, incorporating clean lines and functional layouts, often fused with local materials and occasional decorative elements such as screens or courtyards (Sabr, 2014). Despite these changes, vernacular traditions remained present in domestic architecture, especially in working-class neighbourhoods.

The new homes were typically constructed with one or two storeys, and changes in roofing became apparent, including the use of concrete slabs and jack-arch techniques, learned by the British. While brick remained the dominant building material, subtle shifts occurred in the structural details. Steel columns started appearing in façades, and gardens were now placed at the front of the house (Mahmood, 2019).

Key features:

- Grid-based residential planning
- Public buildings in simplified modernist style
- Functionalism blended with limited local ornamentation
- Expansion beyond the Citadel's organic form



Figure 15 Zoomed in urban form of Saida district (own work)



Figure 13 Specific house during 1930-1980 (Mahmood, 2019)



Figure 14 Specific house during 1930-1980 (Mahmood, 2019)

Monumentalism

Under the Ba'ath regime, architecture was used as a tool of ideological and administrative control. Centralized planning led to the construction of large-scale public facilities, industrial zones and housing blocks, many of which were built in a brutalist style characterized by exposed concrete, massive volumes and repetitive forms. These buildings emphasized state power and were often disconnected from local architectural traditions (Mahmood, 2019).

Traditional neighbourhoods, including parts of the Arab district and the Citadel's outer zones, were abandoned or demolished, making way for new developments with little regard for historical context. In some cases, modern architectural additions were imposed directly onto historic buildings (figure 15), altering their original character by adding a symbolic presence. Architectural identity during this period became standardized, monumental, and state-oriented, reflecting the regime's ideological priorities (Esposti, 2022).

A particularly symbolic intervention was the transformation of the Citadel Gate area, which underwent architectural restructuring to align more closely with the regime's vision of modernity and control. As Almkhtar (2020) notes, such interventions not only altered the material character of historic sites but also redefined their cultural meaning within the narrative. During this period, architectural identity in Erbil became increasingly monumental and state-oriented.

Key features:

- Brutalist architecture with massive concrete forms
- Centralized state-led construction projects
- Neglect and demolition of traditional areas
- Architecture as a political and ideological instrument

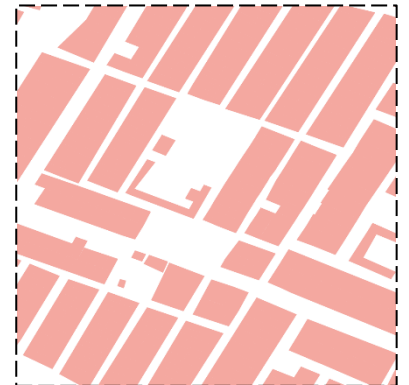


Figure 17 Zoomed in urban form of Mamostiyān 2 district (own work)



Figure 18 Late 20th and early 21st century architecture rising above the brickwork (Kurdistan24, 2015)

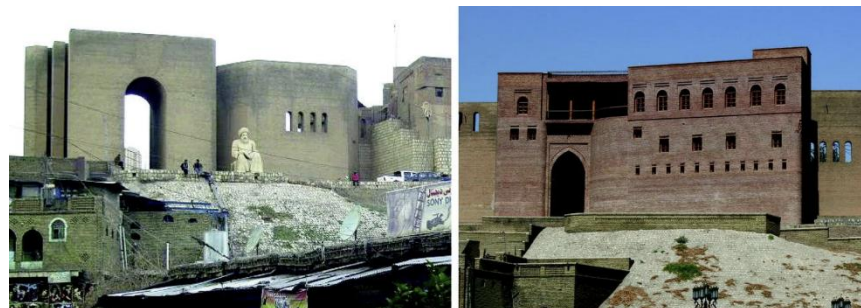


Figure 16 Citadel gates. (left) The recently Babylonian style gate, 1981
(right) The redesigned gate based on the original, 2013-2015 (Almkhtar, 2020)

Globalization

The fall of the Ba'ath regime and the rise of the KRG started a new era of architectural experimentation and even more rapid construction. High-rise buildings, shopping malls and gated communities began to dominate the built environment, which reflects local economic growth and international investment. Much of this architecture borrowed from global models, especially those seen in Gulf cities, with glass façades, steel frames and open-plan interiors (Jaff, 2019).

At the same time, a cultural revival emerged in response to decades of suppression. One of the most prominent examples is the Jalil Khayat Mosque (completed in 2007), reflecting a renewed interest in architectural heritage (Mühlbauer & Shretah, 2022). Nevertheless, these revivalist projects are the exception; most new developments in Erbil prioritise market efficiency and modern aesthetics over continuity with the city's historical context.

Key features:

- Glass-and-steel high-rise construction
- Commercial malls and gated communities
- Some architectural revival in selective religious and cultural projects
- Growing disconnect between new architecture and historical context

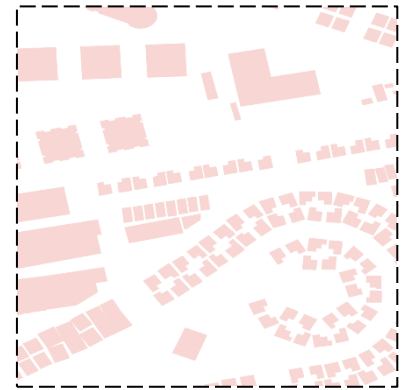


Figure 21 Zoomed in urban form of Italian village (own work)



Figure 20 Aerial view of Park View gated community in Erbil (Baghy Shaqlawa Company, sd)



Figure 19 Photograph from the Erbil White Houses series (Grosso, 2017)

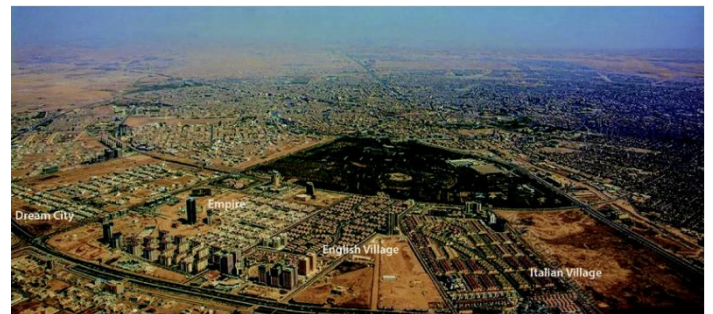


Figure 18 Gated communities (Almukhtar, 2020)

Conclusion

This thesis analyses how colonial and post-colonial influences shaped the urban development and architectural identity of Erbil from 1900 until now (2025). While much attention has historically been given to the Citadel, which is the historical core of Erbil, this research shifted the focus to the 20th and 21st centuries. These periods are marked by spatial and architectural transformations that are driven by external powers and political agendas. The aim of the thesis is to answer the main question: **“How did colonial and post-colonial influences shape the urban development and architecture of Erbil since the 20th century?”**.

Each historical period had its own distinct external influences, urban planning approaches and architectural changes. A key finding of this thesis lies in the **connection** between spatial growth and architectural change. Each phase of Erbil's urban expansion altered the city's size or structure.

- During the British Mandate period, new administrative buildings were introduced around the historic Citadel, which also reflects a blend of Western design principles and local materials. The British also initiated the development of road networks around the old city, encouraging expansion and government control.
- During the monarchy, the rise of modern architecture happened together with the development of wider streets and organised districts. These changes supported new public buildings and allowed housing developments for the growing middle class.
- In the Ba'athist period, the regime's massive urban expansion created space for large-scale, brutalist architecture. Due to the speed of growth, the attention shifted away from the city's historical character to the new urban developments. This resulted in standardised, monumental concrete buildings and the displacement of people's traditional housing of the demolition of the old core.
- Post-2003, the construction of successive ring roads and decentralization of urban form led to the rise of high-rise buildings, shopping malls and gated communities. These were architecturally aligned with the demands of global investment and new consumer lifestyles. At the same time, selective architectural projects attempted to re-establish cultural continuity within this shifting urban context.

This relation between urban form and architecture underlines that architecture is shaped not only by style or function, but also by the physical, political and social shifts of the areas in question.

The research and final map show how Erbil's urban development and architecture have been shaped by colonial, post-colonial and external powers. They have left clear marks on the physical structure of the city. Even though the city expanded intensely and gave new opportunities, this development often came at the cost of cultural continuity. What becomes apparent is not a single narrative of Erbil, but a layered city shaped by ongoing conflicts, political agendas and local responses.

Epilogue

Hoewel deze scriptie in het Engels is geschreven, kies ik ervoor om deze epiloog in het Nederlands te schrijven, omdat dit voor mij de meest natuurlijke manier is om persoonlijk terug te blikken op dit onderzoek

Het schrijven van deze 'History Thesis' is voor mij als Irakees-Koerd, meer geweest dan een academische onderzoek. Het was een gelaagd onderzoek naar een complexe geschiedenis die voelbaar is in de stenen, straten en stiltes van de stad. Door te werken met kaarten, historische bronnen en architectonische analyses leerde ik Hawler (Erbil) lezen als een bijzondere stad waarin politieke invloeden, culturele verschuivingen en lokale veerkracht samenkomen.

Het was waardevol om een onderwerp als postkoloniale stedenbouw en architectuur te benaderen vanuit een academisch perspectief, in plaats van het uitsluitend via persoonlijke of subjectieve verhalen te kennen. Deze thesis beweert geen volledig beeld te schetsen van Hawlers ontwikkeling, maar hoopt wel bij te dragen aan het begrip van hoe externe machten en invloed hebben gehad en blijven hebben op het beeld van de stad en de cultuur.

In een tijd waarin veel steden onder druk staan door snelle groei, verlies van erfgoed of politieke spanningen, hoop ik dat dit onderzoek uitnodigt om met meer aandacht en historisch besef naar onze gebouwde omgeving te kijken.

In veel steden in het Midden-Oosten, Afrika, Zuid-Azië en Latijns-Amerika zijn de ruimtelijke gevolgen van Westerse kolonisatie tot op de dag van vandaag zichtbaar. Overal hebben externe machten vorm gegeven aan hoe mensen wonen, zich verplaatsen en herinnerd worden. Dit onderzoek laat zien dat ook Hawler geen uitzondering is; hoe indrukwekkend het ook lijkt. Ik hoop dat dit onderzoek ons eraan herinnert hoe belangrijk het is om steden niet los te zien van hun verleden, en om kritisch te blijven kijken naar wie bepaalt hoe een stad eruitziet en voor wie die is.

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Appendices

Appendix A: Historical mapping 1900-1958 A4-bundle

Appendix B: Historical mapping 1958-2003 A3

Appendix C: Historical mapping 2003-2025 A1