

**ARCHITECTURE AS A
GEOGRAPHICAL MATTER:**

*Rethinking Antakya after a
major disaster*

ANTAKYA



Fig. 1: An armchair, left behind amidst the remnants of rubble, August, 2024.

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Fig. 2: *Sunflower, symbol of hope*, painted by Liliillustration on the walls of historic Antakya houses, August 29, 2024.

geography

[jee-aa-gruh-fee] *noun*

the study of the physical features of the earth and its atmosphere and of human activity as it affects and is affected by these, including the distribution of populations, the flows of resources, and the forces of political and economic systems.

Abstract

Throughout history, societies have shaped their environments to adapt to the physical and climatic conditions of their regions, drawing on accumulated knowledge and experience. This adaptation has led to the emergence of cities with distinct identities and cultural signatures across various geographical conditions, each uniquely attuned to its surroundings. Such cities, deeply rooted in their local contexts, contribute significantly to cultural heritage, with traditions and customs conveying their unique identities across generations. Culture, encompassing both the social and physical aspects that represent a society, is sustained by a continuity grounded in history. The products of a culture, shaped by the interaction between a city's social and environmental characteristics, inherently belong to their specific locale rather than being universally applicable.

Architecture, therefore, is not an unrestricted art form but a science-based profession focused on problem-solving. Architects carry a critical responsibility in this regard; they are not only tasked with creating spaces but also with answering questions about who the space is for, the cultural and physical context, and the socio-political and economic conditions one must address. In short, an architect should approach their work as a geographical matter, addressing each of the physical, economic, biological, human, and political realities that define a region or place, understanding that cities are complex, multi-layered systems shaped by the collective actions of their inhabitants. Cities should, in this sense, be formed in harmony with the lives of those who dwell within them.

In this context, the more complex and challenging the layers of a region are, the greater the challenges an architect will face. Antakya in Hatay, known for its multi-layered structure, is one of the significant regions for study in this regard. Defined as the "Queen of the East" since the Roman Empire, Antakya has hosted various cultures

and religions over the centuries and is positioned in a geographically challenging terrain. Located in a high-risk earthquake zone, it has endured numerous earthquakes throughout its history, though none as devastating as those of February 6 and February 20, 2023.

This thesis addresses the urgent need for resilient urban redesign in Antakya, Hatay, following the devastating earthquake of February 2023, focusing on the architect's role in this process. While exploring Hatay's rich cultural and architectural heritage from a historical perspective, it also examines how this architectural heritage, as part of a city located at a seismic crossroads, has developed seismic vulnerabilities over the years, with rapid modernization and recent political and economic policies undermining structural integrity and public safety, and its subsequent destruction. This study highlights the importance of sustainable urban renewal approaches that enhance earthquake resilience and restore residents' sense of belonging to the city, underscoring the architect's vital role in this endeavor.



Fig. 3: Archive of old Türkiye photos. Antakya, 1944.

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1.



Introduction

Antakya is the main district of Hatay, Türkiye, that has hosted many civilizations throughout history, standing out with its rich cultural heritage and cosmopolitan nature as a significant crossroads of the Mediterranean. Founded in 300 BCE by Seleucus I. Nicator under the name Antioch, this ancient city has been shaped by the cultural influences of Rome, Byzantium, Seljuks, the Ottoman Empire, and modern Türkiye, with each era adding new layers that enriched its identity. This characteristic of Antakya has made it not only a geopolitical center but also a strong symbol of the “culture of coexistence” throughout history.

The city’s geographical location, situated in the fertile basin of the Orontes River, which forms a bridge between the Mediterranean and Anatolia, has allowed for the development of agricultural prosperity and trade. However, the surrounding mountains and the dynamic nature of the river have made Antakya vulnerable to natural disasters, particularly earthquakes. Throughout history, this vulnerability has caused the city to evolve through both resistance and reconstruction processes.

However, the earthquakes that struck Kahramanmaraş and Hatay on February 6 and 20, 2023, have deeply shaken Antakya’s multi-layered history and its precious heritage. These devastating disasters nearly destroyed the physical fabric of the city and threatened its millennia-old architectural wealth. Moreover, this catastrophe not only caused structural damage but also inflicted deep psychological and social wounds on the city’s inhabitants, damaging their sense of belonging.

Antakya’s resilience and ability to rebuild itself over and over, as observed in its history, underline the need for a strong and well-thought-out reconstruction effort in this process. However, this time, it requires an approach that not only rebuilds physical structures but also integrates the city’s cultural heritage, social fabric, and modern needs, all

while addressing various political and economic challenges. This study discusses how the cultural and architectural heritage of Antakya and the post-earthquake reconstruction process should be addressed in a sustainable, resilient way that strengthens social bonds and restores the damaged cultural fabric.

The role of architects in this process is not limited to the reconstruction of spaces; it also includes the responsibility of ensuring the preservation of history and identity for future generations. In this context, a vision for building a resilient and inclusive city that blends Antakya’s ancient cultural fabric with the needs of the modern world is presented.

Methodology

Earthquake recovery is a multifaceted endeavor. In particular, rebuilding a multicultural city like Hatay, rich in heritage and memory, involves more than just constructing new housing for its residents. It is about creating spaces that will bring back the old sense of belonging when its people walk its streets again. To achieve this, architects must deeply understand and immerse themselves in the city's culture, enriched over centuries, and grasp the architectural forms that have shaped its identity over time. They need to study structural responses to earthquakes, analyze the political and economic frameworks in which the city exists, and engage with the community to learn how to breathe life back into spaces that once thrived but now lie in ruins.

This thesis adopts a methodology that examines Hatay, with a specific focus on Antakya, one of the most severely affected districts, across three primary periods: pre-earthquake, during the earthquake, and post-earthquake. The pre-earthquake analysis begins by exploring how Hatay's multilayered culture evolved historically, with a focus on its architectural characteristics and its demography. This will be followed by an examination of the political and economic decisions in contemporary Türkiye regarding earthquakes and urban development.

After establishing a comprehensive understanding of pre-earthquake Antakya, the study will investigate the scale and destructiveness of the earthquake, its impact on both structures and human lives, and the measures taken in its aftermath. Post-earthquake decisions and their consequences will also be critically assessed.

This discussion, conducted from an architect's perspective, will highlight the role and significance of the profession in addressing such destruction and in contributing to reconstruction efforts. Finally, the thesis will highlight the importance and the key points of a conceptual project outlining how Antakya, and Hatay in general, could be brought back

to life, emphasizing a design approach rooted in cultural sensitivity and community engagement.

The research draws upon a variety of sources, including books, articles, and surveys conducted in Hatay. Additionally, it incorporates findings from a field visit conducted on August 28, 2024, during which interviews were held with local architects and civil engineers involved in the reconstruction efforts. These interviews provide valuable firsthand insights and complement the broader research framework.

2.



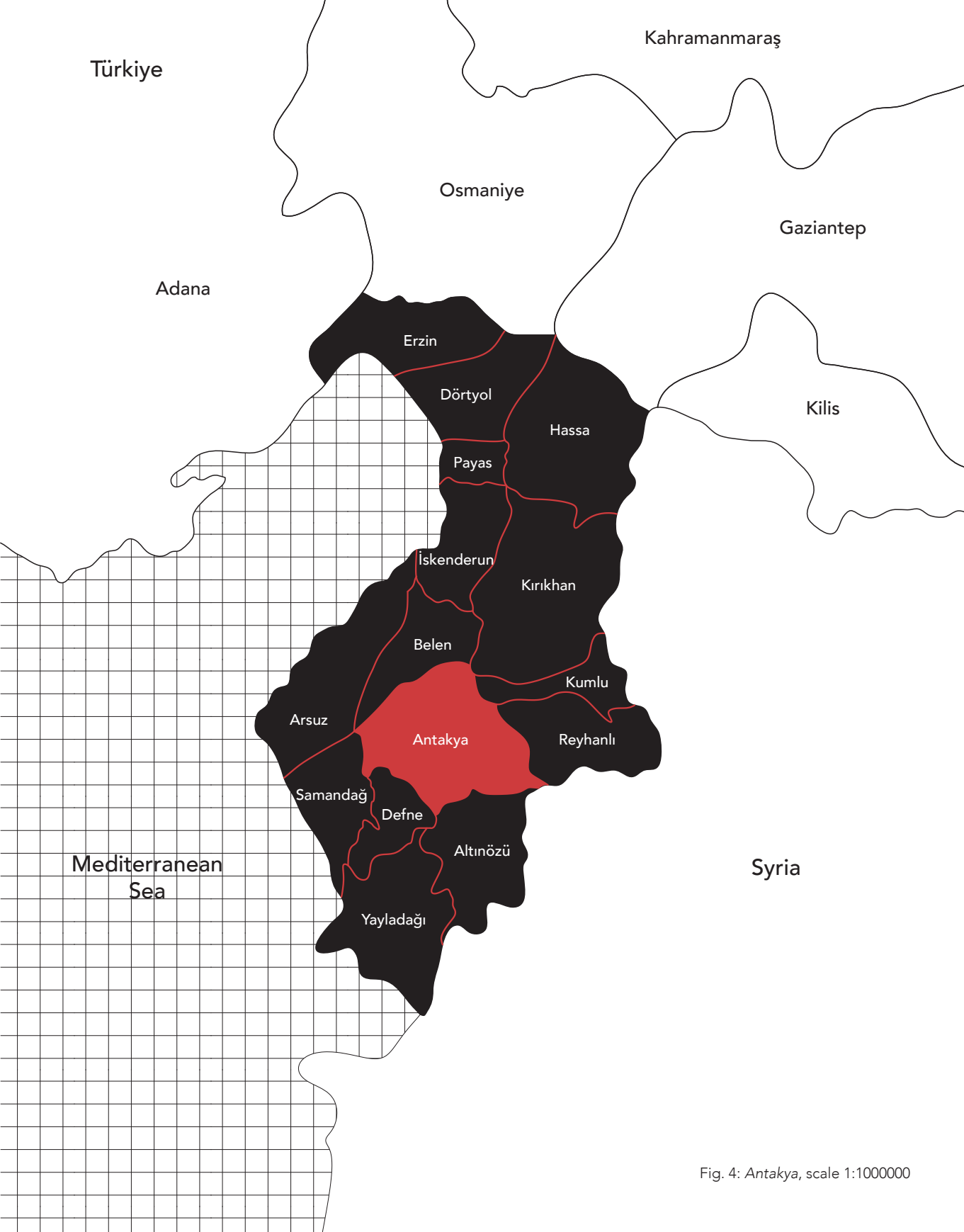


Fig. 4: Antakya, scale 1:1000000

Antakya's Architectural Heritage

Before starting to rebuild Antakya, it is essential to thoroughly understand the city in its entirety. This includes examining its location, its geographical, topographical, and climatic features, the socio-cultural dynamics that have evolved throughout its history and have shaped its architecture, and its distinctive characteristics as a city situated in an earthquake-prone region. Additionally, to fully grasp why the earthquakes of February 6 and 20 were incredibly devastating, it is crucial to analyze the political and economic landscape of Türkiye, particularly from the 1990s onward.

Antakya's Location, a City of Crossroads

Hatay, located in the southernmost part of Türkiye, is an ancient settlement with a history dating back to 40,000 BCE. The district of Antakya, which serves as the provincial center of Hatay, is situated on a fertile plain surrounded by the Orontes (Asi) River. To its east lies Mount Habib-i Neccar, while to its west stretches the Amik Plain. This strategic location has long established Antakya as a prominent center of trade and culture, with its fertile soils and temperate climate fostering both agricultural practices and settlement efforts. Covering an area of approximately 1,030 km², Antakya is home to around 399,000 people, per 2022 data. While plains make up the majority (58%) of its land, mountainous and rugged terrains also occupy a significant portion.¹

Having a Mediterranean climate, Antakya experiences warm, humid summers and mild, rainy winters, with average annual temperatures of 19°C and a humidity level of 68%.² The city's location, nestled between the Orontes River and Mount Habib-i Neccar, reflects a deliberate settlement choice influenced by these climatic conditions. Over the centuries, these natural conditions, combined with the

¹ Şen, Yüksel & Taşçı, G., Gözde. "Antakya Yeniden Doğarken." Yapı Magazine, 2023. <https://yapidergisi.com/antakya-yeniden-dogarken/>.

² Climate Data. "Antakya Climate: Average Annual Weather." Climate-Data.org, 2021. <https://en.climate-data.org>.

city’s evolving social and cultural fabric, have left a lasting imprint on its architectural styles, shaping everything from ancient constructions to modern designs of the 20th and 21st centuries.

Antakya’s historical significance extends beyond its climate and geography. Located at the nearest Mediterranean access point of the Silk Road, it served as a vital crossroad for commerce, culture, and the exchange of ideas. The city’s rich natural environment, abundant resources, and strategic importance have attracted diverse civilizations over the millennia, fostering a unique blend of cultures and beliefs.³ This cultural diversity played a key role in the development and spread of major religions, solidifying Antakya’s legacy as a cradle of coexistence and spiritual significance.

However, Antakya’s location within a geotectonic region shaped by the East Anatolian and Dead Sea fault lines has also exposed it to a history of devastating earthquakes.⁴ This duality of natural beauty and geological volatility has both enriched and challenged the city, leaving behind a legacy of resilience and adaptability that continues to define it today.

**Antakya, the Cradle of Civilizations:
Social and Cultural Evolutions**

Seleucid Era and the Founding of Antioch

Antakya was founded in 300 BCE by Seleucus I Nicator under the name Antioch. Following the death of Seleucus I Nicator, during the reign of his successor, Antiochus I Soter, the administrative center of the kingdom was moved to Antakya, making it the new and final capital of the Seleucid Empire.⁵

Like other Hellenistic cities of its time, Antakya adopted the grid plan scheme during the Seleucid period, characterized by streets and avenues running parallel and intersecting at right angles (Fig. 5). In grid-plan cities, although not a strict rule, streets generally developed in North-South

³ Arıman, Başak. *Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması*. İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, May 2002.

⁴ Korkmaz, Hüseyin., Çetin, Bayram., Özşahin, Emre., Karataş, Atilla. & Bom, Ahmet. "The Geography of Hatay." *Hatay Provincial Yearbook* 2011, 2011. https://www.researchgate.net/publication/256704329_Hatay_Cografyasi, p. 22.

⁵ Arıman, *Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması*, pp. 20-22.

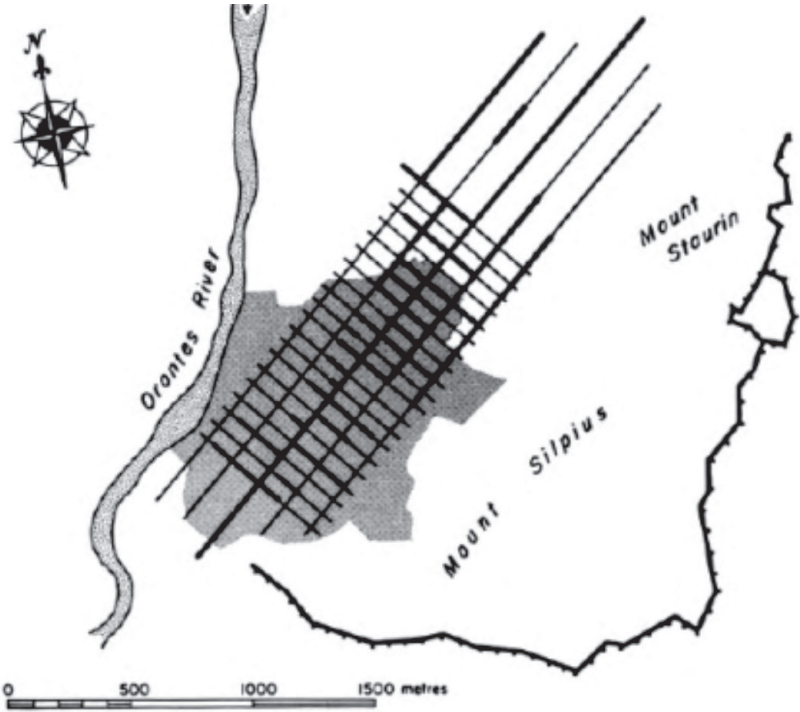


Fig. 5: The city plan of Antakya at the time of its establishment (Downey, 1961: 763)

and East-West directions, shaped primarily by the topography. On steeper terrains, streets could also open in other directions as permitted by the slope. Thus, the grid plan was applied to various terrains, exhibiting a schematic and simple structure on flat lands while taking on a more dynamic appearance on hilly terrains.

Examining the grid plan of Antakya reveals that the Southwest-Northeast orientation was determined to be the most suitable for capturing the prevailing winds. The grid was laid out between the mountains and the Orontes River. Streets were designed to carry cooling breezes from the river during the summer and maximize sunlight during the winter. The streets were spaced 112 meters apart, while roads intersecting them at 56-meter intervals created building blocks, forming the primary 2:1 ratio grid layout of the city.⁶ This city-planning principle, implemented during the city’s establishment, can still be observed in the orientation of some streets today.

During the Seleucid period, Antakya occupied a strategic position along the “Royal Road,” which controlled

⁶ Arıman, *Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması*, pp. 20-22.

long-distance trade routes between the Mediterranean and Samarkand. Consequently, commerce flourished in the city, and the production of high-quality goods brought wealth to the region. The city quickly became an administrative and commercial hub serving a vast area.⁷ At the city's center, an agora (marketplace) was built, surrounded by religious structures, baths, and gymnasiums. Villas were located at the foothills of Mount Silpius (Habib-i Neccar), which physically framed the city.

The architecture of the city, as well as the placement of its structures, was shaped by the daily lives of its socio-economic groups. The architectural features of these buildings mirrored the needs and aesthetic sensibilities of different classes, embodying the architectural attitudes and principles of the Hellenistic period. Stone structures, arched entrances, and predominantly two-story houses with gardens were key architectural elements representing the Seleucid style.⁸

Roman Period

In 64 BCE, Antakya became part of the Roman Empire, emerging as one of the most important cities in the Eastern Mediterranean and earning the title “Queen of the East.” Due to its geographical location at the crossroads of the Silk Road and other major trade routes, Antakya grew into a city even richer in economic and cultural wealth. During the Roman era, particularly under Emperor Augustus and his successors, significant investments were made to develop Antakya as an administrative center and trade hub. By the 1st century CE, these advancements made Antakya the fourth largest city in the world, following Rome, Alexandria, and Ctesiphon.⁹

Moreover, Christianity, which emerged in the first half of the 1st century CE, spread outside Jerusalem for the first time in Antakya. It was here that followers of Jesus were first called “Christians”.¹⁰

⁷ Arıman, *Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması*, p. 22.

⁸ Kılıçoğlu, H. Serdar. *The Effects of Socio-Economic Characteristics on the Architectural Formation of the City Center: The Case of Antakya City Center*. Çukurova University, Graduate School of Natural and Applied Sciences, Department of Architecture, 1998.

⁹ Arıman, *Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması*, pp. 23-24.

¹⁰ Wallace-Hadrill, D. S. *Christian Antioch: A Study of Early Christian Thought in the East*. Cambridge: Cambridge University Press, 2009.

Reshaped by the urban planning principles of the Roman Empire, Antakya featured an orderly system of wide streets and roads. One of the most remarkable architectural features of the ancient city was its colonnaded main avenue, approximately four kilometers long. The rows of columns lining both sides of the avenue added grandeur to the city while defining its commercial zones.¹¹ This structure not only strengthened Antakya's urban organization but also became the heart of its social and commercial life.

The attention paid to Antakya by the Roman and Byzantine Empires resulted in the construction of numerous new structures, further enhancing the city's splendor.¹² Public buildings such as large forums, baths, temples, and aqueducts took a big part in the city's new development plans. Baths, in particular, were an integral part of Roman social life, responsible for introducing the daily cultural practices of Rome to Antakya and shaping the city's socio-cultural fabric.¹³

During the Roman period, Antakya's architecture stood out not only for its functionality but also for its aesthetic appeal. Buildings were adorned with ornate facades, intricate stone carvings, and impressive entrances, reflecting the architectural legacy of the Empire. Mosaics used in Roman-era buildings were a striking expression of Antakya's rich artistic sensibilities and craftsmanship practices.¹⁴

However, the Seleucid and Roman periods in Antakya were far from peaceful. The city faced significant challenges, including earthquakes, fires, famines, plagues, and uprisings, each marking critical turning points in its history.¹⁵ As a favored city of the Romans, often serving as an eastern capital and hosting emperors, Antakya also became a target for destruction through invasions, alongside its struggles with natural disasters and civil unrest.

Antakya in the Islamic World and the Ottoman Empire

After the death of Prophet Muhammad, the Arab conquests rapidly began to influence the eastern provinces of the

¹¹ Downey, Glanville. *A History of Antioch in Syria: From Seleucus to the Arab Conquest*. Princeton, NJ: Princeton University Press, 1961, pp. 54-82.

¹² Ibid.

¹³ Arıman, *Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması*, pp. 22-30.

¹⁴ Ibid.

¹⁵ Şen & Taşçı, "Antakya Yeniden Doğarken."

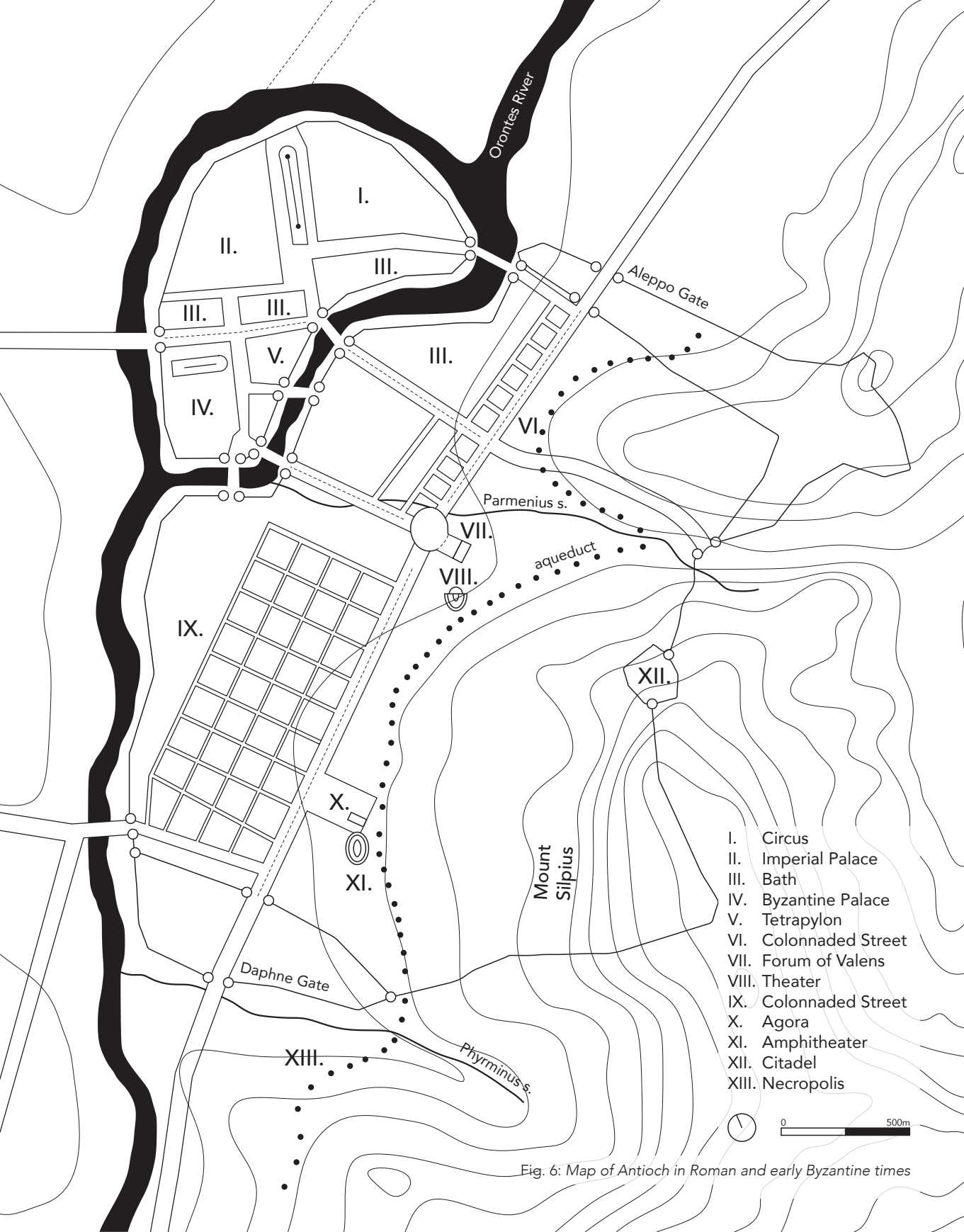


Fig. 6: Map of Antioch in Roman and early Byzantine times

Byzantine Empire. In 634 CE, Arab armies entered Byzantine territories, and following several years of campaigns, many important cities in Syria and its surroundings came under Arab rule. In the 17th year of the Hijra (638 CE), Antakya, already vulnerable due to its weakened state, was conquered by the Muslims as part of these campaigns.¹⁶

The Arab conquest of Antakya was not only a strategic and cultural loss for the Byzantine Empire but also marked a profound turning point in the city's historical identity. This event initiated a new era for the "Queen of the East" of Byzantines and Romans, Antakya, which had been one of the East's most significant military and trade centers. With the conquests beginning in 634 CE and Muslim Arabs taking Antakya under control in 638 CE, the city quickly became an important center within the Islamic province known as Bilad al-Sham. The administration and social order of the city were restructured according to Islamic law and traditions.¹⁷

This transformation resulted in the blending of local cultural and religious elements, which had developed during nearly nine centuries of Roman and Byzantine rule, with Islamic civilization. The new era strengthened the Islamic character of the city while still preserving traces of its earlier cultural heritage.¹⁸ Antakya's significance to Christians never waned, and the Byzantine Empire struggled for over a century to reclaim the city. These efforts, followed by the Crusader Principality period, further complicated the political and religious conflicts over the city. However, this dominance was interrupted by the Seljuks' capture in 1085 and later the Mamluks' conquest in 1268.¹⁹

During this period, Antakya underwent a process of Islamization and Turkification. Under Seljuk and Mamluk rule, the city's socio-cultural fabric changed significantly, though these changes were only minimally reflected in its architecture. One notable transformation was the conversion of the Christian-era Habib-i Neccar Church into a mosque, symbolizing the city's shift toward Islam.²⁰ Beyond this transformation, efforts at Islamization and Turkification found

¹⁶ Downey, Glanville. *A History of Antioch in Syria: From Seleucus to the Arab Conquest*. p. 577.

¹⁷ Demir, Ataman. *Çağlar Boyunca Antakya*. İstanbul: Akbank Kültür ve Sanat Yayınları, 1996.

¹⁸ Ibid.

¹⁹ Arıman, *Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması*, p. 25.

²⁰ Ibid., 26.

limited expression in the city's architectural legacy, and Antakya largely lost its cultural and commercial vibrancy.²¹

Antakya remained under the Ottoman Empire's rule for four centuries, from 1517 to 1918. However, its distance from the capital Istanbul, the loss of its military significance following the conquest of Egypt, and its location outside the new major trade routes of the Middle East rendered the city a small and insignificant town.²² During this period, traditional Ottoman-Turkish houses were commonly constructed, highlighting the city's diminished status and relative isolation.

First World War and French Rule

After the end of World War I, many regions within the borders of the Ottoman Empire were occupied by the victorious Allied powers, and Antakya came under French control during this period. Within the framework of the League of Nations-approved mandate system, France established the Mandate for Syria and Lebanon, which included Antakya and its surrounding areas, aiming to assert its political and social dominance over the region. During this time, Antakya gained an autonomous status as part of the İskenderun Sanjak but underwent significant transformations under French rule.²³

The French administration sought to balance two opposing goals: on the one hand, creating educational institutions that allowed local communities to preserve their cultural identity, and on the other, increasing its own cultural influence. They established educational institutions designed to allow local communities to retain their cultural identities while simultaneously promoting French culture. By deepening religious and ethnic divisions among the population, the French aimed to prevent the formation of a unified resistance movement. These policies were supported by efforts at cultural assimilation and the incorporation of Western influences into the education system.²⁴

²¹ Demir, Çağlar Boyunca Antakya.

²² Arıman, Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması, p. 26.

²³ Duman, Levent. & Can, Şule. "Keşke Kalsaydı" Yerel Tanıkların Gözünden Bir Antakya Tarihi. istos yayın, İstanbul, 2024, pp. 76-135.

²⁴ Ibid., 97-111.

Fig. 7: Photograph, "Antakya between 1918 and 1938 under French administration, showing structures from that period." Hatay Archive, Facebook, May 31, 2018.



Fig. 8: Photograph, "Nostalgia Hour: Antakya Post Office Building, 1940. Hatay, Antakya." HatayTube, Facebook, October 18, 2019.



Fig. 9: Photograph, Old Governor's Office Building. From "Antakya'da gerçekleşen son depremde tarihi Vilayet binası da yıkıldı." gdh digital, February 21, 2023.



Fig. 10: Photograph, Old French Consulate Building. From Hatay Provincial Directorate of Culture and Tourism's Archive.



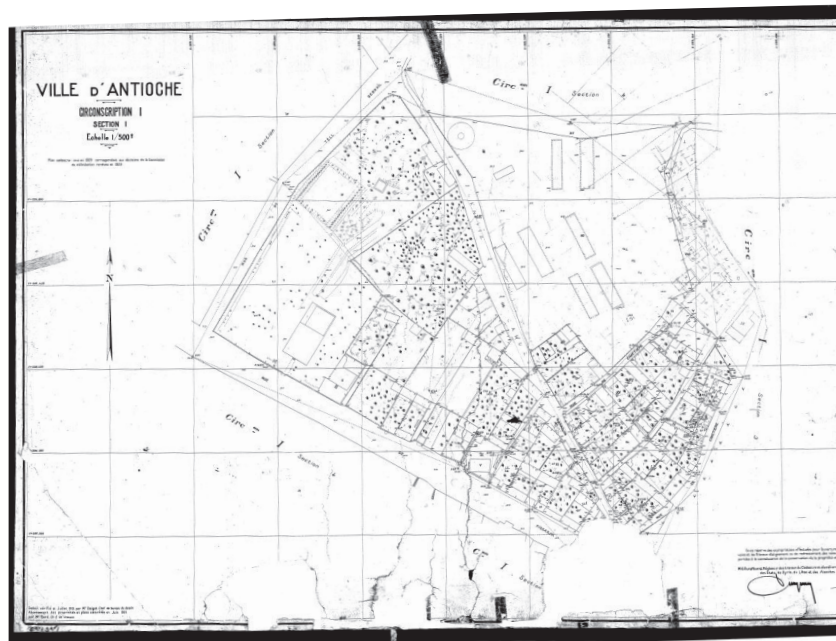


Fig. 11: French Cadastral Map, dated 1929–1930, scale 1:500. Hatay Metropolitan Municipality Map Archive.

France also undertook extensive infrastructure projects, constructing new roads, bridges, and public buildings to blend the region's traditional character with Western architectural styles while consolidating economic and logistical control. Modernizing land registries and implementing cadastral surveys (Fig. 11) were among the notable initiatives of this era.²⁵

The 1921 Ankara Agreement marked the end of the conflict between Türkiye and France, defining the Syrian border and officially incorporating Antakya into French-controlled Syrian territory. While the agreement included provisions to preserve the cultural identity of the region's Turkish population, Türkiye also sought to prevent the emigration of Turks from the area. Despite these measures, French policies exacerbated social tensions by deepening divisions among local communities.²⁶

Antakya's architectural fabric was once again reshaped during this period under the influence of Western styles. Modernization and Westernization policies led to the construction of European-style public spaces (Fig. 7) and administrative buildings such as Old Post Office Building

(Fig. 8), Hatay Governor's Office Building (Fig. 9), Old French Consulate Building (Fig. 10). However, these efforts were often criticized for prioritizing the colonial administration's interests over the needs of the local population. The French administration was largely ineffective in preserving Antakya's historical and cultural identity, limiting the sustainability of the social and cultural changes implemented during this time.

Republic of Türkiye

The region formerly known as "İskenderun Sanjak and Surroundings" under the French Mandate was officially incorporated into the Republic of Türkiye in 1939. Following this, the area was renamed "Hatay," inspired by the ancient Hattena Kingdom that once existed there, as envisioned by Mustafa Kemal Atatürk.²⁷ This significant change symbolized the integration of Antakya and its surroundings into Türkiye's modernization and nationalization policies.

During the Republican era, Antakya underwent both political and cultural transformations. Modernization efforts, led by Atatürk, sought to align the city's socio-cultural fabric with the identity of the Turkish nation-state. This process reshaped urban life according to the modernization and national unity goals dictated by Republican ideology. The construction of the Turkish nation-state aimed to minimize ethnic and cultural diversity to strengthen national unity.²⁸

Although these modernization efforts aimed to establish a uniform cultural and social order, different social, ethnic, and religious groups in Antakya experienced this transformation in distinct ways. While a collective memory was constructed through rituals and spatial practices, the modern state's approach to homogenized citizenship partially suppressed this memory, sometimes triggering processes of "forgetting." The various communities in Antakya responded to these changes based on their class, ethnic, and religious perspectives, adding more layers to the city's historical identity.²⁹

²⁷ Arıman, *Antakya Kenti Tarihi Doku İçinde Tipolojik Analiz Çalışması*, p. 26.

²⁸ Can, Mustafa. "Hatay'ın İşgali ve Kurtuluşu." *Akademik Tarih ve Düşünce Dergisi* 2, no. 4, 2011.

²⁹ Duman & Can, "Keşke Kalsaydı" *Yerel Tanıkların Gözünden Bir Antakya Tarihi*

²⁵ Duman & Can, "Keşke Kalsaydı" *Yerel Tanıkların Gözünden Bir Antakya Tarihi*, pp. 97-98.

²⁶ Ibid., 213-234.

Türkiye's modernization process, particularly in the early Republican period, significantly impacted the physical and social fabric of many cities within its borders. However, decisions made in the late 1990s and early 2000s heavily altered the direction of modernization and urban transformation policies, leading to adverse effects on the delicate natural and cultural balance in cities like Antakya. Unplanned urbanization, insufficient regulatory oversight, and rapid construction practices weakened Antakya's historical texture and considerably reduced its resilience to natural disasters such as earthquakes. Policies such as construction amnesty further compromised the quality and safety of buildings, leaving the city and its inhabitants vulnerable. This flawed evolution culminated in the devastation caused by the 2023 earthquake, which destroyed much of the city, rendering many historical structures and modern buildings unusable.

The following sections will dive deeper into the urbanization policies, the lack of oversight, and the decisions made since the 1990s that left Antakya vulnerable while considering the role of the architect throughout these processes. This analysis is crucial for understanding the dynamics of modernization and identifying measures needed to safeguard the future. However, before delving into this analysis, it is crucial to examine the architectural structures prior to modernization, their resistance to earthquakes, and the demographic characteristics of the city before the earthquake. This will provide insight into how the architectural fabric has evolved over time in order to make comparisons between past and present architectural responses to earthquakes. At the same time, the different groups of people currently inhabiting these architectural structures will also be discussed.

Traditional Building Techniques

Located in a region susceptible to seismic activity, Antakya offers a rich architectural history that demonstrates the city's and its citizens' adaptation to the unique challenges posed by frequent earthquakes. For centuries, traditional construction methods in Antakya have incorporated elements specifically designed to increase resilience and to protect structures from seismic forces. Buildings were often made of stone, wood, and adobe, materials that offer flexibility and shock absorption, showcasing a deep understanding of local materials, climate, and topography. The use of these materials allowed buildings to sway with tremors rather than collapse.³⁰

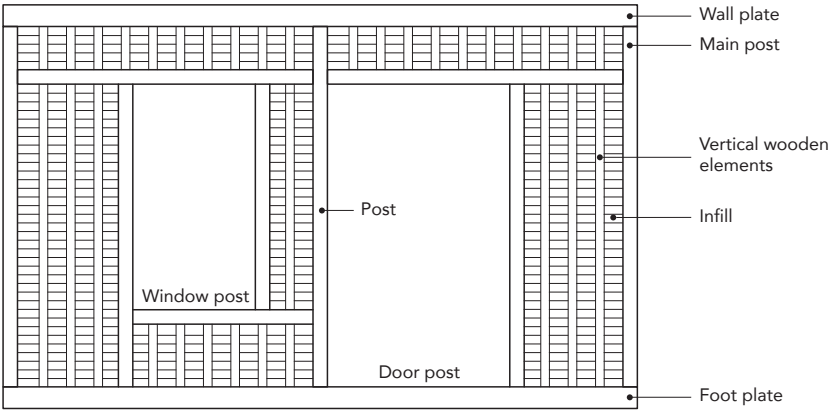
One notable traditional technique observed in Antakya is timber framing, commonly known as *hımış* construction. This method involves creating a wooden skeleton for the building and using infill made of lighter materials such as brick or adobe. A such design allows structures to absorb and dissipate seismic energy, providing essential flexibility during earthquakes. In addition to this technique, builders historically used stone foundations to create a solid base, preventing the buildings from shifting or sliding during tremors. *Hımış* structural systems are also divided into two categories: non-diagonal (Fig.12 a.) and diagonal (Fig. 12 b.). In *hımış* structures, vertical wooden elements and horizontal wooden elements are connected to each other with nails. While wooden elements have a large bearing capacity in the direction of the seam, this capacity is very low in the perpendicular direction of the seam. The wooden elements used in the load-bearing system are very fragile under shear and tensile action.³¹

The other traditional method frequently used is the *bağdadi* construction, which is very similar to *hımış* construction but, it is characterized by the use of short rough pieces of timber for the infilling the wooden frame instead of masonry.³² These pieces are then usually plastered on the interior and exterior to form a solid wall. In these structures, the construction technique consists of wooden strips that

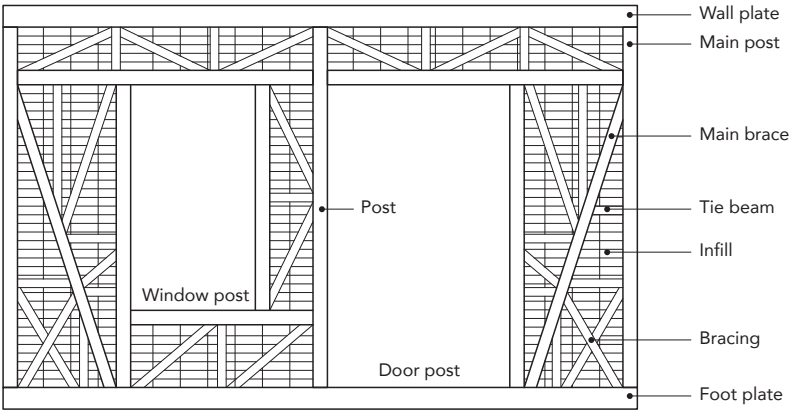
³⁰ Doğan, Mizam. "Seismic Analysis of Traditional Buildings: Bağdadi and Himis." *Anadolu University Journal of Science and Technology, Applied Sciences and Engineering* 11, no.1, 2010: 35–45.

³¹ Ibid.

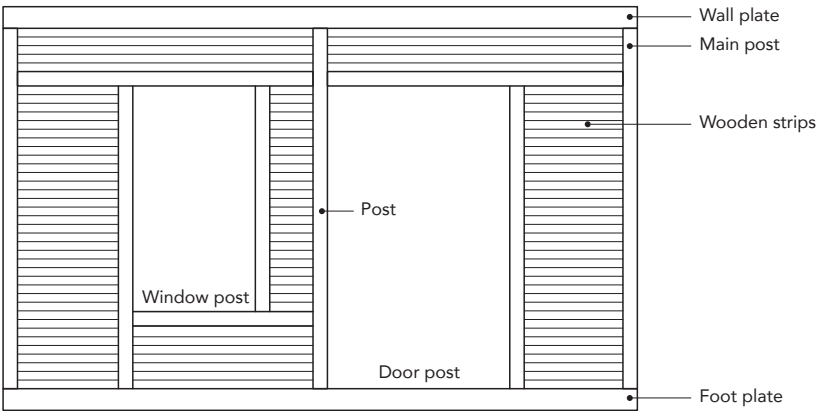
³² Gülkan, Polat, & Langenbach, Randolph. "The Earthquake Resistance of Traditional Timber and Masonry Dwellings in Türkiye." Paper presented at the 13th World Conference on Earthquake Engineering, Vancouver, B.C., Canada, August 1-6, 2004. Paper No. 2297.



a. *Hımış* - non-diagonal



b. *Hımış* - diagonal



c. *Bağdadi*

Fig. 12: Traditional construction models in Antakya, scale 1:50.

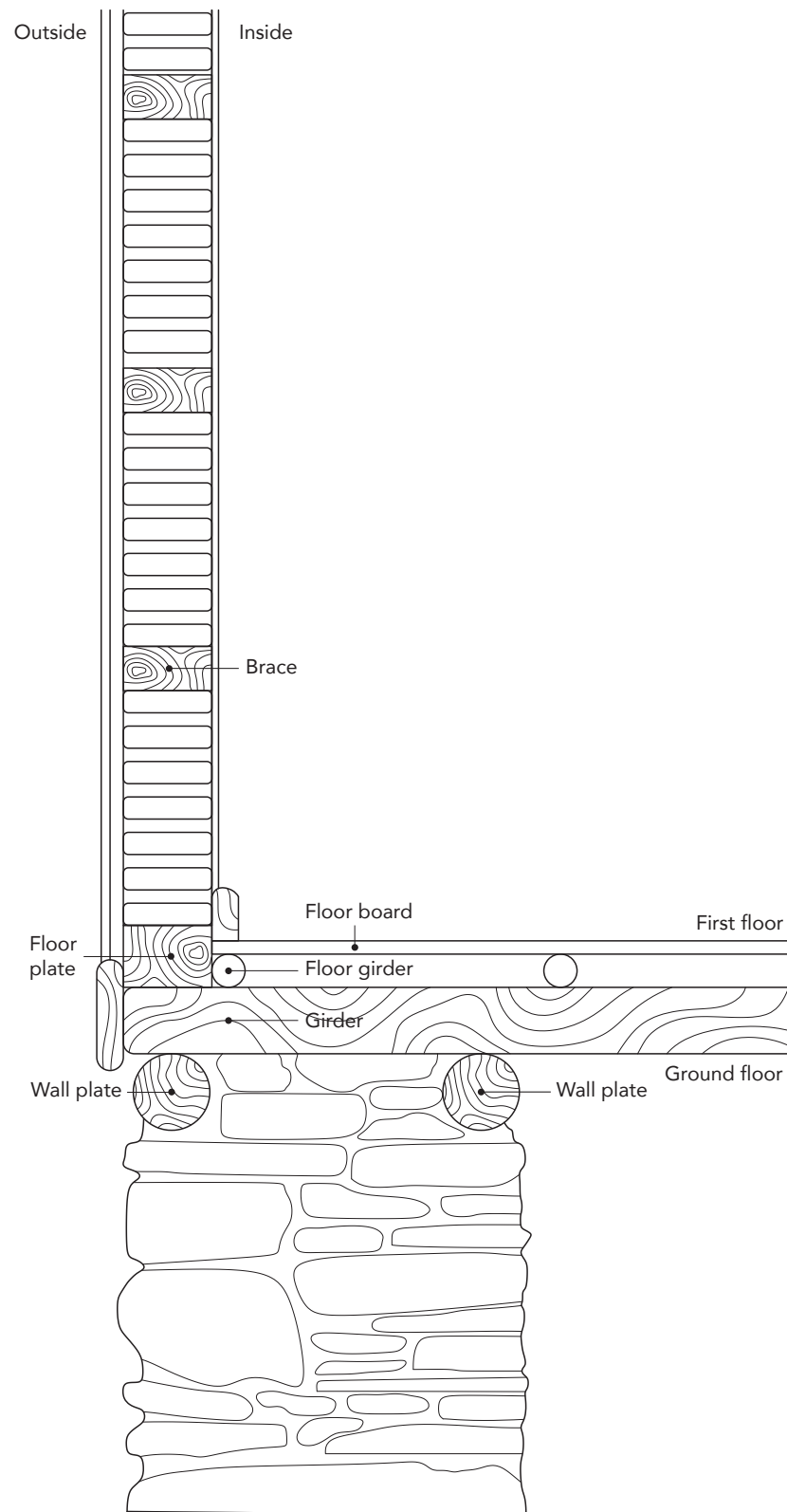


Fig. 13: *Hıms* - diagonal construction detail, scale 1:12,5.

are nailed to columns horizontally in both outer and inner walls (Fig 12. c.). In using what must have largely been scrap wood that could not be used for structural elements, *bağdadi* houses were lightweight, earthquake resistant, economical to build, and did not require industrialized sawmills for the preparation of the timbers.

Generally, these traditional buildings were made of two or three stories. The ground floor of these constructions was made up of natural stone and adobe, but its first and second floors were made up of *bağdadi*. The reason for the ground floor being made up of stone or adobe was related to the water isolation and the endurance of the building; on the other hand, for the upper *bağdadi* floors, the aim was to create lighter structures compared to masonry.³³

Until the 1950s, construction in Antakya and throughout Türkiye primarily relied on *hıms*, *bağdadi*, and masonry techniques. However, with the rise of reinforced concrete structures, many homeowners began opting for this modern approach and started to “forget” these constructions.³⁴ Despite this shift, traditional *hıms* and *bağdadi* structures remain prevalent today, and analyses have shown that they generally sustain less damage during earthquakes compared to more modern constructions. This endurance underscores the effectiveness of traditional building methods and suggests that incorporating these techniques into contemporary architectural practices could enhance safety in seismically active areas like Antakya.

In contrast to these findings, modern construction in Antakya has shifted towards reinforced concrete as the primary building material, which is less flexible than wood.³⁵ While reinforced concrete can be designed to withstand earthquakes, achieving seismic resilience requires complex structural planning and quality control, which can lack in rapidly urbanizing areas. Recent earthquakes have exposed vulnerabilities in contemporary structures, especially in poorly constructed buildings where the regulations described in upcoming sections are not strictly enforced.

³³ Doğan, "Seismic Analysis of Traditional Buildings: Bağdadi and Hıms."

³⁴ Er Akan, Aslı. The Behavior of Traditional Wooden Structures under Earthquake Conditions. Master's thesis, Middle East Technical University, 2004.

³⁵ Gülkan & Langenbach. "The Earthquake Resistance of Traditional Timber and Masonry Dwellings in Türkiye.", p. 44.

Demographic Structure

Before the earthquake, Hatay had a population of 1,686,043. In terms of age distribution, 537,008 were aged 0–17, 291,618 were 17–29, 719,632 were 29–64, and 137,785 were aged 65 and above. From a gender perspective, 50.2% of the population were male, while 49.8% were female. Notably, 12% of the population comprised individuals with disabilities³⁶, who, even before the earthquake, faced significant accessibility challenges in Hatay, a region with a mix of dense urban and rural areas.

As one of Türkiye’s most cosmopolitan provinces, Hatay’s population was composed of various ethnic groups such as Turks, Arab Alevis, Arab Sunnis, and Kurds, which also consists of different religious communities, including Muslims, Christians, and Jews.³⁷

This data highlights Hatay’s demographically rich and diverse structure. Unfortunately, the earthquake will deeply impact the city’s most vulnerable groups, such as individuals with disabilities, the elderly, women, and children, while also bringing grave changes to Hatay’s social fabric.

"A distinct and remarkable culture; a strong culture of coexistence exists here.

However, this is not simply about "tolerance." It is a city that creates space for different ethnic and religious cultures to thrive."

³⁶ Turkish Statistical Institute (TUIK). Population and Demographic Statistics of Hatay. 2022.

³⁷ Duman & Can, "Keşke Kalsaydı" Yerel Tanıkların Gözünden Bir Antakya Tarihi.

Quoted from an interview with an earthquake survivor from Antakya. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process*, 2024.



Fig. 14: Traditional houses that endured the earthquake, August, 2024.

Political and Economical Influences on Urban Planning

The evolution of Türkiye’s urban fabric reveals a complex interplay between political agendas, economic strategies, and the pressures of modernization. In Antakya, a city with a rich historical and architectural heritage, these influences have profoundly reshaped its urban landscape. From colonial influences to the rapid expansion of urban centers in the late 20th century, political and economic decisions have left a lasting impact on architecture and urban planning, often with negative consequences for seismic preparedness, providing the basis for the catastrophic February 6 and 20, 2023 earthquakes.

Türkiye’s political landscape has oscillated between centralized modernization efforts and local governance, often prioritizing rapid urbanization over sustainable planning. Economic policies since the mid-20th century, particularly those promoting industrialization and population migration to cities, catalyzed a construction boom. As a result of rapid urbanization, the expansion of major cities and the emergence of unregulated, unplanned developments outside municipal boundaries prompted the search for specialized governance models in municipal administration. Since the 1980s, central governments in Türkiye have gradually delegated some responsibilities to local governments and municipalities. This shift has increasingly involved municipalities in urban planning and, through legislative changes, expanded their roles and responsibilities in the implementation of zoning practices, leading to municipalities managing urban planning processes.³⁸

Today, the increasing dependency on construction is not only impacting urban planning and the functioning of the government but is also beginning to affect the profession of architecture. Architecture has started to transform into a field driven entirely by economic interests due to uncontrolled urban development. Individuals without any architectural or engineering knowledge or qualifications, operating under the title of the contractor, have begun to

³⁸ Babalık-Sutcliffe, Ela. "Urban Rail Operators in Türkiye: Organisational Reform in Transit Service Provision and the Impact on Planning, Operation and System Performance." *Journal of Transport Geography* 54 (2016): 464–475.



Fig. 15: Historical development map of Antakya

dominate the construction sector due to their economic power, reducing the architect's role to merely a signature on paper.

State-led policies have further exacerbated vulnerabilities in provinces like Antakya. The push for large-scale development, supported by the neglect of proper urban planning frameworks, has often overridden local knowledge and sustainable practices. Political centralization has frequently sidelined local initiatives aimed at seismic risk mitigation. In this environment, urban plans were regularly altered to serve short-term economic or political goals, including profit-driven construction industries that prioritized quantity over quality.

One of the most controversial policies influencing urban planning in Türkiye is the construction amnesty. This policy, introduced to legalize unauthorized or non-compliant buildings, has had severe implications for seismic safety. Under the zoning amnesty regulation enacted in 2018 through Law No. 7143, titled "Law on the Restructuring of Certain Taxes and Amendments to Certain Laws", a total of 7,085,969 unauthorized or non-compliant buildings—whose health and safety conditions remain uncertain—were granted building registration certificates.³⁹ By legitimizing structurally unsound buildings, the construction amnesty policy has effectively increased the vulnerability of urban areas to earthquakes.

In Hatay, it is estimated that 43% of the buildings were granted occupancy permits under this amnesty policy.⁴⁰ In provinces like Antakya, where many buildings were already suffering from poor construction practices, this policy elevated risks by allowing unsafe structures to remain standing without adequate retrofitting.

While being marketed as a solution for citizens to resolve property disputes and secure legal ownership, in practice construction amnesties prioritizes political expediency and economic gain over public safety. The 2018 amnesty left a significant portion of Türkiye's urban population living in

structures unable to withstand seismic forces. In seismic zones such as Antakya, the consequences of these decisions were particularly dire, as the city faced both a high earthquake risk and the tragedy of poorly constructed or unregulated buildings.

From an economic perspective, the construction sector in Türkiye has played a very important role in the economic development of the country, especially since the 1980s (Fig. 15). In the 80s, Türkiye shifted from an import-substitution industrialization model to an export-led growth strategy, with the construction industry becoming a key driver.⁴¹ The sector further flourished in the early 2000s when political stability and the economic policies of the AK Party government prioritized massive infrastructure projects. This period also saw the private sector grow with large-scale housing and commercial building projects.

However, this growth also sheds light on the complex dynamics of Türkiye's architectural and urban development. The government continues to favor new construction, driven by economic and political motivations, while opposition groups usually advocate for building reuse and preservation. Yet, the opposition's influence remains limited, and new construction efforts are often prioritized to signal economic strength both domestically and internationally. This focus persists even as Türkiye faces an economic crisis and as space for new projects in urban areas is shrinking. The government's push for construction is further bolstered by the desire to maintain strong relations with regional allies, especially those that provide financial support.

Despite its economic significance, the construction boom has created various challenges. Many buildings in Türkiye remain abandoned, and a lack of robust policies supporting the reuse and reinforcement of existing structures leaves them vulnerable to natural disasters, particularly earthquakes.⁴² The practice of granting construction amnesties further intensifies the risk, as seen during recent disasters, especially in the earthquakes of February 6 and 20, 2023. Environmental concerns and adherence to cons-

³⁹ Ministry of Environment, Urbanization and Climate Change. 2022 Annual Activity Report. Ankara: Ministry of Environment, Urbanization and Climate Change, 2022.

⁴⁰ Ibid.

⁴¹ Kaya, Vedat, and Ömer Yalçınkaya. "The Role of the Construction Sector in Economic Growth: The Case of Türkiye (1987-2010)." *Atatürk University Journal of Economics and Administrative Sciences* 27, no. 4 (2013): 148-167.

⁴² Özkorkut, Ecenaz & Kluser, R. "On the Profession of Architecture in Türkiye." Personal Interview with Architect Sevince B., February 27, 2024.

truction regulations are sometimes overlooked in the rush to build, raising questions about the sustainability and safety of Türkiye’s architectural future.

When addressing the general Hatay region, several important points must be highlighted. Particularly, with the transformation of villages into neighborhoods and their subsequent elevation to district status, the number of municipalities in Hatay increased from 11 to 15 following the enactment of the Municipalities Law in 2012. This law grants each municipality the authority to develop its own zoning plans, each with its own set of regulations. Over time, this decentralized approach has significantly contributed to the unchecked and irregular urban development in Hatay, fostering a landscape of inconsistent construction practices and planning standards. Looking at the Antakya and Defne provinces, although they are adjacent and in the same region, differences in zoning decisions are evident. On one side of a street separating the two areas, construction is allowed up to a maximum of eight floors, while on the other side, only five floors are permitted.⁴³ Over time, this disparity led contractors to focus on economic inequalities rather than on what was architecturally and structurally correct, prioritizing financial gain and maximizing profit over ensuring architectural integrity. Consequently, poor construction practices started to become the new norm due to it being seen as a point of profit.

Hatay’s multi-religious and multicultural structure has also led municipalities to use varying approaches to urban development. Over the years, under the Islamic policies pursued in the country, efforts have been made to segregate the region, which had coexisted harmoniously for centuries, into non-Muslim and other neighborhoods. Reconstruction efforts in non-Muslim neighborhoods have been delayed as part of this process.⁴⁴

Given that Hatay lies on a fault line, buildings should be constructed in accordance with Türkiye’s Building Earthquake Regulations.⁴⁵ However, the inconsistent growth in the construction sector has sometimes led to non-compliance

with these regulations and a lack of oversight. For economic gain, practices such as cutting corners with materials, using unsuitable materials, employing faulty and unsustainable construction techniques (such as the tunnel-concrete method to speed up construction), and cutting columns without considering the structure’s integrity to increase usable space have all become more common.⁴⁶ When efforts were made to demolish or fix these buildings, the practice of granting construction amnesties allowed them to remain as they were. All of this has contributed to making earthquakes more destructive and deadly.

On the other hand, the country’s construction policies, focused on constant new development, have resulted in a reduced emphasis on the supervision, restoration, and reinforcement of historical and older architectural structures. The lack of laws on these matters, coupled with the fact that no actions were taken based on the annually-prepared building instruction reports and their findings, led to the near-total destruction of the historical fabric in the February 6 and 20 earthquakes. The municipality’s response to reports presented by the Turkish Chamber of Engineers and Architects (TMMOB) was “We’ll look into it later,” verbatim, with their focus turned on pursuing new construction projects. This approach appeared to prioritize showcasing economic strength and demonstrating political influence rather than addressing the concerns raised about structural ethics and safety. Moreover, at the time, the limited budget of Hatay’s metropolitan municipality was spent on new projects like Hatay EXPO through loans from banks, and despite the warnings of the TMMOB, no measures were taken for buildings unprepared for earthquakes due to a lack of budget and neglect.⁴⁷ After the earthquake, all that remained was a lightly damaged Hatay EXPO and a lake of debris. What remains after the earthquake will be presented in more detail in the next chapter.

⁴³ Özkorkut, Ecenaz. Interview with an anonymous civil engineer. Personal interview, August 29, 2024.

⁴⁴ Heinrich Böll Stiftung Türkiye Representation. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process*. February 2024.

⁴⁵ Özkorkut, Interview with an anonymous civil engineer.

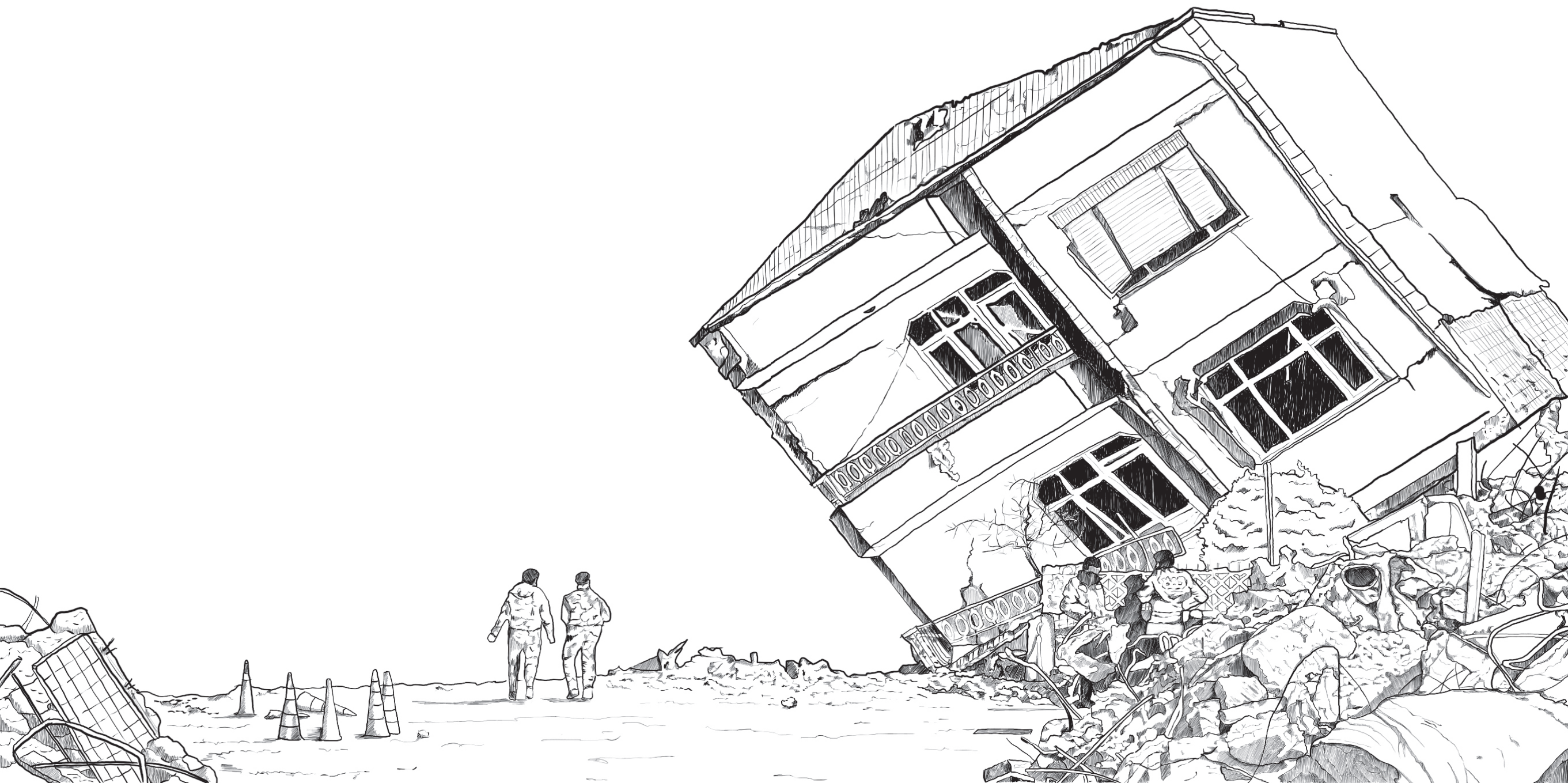
⁴⁶ Özkorkut, Ecenaz. Interview with an anonymous architect. Personal interview, August 30, 2024.

⁴⁷ Ibid.



Fig. 16: Antakya's vast cityscape as seen from Mount Habib-i Neccar, August, 2024.

3.



Impact of the Earthquake

The earlier sections have explored how Hatay, and specifically Antakya, evolved culturally, socially, architecturally, economically, and politically over the years leading up to February 6, 2023. They also highlighted how this valuable, multilayered heritage was progressively eroded amidst neglect and power struggles.

But was the situation truly as dire as portrayed?



Fig. 17: TRT Haber. "Satellite Images of Hatay Before the Earthquake." News entry, June 30, 2023.

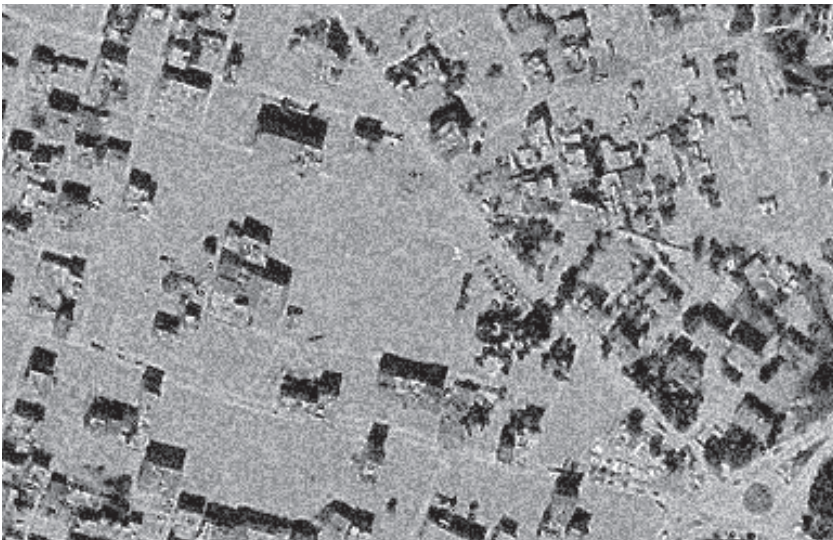


Fig. 18: TRT Haber. "Satellite Images of Hatay After the Earthquake." News entry, June 30, 2023.

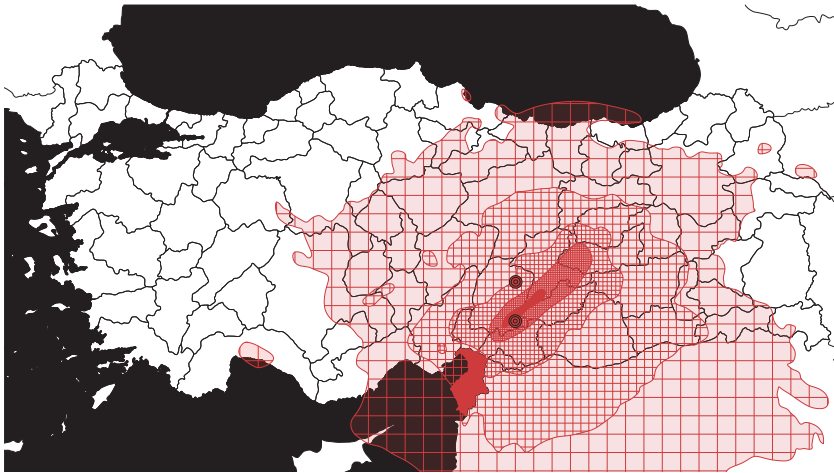


Fig. 19: USGS. Damage Map of the February 6, 2023, Earthquakes, Created Based on USGS Data. scale 1: 10000000

- Epicenters
- Severe
- Very strong
- Strong
- Moderate
- Low
- Hatay

On February 6, 2023, first at 4:17 AM and then at 1:24 PM local time, two massive earthquakes struck, with epicenters in the Pazarcık and Elbistan districts of Kahramanmaraş, measuring Mw7.7 (focal depth: 8.6 km) and Mw7.6 (focal depth: 7 km), respectively (Fig. 19). Additionally, on February 20, 2023, at 8:04 PM local time, another earthquake with a magnitude of Mw6.4 struck Hatay's Yayladağı district.⁴⁸ Collectively, these earthquakes caused widespread devastation across 11 provinces just for Türkiye. In terms of intensity and affected area, these disasters were unparalleled in modern history.

The earthquakes claimed the lives of over 48,000 people, according to official records, damaged over half a million buildings, and severely impacted communication and energy infrastructure, resulting in significant economic losses.⁴⁹

Hatay emerged as one of the most severely affected provinces. According to damage assessment reports, 13,517 buildings were completely destroyed, while 75,508 buildings were classified as heavily damaged, requiring urgent demolition or reinforcement.⁵⁰ This left thousands without shelter, deepening the crisis as temperatures dropped be-

⁴⁸ Republic of Türkiye Presidency of Strategy and Budget. 2023 Kahramanmaraş and Hatay Earthquakes Report. 2023.

⁴⁹ Ibid.

⁵⁰ Ibid.

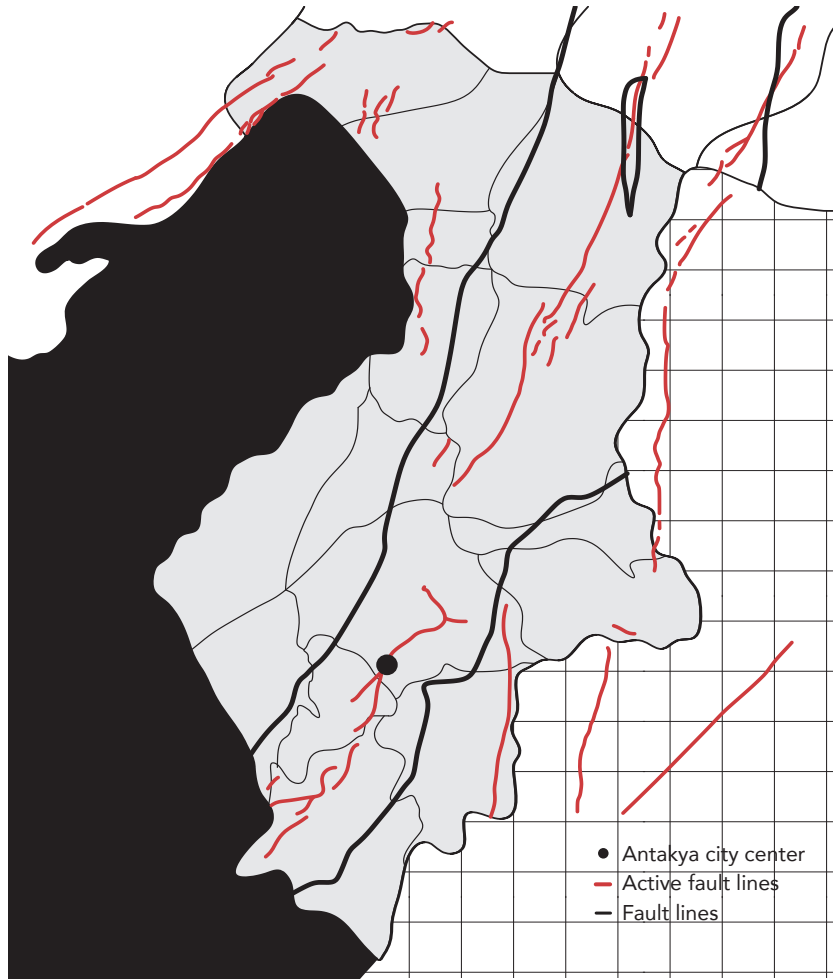


Fig. 20: Hatay Fault Line Map, scale 1: 1000000

low 0 °C at night during the following days and fared 2-5 °C below average during the winter months.⁵¹ The earthquakes claimed the lives of over 24,000 people in Hatay, injured more than 38,000, and left many missing, their bodies yet to be recovered.⁵²

Especially for Antakya, a combination of geological and seismic processes can be seen as another cause for the extreme level of destruction. The East Anatolian Fault, which was the source of the earthquake, is predominantly a strike-slip fault.⁵³ However, during the February 6 earthquakes, the fault ruptured with both horizontal and vertical components, leading to a more intense release of seismic energy.⁵⁴ The addition of vertical motion in the fault's rupture mechanism generated greater ground acceleration at

the surface, particularly in populated areas, causing more severe structural damage.

Additionally, the alluvial and liquefaction-prone soil composition of the Amik Plain amplified the earthquake's effects at the surface. Soil liquefaction during the earthquake significantly undermined the stability of building foundations, exacerbating the damage.⁵⁵ Moreover, the loose ground conditions amplified seismic waves, spreading the destruction across a wider area.

Recurring aftershocks and the Yayladağı-centered earthquake on February 20 further intensified and amplified the destruction in already damaged regions. The convergence of these processes led to the catastrophic scale of devastation witnessed in Antakya.

The Tragedy of Rönesans Residence

Renaissance Residence, constructed between 2011 and 2012 in Antakya, was initially celebrated as the region's first luxury housing complex. Completed in 2013, the 12-story building consisted of 249 apartments and was marketed as a "corner of paradise".⁵⁶

During the devastating February 6, 2023, earthquakes triggered by the East Anatolian fault line located 26 km southwest of the site, Rönesans Residence completely collapsed, leaving an estimated 800 people trapped under the rubble, with official records confirming 269 fatalities and 55 individuals still unaccounted for.⁵⁷ Structural engineers have linked the collapse to potential design flaws, substandard materials, and inadequate construction methods. The building's slender, rectangular shape, combined with soil conditions and insufficient reinforcements, likely contributed to its vulnerability during the 7.8 and 7.5 magnitude earthquakes. Specific design elements, such as the "soft story" entrance hall and weak foundations, were also identified as critical points of failure.⁵⁸

⁵¹ General Directorate of Meteorology (MGM). "Hatay Weather Conditions Following the February 6, 2023 Earthquake." 2023.

⁵² Republic of Türkiye Presidency of Strategy and Budget. 2023 *Kahramanmaraş and Hatay Earthquakes Report*.

⁵³ Altunel, E., and A. Barka. "Active Tectonics of the East Anatolian Fault Zone." *International Geology Review* 40, no. 3 (1998): 228-250.

⁵⁴ Bursa Technical University. 6 February 2023 *Kahramanmaraş Earthquakes: Observations and Assessments Report*. Bursa: Bursa Technical University, 2023.

⁵⁵ Bursa Technical University. 6 February 2023 *Kahramanmaraş Earthquakes: Observations and Assessments Report*.

⁵⁶ Financial Times. "Türkiye Earthquake: Tracking the Deadly Collapse of Buildings."

⁵⁷ NTV. "Rönesans Rezidans'ta Kaybolan 55 Kişiden 4-5 Aydır Haber Yok."

⁵⁸ Financial Times. "Türkiye Earthquake: Tracking the Deadly Collapse of Buildings."



The collapse sparked significant public outrage, prompting scrutiny of construction standards across the country. Geophysics professor Ahmet Ercan noted that the building's foundation was not sufficiently deep, suggesting that seismic waves, amplified in Antakya, caused the structure to tip over rather than collapse traditionally, leaving columns and beams relatively intact. Hatay Metropolitan Municipality Mayor Lütfü Savaş stated that the building was likely constructed in accordance with earthquake standards and under normal circumstances but stressed the need for further investigation into possible construction deficiencies. Japanese architect and engineer Yoshinori Moriwaki pointed out the absence of friction piles in the foundation as a possible factor in the collapse and suggested that the building's elongated design may have also played a role.⁵⁹

Some former residents reported pre-existing structural issues, including cracks and foundation shifts, which they claim were ignored despite their complaints. These warnings that were raised before the disaster went unaddressed, raising questions about oversight and accountability.⁶⁰

Fig. 21: DHA (Demirören News Agency). "Rönensans Residence Destroyed After the Earthquake." 2023.

⁵⁹ Wikipedia. "Rönensans Rezidans."

⁶⁰ Financial Times. "Türkiye Earthquake: Tracking the Deadly Collapse of Buildings."

The tragedy has sparked nationwide outrage and a renewed focus on construction standards in Türkiye. More than 180 contractors and engineers have been arrested in connection with the disaster. Mehmet Yaşar Coşkun, one of the contractors of the Rönensans Residence, denied any wrongdoing but was detained while trying to flee the country. The families of the victims had previously raised safety concerns, but their lawsuits have not been finalized.⁶¹

The Rönensans Residence has since become a striking symbol of the shortcomings in Türkiye's construction practices, despite claims that building codes were followed.

This disaster highlights systemic problems, such as lax enforcement of building regulations and widespread recourse to development amnesties. While 6.7 million buildings across Türkiye need to be retrofitted, the collapse of the Rönensans Residence emphasizes the urgent need for comprehensive reform to prevent similar tragedies in the future.⁶²

⁶¹ Middle East Eye. "Türkiye Earthquake: Building Complex Owner Arrested at Airport in Hatay."

⁶² Financial Times. "Türkiye Earthquake: Tracking the Deadly Collapse of Buildings."

Damages on Social Life

It is essential to address not only the material destruction but also the emotional and psychological toll of the disaster. While the sheer number of destroyed buildings may raise awareness among those outside the affected areas, it must not be forgotten that each collapsed structure represents many lives cut short. The unimaginable scale of the earthquake, with its countless deaths, the massive debris yet to be cleared, the commercialization of rubble removal, the uncontrolled handling of debris laden with asbestos risks, and the ongoing issues of hygiene and security have fostered an overwhelming sense of uncertainty, anxiety, and despair.⁶³ Moreover, as discussed in later sections, the shortcomings of state intervention and the policies implemented during this process have further deepened the sense of hopelessness among the affected communities.

⁶³ Heinrich Böll Stiftung Türkiye Representation. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process*.

"Uncertainty is destroying us.

My friend, when will you finish demolishing the houses?

What will you put in their place?

Where will you send the owners of these houses?

Will they live here again?

Will they fit?

Will their rights be protected?"

Quoted from an interview with an earthquake survivor from Antakya. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process*, 2024.

4.



After the Earthquake

Government and Institutional Responses

In the aftermath, the overwhelming magnitude of the earthquake, its immense death toll, the unmanageable debris turning into a profit tool, the removal of the debris without precautions and the resulting asbestos hazard in the city, hygiene problems and many other concerns created an atmosphere of uneasiness, uncertainty and caused many difficulties in making decisions, all of which lead to anguish for impacted citizens.

Reconstruction of the City

One of the most pressing issues following the earthquake was, without a doubt, the immediate need for shelter. To address this need, tent cities were initially established. However, due to the magnitude of the earthquake, the vast area it affected, and harsh weather conditions, container cities were also constructed as temporary housing solutions. These container cities were set up through the collaboration of AFAD (disaster and emergency management presidency), local municipalities, and various organizations, and displaced individuals began to be relocated there.⁶⁴

Numerous projects were initiated to meet the urgent need for housing. However, the urgency of this need, combined with the vastness and uncontrollability of the affected area, led to rapid and often unregulated construction practices once again. The expedited urban development plans introduced after the earthquake, which largely mirrored existing city center zoning plans without significant revisions, further facilitated the swift emergence of these types of projects.⁶⁵

On the other hand, since the primary goal of the projects (Fig. 22) was rapid completion, structures that lacked aesthetic consideration and failed to align with the fabric of



Fig. 22: Republic of Türkiye Ministry of Environment, Urbanization, and Climate Change. "Deprem Bölgesi'nin İkinci Büyük Şantiyesi: TOKİ Hatay Dikmece.", 2023.

the city began to be constructed. The choice for locations of these rapidly spreading projects also created separate issues. These quickly constructed projects that got positioned according to the new urban plan—which is a near-identical copy of the old plans—were placed near active fault lines in many areas of the city. Moreover, especially after the earthquake, despite the abundance of suitable empty space, attention was directed towards century-old olive groves, with trees being cut down to make way for new developments.⁶⁶

Despite new projects being launched, one year after the earthquake, the housing issue in Hatay remains unresolved, with some survivors still living in tents.⁶⁷ It has also been observed that debris has not been fully cleared, and many buildings marked for demolition have yet to be taken down.

Alarmingly, some moderately damaged buildings were downgraded to “lightly damaged” following appeals, with no proper monitoring of these changes. This has resulted in people continuing to live in these unsafe buildings and businesses operating within them, painting a grim picture of the situation.⁶⁸

⁶⁴ Kimura, Shuhei. 6 Şubat Depremi Üzerine Bir Saha Raporu.

⁶⁵ Transparency International Türkiye. 6 Şubat Deprem Raporu: Kurumlar, Usulsüzlükler ve Şeffaflık.

⁶⁶ soL Haber. "Hatay'da TOKİ için Milyonlarca Zeytin Ağacı Kesilecek."

⁶⁷ Transparency International Türkiye. 6 Şubat Deprem Raporu: Kurumlar, Usulsüzlükler ve Şeffaflık.

⁶⁸ Özkorkut, Interview with an anonymous civil engineer.

Some housing projects have been launched without proper ground surveys, and aftershocks are still ongoing. Contracts for these projects were signed prematurely, and construction began without public transparency regarding the terms of agreements with the firms involved.⁶⁹ This lack of information has fostered significant uncertainty and concern among the local community.

Responses to the Destruction of Historic City Center

After the earthquake, decisions taken and implemented by the government in Antakya’s historic city center focused on damage assessment, the preservation of cultural heritage, and the processes of rebuilding the city. In the aftermath of the disaster, damage assessments carried out by the Ministry of Environment, Urbanization, and Climate Change identified the condition of buildings.⁷⁰ However, it was observed that many structures belonging to foundations were excluded from this evaluation. Following these assessments, the demolition of heavily damaged structures and the removal of debris were expedited.

One of the most notable initiatives post-earthquake was the development of policies aimed at preserving Antakya’s historical fabric. The Ministry of Environment, Urbanization, and Climate Change decided that qualified materials from registered civil architectural examples and traditional buildings in the Old Antakya region would be separated on-site and their debris transported to a “Cultural Debris and Sorting Center.” Through this process, many significant cultural assets among the registered buildings were safeguarded and relocated to designated areas for preservation. Items of cultural value, such as mosaics, icons, and stone inscriptions, were particularly sorted on-site.⁷¹

For some historical structures under the General Directorate of Foundations, scaffolding was erected in situ before demolition to attempt preservation. However, during a visit conducted on August 29, 2024, it was observed that, despite these efforts, many restoration attempts failed, leading to decisions to demolish these buildings. After de-

⁶⁹ Transparency International Türkiye. 6 Şubat Deprem Raporu: Kurumlar, Usulsüzlükler ve Şeffaflık.

⁷⁰ Varnacı Uzun, Funda, & Somuncu, Mehmet. "Evaluation of the Antakya Urban Cultural Heritage after the Earthquakes." Ankara Üniversitesi Çevre Bilimleri Dergisi 10, no. 1 (2023): 9-23.

⁷¹ Republic of Türkiye Ministry of Culture and Tourism. 2023. "A Disaster Zone Excavation Directorate Will Be Established for Cultural Assets in the Earthquake Region."



Fig. 23: An empty scaffolding left on Kurtuluş Caddesi, August 29, 2024.

molition, although the debris was cleared, no decision was made to remove the iron scaffolding, leaving empty scaffolds scattered throughout the streets (Fig. 23).

Field observations conducted after the earthquake revealed certain shortcomings in the protection of Antakya’s cultural heritage. During site visits in March 2023, it was noted that some registered buildings classified as severely damaged were still standing and could potentially be saved through restoration and reinforcement. However, as official decisions progressed, these structures were demolished and transported to debris-sorting sites. Additionally, many unregistered buildings constructed using traditional techniques and materials were completely destroyed during this process. Since these structures were unregistered, they were not included in the sorting process, resulting in their irreversible loss.

Although numerous decisions were made to protect Antakya’s historic fabric post-earthquake, challenges encountered during implementation and the irretrievable loss of certain structures highlight deficiencies in the process. The unique architectural heritage of Antakya has suffered significant damage due to ongoing demolitions and the removal of structures without adequate restoration efforts.

Post-Earthquake Discrimination and Social Segregation

The decisions made after the earthquake deeply disrupted the social fabric of affected areas, particularly in Hatay. In the wake of such devastating events, societies often turn to central authorities for solutions. Modern nation-state principles are built on a reciprocal relationship between citizens and the government, where the government is expected to provide fair and equitable solutions to problems individuals cannot handle alone.⁷² However, the intervention in Hatay fell short of these principles and has been criticized for its lack of justice and adequacy.

Hatay received insufficient and unequal support compared to other regions.⁷³ Specific areas, such as Antakya, were

reportedly neglected, fueling allegations of discrimination. Hatay’s cultural and political diversity, traditionally seen as an advantage, became a basis for the inequalities in aid distribution. The unequal allocation of resources—from container homes to emergency supplies delivered by helicopter—heightened feelings of exclusion, particularly among Antakya’s residents.⁷⁴ This situation has eroded trust in state institutions and raised concerns about the weakening of social solidarity.

Residents of the region are deeply worried about the long-term effects of these inequalities. Rising social and political tensions, combined with feelings of neglect and discrimination, have reinforced the perception that practices such as the “charity culture” in aid policies undermine human dignity.⁷⁵ Additionally, Hatay’s multicultural character and often-overlooked refugee communities highlight the critical need for inclusive and equitable reconstruction policies. Unfortunately, efforts to rebuild and restore social life have been undermined by this environment of discrimination and inequality.

Discussions at the governor’s office revealed how Islamic state policies have shaped the approach to the city’s multicultural and multi-religious fabric. While officials stated their intent to restore the city as quickly as possible, it was observed that work in areas and on structures labeled as “non-Muslim” was either delayed or not initiated at all.⁷⁶ Despite the launch of reconstruction projects, this underscores the threat to Hatay’s millennia-old socio-cultural structure.

Beyond immediate aid, the earthquakes have caused significant demographic and social changes in the region. The displacement of nearly one million people, combined with uncertainty about their return, threatens the economic and social stability of the area. While many displaced individuals express a strong attachment to Hatay, their return depends on reconstruction efforts and economic recovery. Rising costs throughout Türkiye and limited resources of the region further complicate this process.

⁷² Heinrich Böll Stiftung Türkiye Representation. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process.*

⁷³ Ibid.

⁷⁴ Heinrich Böll Stiftung Türkiye Representation. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process.*

⁷⁵ Ibid.

⁷⁶ Özkorkut, Interview with an anonymous civil engineer.

Global and Local Efforts in Response to the Earthquake

After the earthquake, not only governmental institutions but also many organizations and institutions worldwide mobilized to provide aid to the affected regions. The immense destruction the earthquake brought initiated the creation of a vast aid and support process at both national and international levels. With aid starting to come from all over Türkiye, volunteer groups and organizations quickly mobilized to assist the people and launched various efforts to provide the incoming aid to areas in need.⁷⁷ International aid organizations also began supporting the disaster region by mobilizing their own resources.

In the following periods, on an international level, help continued to arrive from all around the globe, and the assistance was not only limited to financial support. Experts, engineers, and architects from all corners of the world have come together to develop projects for earthquake victims. Among these projects, many international firms, including world-renowned design offices such as Foster and Partners, have prepared plans to revive cities, especially in Antakya, where the destruction was especially severe.⁷⁸ These projects were seen as a promising step toward the rapid reconstruction of cities and were appreciated as a beautiful example of international solidarity.

However, it has been pointed out that a large portion of these projects were planned without considering local conditions and the real needs of the region. It was emphasized that elements such as the locals’ way of life and cultural dynamics should have been given more attention during the design phase of the projects.⁷⁹ Unfortunately, while many projects were impressive in terms of technical and aesthetic aspects, they fell short in meeting the actual needs of the victims and struggled to produce tangible solutions for improving the quality of life of the local population. This stands as a point to highlight the importance of ensuring that post-disaster aid includes not only physical reconstruction but also social, cultural, and economic recovery.

⁷⁷ Heinrich Böll Stiftung Türkiye Representation. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process.*

⁷⁸ Özkorkut, Interview with an anonymous architect.

⁷⁹ Ibid.



Fig. 24: Efforts to preserve the historic building supported by scaffolding, August, 2024.

5.



The Architect's Role

The reconstruction of Antakya is not solely about rebuilding physical structures. It is also a process of redefining the region's identity, resilience, social fabric, and social ties. However, this process requires, first and foremost, a shift in the perception and practice of architecture, not specific to Antakya but rather a shift in Türkiye's vision for architecture in general.

The widespread destruction is a direct consequence of the lack of recognition and importance given to architecture and architects. When structures are seen merely as economic assets and architects reduced to mere signatories, it becomes impossible to create layered, safe, and human-centered spaces.

Architecture is not just the practice of creating a built environment; it also captures and reflects the very essence of the culture, the identity, and the community values. It is not only about creating structures to shelter people but about crafting a space they can truly call home, a place that resonates with their sense of belonging and purpose. Without the proper inclusion of architects in this process, expecting good and meaningful outcomes is unrealistic.

Preserving Heritage, Building Resilience

At its core, architecture can be seen as existing only to create the physical environments in which people live, but it is far more than the built environment; it is also an integral part of culture everywhere. Architecture is a physical manifestation of how we see ourselves and how we perceive the world. Initially, architectural styles were influenced by factors such as climate, material availability, and societal values. Over time, they evolved alongside globalization.⁸⁰ Even today, architecture must strive to honor cultural nuances in the built environment, preserving local values and identities. It is not a “free” artistic activity; rather, it is a science-based profession that aims to solve various prob-

⁸⁰ Tekeli, İlhan. "Antakya'nın Deprem Sonrası Kent Planlaması İçin Bir Strateji Önerisi." Sarkaç. April 2023.

lems.⁸¹ Architects must combine traditional construction techniques with advanced engineering solutions to design structures that reflect historical narratives while meeting contemporary safety standards. This approach not only preserves regional identity but also enhances the resilience of the structures, creating environments resistant to natural disasters.

Discussions about Antakya often begin by highlighting the city's history, cultural heritage, and the coexistence of diverse identities. What makes this region unique is its ability to cultivate not just side-by-side living but a true culture of togetherness.⁸² Pluralism in Antakya is not just mere words or a mechanical arrangement; it is an organic fabric that blends seamlessly into the flow of everyday life. Examples of this unity include people speaking multiple languages that are not their mother tongues, religious rituals shared among communities, and a level of mutual respect that surpasses tolerance to become a natural part of daily existence. This diversity manifests itself in every aspect of life in Antakya.

The culture of coexistence that has flourished in Antakya throughout the millennia is a core element of the region that will never fade, even though the city has been completely destroyed. The people of Antakya will continue to preserve their sense of belonging to the city, as well as the bonds of respect and connection they share with one another, no matter how much time passes.

In such a relation between the space and its people, where even the smallest object holds meaning⁸³, the steps and choices made in rebuilding a city are vital. Historical structures must be preserved and reconstructed either faithfully or in ways that commemorate their original form. All these buildings have a meaning that is deeply connected to culture, alongside the preferences and choices of its people. They have a meaning closely linked to desires rather than needs.⁸⁴ Throughout this process, it is essential to listen to all the voices of Antakya including architects, the involvement of bureaucracies, local governments, professional

⁸¹ Rapoport, Amos. *Culture, Architecture et Design*. Collection Archigrahy Témoignages, 2003, p. 9.

⁸² Heinrich Böll Stiftung Türkiye Representation. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process*.

⁸³ Rapoport, *Culture, Architecture et Design*, p. 73.

⁸⁴ Heinrich Böll Stiftung Türkiye Representation. *Rebuilding Hatay: An Evaluation Report on the Post-Earthquake Reconstruction Process*.

chambers, and civil society organizations. It is also essential to develop inclusive designs that cater to people from all walks of life, provide accessible design, and meet the needs of different age groups.

In the reconstruction of Antakya, architects must design and create with supporting societal recovery in mind. While it is generally acknowledged that the reconstructed buildings may not fully restore the authentic history or the memory of the city, the restoration of these buildings is essential to remember and never to forget what Antakya is at its core. The preservation—or more accurately, the restitution—of the memory spaces, which serve as key references for the culture of coexistence, is crucial. Undoubtedly, how the restoration or restitution is carried out is of great significance. Wherever possible, adhering to the original designs will nurture the historical continuity of the city's pluralistic heritage. However, this process is not a simple “we replicated it, and it's done” approach; it requires meticulous care and attention.

Following the earthquake, several structures in the city, considered as historical and cultural heritage sites, were destroyed. These include Habib-i Neccar Mosque (Fig. 27), Ulu Mosque, the Assembly Building, the Saints Peter's and Paul's Church (Fig. 25), the Latin Catholic Church in İskenderun, and the Church of the Virgin Mary in Vakıflı. The Antakya Synagogue, Sarimiye Mosque, and many other buildings were severely damaged. Almost all of the old Antakya houses on the historical Kurtuluş Street were buried under the rubble.⁸⁵

These structures play a significant role in the “spiritual” construction of Antakya's identity, and the loss of even one of them has the power to wound this identity deeply. The imagery that once nurtured the emotions of those walking, working, shopping, or heading to places of worship in their daily lives in Antakya has disappeared. For the people of Antakya, who possess a deep attachment to shown steadfast attachment to their settlements and their historical fabric, it is essential to restore these places

and reintroduce them to society. The Christmas celebrations throughout Antakya on December 25, 2024, serve as a striking example of how deep this attachment goes for Antakya's community.⁸⁶ The destruction of churches did not deter the people from celebrating. Christmas celebrations were seen both in the ruined streets of the city and in the ancient cave church located relatively outside the city.

To ensure the continuity of these ties, the post-earthquake reconstruction process must focus on social recovery and cohesion. Designing shared spaces where people can come together, interact, and rebuild collective memory is a critical component of this effort. These environments should not only be functional but also respond to the desires, activities, and cultural expressions of their users.⁸⁷ In Antakya, this means creating designs that strengthen interaction and unity while preserving a sense of familiarity. An environment should be recreated where, like in the old days, the jeweler and the kebab shop owner work under the same roof; where John, who goes to church, and Mr. Ahmet, sitting at the café, celebrate Ramadan Bayram together; and where Alevi Aunt Ayşe, working in the olive grove, brings the olives she collects to Yael, the Jewish olive oil producer, in the city center. Preservation of the remaining existing structures and integrating them with new designs minimizes resource waste and ensures continuity in social identity as well.⁸⁸ Because architecture is also the profession of creating something new from the existing, making use of what is already present. Although it may seem that no tangible structures remain in Antakya, a vast history lies beneath the surface. Architects should view this rich historical heritage not as an obstacle but as an opportunity to blend this important heritage with contemporary needs and bring it all back to life in harmony. No matter how much the world develops and changes, some traditions persist and retain their permanence, and architects must reflect this permanence in their works. This also creates a framework for architects to adapt to socio-ecological and technical transition while encouraging them to remain connected to inherited cultural practices.⁸⁹

⁸⁶ Bianet. "Hatay'da St. Pierre Kilise-si'nde Noel Ayini." <https://bianet.org/haber/hatay-da-st-pierre-kilise-si-nde-noel-ayini-303033>.

⁸⁷ Rapoport. *Culture, Architecture et Design*, p. 9.

⁸⁸ Bourdon, Valentin, Friel, L., Anna, and Viganò, Paola., eds. *Architecture Revalued: Baukultur and the Culture of Transition*. EPFL Press. 2024.

⁸⁹ Ibid.

⁸⁵ Varnacı & Somuncu. "Evaluation of the Antakya Urban Cultural Heritage after the Earthquakes."



Fig. 25: Wikipedia. *St. Paul's Church*. 2011.



Fig. 26: *St. Paul's Church* after the earthquake, August 29, 2024.



Fig. 27: Wikipedia. *Habib-i Neccar Mosque*. January, 2023.



Fig. 28: *Habib-i Neccar Mosque* after the earthquake, August 29, 2024.

Addressing Complex Needs in Reconstruction

It is strikingly evident that the reconstruction of Antakya is not only about restoring historical structures. It is an intricate architectural process that integrates the cultural, social, economic, and structural needs of the city and its citizens for both historical and non-historical spaces.

In a city like Antakya, which has been a victim of uncontrolled development since the construction boom in the 1980s, it is now essential to develop a plan that separates the old city from the new; clear distinctions must be made. The historic fabric of old Antakya should be preserved, while new constructions in the surrounding areas should adhere to principles of urban planning and development. Just as skyscrapers are not seen in the historic center of Lausanne or modern buildings are avoided in old Paris, Antakya's historical core must be preserved in its original form, with modern structures built in its periphery. The new city should be planned with earthquake-resistant building techniques, urban planning principles, and sensitivity to the needs of its people. The preservation of cultural and historical values should also support economic development. Furthermore, policies like "construction amnesties," which pose threats to historical and cultural heritage, must be abolished to protect urban integrity.

Earthquake-resistant construction techniques, adherence to urban principles, and planning responsive to public needs play a critical role in shaping the city's future. Every new structure must be designed and built considering not only its memory and aesthetics but also its resilience to earthquakes, solid foundations, durability of materials, ecological impact, lifecycle, and usability. In this process reviving traditional architectural techniques, integrated with contemporary technologies, is critical. Traditional construction methods such as *hımış* and *bağdadi* can be adapted using modern materials and engineering approaches to build more earthquake-resistant structures. In addition, these spaces should not merely serve as symbols or monuments but as functional, meaningful environments

for people. Architects must approach their work with this holistic understanding.

The reconstruction process must organize urban land in ways that do not allow it to become a new tool for profiteering or economic power struggles. Breaking free from these will allow healthier solutions to be found for the city. The approach to rebuilding should also aim to create structures that promote social cohesion and resilience, addressing the needs of people from all demographics and age groups. Special attention should be given to accessible, inclusive designs that consider the ongoing regional impacts of the earthquake. For instance, the increased population of individuals with disabilities following the earthquake and the inadequacy of infrastructure and services necessitate solutions that address these specific needs.

In addition to concrete and restorative measures, symbolic actions should not be overlooked. Ensuring that the disaster is never forgotten could involve erecting monuments that remind people of the earthquake and emphasize the importance of building resilient structures to prevent future tragedies. The memory of a city is built through historical and symbolic buildings, spaces that reflect aesthetic and geographical beauty, and those that provide a sense of warmth and belonging. However, reconstructing the memory of a city that was nearly destroyed is no easy task. Yet, if this process involves everyone under the leadership of architects, the collective participation will help the people reclaim and rebuild their city.



Fig. 29: Ceramic tiles left over from the remnants of buildings, August, 2024.

6.



Conclusion

The reconstruction of Antakya represents a multifaceted process that goes beyond addressing the physical destruction caused by the earthquake; it seeks to carry the city's identity and history into the future. In this process, preserving not only Antakya's architectural and cultural heritage but also its collective memory is crucial. The February 2023 earthquakes exposed the urban planning vulnerabilities of Hatay and Antakya, as well as the devastating impact of political decisions. Therefore, the reconstruction of Antakya must aim not only to resolve existing issues but also to establish a sustainable vision for the city.

Throughout history, Antakya has been home to various civilizations, providing it with a rich cultural and architectural legacy that can guide its reconstruction. However, preserving this legacy must go hand-in-hand with modern structural resilience standards. Mixing traditional construction methods such as *hımış* and *bağdadi* with modern techniques and materials will increase the earthquake resistance of structures, while preserving some historical aspect of the city within its future.

This work underscores the significant role architects must play in Antakya's reconstruction. Architects are not merely creators of aesthetic spaces but also agents who strengthen social bonds, ensure cultural continuity, support environmental sustainability, and engage with economic and political realities. The rebirth of Antakya should not be seen as only physical renewal but also as a process of societal healing. In this context, encouraging public participation and fostering a transparent and equitable planning process are essential for the success of the reconstruction efforts.

In conclusion, the reconstruction of Antakya offers an opportunity to build a more resilient city while preserving its historical identity and cultural heritage. The process is undoubtedly complex and challenging, as emphasized by lo-

cal architects and civil engineers involved in the efforts as well. However, this does not make it impossible—it calls for a shift in perception and a different approach to tackling the problem. Achieving success in this endeavor will require strong collaboration between architects, urban planners, local communities, and decision-makers, all guided by a vision that embraces the city's multi-layered character. Thus, Antakya will not uniquely be rebuilt as a city but also as a society that looks toward the future with hope.

Finally, it must be remembered that an earthquake is merely a natural phenomenon. While its destructive power is immense, it does not create a scenario where humanity is helplessly doomed. Such devastation occurs in this century only when human negligence compounds it. Therefore, fatalistic statements like "It was fate." must be set aside, and efforts must focus on building an Antakya where people can live together, laugh, celebrate, and thrive without the shadow of fear or the burden of neglect.



Fig. 30: A carpet among the rubble,
August, 2024.

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Appendix

Field trip highlights made by a civil engineer actively working in Hatay regarding the earthquake on August 29, 2024, translated to English from Turkish:

... We saw terrible things; let me say this professionally: none of the stone-clad buildings even had their walls intact. The heavy stone cladding pulled everything outwards. It was very bad, truly awful. We are still making mistakes and have not learned our lesson. We've moved from worrying about lives to focusing on material things. It's terrible. People are trying to pass off lightly damaged buildings with just plaster and paint repairs. There are laws, but they see this happening and do nothing. If you ask me, this is extremely risky. I emptied my office because of this. It's still standing, and people are still living in it. There was a problematic building nearby, constructed by another contractor. After the earthquake, it was declared an urgently demolishable building and immediately torn down. Now, the area has been declared a reserve zone, and it's just sitting there. No one is doing anything.

But this city is difficult. Think about it: a city that has endured for years has turned into nothing, and restoring it to a point where life and development are viable again will take a very long time.

... The projects carried out by TOKI (the Housing Development Administration) use a courtyard house system and build structures that are all adjacent. Let me put it this way: they pour concrete with an unacceptable level of segregation. Zero control. They conduct their own inspections. All the big firms are here. Let me share an example. In Antalya city center, there was an old teachers' lodge. The Ministry of Education prepared a project to rebuild the lodge on the same site and put it out for tender. When they went to check the site, Cevahir (a big construction company) had set up workers' barracks there..., dormitories for workers, you know, those stacked structures. Our team told Cevahir

they needed to vacate the area for the project. Cevahir refused. When they asked where they should proceed with the project, they were told, "Do it somewhere else." Our team wrote to the governor, to the ministry. The response was, "Don't interfere. Let the company do whatever they want; you move the teachers' lodge elsewhere."

Now, you're doing a favor for this company, but at the same time, you're disrupting the city's dynamics. There's a significant difference between building a teachers' lodge in the city center versus somewhere far away. This negatively impacts the city's value.

... Now, here you have political issues, border issues, security concerns, and problems with rebuilding the demographic structure. You need to recreate this all over again.

... The situation for the city is truly difficult. The city's dynamics are not present here anymore. Our people are making an effort to live here and rebuild their lives, but the uncertainties are ruining us. Right now, we don't know what to do; we're battling with uncertainties. If you're going to deliver the buildings to the rightful owners, do it. If you're asking them to wait, then explain. If you're going to allow on-site reconstruction, give permission so that people can take care of themselves. But there's complete silence. Because of this, no one can take any steps, and the process keeps getting delayed. Can you imagine? It's August 2024, and we're still dealing with demolitions.

The economy is also in a very bad state. Maybe if the economic conditions were better, more resources could have been provided to this region. But under the current circumstances, it's incredibly difficult to make progress.

... The mind doesn't function properly. Because of the shock, it doesn't work right, and you can't plan certain things properly.

... Let me tell you about the construction site behind me. The other day, I got a phone call. Apparently, a middle

school project is to be built, and they've spoken to the governor. They wanted me to be the contractor. At first, I thought it was a joke, but they were very serious. I thanked them and accepted. Forty-five philanthropists are funding the construction. Schools are incredibly important, in my opinion. They help organize social life here and provide a fresh start. Schools are environments where children can come and go, interact with each other, and create their own spaces. They'll help return life to normal.

...No, no. It's history now. The places we lived, the history of the past; it's all gone. There's nothing left to revive those places, those people, or that spirit. Let me look at it from a different angle: my children, apart from the past they lived with their grandparents, have reached their own era, and by that time, the city was already gone. Now, it's impossible for them to experience that atmosphere. So how can this be revived? Right now, this issue has been pushed far back because the priority is survival, making ends meet. People need to be fed...

...Let me put it this way: there used to be tall buildings here. Five- and six-story buildings existed, thanks to zoning regulations. But they've all been demolished. How can life here return to what it once was? We can't find an explanation for this. Do you see that spot over there? Yes, let me give you a statistic. Speaking for Antakya and Hatay in general: 86% of the buildings that collapsed were less than five stories. Doesn't that strike you as odd? Because although there were quite a lot of taller buildings here, they account for only 14% of the damage. And most of this 14% is in this area. Why? Because the ground here liquefied incredibly, and the acceleration was at its maximum. This isn't even a flat area; it's more like a hill, isn't it? You see the dirt road. Did you notice that concrete wall over there? That wall is almost entirely buried underground.

...As for why that infamous residence collapsed, the biggest reason was a design flaw. I know the contractors who built it—two brothers. The younger one was a classmate of mine. They're genuinely excellent contractors, both in

construction quality and technical expertise. But this building had an incredibly poor design. Perhaps you've seen pictures of it. Was it called 'Rönesans'? Yes, I remember it as a massive building. It tilted over. The reason was the incompatibility between the dilation in its foundation and the dilation in the building. It was a terribly and poorly executed structure. This area experienced an extraordinary number of casualties. Look at the foundation—do you see that spot? Even the foundation walls were displaced. There are still missing people here. The official numbers don't reflect reality. I noted down 152 names on my phone alone. That's just the number I personally recorded. This area, as you can see, was entirely filled with buildings. Those buildings are now gone. It feels awful. Constantly talking about these issues is a burden, but it's the truth. Isn't it interesting? Those foundations over there are still standing.

...Everything that once existed here is gone. Let's move forward a bit more, as I'll continue without looking back. We're heading to the ring road. There's a junction we call the Honda Junction. If you continue on the ring road instead of entering the city, this road will take you to the spot where we're currently working at the hotel. Why am I showing you this area? Because this was the newly developed part of Antakya. Behind us is the area with the 75th wall I mentioned, but all the buildings here were damaged in the first earthquake. They remained standing, but they completely collapsed in the February 20th earthquake.

...One of our biggest issues here is infrastructure. Sewage, water, electricity: none of these have been resolved yet. New buildings are being constructed, but there's no infrastructure. In the future, infrastructure will be built based on the buildings, and there will be constant digging. This will delay life returning to normal. Right now, unprofessional people are simply happy to see buildings being erected. But I tell them, when you move into that building, you'll be wading through mud in winter because of sewer work. Natural gas, telephone lines, and drinking water will be installed, and they'll all overlap and interfere with each other.

...This is, as you said, a high area. Across from it is Harbiye. Do you see this view? This area used to have a completely enclosed horizon—you couldn't see this view. Now, everything is open. The city has completely changed. But let me say this: it will take a long time for this city to come back to life. There used to be the city's largest park here. Now, it's completely neglected, and nothing is being done...

...There's the Military Office, that white building. Right next to it was the military barracks—a building constructed by the French. The new buildings in front were demolished, but that old French building also collapsed. Some old buildings didn't collapse but were heavily damaged. For example, that building over there is mine. We can't use it at all right now. I had moved my office there, but it's hard to convince people because the building is heavily damaged. Due to changes in zoning regulations, the building's future is also uncertain.

...We're crossing a bridge here, aren't we? This area has been filled with asphalt four times, yet it still collapsed. The bridge is still standing, but the ground has completely sunk. Now, we're passing over bumps. If you ask me, even these bridges need to be completely replaced.

...Look at the city. This is the very heart of the city, and they've built a concrete plant here. There's no other way, as there's no method to transport concrete here. For example, the company that won the tender for this area set up a concrete plant here. That's the old stadium. This area has been declared a reserve zone. The buildings surrounding Atatürk Avenue, with reduced zoning permits, will be constructed here. Initially, they started with four stories; it wasn't enough, so they increased it to five, and now it's six. Independent, disconnected blocks are being erected in the middle of Antakya. This is deeply painful. This area was the city's heart, one of its busiest spots. Now, nearly all of it has been demolished. A few buildings remain standing, but there used to be no empty space here at all...

An interview with the architect working actively in Hatay on August 30, 2024, regarding the earthquake, translated to English from Turkish:

Q: What are the main issues you encounter in urban planning processes?

A: The root of the problems lies in numerous uncertainties. In decision-making processes, the advice of experts is often ignored. There is a more profit-driven approach. For example, in a project for a historical area, the plan is made based on construction space, shopping malls, or residential complexes. Technical requirements and social needs are disregarded.

Absurd situations occur even in zoning processes. For instance, when we received a zoning permit for a project, we had to wait months to resolve issues related to partition lines and road relinquishments. We had meetings with officials from the Ministry of Education and worked with map engineers, but it became nearly impossible to get results. Most processes are delayed due to a lack of technical knowledge and competence issues.

Q: What deficiencies do you observe in the planning efforts after the earthquake?

A: The post-earthquake planning process should be very different from regular urban planning. However, unfortunately, we struggle to communicate this difference. Authorities usually act as if they are doing ordinary urban planning, completely ignoring the urgent needs and uncertainties of the people affected by the earthquake.

For example, planning work in historical areas in Hatay started last year. The Minister of Culture stated that the plan would be completed by September 1. However, the public review process is still ongoing. The plan's rapid preparation resulted in many deficiencies and mistakes, causing the process to drag on. Many actions taken with the intention of making quick decisions after the earthquake

actually led to larger problems.

Q: What is the situation regarding local and international cooperation projects?

A: After the earthquake, many international organizations and design offices got involved in the projects. For example, one of the world's largest design offices, Foster & Partners, was involved in projects in Hatay. However, most of these projects progress without considering local conditions and needs.

In TOKİ (Housing Development Administration) projects, a tunnel formwork system was used. Technical issues during the implementation of this system led to major debates. Moreover, the exclusion of local stakeholders and NGOs from the process was one of the biggest shortcomings in the planning process.

Q: What do you think about the impact of these planning efforts on the local people?

A: If the plans are not for the people living here, it is a problem. People cannot return, they cannot rebuild their lives. This destroys sociological, economic, and cultural continuity. If we want to preserve the spirit, demographic structure, and history of Hatay, we need to prioritize these in the planning process. In summary, the work done after the disaster is being driven by speed and profit, but such an approach will not offer a solution for restoring people's lives or the city's identity.

Q: You mentioned the challenges in the urbanization and zoning processes in Antakya. What was the situation like during that time?

A: If you move forward a bit, let's say to the Odabaşı neighborhood. It is now a separate neighborhood, a separate municipality, with its own council and zoning authority. A little further, there's another neighborhood. The center of Antakya, at that time, was surrounded by exactly 17 diffe-

rent municipalities. This means: zoning authority should be managed in a balanced way with democracy and participation. However, at that time, zoning authorities were distributed like bread. There was no mechanism to oversee this. Municipalities had insufficient technical staff; in fact, some council members had no knowledge of this at all.

Q: What were the consequences of the mismanagement of zoning authorities?

A: The effects were significant. For instance, 76 municipalities, each made their own plan without knowing what the others were doing. In one area, a four-story building was allowed, while just next door, eight stories were permitted. The result? Chaotic development and unplanned urbanization. This situation escalated to the point where parcel-based zoning changes were shaped by the power of money. When one plot was allowed to go up to eight stories, neighboring landowners also pushed for the same permission. Unfortunately, due to bribery allegations, insufficient supervision, and ongoing lawsuits, things became even more complicated.

Q: What role did professional associations play during this process?

A: As professional associations, we continuously warned during that time. In 1996, a decision was made to start working on solving Antakya's issues. However, in the 2000s, the construction sector began to be seen as an economic locomotive. This led to rapid, parcel-based zoning changes and unplanned construction. We filed numerous lawsuits during that period, but it took 13-14 years to get results. By then, it was too late. People had already started living in those buildings, and neighborhoods had settled in.

Q: What efforts were made to prepare for the earthquake risk?

A: As professional associations, we have been constantly

warning since 2001 that "Hatay's priority should be earthquake preparedness." However, actions were taken very slowly. Planning efforts were completed in 2018, but the results were still not satisfactory. More should have been done.

Q: What changed when Antakya gained metropolitan status?

A: In 2014, Antakya became a metropolitan municipality. We supported this because the fragmented planning structure was not being solved. However, it didn't go as expected. The Metropolitan Municipality simply combined the old plans and presented them to us. They copied the problems exactly and continued with them. Furthermore, due to technical inadequacies, no progress was made.

Q: Finally, what happened after the earthquake?

A: After the earthquake, the lack of planning and coordination became even more evident. Theft, security deficiencies, and infrastructure problems caused the recovery process to drag on. Would you believe that even containers, generators, and road signs were stolen? After such a huge disaster, people turned to opportunism instead of solidarity. This revealed how weak the system was.



These illustrations were hand-drawn
by the author

Fig. 31: Antakya, 1898.



Fig. 32: The old city of Antakya,
2024.



Fig. 33: A building in Antakya after
the earthquake, 2023.



Fig. 34: A container city in Hatay,
2023.



Fig. 35: "Ezan Çan Hazzan" the
crossroads of three religions, Antak-
ya, 2019.



Fig. 36: Hatay's olive groves, 2019.

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