



ISRG PUBLISHERS Abbreviated Key Title: ISRG J Arts Humanit Soc Sci ISSN 2583-7672 (Online) Journal homepage: <u>https://isrgpublishers.com/isrgjahss</u> Volume -1 Issue-V (September - October) 2023 Frequency: Bimonthly

Politics, ethics, and architecture: The earthquake disaster in Turkey

Sengul Oymen Gur^{1*}, Gamze Kaymak Heinz²

¹Professor, PhD at Beykent University Turkey

²Department of Architecture, Istanbul Beykent University, Istanbul, Turkey

| Received: 24.09.2023 | Accepted: 27.09.2023 | Published: 29.09.2023

***Corresponding author:** SENGUL OYMEN GUR Professor, PhD at Beykent University Turkey

Abstract

On February 6, 2023, Turkey was shaken by two large earthquakes of 7.7 and 7.6, several hours apart. The quake destroyed 11 major cities in the country's southeast, built on an already known fault line. According to the latest official data, 49,589 people have died, and 144,595 buildings have been severely damaged. This earthquake revealed a triangle of demons. House ownership is over-emphasized by religious belief, which goes as "place in the world faith in the hereafter" by the population left ignoramus. This delirious desire becomes a powerful force in exploiting and abusing the city development master plans along with the developers. This is the first haunt. During the last 20 years, this population was deceived by the politicians who came to power with the promise of housing. Warped housing policies of the ruling government turned construction into profit and vote by blocking control of non-governmental organizations. As a rule, they promise and declare building amnesty and squatter pardons before elections. Thus, the second haunt of the disaster is the politicians. The third is professionals' unethical and careless practices in building design, construction, and control. In the study, the symbol buildings that collapsed in the earthquake are pointed out. Historic buildings that survived and facilities designed and controlled by famous architects are considered exemplary cases.

Keywords: Turkey; earthquake; disaster; politics; ethics; architecture

Introduction: Causes leading to the catastrophe

Approximately 80% of the buildings that make up the cities are residential. They require an excellent service consisting of city roads, railways, bicycle lanes, underground train systems and stations, docks, necessary health services, schools, kindergartens, and similar buildings. Meanwhile, the places that produce goods and services are excluded from this account. If all this is calculated and divided by the number of urban housings, one will notice that the cost is twice what it seems. In addition, from the point of view of energy consumption, housing is an ominous decision.

The power supply is a significant issue in ecological planning and building. Statistics show that in the final energy score, the heating of space, with 74%, is the highest consumer in private households, compared to warm water with 11.9%, mechanical energy with 7.9%, other process heat with 4.6%, and illumination with 1.5% in 2006 (Arnke, 2009, p. 414). This means that in building a house,

In the years when Britain had to close its housing gap, 90% of the housing stock was in the hands of 10% of the population, and municipalities owned a large part of it. In those years, a large part of the working population in Europe lived in one-room houses with shared bathrooms, canvas laundry, and even kitchens provided in small courts. In Germany, as everywhere in Western Europe in the late 19th century, the countryside emptied into the cities as the basis for economic development changed from agriculture to industry. Workers needed to be housed, and factories built and manned. The physical destruction caused by the First World War and the financial crises that followed allowed the pre-war aims of the Werkbund-rationalized construction as conceived under the banner of Modernity-to take hold and take over. By 1945, at the end of the Second World War, Modernism, the architecture of crisis and recovery, had become the only way out. And no state in the world was doing housing with great appetite.

The housing market is incorporated into the gross domestic product (GDP), the prominent measure of economic activity, in two ways. First, GDP includes all spending on constructing new single- and multi-family structures, residential remodeling, and brokers' fees, referred to as residential fixed investment (Weinstock, 2023) (averaging roughly 3-5% of GDP).

In America, undamaged by war, civilian construction accounted for 11 percent of the gross national product in 1950. By 1990, its share had dropped to 7.9 percent. The rate of building production over the same period increased from 600 million to 3,500 million square feet per annum. Thus, due to efficiency concerns, a 600 percent increase in construction volume was achieved with a 25 percent decrease in gross national product (GNP) expenditure. Benedikt argues:

"This is the viewpoint of the economist who does not see that the product itself has changed... Our environment has become increasingly commoditized, subject to short-term investment, income generation, and resale, rather than lifelong dwelling or long-term city making... While there is no doubt a high need for housing here, the capital does not accumulate on housing. Why isn't the need turned into profit?" (1999:5).

As of 2021, spending on residential fixed investment was about \$1.1 trillion in the USA, accounting for about 4.8% of GDP. GDP includes all spending on housing services, which provides for renters' rents and utilities and homeowners' imputed rent and utility payments. As of 2022, spending on housing services was about \$2.8 trillion, accounting for 11.9% of GDP. Finishing within the housing market accounted for 16.7% of GDP in 2022 (Weinstock, 2023). This makes it clear that low-quality housing does not turn into high profit!

Until the 1960s, well-manipulated public housing in the leading countries, financed by public subsidies, functioned as the object of new accumulation. The new social housing facilitated the mass consumption of fresh goods and ensured stability. Over the same period, the share of GNP represented by the economy's banking, real estate, entertainment, and communication sectors burst.

Turkey's story of Modernization over the last 70 years is a failure. The Modernization of Turkey, which started in the mid-1930s, accelerated in the 1960s. The fast multiplication of the markets, the advertising sector, and shopping after the 1950s represents the beginning of Turkey's living standards today. During these periods, automobiles, white goods, televisions, telephones, cinemas, and public housing entered our lives. Turkey was in sync with the world. Everything that was sold in the world was also sold to us. Thus, it is now finance, computing, media, etc.

However, in the Europe of the 20th century, it will be seen that large-scale activities are in infrastructure and superstructure investments. Financial institutions like banks and insurance companies are primarily interested in such concerns. However, significant capital in Turkey was not interested in these issues if we left aside the dam and highway constructions. The trigger of construction activities emerged in the 1980s with encouragement from abroad, and large companies were established and successfully served as contractors of buildings in many countries other than Turkey.

In developed countries, the social housing and planning moves financed by public subsidies in the 1950s and 60s did not happen in Turkey because the government did not have such a unit, nor was it willing to establish one. Until the 1960s, 60% of household ownership was achieved thanks to the working people of each household or via the housing cooperatives defined by law, as in remedial Europe.

Within 50 years of the republic, the people of eastern Marmara increased 15-fold from 1 million to 15 million. This meant the need for 100,000 houses. Over 50% of the population lives in the Sakarya, Istanbul, and Bursa Triangle. At present, this population is about 30 million!

After the 1960s, everyone would solve their problems, and the companies selling materials, the administration, and the law would not interfere. An unprecedented move was made to build a reinforced concrete apartment building. The land owners made agreements with their fellow citizens, artisans and apprentices, contractors and cooperatives, and made agreements with the municipalities and built their own houses or apartments. However, unpaid modernization also led to slum dwellings on the outskirts of big cities and industrial towns; over time, the zoning amnesty of the political parties that came to power turned into election propaganda with the slum amnesty law, and during the last two decades housing amnesty law.

The political party that came to power in 2002 and still governs the country first abrogated the State Planning Organization and put housing investment and production under its hegemony. Stateproduced housing was virtually transferred to selected unqualified contractors in the name of fellowship. These houses, referred to as TOKI (Housing Development Administration of the Republic of Turkey) residences, were realized in unplanned places without environmental and housing quality ideas and were never transferred to those in real need. While the housing need of the population constitutes almost half of the country's population, the activities of the producers of housing continue at full speed with the wholehearted support of the tremendous immoral covenant and the evil pledge among the client, authorities, and those responsible for control because housing is essential in this culture.

The present government has failed to take planned and appropriate modernization steps for urbanization and housing. All economic resources have been squandered in the last 22 years; most importantly, the treasury has been emptied, and all moral investors have been eliminated.

After the earthquake that took about 49,589ⁱ lives in Turkey, the argument of this paper resides on basic, robust, and ethical architecture: The earthquake devastation Turkey experienced on February 6, 2023, is a 'Triangle of Satan.' The first pillar is the people themselves.

In this culture, house ownership is over-emphasized by religious belief, which goes as "place in the world, faith in the hereafter" by the population left ignoramus. Approximately 40% of the Turkish population is renters at present. Owning a house breaks the cognitive caste in this society. This delirious desire becomes a powerful force in exploiting and abusing the city development master plans along with the developers. This is the first haunt.

Shanty accommodation met the demand in slums surrounding the industrializing towns. Rather than the clearance of slums, politicians promised amnesty, which was easier to offer. Since then, such forgiveness has become a tool for luring votes. This delirious desire becomes a powerful motive for exploiting and abusing the city development master plans by the politicians. This is the second haunt.

Planners, engineers, architects, contractors, workers, artisans, etc., who supposedly supervise and ignore all unfair practices, are guilty! Planners who make urban zoning plans by disregarding the warnings of earthquake experts for the sake of having done business, architects who do not know how to control the project, unauthorized-undocumented-unlicensed developers and contractors who produce reinforced concrete buildings with incomplete equipment, and quality by stealing materials and implementation time with excessive and unfair profit greed. These municipal authorities approve these applications without checking them and give residence permits to the building based on kinship or partisanship rather than merit. The city supervisors who called, the lawmakers who forgave under 'Reconstruction Peace' to convert the wrong, erroneous, illegal floors and abducted buildings from all kinds of inspections into votes, are all guilty.

Eleven settlements that the last earthquake stroke had hardly any master plan nor developmental plans in use.

The provinces hit by the February 2023 earthquake and the extent of the destruction

Turkey was hit by a 7.7 magnitude earthquake on February 6, 2023, at 4.17 in the Pazarcık district of Kahramanmaraş and a 7.6 magnitude earthquake in the Elbistan district at 13.24. After the first earthquakes, numerous aftershocks occurred. This earthquake, which took place on an already known fault line, destroyed eleven provinces: Kahramanmaraş, Elazığ, Kilis, Diyarbakır, Adana, Osmaniye, Gaziantep, Şanlıurfa, Adıyaman, Malatya, Hatay (Antakya) and their sub-provinces. This area is 115,000 km², where 15 million live (Fig. 1).



Figure 1. Turkey earthquake hazard map by AFAD, showing Turkey's fault lines and provinces with earthquakes (created by the authors using https://www.afad.gov.tr/inforgrafikler as a base).

These are all autochthonic settlements. The first modern master plan of Kahramanmaraş, which has a settlement history of about ten thousand years, was made in 1957 to open the south of the town to development when the city was already growing to the east to harbor the old industrial zone when the new so-called planned industry was being built in the south. The master plan of Kahramanmaraş, made by the city planner Bülent Berksan in 1978, envisaged 4-story buildings at the most, wide roads, and green spaces due to the tuff ground. The mayor and his administration took these rules into account for a long time and supported the approach. Still, again, at the request of the people and the concessions of the new municipal administration, which took part in the election propaganda, the construction of multi-story buildings began (Başkır, 2021). However, based on 1996 data, the city was pronounced in the first-degree earthquake zone, and local governments were warned. Despite this crucial information, unplanned development swelled (Oğur, 2023).

Antakya, founded by Seleukos around 300 B.C. C is based on a Hippodamos plan and is divided by the Asi River on an NE-SW axis; it is a tetra polis that dates back to the Hellenistic period (Salıcı et al., 2007, p. 711). Antakya, the center of all religions, was determined a historical site, which was taken into notice in 1975 planning. However, until 1978, the city underwent three more zoning plans due to rising demand; in 1987, a protection-oriented zoning plan was finally realized (Çetin, 2012). Research clearly shows the protection plan's abuse (Atar, 2022: 2-14). In 2021, a zoning plan was recognized, and on April 29, 2021, the disaster-prone areas were specified as reserved building areas by the zoning law!

The settlement history of Diyarbakır, which has been home to various cultures, dates back to 7250-7000 B.C. Historically, culturally, and architecturally, a significant part of the works and traces of all these civilizations are located in the Suriçi Region, so the Sur district is accepted as an open-air museum (Karaşin et al., 2007: 2).

The first known zoning plan in Diyarbakır was made in 1937. Subsequently, transformation and development plans covering the Suriçi region in 1962 and 1965 were made, and the plan prepared between 1983 and 1985 was revised in 1993 (Kayan, 2019, p. 771). However, due to increased immigration in the 1990s, the Sur district (city walls) was filled with unplanned, irregular, illegal buildings and slums. As a result, the Sur district has deteriorated, its historical international mission has been lost, and the features of many historical, tourist, cultural, and ancient structures have been extinct. Upon these adverse developments in the Sur district, it was declared a protected urban area in 1988. After the protected area was announced, a conservation zoning plan was made to preserve the Suriçi Region in the early 1990s (Nabikoğlu & Dalkılıç, 2013 p. 26).

However, the conservation zoning plan could not prevent the construction of illegal buildings and slums in the wall. To avoid the deteriorating situation of unlawful structures, slums, and historical, cultural, and ancient buildings in Suriçi, Diyarbakır Metropolitan Municipality and TOKİ agreed on urban transformation for the Surici Region in 2008, and the urban transformation project started to be implemented. However, the urban transformation project, which began in 2008, was stopped in 2012 after some property owners did not reach a compromise after a short-term implementation. In the terror/security incidents that started in late 2015 and ended in early 2016, 6 of the 16 neighborhoods within the city walls completely collapsed, and approximately 3000 of the average 9000 structures within the walls were damaged to a degree that could not be repaired. Upon such adverse developments, the Council of Ministers hastily expropriated the Surici Region in 2016. Following the decision of the Council of Ministers, Diyarbakır Metropolitan Municipality, TOKI, and the Ministry of Environment and Urbanization started urban transformation practices in the Suriçi Region again (Kayan, 2019, p. 779).

The history of Malatya has offered a settlement to a wide range of cultures dating back to 7000 BC (Demiral and Evin, 2014: 79). However, Malatya's "modern" planning dates to the 1930s. With the support of the famous German urban planner Jansen, who came to Turkey for Ankara urban planning at that time, it was decided to organize a garden city model with a population of 30.000 around four main industrial facilities (Demiral and Evin, 2014: 81). With Malatya being in the first-degree earthquake zone; it can be said

243

that it grew by spreading on hard ground in the east-west direction at the foot of the Bey Mountains. For now, the Beydağı campus (TOKİ Houses), which is seen as a "satellite city," Yıldıztepe, the University campus, and the Yakca campus in the west, point to the medium and long-term expansion areas of Malatya.

Kilis master plan was developed by the Turkish Ministry of Environment and Urbanization, the governorship of Kilis, district municipalities, and authorized institutions and organizations according to their subject on September 15, 2017, and has been amended three times since then.ⁱⁱ

The relatively minor cities and towns are not brought to the fore due to similarities in the history of foundation, zoning, and planning stories.

On the 21st day of the earthquake, 84 percent of the damage assessment studies in the earthquake region were reached. Approximately 1.430.363 buildings collapsed in 11 provinces. Their equivalent as independent departments is 4.874.588.^m Although the number of destroyed buildings and the poor quality of the facilities indicate that the number of deaths and loss of life will be high, official sources have given this by starting with 500 and increasing the population a little more every day. Although there is still no reliable, precise figure at the end of 1 month, the number of deaths is 47.932, according to press and broadcast sources.^{iv} However, simple mathematics indicates that this figure may be three times higher due to the number of collapsed buildings. In a process in which we said that nothing would ever be the same anymore, where the lives of the earthquake victims lost, the homes of the survivors, their loved ones, their memories, their memories with the destroyed cities, and the identity of the towns were lost, we all focused more on the "destroyed" and questioned our profession as architects.

Two buildings are the symbols of destruction.

Due to the magnitude of the destruction, two structures became the symbol of the earthquake: The Ebrar Housing and the Renaissance Residence. The story of the formation of these buildings exhibits a cause-and-effect relationship.

Ebrar Housing, Kahramanmaraş

Close to the city center and a shopping mall, one of the site's two contractors is a retired Religion Teacher, Tevfik Tepebaşı. In 2019, the complex was built in 14 blocks with 320 apartments, each with ten stories (Altıntaş, 2023). The apartments were sold with the slogan of "a corner of paradise," earthquake resistant, luxurious, and safe; it was claimed that their prices were low according to their location. However, 8 of the 14 blocks were destroyed in the earthquake, and the others were severely damaged (Fig. 2-3). It caused the death of 1,200 people. One of the contractors was arrested, and the second was a fugitive (Tahincioğlu & Zeren, 2023). Damage assessment studies showed the meager ratio of iron and steel used in buildings. However, even the meaning of the word Ebrar, which is of Arabic origin, means "good-natured, does not steal, does not beat."



Figure 2-3. Ebrar Housing before and after the earthquake, © trhaber, available at https://www.trhaber.com/gundem/ebrar-sitesimuteahhitlerinden-mustafa-timurbanga-firari-feto-uyesih91133.html

Renaissance Residence

Renaissance Residence was built in 2011 as a 12-story building in the Ekinci neighborhood of Antakya/Hatay and was home to about 700 people. The wreckage of the Renaissance Residence, which was destroyed in the earthquake, was removed, but the exact number of deaths was not determined, and many people could not be reached. This building was also marketed to the public with the slogan "a corner of paradise." The building's contractor, Mehmet Yaşar Coşkun, was arrested at Istanbul Airport shortly after the quake as he prepared to fly to Montenegro to work on other projects.^V

Traditional and historic buildings that have survived

The 'five mansions' in Malatya and the Mimar Sinan's Sokullu Mehmed Pasha Complex in Hatay were among those that survived the earthquake.

'The five mansions' in Malatya

Some traditional buildings survived the earthquake undamaged for example, the "five mansions" in Malatya (Fig. 4).^{vi}



Figure 4. The "Five Mansions" in Malatya attest to the old ethical values, © Sözcü, available at https://www.sozcu.com.tr/hayatim/yasam-haberleri/malatyada-120-yillik-beskonaklar-depremde-dimdik-ayakta/

Sokullu Mehmed Pasha complex in Hatay

It is stated that the Sokullu Mehmed Pasha complex, which was built in the second half of the XVI century in Dörtyol Payas, Hatay, on the critical historical trade route and pilgrimage route, to help and serve the passengers, was built by Mimar Sinan and his master's builders, clearly authorized based on its decorations and details. Its original use included many functions: accommodation, leather production, trade, education, and worship (Müderrisoğlu, 2009, pp. 364-366). Without being damaged by the tremors, the complex became a shelter and refuge place for earthquake victims, with tents in its garden (Fig. 5).



Copyright © 2023 The Author(s): This work is licensed under a Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) Corresponding author: Sengul Oymen Gur

Figure 5. The use of the garden and interior of the Sokullu Mehmed Pasha Complex in Hatay as a place of refuge after the earthquake, © haberturk, available at https://www.haberturk.com/tum-depremlerden-hasar-gormedencikti-mimar-sinan-eseri-sokullu-mehmet-pasa-kulliyesidepremzedelere-ev-oldu-3568018/5

Modern buildings that have survived

Notably, new structures of quality are standing among the ruins. Their number may be limited to the fingers of two hands, but they are just as remarkable. It proves that buildings can "stand" in the same city or place regardless of the earthquake's intensity. Which facilities are these, who built them, when under what conditions, and through what processes they went through?

A significant part of the earthquake survivors was modern buildings that had undergone good planning, had a selective employer, and worked with expert teams.

Antakya chamber of commerce and industry administration building

The design team of the 2150 m² building, where the employer is Antakya Chamber of Commerce and Industry, consists of architects Çinici, Katkat, Yilmaz, Agüday, and Koytak. The planning work of the administration building started in 2015, and its construction was completed in 2019. In the curved corner of the building, which is located in a narrow area, the vertical shaft with stairs, wet volumes, and other service areas is installed. Thus, the perception of an external corner was emphasized, and several historical corner buildings of Antakya were referred to. This decision also increased the efficiency and comfort of use in the plan, creating an interior with gallery space connecting several office floors. A grill made of travertine stone surrounded the exterior of the building, which has intensively used inner spaces housing open offices, large and small meeting rooms, and executive rooms and offices, and controlled sunlight is provided to the interior spaces with horizontal, thin stone and elements hung on these grids. The building academy carries out its mechanical project, Elmaksan engineering, and electrical project; Elektra Engineering has made a strong team, including the TEPTA Lighting team for the lighting design.vii

In addition to the correct system of construction, the presence of a basement probably played an essential role in the survival of this building in the earthquake as a feature that strengthened the connection of the building with the ground construction of the carrier.



Figure 6. Antakya Chamber of Commerce and Industry and general views of the building. © Ömer Selçuk Baz, Published by Çinici Mimarlık's website in the public domain, available at https://www.cinicimimarlik.com/tr/antakya-ticaret-ve-sanayi-odasi-yonetim-binasi/

Koluman Tower

In the center of Gaziantep, the prestigious and landmark building was designed by K.G. Architectural Limited Company, which Kurtul Erkmen founded in 1990. was built by the company of the same name in 2014 on land of 4.829.50 m², with a closed area of 32.681 m^2 . The office mass is raised on columns to make the separation of functions between the groups physically felt. On the east side of the office block facing the city, floor gardens establish a natural air relationship (Fig. 7).^{viii}

For over 50 years, Koluman Group of Companies has invested in its own construction companies. SAPA panel glass façade + precast cladding, GOLD on office floors, demountable walls with partition glass, EPDM waterproofing, XPS, and stone wool thermal insulation have B class energy identity certificate.



Figure 7. General views of the Koluman Tower, published on Koluman Tower's website, in the public domain, available at https://koluman-tower.com/

Kahramanmaraş Municipality Service Building

Designed by Özgür Karakaş,^{ix} who was selected with the 'Kahramanmaraş Municipality Service Building National Architectural Project Competition' in 2006 (Eralp, 2006), the local municipality service building project was built in 2010 on an area of 10,491 m² (Fig. 8).

The project comprises administrative, presidency, assembly, social, and shopping center blocks. Although designed over two separate leagues, it has three standard basement floors and nine floors on top. Considering the close environmental relations, such as the city's main arteries, the building is located on the northeast-southwest axis on foot, lower ground floor leading to Azerbaijan Boulevard – the upper ground floor from the entrance platforms (Street 36008). It is reached from the controlled crossing point on the street (Akçay & Sahil, 2021).



Figure 8. View Kahramanmaraş Metropolitan Presidency Service Building after the earthquake, © gazetedogu, available at <u>https://www.gazetedogu.com/iste-kahramanmaras-in-</u> merkezi/7455/

Kipaş administration building

The project is a management structure designed for Kipaş Holding, an important company in the textile sector. A-Design &

Architecture team intended it on a construction area of 12.841 m² in Kahramanmaraş between the years 2011-2012 (Fig. 9). A-Design & Architecture, founded by Architect Ali Osman Öztürk, carries out the project process with investors, engineers, and teams from different disciplines.^x

On the Maraş - Gaziantep road, it was aimed to be a noticeable structure among the factories. Therefore, a structural order surrounds the building and creates a city space by transforming it into a symbolic expression defined in the "city balcony" underneath. The climatic features of Maraş were considered, and the sun-shading elements that shaped the façade were used in the project. In addition, Yüksek Proje, mechanical by Setes Engineering, electrical by Akay Engineering, and the landscape by Dalokay Design Studio, carried out static.^{xi}



 Figure 9. General view of Kipaş Management Holding Building,

 ©
 atasarim,
 available
 at

 https://www.atasarim.com.tr/tr/proje/kipas-yonetim-binasi

Museum Hotel in Antakya

According to ancient sources, the Museum Hotel Antakya is located at Antioch's center, known as the world's fourth-largest developed city during the Roman Empire. Moreover, the site – approximately $20,000 \text{ m}^2$ – is close to the Christian World's most important pilgrimage site, St. Pierre Church.

The client, ASF Tourism, an investor who wished to build a fivestar hotel, started excavating for a conventional project already commissioned to a different architectural group. As soon as the process began, significant archaeological artifacts were found. At that point, the Cultural and Natural Assets Protection Board demanded that the investor initiate a scientific archaeological excavation. In the face of this, a scientific committee constituted a trans-disciplinary group of experts, including archaeologists, art historians, restorators, and architects, to evaluate the process. Under the supervision of the committee, a significant number of remarkable archaeological findings belonging/that belonged to different civilizations were discovered, and their exploration revealed the 'impossibility' of construction of a conventional building on this land. Emre Arolat Architecture (EAA)'s involvement with the project began upon a call from a scientific committee member. The tension between the significance of archaeological findings, their restrictions, and the hotel's strict programmatic codes was the primary determinant that constituted the contextual and physical frame of the project.

With the intense coordination of the group of experts, the exact locations of the not-yet-discovered artifacts were determined with all details. A protective canopy/roof approximately twenty-five meters above the archaeological ruins was placed on composite solid piers located on spots with no ruins and the old riverbed passing through the centreline of the site. Common hotel facilities, such as a ballroom, restaurant, night club, gym, and swimming pool, are mostly placed on the ground floor in any conventional hotel design were put on this roof level by taking the traditional local architecture as a reference with its open courtyards and landscape elements. A grid structure was built with steel beams on the lower level, approximately 15 m above the findings. The offsite assembled prefabricated hotel room modules were placed with interspaces above this system by the cranes. The hotel lobby and lounge were designed under the rooms, approximately 10 meters above the ancient ruins. The spatial fluidity and permeability through each floor enabled various visual connections to the archaeological site. In this way, the project, a total of 34.700 m^2 of construction dispensed over an extended period between 2010-2019, was finally opened to public use in real terms. The main objective of the design from the beginning of the process till the end was that The Museum Hotel Antakya would positively impact the geography in which it is located as a unique building that simultaneously benefits from the potential and opportunities of the context (Fig. 10).xii



 Figure 10. Museum Hotel Antakya, photo shows the completed building,
 ©
 Emre
 Arolat,
 available
 at

 https://emrearolat.com/project/the-museum-hotel-antakya/

Göbeklitepe historic site - the cover and the tourist center

Göbeklitepe is a Neolithic archaeological site in the south-eastern Anatolia Region of Turkey. Dated to the Pre-Pottery Neolithic, between c. 9500-8000 BCE, the site comprises several large circular structures supported by massive stone pillars – the world's oldest known megaliths and religious centers and houses. It is located at Örencik-Haliliye/Şanlıurfa, in South-eastern Anatolia. The team leader, Klaus Schmidt, a prominent and diligent researcher, is responsible for all the excavations from 1995 until his death. Since his death, his colleagues, archaeologists Necmi Karul and Lee Clare, have administered the mission (Ayaydın, 2021).

The "protective roof" of Göbeklitepe in Şanlıurfa was completed with the realization of the project obtained by Deutsches Archaologisches Institut (DAI) through a competition organized by Turk Antiquities between March 2010 and March 2011. Experts were invited to the simple archaeological sites. The responsible group was Study Group Klessing/Steiner and Ingenieurgruppe Bauen. In the project, where the prevention of climatic erosion was the main objective, the safety of the protected area and the structure was the most important design concern. Therefore, the building, which successfully fends off the disaster with such a substantial nature, stands with all its strength as a monument of intelligence, knowledge, and diligence (Klessing et al., 2010-2011), (Fig. 11).



Figure 11. The grandiose protective roof of the excavated part of Göbeklitepe

Conclusion

In Turkey, it is time to question some practices after this disaster. There are more contractors in the country than the total number of contractors in all European countries.^{xiii} Having completed the age of 18 is possible with a document that can be obtained by anyone who registers with the Chamber of Commerce. They have good relations with politicians to obtain building permits from the relevant authorities. It has become usual practice to obtain a building permit on the fault line to change the zoning plans so that 14 floors can be built where there is a 4-story building permit by activating political relations in places with low-rise building permits. Regarding use permits, organizations such as TMMOB (Chamber of Architects and Engineers of Turkey) as the supervisory body have been turned off by political preferences, and private companies have been put into operation.

The crowded masses of people need the chance to act selectively with the lack of information on the one hand and the limited economic opportunities on the other. Most of these architectural works, which are the product of meticulous work and teamwork, are public and office buildings. If the earthquake had not happened at night, all the people in these places, not in their homes, would have been alive. Could it be a coincidence that these structures stand tall in cities where the destruction is so great? These examples show us. If there is the right zoning plan, the proper ground survey, the right project, the correct building inspection, the right contractor, if there is the right site responsible, if there is the appropriate construction team, and if the user makes the necessary repairs correctly, the construction does not kill.

- i CNN Türk (2023) 42. gün! Depremde ölü sayısı ne kadar oldu, güncel yaralı sayısı kaç? Hangi ilde kaç bina yıkıldı, kaç kişi öldü? Available at https://www.cnnturk.com/turkiye/42-gun-depremdeolu-sayisi-ne-kadar-oldu-guncel-yarali-sayisi-kachangi-ilde-kac-bina-yikildi-kac-kisi-oldu (accessed 10 March 2023)
- ii T.C. Çevre Şehircilik ve İklim Bakanlığı / Republic of Turkey, Ministry of Environment, Urbanization and Climate Change. Available at https://mpgm.csb.gov.tr/kilis-ili-1-100.000-olceklicevre-duzeni-plani-i-82339 (accessed 19 March 2023)
- iii Sözcü (2023) 11 ilde 1 milyon 430 bin 363 bina incelendi:
 144 bin 595 bina ağır hasarlı. Sözcü, 27 February 2023.
 Available at https://www.sozcu.com.tr/2023/gundem/11-ilde-1-

milyon-430-bin-363-bina-incelendi 7604727/?utm_source=anasayfa&utm_medium=free& utm_campaign=sol_surmanset (accessed 3 March 2023)

- iv Gazete Duvar (2023) Depremlerde can kaybi 47 bin 932'ye yükseldi. 10 March 2023. Available at https://www.gazeteduvar.com.tr/depremlerde-cankaybi-47-bin-932ye-yukseldi-haber-1607661 (accessed 10 March 2023)
- v Cumhuriyet (2023) Rönesans Rezidans nerede? Rönesans Rezidans'ta kaç kişi öldü? 24 February 2023. Available at https://www.cumhuriyet.com.tr/turkiye/ronesansrezidans-nerede-ronesans-rezidansta-kac-kisi-oldu-2054901 (accessed 3 March 2023)
- vi Sözcü (2023) Malatya'da 120 yıllık Beşkonaklar depremde dimdik ayakta kaldı. Available at: https://www.sozcu.com.tr/hayatim/yasamhaberleri/malatyada-120-yillik-beskonaklar-depremdedimdik-ayakta/ (accessed 16 March 2023)
- vii Antakya TSO Yönetim Binası, in: bi_özet gayrimenkul. Available at https://bi-ozet.com/2022/10/24/projeantakya-tso-yonetim-binasi/ (accessed 3 March 2023)
- viii K,G: Mimarlık (Architecture) website. Available at: https://kgmimarlik.com.tr/hakkimizda/kolumanholding-gaziantep/ (accessed 3 March 2023)

ix Kahramanmaraş Belediye Başkanlığı Hizmet Binası Ulusal Mimari Proje Yarışması / Kahramanmaraş Municipality Service Building National Architectural Project Competition. Available in https://www.yarismo.org/arsivdetay.php?id=170&yarisma=kahramanmaras-belediyebaskanligi-hizmet-binasi-ulusal-mimari-proje-yarismasi (accessed 3 March 2023)

- x A Tasarım Mimarlık / Architectural Design website. Available at https://www.atasarim.com.tr/tr/profil/hakkinda (accessed 3 March 2023)
- xi Kipaş Yönetim Binası, A Tasarım Mimarlık / Architectural Design website. Available at https://www.atasarim.com.tr/tr/proje/kipas-yonetimbinasi (accessed 3 March 2023)
- xii EAA-Emre Arolat Architecture website. Available at https://emrearolat.com/project/the-museum-hotelantakya/ (accessed 19 March 2023)
- xiii There are 453.497 building contractors in Turkey, in contrast with 3000 in Germany. About 145.000 of this amount work with temporary documents. 60.000 of this number is in İstanbul, 40.000 in Ankara and 7.000 in İzmir. Source: Balbay M (2020) Türkiye'de müteahhit sayısı: 453 bin 497 Almanya'da: 3 bin 550. *Cumhuriyet*, 28 January. Available at https://www.cumhuriyet.com.tr/yazarlar/mustafabalbay/turkiyede-muteahhit-sayisi-453-bin-497almanyada-3-bin-550-1716733 (accessed 10 March

2023)

References

1. Akçay FÇ and Sahil S (2021) Yarışma Pratiğinden Yansımalar. *Yapı dergisi* 470 (10). Available at

https://yapidergisi.com/yarisma-pratiginden-yansimalar/ (accessed 3 March 2023)

- Altıntaş İ (2023) Ölüm müteahhitleri... Siteye "Hayırlı" adını verdi hepsi yıkıldı... Din öğretmeni müteahhit. Oda TV, 15 February. Available at: https://www.odatv4.com/guncel/olum-muteahhitlerisiteye-hayirli-adini-verdi-hepsi-yikildi-din-ogretmenimuteahhit-270793 (accessed 10 March 2023)
- Arnke P (2009) Construction as, construction' ecology and energy issues advancing building technologies. In: *Livenarch IV* (ed S Oymen Gur), Trabzon, TR, 9–11 July 2009, vol. 2, pp. 413-417. İstanbul: Vizyon Printing Center.
- Atar MT (2022) Kent Kimliğinin Değişim Sürecinin İrdelenmesi: Antakya Örneği / An Investigation on Urban Identity: Case of Antakya. Master's Thesis, Istanbul Beykent University, TR.
- Ayaydın E (2021) Göbeklitepe'yi insanlık tarihine kazandıran Prof. Dr. Klaus Schmidt vefatının 7. yılında anılıyor. AA (Anadolu Ajansı). Available at https://www.aa.com.tr/tr/kultur-sanat/gobeklitepeyiinsanlik-tarihine-kazandiran-prof-dr-klaus-schmidtvefatinin-7-yilinda-aniliyor/2309861 (accessed 19 March 2023)
- Başkır M (2021) Son Yarım Asrın Belediye Başkanı Hacı Ali Özal'dır. *Maraş Pusula*, 24 September. Available at https://www.maraspusula.com/baskir-sonyarim-asrin-belediye-baskani-haci-ali-ozaldir (accessed 10 March 2023)
- Benedikt M (1999) Less for Less Yet. In: 7 Conflicting Values Essay. Available at: http://www.harvarddesignmagazine.org/issues/7/less-forless-yet (accessed 20 July 2023)
- Çetin B (2012) Hatay'da Kentleşmenin Seyri (1940-2009) ve Mekânsal Dağılışı / The Course of Urbanization (1940-2009) and its Spatial Dispersion in Hatay. *Hatay Doğu Coğrafya Dergisi / Hatay Eastern Geographical Review* 28(17): 231-257.
- Demiral B and Evin H (2014) Malatya Büyükşehir Belediyesi: Arakentten bütünkente bir dönüşüm hikâyesi / Malatya Metropolitan Municipality: A story of transformation from city to metropolis. Adnan Menderes Üniversitesi, Sosyal Bilimler Enstitüsü Dergisi, Özel Sayı / Adnan Menderes University, Journal of Institute of Social Sciences, Special Issue 1: 77-87. Available at https://doi.org/10.30803/adusobed.188830
- Eralp A (2006) Kahramanmaraş Belediye Başkanlığı Hizmet Binası Ulusal Mimari Proje Yarışması / Kahramanmaraş Municipality Service Building National Architectural Project Competition. Available in https://www.arkitera.com/yarisma/kahramanmarasbelediye-baskanligi-hizmet-binasi-ulusal-mimari-projeyarismasi/ (accessed 3 March 2023)
- İltir M (2023) Son İmar Affindan 7 Milyonun Üzerinde Konut ve İşyeri Yararlandı. *Doğrulukpayı*, 9 February. Available at https://www.dogrulukpayi.com/bulten/sonimar-affindan-7-milyonun-uzerinde-konut-ve-isyeriyararlandi (accessed 10 March 2023).
- Karaşin A, Karakaş S, Gürbüz Ş, Özyılmaz H, et al. (2007) Diyarbakır Suriçindeki Yığma Binaların Afet

Potansiyeli Bakımından Değerlendirilmesi. In: *TMMOB Afet Sempozyumu* (ed TMMOB İnşaat Mühendisleri Odası), Ankara, 5-7 December, pp. 369-374. Ankara: Mattek Matbaacılık.

- 13. Kayan A (2019) Kentsel Dönüşüm ve Diyarbakır Sur Örneği / Urban Transformation and the Case of Diyarbakır Sur. Uluslararası Yönetim İktisat ve İşletme Dergisi / International Journal of Management Economics and Business 3(15): 758-782. Available at: https://doi.org/10.17130/ijmeb.2019355049
- Klessing Hoffschildt Architects (2010-2011) Göbekli Tepe Competition Entry "Protective Roof" Available at https://klessing-hoffschildt-architects.com/turkeygoebekeli-tepe-competition-entry-roof/ (accessed 22 March 2023)
- Müderrisoğlu MF (2009) Sokullu Mehmed Paşa Külliyesi, in: TDV İslam ansiklopedisi 37: 364-367. Available at https://islamansiklopedisi.org.tr/sokullumehmed-pasa-kulliyesi--payas
- 16. Nabikoğlu A and Dalkılıç N (2013) Diyarbakır Surlarının Günümüzdeki Durumuna Yeni Bir Bakış - A New Perspective on the Current Status of the Diyarbakır City Walls. *Restorasyon ve Konservasyon Çalışmaları* Dergisi / Journal of Restoration and Conservation 15: 23-35. Available at https://dergipark.org.tr/tr/pub/restorasyon/issue/48722/61 9947
- 17. Oğur Y (2023) Seher Hoca'nın oğlu nasıl katil müteahhit oldu? *Serbestiyet*, 4 March. Available at https://serbestiyet.com/gunun-yazilari/seher-hocaninoglu-nasil-katil-muteahhit-oldu-120299/ (accessed 10 March 2023)
- 18. Salıcı A, Güzelmansur A and Altunkasa MF (2007) Kentsel Yapı Değişiminin Tarihî Kent Dokusuna Etkilerinin İrdelenmesi: Antakya Örneği. In: 38. ICANAS Uluslararası Asya ve Kuzey Afrika Çalışmaları Kongresi (ed D Zeki), Ankara, TR, 10-15 September 2007, vol. 2, pp. 707-716. Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu
- 19. Tahincioğlu G and Zeren Ö (2023) En acı bekleyişin hikâyesi: Ebrar Sitesi, Kahramanmaraş. *T24*. 23 February. Available at: https://www.youtube.com/watch?v=mlpl-XAZIJI (accessed 3 March 2023)
- 20. Weinstock LR. (2023) Introduction to U.S. Economy: Housing Market. *in focus*. Congressional research service. Informing the legislative debate since 1914. Updated January 3, 2023. Available at http://sgp.fas.org/crs/misc/IF11327.pdf