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Diyarbakır Hasan Pasha Inn: A thorough evaluation of risk analysis and accessibility concerns

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Abstract

The importance of accessibility in maintaining historical and cultural structures is evident across all facets of society. It is crucial to ensure that these structures remain secure, readily available, and sustainable, as they represent significant cultural heritage for both the local community and tourists. In this study, the risk analysis and accessibility status of the historic Hasan Pasha Inn in Diyarbakır's Sur district were thoroughly explored. The Inn holds a significant historical and cultural location on Gazi Street, across from the Ulu Mosque. The primary goals of the research are to identify current risks, conduct a methodical analysis, and offer suggestions for risk mitigation. The Inn's accessibility was assessed by aligning headings with the accessibility guide. The analysis utilized the 5x5 L-type matrix method to systematically evaluate risks based on specific criteria and determine their relative importance. Risk factors were categorized as minor (0–6), medium (8–12), major (16–20), and disaster (25 and above). A total of 31 risks were identified and grouped under different headings. Precautions were suggested for each risk with the goal of reducing the Inn's overall risk levels. Measures such as improving physical access, enhancing emergency preparedness, implementing safety measures, and undertaking maintenance and repair projects are being pursued to promote tourism and enhance safety in the neighborhood for both locals and visitors. The study concludes by outlining the necessary actions to improve accessibility and safety at the Hasan Pasha Inn, while also contributing to the preservation of this historic building. The proposed measures aim to make the Inn more accessible to both locals and tourists, and to ensure the sustainability of this culturally significant site. The findings of the study will serve as a valuable resource for enhancing accessibility standards and conserving historic buildings. The limited number of publications on accessibility in historical buildings reveals the need to raise awareness in this field and offer solution suggestions; Therefore, the work we carry out is of great importance. It is expected that this study will offer insights for future risk analyses and accessibility evaluations of similar structures.

Keywords: Diyarbakır Hasan Pasha Inn, accessibility, risk analysis, cultural heritage, risk assessment

1. Introduction

Turkey, with its rich history and geographical diversity, is home to many significant cultural heritage sites. The preservation and accessibility of cultural heritage are crucial issues that not only affect physical structures but also directly influence social participation and public life. Accessibility refers to the ability of all individuals, from children of different age groups to the elderly, to freely reach their desired destinations from their current locations (Ateş, 2024). In this context, accessibility in cultural heritage sites involves not only the removal of physical barriers but also the necessary social, cultural, and mental adjustments to ensure equal access for all. These structures, beyond serving as cultural values that carry the traces of the past, should be accessible to everyone to contribute to the future (Miroğlu & Çıkan, 2022).

Every structure must be usable and accessible for users, as accessibility is a fundamental principle that must be considered in the design of structures (Müezzinoğlu et al., 2023). Historical and cultural structures' accessibility is crucial for their physical state as well as their influence on

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social life and participation (Karadoğ, 2020). Accessibility is not only a need but also a necessity for the sustainability and tourism potential of historical buildings (Altın et al., 2024).

According to Güler and Tutal (2017), these structures stand out as essential markers of identity for societies. Protecting and integrating them into daily life becomes possible by providing access and functionality. However, creating access in historical buildings is a more complex process compared to modern buildings, as it is crucial not to damage the authentic fabric of the building during such interventions. Accessibility regulations should not only address physical access but also ensure access to information and services. Therefore, regulations related to accessibility in historical buildings must strike a balance between preservation and use, implementing reasonable solutions (Güler & Tutal, 2017).

Vardia, Khare, and Khare (2016) argue that historical buildings are unique and irreplaceable resources that reflect a nation's cultural and natural values. However, most of these areas were not designed for people with disabilities and other special needs. Implementing inclusive design principles contributes to the social, environmental, and economic sustainability of these spaces. Thus, accessibility in historical areas is not just a need but also an obligation to ensure social justice (Vardia et al., 2016).

According to Ölmez (2022), the reuse of historical buildings is one of the most effective methods for their preservation. However, in this process, ensuring accessibility requires not only considering the physical characteristics of the building but also the spatial comfort of new users. Historical buildings, especially those repurposed for public use, should be designed so that all individuals can benefit equally. Accessibility is crucial not only for preserving historical buildings but also for integrating them into social life (Ölmez, 2022).

Diyarbakır, with its rich cultural and historical heritage, stands out in this regard. With its 3.5-kilometer-long city walls, mosques, churches, and other historical structures, Diyarbakır holds significant cultural importance at both local and international levels (Işık, 2022). Diyarbakır, located in the Southeastern Anatolia Region, has a history spanning thousands of years and has been home to many civilizations. It has maintained its historical texture to this day (Dağtekin & Halifoğlu, 2024). The city walls of Diyarbakır, which are included in the UNESCO World Heritage List, play a key role in preserving the historical fabric of the city, along with the surrounding structures. The focal point of this study, Hasan Pasha Inn, is located on Gazi Street, one of the main routes of the city's historical walls. This historical building is an important meeting point for both local residents and visitors, and it is an integral part of Diyarbakır's cultural fabric (Cebe et al., 2019). Hasan Pasha Inn is a three-story building with a courtyard, originally constructed for commercial purposes (Yıldırım, 2017). The basement houses a restaurant and stationery, the first floor contains shops, and the second-floor features breakfast establishments (Yıldırım, 2012). However, the accessibility of this building has become an important issue for modern-day users.

In this context, the Accessibility Guide published by the Ministry of Family, Labour and Social Services will be used to evaluate the accessibility conditions and risks of Hasan Pasha Inn in detail. This guide provides specific standards for both external and internal accessibility of buildings and plays a significant role in this study (ACSHB EYHGM, 2020). In the analysis of Hasan Pasha Inn, the L-Type Matrix Method will be employed to systematically identify risks. This method assesses risks based on cause-and-effect relationships in a 5x5 table, allowing for the early detection of existing risks and the implementation of preventive measures (Doğan & Keskin, 2023). Through this analysis, deficiencies and risks in Hasan Pasha Inn will be identified, and accessibility strategies will be developed to mitigate these risks.

The primary aim of this study is to comprehensively examine the current accessibility status and risks of Hasan Pasha Inn. In this context, the following questions will be addressed:

- *What are the current risks of Hasan Pasha Inn, and what preventive measures can be implemented to reduce the effects of these risks?*

- *Has Hasan Pasha Inn been evaluated in terms of its compliance with the Accessibility Guide? Has the building been designed to be accessible to all individuals?*
- *What is the likelihood of making the building fully accessible to everyone by eliminating the current risks?*

This research will not only discuss the current deficiencies in the accessibility of Hasan Pasha Inn but also explore the accessibility strategies that can be developed for such structures. Furthermore, the proposed strategies will shed light on both the assessment of the current situation and future improvement efforts. In the conclusion section, recommendations will be presented based on the answers to these questions, with a focus on strategies to enhance accessibility while emphasizing the historical and cultural significance of Hasan Pasha Inn. This process will contribute to the preservation of the historical structure while supporting the goal of making it accessible to a wider audience.

2. Method of Research

The study area is in Diyarbakır province, in the Southeastern Anatolia Region of Turkey. Hasan Pasha Inn, situated on Gazi Street—one of the main thoroughfares in the Sur district, commonly known as Old Diyarbakır—is a historically and culturally significant site. The Inn is positioned directly across from the Ulu Mosque to the west of Sipahi Bazaar and to the southeast of the Jewelers Bazaar, offering significant convenience in terms of transportation due to its strategic location (Figure 1). Being part of the historic district, the area is surrounded by many ancient mosques, churches, and Inns, adding to the region's rich cultural heritage. The scope of this research focuses on Hasan Pasha Inn and its immediate surroundings (Figure 5).

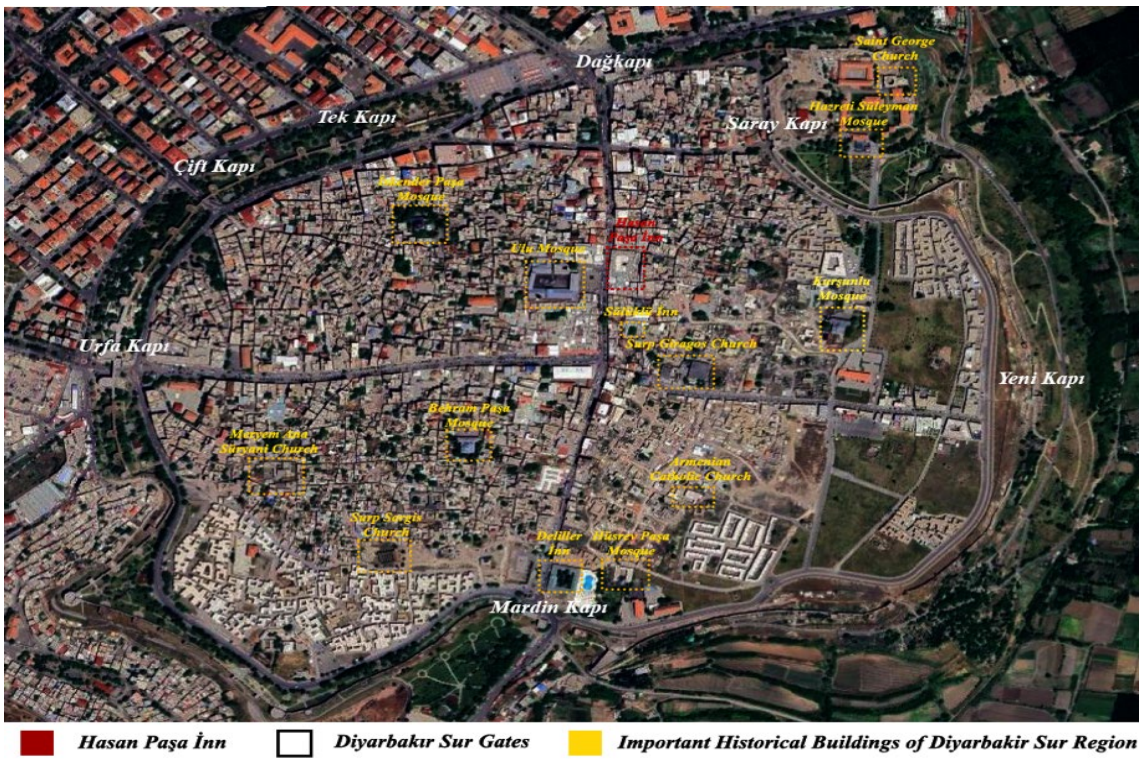


Figure 1 Map of the old city of Diyarbakır and the location of the inn (Barış, 2024)

Hasan Pasha Inn is a three-story structure, consisting of a basement, ground floor, and first floor. The basement is accessible via two separate staircases and houses a variety of services, such as a bookstore, restaurant, and toilets (Figure 4). The ground floor contains shops and cafés, while additional services are available on the first floor (Figure 2). The cafe is in the center of the courtyard. Access to the first floor is facilitated by four separate staircases, and the floor provides

breakfast and café services in its porticoed areas (Figure 3). Vertical circulation within the building is solely provided by stairs, as there is no elevator.

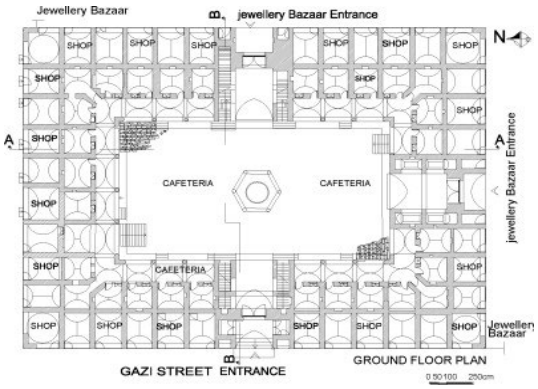


Figure 2 Ground floor plan (Yıldırım, 2012)

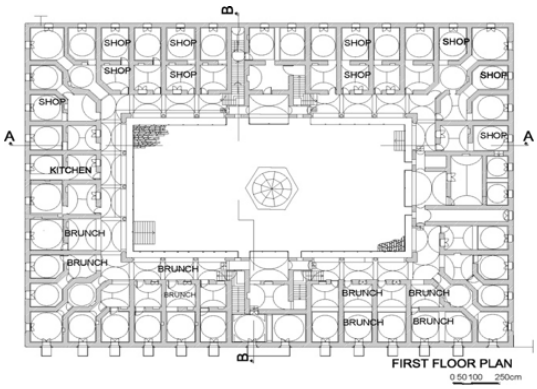


Figure 3 First floor plan (Yıldırım, 2012)

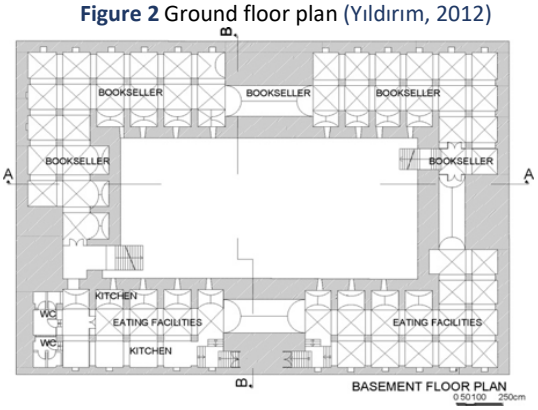


Figure 4 Basement floor plan (Yıldırım, 2012)

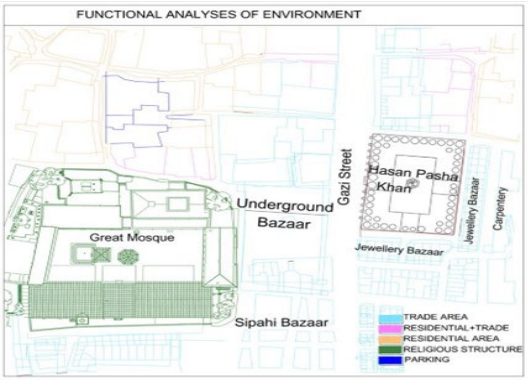


Figure 5 Site and environmental plan (Yıldırım, 2012)

Given the Inn's location in a historically significant area, it is surrounded by numerous other historical mosques, churches, and Inns, which collectively contribute to the region's rich cultural heritage. Both the Inn itself and its surrounding context are key to understanding the cultural fabric of Diyarbakır. The primary objective of this study is to evaluate the accessibility of Hasan Pasha Inn and its surroundings, perform a risk analysis, and propose solutions to address the accessibility challenges faced by historical buildings.

This research will provide a comprehensive assessment of the Inn, systematically identifying its deficiencies and risks, with particular emphasis on the accessibility guide. A detailed risk assessment will be conducted using the 5x5 L-Type matrix method, allowing for an objective ranking of the identified risks based on their relative importance. Furthermore, strategies to improve the building's accessibility will be developed, and recommendations for mitigating the identified risks will be thoroughly explored. This analysis will form the basis for future improvement projects and will set a benchmark for evaluating the current state of accessibility.

2.1. Risk Assessment Method

In this study, an L-type matrix approach was used for risk stratification. This is a method of systematically measuring risk using a 5x5 scoring system (Doğan et al., 2024). Probability refers to the likelihood of a particular risk occurring; Severity refers to the seriousness of the consequences of the risk. The product of these two criteria gives the risk score, which is the important criterion that determines the degree of acceptability of this risk (Ünverdi & Çetinyokus, 2021). With the L-type matrix, risk scenarios can be predicted, and adequate preventive measures can be implemented.

2.2. Probability Assessment

According to their likelihood of occurring, probabilities are categorized into five groups, offering a methodical approach to analysis (Bedir et al., 2024). The purpose of this probability rating is to assess the likelihood that a specific risk will materialize (Table 1).

Table 1 Probability Rating (Özkılıç, 2005)

Point	Probability
1	Very Low
2	Low
3	Probable
4	Frequent
5	Very frequent

With a score of 1, "Very Low" is the category with the lowest probability, meaning that the risk will hardly ever materialize. This level of risk is typically regarded as insignificant or as a situation that doesn't need to be addressed. A score of 5 indicates that the risk will occur very frequently, making it the highest probability category (Kıray, 2023). This level of risk must be viewed as an emergency that needs immediate attention.

2.3. Severity Rating

To Risks are evaluated to determine the seriousness of an incident and its potential consequences, which helps assess the level of intervention required (Yılmaz & Gedik, 2022) (Table 2).

Table 2 Severity Rating (Özkılıç, 2005)

Point	Severity
1	First aid required
2	First aid and outpatient treatment required
3	Minor injury
4	Serious injury
5	Death

The rating system uses a scale of 1 to 5 points. Situations requiring only first aid are rated 1, indicating minor injuries that do not need emergency assistance (Karahan & Aydoğmuş, 2023). A score of 5 represents incidents that result in death, posing serious risks to life and having significant societal consequences.

2.4. Calculating Risk Scores

One of the fundamental elements of the 5x5 L-type risk analysis matrix is the risk score, which is calculated using probability and severity levels (Table 3). This matrix offers a scoring system that is derived by multiplying each risk's probability by the seriousness of the outcomes that would follow if it materialized. Severity levels indicate how serious an event is, whereas probability levels establish how frequently an event occurs (Başar & Ceylan, 2020).

Table 3 Risk Scores (Özkılıç, 2005)

PROBABILITY	SEVERITY				
X	**1 (Very minor)**	**2 (Minor)**	**3 (Medium)**	**4 (High)**	**5 (Very high)**
1 (Very low)	1 (Insignificant)	2 (Minor)	3 (Minor)	4 (Minor)	5 (Minor)
2 (Low)	2 (Minor)	4 (Minor)	6 (Minor)	8 (Medium)	10 (Medium)
3 (Probable)	3 (Minor)	6 (Minor)	9 (Medium)	12 (Medium)	15 (Major)
4 (Frequent)	4 (Minor)	8 (Medium)	12 (Medium)	16 (Major)	20 (Major)
5 (Very frequent)	5 (Minor)	10 (Medium)	15 (Major)	20 (Major)	25 (Disaster)

While lower scores (such as 4–8) suggest that current risks are manageable, higher scores (such as 16 or above) indicate serious risks that call for immediate action. In this case, risk scores allow for a proactive approach to potential risks in addition to evaluating the current situation.

2.5. Risk Acceptability Values

A crucial criterion that establishes the type of precautions to be taken in accordance with specific risk levels is risk acceptability values (Table 4). These values unambiguously show which risks, in terms of the structures' safety, are acceptable at the degree of tolerance and which ones call for immediate action (Özkılıç, 2005).

Table 4 Acceptability Values of Results (Özkılıç, 2005)

RISK LEVEL	DESCRIPTION
Intolerable (25 point)	Until the designated risk is removed, the action must be halted; if the risk score does not drop, the activity must be blocked.
Greater Risks (16-20 point)	Until the risk has decreased, action must not be taken; instead, risk-related actions must be taken and continued based on their outcomes.
Medium Risks (8-12 point)	To lessen the risks that have been identified, action must be taken.
Small Tolerable Risks (1-6 point)	It may not be necessary to implement additional control procedures; it is crucial to preserve current controls.

This table effectively delineates which risks are deemed acceptable and when immediate action is warranted. The study comprehensively assesses the risks at the Hasan Pasha Inn using the 5x5 L-type matrix method and offers recommendations for enhancing safety.

3. Research Findings

This section will go into detail about the risk factors and how they affect the Hasan Pasha Inn. Findings about the risks surrounding the Inn and their potential consequences are shown below.

3.1. Immediate Surroundings

Hasan Pasha Inn has a strategic location in the historical Sur district of Diyarbakır province. Jewelers' Bazaar is in the south and east of the Inn, Süleyman Nazif Street is in the north, and Gazi Street is in the west (Table 5). Due to its central location, the Inn has three entrances: The main entrance is on Gazi Street (Visual 1 and 3), the other two are in the Jewelers' Bazaar. Located in the heart of the lively market area in the historic Sur district, the Inn's surroundings are always lively and lively. Since Gazi Street is one of the main roads leading to Sur, traffic density is high (Visual 2).

Table 5 Hasan Pasha Inn's Immediate Surroundings

Visual 1 Photograph: Google, 2024

Visual 2 Photograph: Barış, 2024

Visual 3 Photograph: Barış, 2024

Due to the high density of both people and cars, the area surrounding the Hasan Pasha Inn is potentially hazardous. Crossing Gazi Street presents a serious risk, particularly for users wishing to get to the Inn's entrance. During this transition, the car accident risk score was evaluated as 15 (Table 6). Because of this high-risk score, immediate action is required. To improve crossing safety, it is advised that pedestrian crossings be equipped with both visual and auditory signals.

Another risk that jeopardizes user circulation is the store stands surrounding the Inn. Despite the possibility of accidents due to the presence of these stands, the risk score of 6 is still lower (Table 6). However, by taking these stands down, the risk can be avoided.

Table 6 Immediate Surrounding Risks

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Getting to the Hasan Pasha Inn	Crossing Gazi Street	Visitors Employees Business owners	Risk of car accidents	15	Controlled pedestrian crossing
2	Arriving at the Inn and circling it	Store stands on sidewalks	Visitors Employees Business owners	Risk of hitting stands	6	Shop stands must be removed
3	Arriving at the Inn and circling it	Uneven and broken sidewalks	Visitors Employees Business owners	Risk of tripping or falling	9	Sidewalks must be repaired

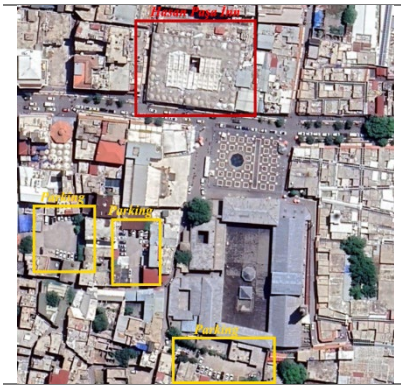
Uneven and broken sidewalks are a major concern. They don't just pose a risk to people staying at the Inn but also to anyone walking nearby. The cracked pavement and poorly placed lighting make it easy for someone to trip and fall. To prevent these kinds of accidents, the local municipality needs to step in and take care of the repairs and maintenance.

The problems outlined not only heighten the risk of accidents but also hinder the accessibility of the Inn. Issues such as unmarked pedestrian crossings, the absence of ramps, and narrow walkways pose significant obstacles for individuals with limited mobility. However, with some straightforward improvements, Hasan Pasha Inn could become more inclusive, benefiting not only people with special needs but all visitors. Implementing these changes would allow a broader range of people to experience and enjoy the space. Establishing a well-designed risk management strategy is essential for preserving the historical integrity of the Inn while making it accessible to everyone.

3.2. Parking Areas

The Hasan Pasha Inn does not have a direct parking lot (Table 7). Parking around the Inn is nearly impossible due to the Jewelers' Bazaar's congested streets and narrow streets. The nearest parking lots to the Hasan Pasha Inn are 150–200 meters away, as shown in Visual 4. Even though there are private company parking lots close by (Visuals 5 and 6), access to these areas is made possible by the narrow streets. Due to this circumstance, drivers must cross unpaved and uneven roads to get to Gazi Street after parking.

Table 7 The Connection Between the Parking Areas and the Hasan Pasha Inn



Visual 4 Photograph: Barış, 2024

Visual 5 Photograph: Barış, 2024

Visual 6 Photograph: Barış, 2024

Every user is seriously at risk due to the scarcity of parking spots near the Hasan Pasha Inn. When crossing Gazi Street to get to the Inn, drivers searching for a private parking spot may divert their focus from the road and pedestrians, which could result in accidents. Installing big, illuminated parking lot signs is advised to help avoid these kinds of mishaps. Drivers can reduce the risk and find parking spaces more easily in this way. Additionally, drivers must cross Gazi Street to access the Inn after parking. Pedestrians could be struck by cars during this transitional phase. This risk must be removed as soon as possible because of its high-risk score (15), (Table 8). This risk can be considerably decreased by establishing controlled pedestrian crossings.

Table 8 Risks of Parking Areas

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Access by car	Driving and finding a parking space	Visitors Employees Business owners	Risk of car accidents	15	Signs indicating private parking spaces
2	Access by car	Crossing Gazi Street	Visitors Employees Business owners	Risk of car accidents	15	Controlled pedestrian crossing

Another significant factor affecting the Inn's accessibility is the lack of parking. There are various barriers to accessibility, especially for vulnerable groups such as the elderly, people with disabilities,

and families with young children. The additional measures proposed aim to make Hasan Pasha Inn accessible to all. These steps will not only ease the use of the Inn but also reduce safety risks. As a result, both residents and tourists will have a safer and more convenient experience.

3.3. Entrances

The Hasan Pasha Inn features three main entrances. The most prominent entrance is situated on the west side of Gazi Street (Visual 8). Access to the Jewelers Bazaar is available through two entrances on the east and south sides. The east side gate, with its shop stands, is relatively small (Visual 7). In contrast, the south side entrance provides a larger space and a more gradual approach (Visual 9). The courtyard's ground level is lower than the entrances, and all these entrances lead to it. As a result, each entrance is equipped with stairs. However, the absence of ramps presents significant accessibility issues (Table 9).

Table 9 Entrances of the Hasan Pasha Inn

Visual 7 Photograph: Barış, 2024

Visual 8 Photograph: Barış, 2024

Visual 9 Photograph: Barış, 2024

The entrances of the Hasan Pasha Inn present several hazards (Table 10). The absence of ramps is a significant barrier, especially for underprivileged populations such as the elderly, disabled individuals, and families with infants. These individuals are unable to access the Inn due to the lack of accessible entrances. The stairs pose a high risk of falling, slipping, and tipping. To address this issue, an immediate solution would be to add a ramp to at least one entrance without compromising the historical structure's texture and aesthetics (Table 10).

When the basalt stones deteriorate and become wet, the absence of non-slip tape on the stairs increases the likelihood of slips. Applying non-slip tape to the stairs is a practical way to mitigate this risk. Additionally, the lack of railings at the entrances raises the possibility of falls and endangers all users. Therefore, designing and installing railings is necessary (Table 10).

Table 10 Entrance Risks

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Entrance to the Inn	Lack of ramp	Visitors Employees Business owners	Wheelchairs and strollers tipping over	12	A ramp must be constructed.
2	Entrance to the Inn	Lack of non-slip materials on stairs	Visitors Employees Business owners	Slip and fall	16	There must be non-slip material on the stairs
3	Entrance to the Inn	Stands narrowing the entrance	Visitors Employees Business owners	Tripping and falling	6	Stands at entrances must be removed
4	Entrance to the Inn	Lack of railings	Visitors Employees Business owners	Loss of grip and falling	9	Railings must be installed

The existence of commercial stands at the entrances poses a significant risk as well. These stands make the entrance area smaller and increase the risk of tripping and incidents. To avoid such hazards, the stands at the entrances must be taken down.

3.4. Gates and Windows

For the Hasan Pasha Inn to be both functional and aesthetically pleasing, the gates and windows are crucial components (Table 11). The windows are essential for natural lighting and ventilation, even though the gates offer horizontal circulation. These openings require routine upkeep and repairs because the building is historic (Visual 11). As seen in visual 10 and visual 12, elements of the Hasan Pasha Inn such as windows and doors also need maintenance.

Table 11 Gates and Windows of the Hasan Pasha Inn

Visual 10 Photograph: Barış, 2024

Visual 11 Photograph: Barış, 2024

Visual 12 Photograph: Gokcel, 2023

Gates and windows carry certain risks for users, even though their risk scores are typically low (Table 12). Primarily, it is essential to regularly inspect and maintain old iron gates. Regular maintenance is crucial because the gate may fall or cause serious injuries if not properly maintained.

The probability of visitors hitting their heads is increased by the low height of store gates. It is advised that warning signs be hung on the gate to avoid this circumstance. Similarly, the windows on the first floor are situated close to the ground, which increases the likelihood of accidental collisions. Therefore, it would be advisable to place warning signs along the edges of the Windows.

Table 12 Risk of Gates and Windows

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Entrance to the Inn	Historical iron gate	Visitors Employees Business owners	Risk of gate falling	10	Regular maintenance of the historical gate
2	Use in commercial stores	Store gate	Visitors Employees Business owners	Bumping your head when walking through a gate	9	Warning sign indicating that the gate height is low
3	Use in commercial stores	Store window	Visitors Employees Business owners	Bumping to a window	9	Warning sign indicating that the window height is low
4	Use in commercial stores	Store gate	Visitors Employees Business owners	Tripping over steps in gateways	6	Steps on gate thresholds must be removed

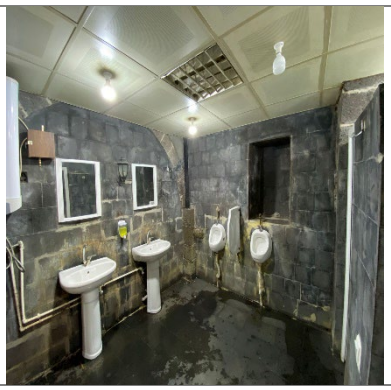
Steps on gate thresholds pose a danger, especially for people with limited mobility. There is a risk of users tripping over these steps and falling. Therefore, eliminating the steps on gate thresholds will improve accessibility while also guaranteeing general safety.

3.5. Toilets

The Hasan Pasha Inn needs accessible toilets. Currently, the toilets are only situated in the basement, accessible only by stairs (Visual 13 and 15). This poses a significant challenge for people with disabilities and limits the overall usability of the Inn. The toilet facilities at the Hasan Pasha Inn are insufficient, with only two toilets for each gender (Visual 14). Moreover, there is no provision for disabled individuals, and the only access is via stairs, posing a challenge for these groups (Table 13).

Table 13 Toilets of the Hasan Pasha Inn

Visual 13 Photograph: Barış, 2024



Visual 14 Photograph: Barış, 2024

Visual 15 Photograph: Barış, 2024

Access to the toilets is solely by stairs, increasing the risk of slipping and falling. Additionally, the absence of non-slip tape on the stairs exacerbates this risk (Table 14). To address this concern, it is recommended to install non-slip tapes and add railings to the stairs, effectively reducing the risk of accidents and injuries (Table 14).

Table 14 Risks of Toilets

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Access to toilets	Having only stairs	Visitors Employees Business owners	Falling and slipping	12	Elevator for the disabled and non-slip tapes must be used.
2	Use to toilets	Flooding	Visitors Employees Business owners	Falling and slipping	6	Regular maintenance and inspections must be performed on the installation.

The risk of toilet flooding is a significant concern. Without regular inspections, blockages and flooding may occur, leading to an increased risk of slips and falls. To mitigate these risks, it is essential to regularly inspect toilet installations and perform necessary maintenance. Access to toilets presents significant challenges for underprivileged groups, particularly those with disabilities. To ensure easy toilet access for disabled individuals, the installation of an elevator must be considered. This will guarantee that everyone, regardless of ability, can use the toilets at the Hasan Pasha Inn and meet their needs.

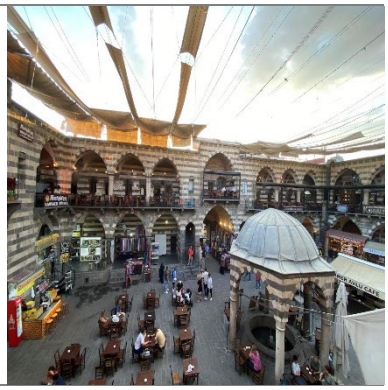
3.6. Horizontal and Vertical Circulation

Buildings need to have both horizontal and vertical circulation to allow people to move around space easily. Since Hasan Pasha Inn has a 3-storey structure including the basement, it should be examined in terms of both vertical and horizontal circulation (Visual 18). Vertical circulation in Hasan Pasha Inn is provided by stairs, as seen in visual 16 and 17, but there is no elevator (Table 15). The effectiveness of the circulation system at the Hasan Pasha Inn is crucial for ensuring safety and meeting the needs of all user groups. The following section identifies the potential risks that could arise during circulation.

Table 15 Horizontal and Vertical Circulation Visuals of the Hasan Pasha Inn

Visual 16 Photograph: Barış, 2024

Visual 17 Photograph: Barış, 2024



Visual 18 Photograph: Barış, 2024

There are several risks for visitors at the Hasan Pasha Inn (Table 16). Because of the height variations on the steps, the vertical circulation stairs could pose significant risks. In the event of negligence, these variations may have lethal results. Therefore, posting warning signs on the stairs must raise awareness. An additional risk is also presented by the stairs' railings and the absence of non-slip tape. The installation of non-slip tapes and the installation of any missing railings are crucial steps in preventing these circumstances.

Table 16 Horizontal and Vertical Circulation Risks

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Circulation of the Inn	Differences in stair step height	Visitors Employees Business owners	Risk of falling, slipping and injury	16	There must be warning signs and railings.
2	Circulation of the Inn	Lack of elevator	Visitors Employees Business owners	Risk of injury to disabled, children and elderly people when climbing up to the floors	16	To preserve the historic architecture, the elevator must be added from the outside.
3	Circulation of the Inn	Level differences on the ground	Visitors Employees Business owners	Risk of falling, slipping and injury	6	There must be warning signs
4	Circulation of the Inn	Insufficient safeguarding on the arcaded floor	Visitors Employees Business owners	Risk of falling	10	There must be protective equipment and warning signs
5	Circulation of the Inn	Level difference between ground floor stores	Visitors Employees Business owners	Risk of falling, slipping and injury	16	There must be railings and non-slip tape
6	Circulation of the Inn	Lack of non-slip tapes on the stairs	Visitors Employees Business owners	Risk of falling, slipping and injury	16	There must be non-slip tapes

There is also a probability of falling due to the ground floor's elevation variations. Warning signs can help lower this risk. Because the ground-floor commercial shops in the courtyard area must be accessed by stairs due to their height, there is a risk of falls. This risk can be reduced by installing railings and raising awareness with warning signs. Safety nets must be installed because the iron railings on the arcaded floor might not be enough. For safety, railings must be maintained on a regular basis.

The lack of an elevator is a significant disadvantage for groups with access issues, even though it does not endanger visitors. Children, the elderly, and people with disabilities can more easily and safely access the upper floors thanks to the addition of an elevator. As a result, the Hasan Pasha Inn becomes a welcoming and secure location for everyone.

3.7. Alarms and Installations

A building's safety of use is greatly influenced by its architectural design as well as the efficiency of its safety measures and installation systems (Table 17). For the comfort and safety of the users, the alarms and installations in Hasan Pasha Inn, seen in visuals 19, 20 and 21, were meticulously examined.

Table 17 Alarm and Installation Visuals of the Hasan Pasha Inn

Visual 19 Photograph: Barış, 2024

Visual 20 Photograph: Barış, 2024

Visual 21 Photograph: Barış, 2024

The Hasan Pasha Inn poses several risks for its occupants. The most significant of these hazards is the absence of a fire alarm system, as indicated in Table 18. If a fire goes undetected, it could result in fatal injuries. Therefore, installing a fire alarm system is essential to prevent a potential disaster. Additionally, there is a significant risk associated with exposed electrical installations, also noted in Table 18. Leaving electrical cables uncovered poses the risk of electric shock. These installations must be regularly inspected and securely covered.

Table 18 Alarm and Installation Risks

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Usage and circulation of the Inn	Lack of fire alarm	Visitors Employees Business owners	Risk of failing to detect the fire	10	Fire alarm must be installed
2	Usage and circulation of the Inn	Open electrical installations	Visitors Employees Business owners	Risk of electric shock	8	Exposed electrical cables must be removed
3	Usage and circulation of the Inn	Gas chimney passing through the courtyard	Visitors Employees Business owners	Risk of gas leakage	6	Gas chimney maintenance and control must be done.
4	Usage and circulation of the Inn	Insufficient lighting	Visitors Employees Business owners	Risk of falling and bumping	10	Lighting equipment must be more
5	Usage and circulation of the Inn	Lighting equipment	Visitors Employees Business owners	Risk of lighting equipment's falling	6	Lighting equipment must be checked and maintained.

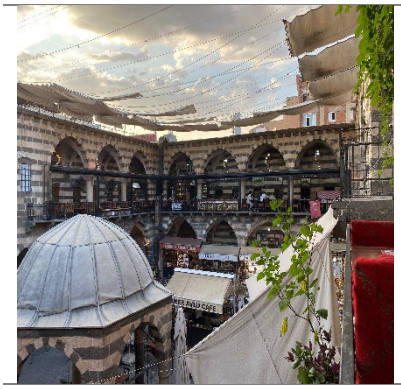
Users, particularly those walking in dark areas, run the risk of falling and bumping by inadequate lighting. To improve night lighting, it is advised to use strong lighting equipment like projectors. In addition to improving safety, this will make it possible for people to use the area more securely and comfortably. Another significant risk factor is the gas chimney that runs through the courtyard. The potential for gas leaks can result in dangerous accidents. Gas chimneys must be regularly maintained and inspected to reduce this risk.

The Hasan Pasha Inn has a lot of lighting equipment for illumination and decoration. Every six months, these pieces of equipment must be inspected to make sure they don't fall and pose a risk. As a result, the condition of the alarms and installations directly affects the Hasan Pasha Inn's safety. The measures to be taken will support the facility's overall operation in addition to improving user safety. As a result, everyone will have access to a secure environment.

3.8. Signboards and Signs

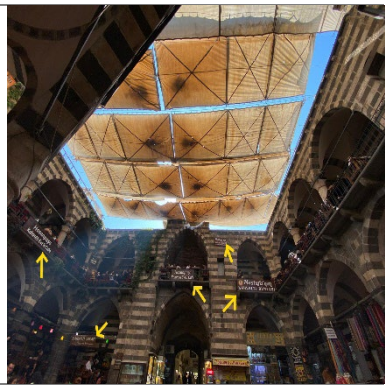
The interior and exterior of Hasan Pasha Inn hosts various commercial enterprises. For this reason, there are signs seen in visuals 22 and 24 to guide and inform users. However, there are some risks arising from the shortcomings of the current system. There are also awning and tension shading systems to protect the Inn from the noon sun (Visual 23). All these systems and signs pose a risk to users (Table 20).

Table 19 Signboards and Sign Visuals of the Hasan Pasha Inn



Visual 22 Photograph: Barış, 2024

Visual 23 Photograph: Barış, 2024



Visual 24 Photograph: Barış, 2024

The Both inside and outside, the Hasan Pasha Inn is home to a variety of commercial enterprises. Thus, to direct and instruct users, an efficient signage system is required. However, there are several risks associated with the current system's shortcomings (Table 20).

Table 20 Risks of Signboards and Signs

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Usage and circulation of the Inn	Awnings	Visitors Employees Business owners	Risk of awning collapse	10	Awnings must be inspected and maintained.
2	Usage and circulation of the Inn	Signs	Visitors Employees Business owners	Risk of signboard falling	12	Signs must be checked and maintained.
3	Usage and circulation of the Inn	Tension shading system	Visitors Employees Business owners	Tension shading system collapse risk	10	Tension shading system must be controlled and maintained.
4	Usage and circulation of the Inn	Lack of signs and directions	Visitors Employees Business owners	Risk of falling, slipping and injury	10	Signs and directions must be added

Awning and tension shading systems are useful for sun protection, but they also pose the risk of collapsing or being blown away. Regular maintenance and inspections are necessary for these systems to prevent potential injuries. Similarly, the signs in the Inn also carry the risk of falling. Injuries could result from improper placement or maintenance of the signs. These incidents can be avoided by conducting thorough inspections of hazardous areas and examining the signs. Additionally, the absence of signs and instructions could pose significant risks. It is essential to install clear signs and directions to facilitate quick identification of potential hazards and emergencies, minimizing the risk of users getting confused or taking the wrong route.

That is why it is crucial for safety reasons that the Hasan Pasha Inn's direction and signage systems be strengthened. These steps will improve the venue's overall safety while also improving the user experience.

3.9. Tactile Walking Surface Indicators (Twsis)

For visually impaired people, Tactile Walking Surface Indicators are crucial to ensuring their mobility in the area. These signs make it easier for people with visual impairments to navigate their environment and get to the places they need. However, the Hasan Pasha Inn's lack of these markings creates a significant challenge for those who are visually impaired (Table 21).

Table 21 Risk of Tactile Walking Surface Indicators

Nr	ACTION	DANGER	AFFECTED GROUPS	RISK	RISK SCORE	MEASUREMENT
1	Usage and circulation of the Inn	Lack of Tactile Walking Surface İndicators	Visitors Employees Business owners	Risk of falling, slipping and injury for visually impaired citizens	20	Tactile Walking Surface İndicators must be installed

The absence of Tactile Walking Surface Indicators at the Hasan Pasha Inn poses a significant danger to visually impaired individuals. This increases the risk of slipping, falling, and injury, and makes it nearly impossible for visually impaired individuals to navigate the space. The risk score has been determined to be 20, categorizing the situation as a "major risk". Therefore, it is crucial to take action to reduce this risk as soon as possible.

The installation of Tactile Walking Surface Indicators will not only enhance safety but also significantly improve the accessibility of the Inn. These markings will assist visually impaired individuals in navigating the space independently, making the Hasan Pasha Inn a more inclusive and accessible place for everyone. It is crucial that these markings are designed and placed according to specific standards. Tactile Walking Surface Indicators must be placed prominently on the floor and designed with consideration for factors such as friction, ensuring safe movement for visually impaired individuals.

4. Conclusion and Recommendations

This study provides a comprehensive evaluation of the risk analysis and accessibility of the historic Hasan Pasha Inn in Diyarbakır's Sur district. Utilizing the 5x5 L matrix risk analysis method, the study identifies current risks and proposes measures to mitigate their impact. It encompasses an assessment of the Inn's current risks, strategies to minimize their effects, compliance with accessibility guidelines, and efforts to ensure the building's accessibility to all.

4.1. Current Risks and Preventive Measures

What are the current risks of the Hasan Pasha Inn?

The structure's primary risks are significant components that have a direct impact on user safety. Among these dangers are:

- Stands at the entrance: This restricts people's movement in crowded areas, increasing the risk of accidents and falls.
- Slippery stairs: These can cause accidents, especially during wet conditions, due to the increased likelihood of slipping.
- Inadequate lighting: Dark areas make it difficult for people to navigate the space safely, particularly in the evening.
- Exposed electrical installations: Exposed cables pose a risk of electric shock in case of an emergency.

- Lack of directional signs: This makes it challenging for people to find their way during an emergency, leading to disorientation.

What preventive measures can be put in place to lessen the effects of these risks?

The recommended preventive measures can be listed as follows to both increase safety and improve user experience:

- Entrance arrangements: To minimize the risk of falling and injury, it's advisable to remove the stands at the entrance, expand the area, and apply non-slip tape to the stairs. Regular maintenance of the entrance gate is also important for safe use.
- Lighting improvements: Enhancing the lighting systems in the interior and exterior areas of the structure, and adding powerful lighting equipment, especially in dark areas, will enhance safety during nighttime use.
- Electrical safety: Safely covering or placing exposed electrical cables underground will significantly reduce the risk of electric shock.
- Directional signs: Adding missing signs and directions will make it easier for users to find their way and reduce possible risks of falling and hitting. It is also crucial to design special signs for disabled individuals.
- Toilet access: Installing portable disabled elevators for access to toilets and applying non-slip tape to the stairs will ensure that all individuals have access to these areas. This will enable disabled individuals to use toilets independently.

The impact of current risks will be greatly diminished by the methodical application of these measures.

4.2. Compliance with Accessibility Guidelines

What risks does the Hasan Pasha Inn currently face, and what precautions can be put in place to lessen their impact?

There are serious accessibility issues with the structure in question. Accessibility issues for people with disabilities are caused by narrow passageways and slippery stairs. This needs to be corrected because it does not adhere to the accessibility guide's requirements.

What opportunities does this structure offer for accessibility for all people?

In addition to people with physical disabilities, the structure creates access challenges for underprivileged populations like the elderly, young children, and expectant mothers. These groups find it challenging to use the space comfortably due to narrow passageways and slick floors, which lessens the possibility that the building will be a location that is accessible to all.

4.3. Accessibility Potential

Is it possible to remove the existing risks at the Hasan Pasha Inn and make the structure accessible to all?

It is feasible to make the structure accessible to everyone by removing the risks. The structure will be safer and more user-friendly if the accessibility issues are resolved with the solutions. Accessibility will significantly improve with the implementation of the following components in particular:

- Ramps and railings: People with limited mobility will find it easier to access areas on the ground floor and stairs if ramps and railings are installed. Particularly for the elderly and disabled, this is an urgent need.
- Installing an elevator: This will greatly improve access between floors without causing any damage to the historic building. The elevator will be very convenient, especially for older people and those with disabilities.

- Education and awareness: Setting up accessibility awareness training for users and business owners will help create a more considerate stance on this matter. Both staff and guests' behaviors will be influenced by the training to make the building more accessible.

As a result, this historic building may become accessible to all if the hazards at the Hasan Pasha Inn are decreased, and the required upgrades are completed. All people will have a safe and accessible environment, and the structure's cultural and social functionality will be enhanced. The Hasan Pasha Inn will maintain its historical and cultural significance while becoming a location that is open to all. Both residents and tourists will benefit greatly from this process, and the building will be recognized as an excellent example of accessibility.

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Resume

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