

# Overlooking the Visibility of Mosques: From a Norm to a Harm on Developed Urbanism in Nablus City

\* B.Arch **Diana Enab**

*Department of Architectural Engineering, Faculty of Engineering and Information Technology, An-Najah National University, Nablus, Palestine*  
E-mail: [diana.enab@najah.edu](mailto:diana.enab@najah.edu)

## Abstract

Addressing issues of existing Islamic cities is paramount to the establishment of possible modern imprints of Islamic architecture. The visibility of mosques has been identified as a dilemma in the context of Nablus City, where topography raises the urban impacts of vertical growth on space perception. This paper aims to investigate the transition of visibility from historic mosques in the old city and aims to measure the visibility of contemporary mosques in existing urbanism. Computational tools like DecodingSpaces and Ladybug plugins are used to operate Isovist and View Percentage analysis of the context of investigated mosques. Findings showed that the horizontal distances, the lengths and heights of buildings' façade, and the topography, altered the values of mosques visibility. The results of the study bring insights and suggest recommendations to the practice of urban planners, designers, and contributors to the planning of contemporary Islamic architecture.

**Keywords:** Visibility, Context, Urban Development, Islamic Architecture, Historic & Contemporary Mosques.

## 1. Introduction

The topic of contemporary Islamic architecture has been part of many academic, theoretical, and practical discourses, both on a local and global scale. The lack of a continuous contribution to the architecture of Islam and Muslims and the dilemma of identification of Islamic architecture have been identified in the literature, evidently in two spectrums. One side classified Islamic architecture as 'frozen-in-time', repeated architecture, restricted to specific architectural typologies and symbolised elements (Awawda, 2014), and the other side called it similar architecture, being irresponsive to the social and cultural diversities of Islamic countries (Rabbat, 2012). Thus, specialised organisations and experts are researching interventions to bring possibilities and rationales to modern imprints of Islamic architecture in the form of reviving cultural-Islamic elements (Abu Zer & Reyhan, 2023) and in the form of reviving Islamic principles (Ali et al., 2021).

Those interventions are valuable to the existing issue of undermining the value of historic Islamic architecture in contemporary times, eventually affecting the making of modern and future Islamic architecture. Cities, including Islamic cities, are growing fast with large-scale vertical and horizontal schemes, irrespective of mosques - the most pivotal Islamic building typology. In this research, the lack of value of Islamic architecture is not referred to as weak conservation or complete deterioration of the architecture; instead, it is the weak preservation of the urban measures of historic Islamic architecture. Among these measures, this paper aims to stress Visibility, an urban measure that is highly substantial in defining architectural landmarks (Lynch, 1960, Amen & Kuzovic, 2018; Amen & Nia, 2021; Abdulla & Abdelmonem, 2023; Afolabi & Adedire, 2023; Aziz Amen, 2017; Aziz Amen & Nia, 2018; Ho et al., 2023).

This paper tests the ties of mosque visibility to its value by answering how the norm of historic mosque visibility changed to harm the developed urbanism of Islamic cities. The investigation takes the city of Nablus as a case study since its topographic context challenges visibility to a considerable extent. Answering the paper's question leads to a better understanding of the evolution of this urban attribute, its impact on context, and its significance as an indicator of how spaces are practised and perceived.

The paper uses qualitative and quantitative methods to satisfy the two sides of the study: Norm, and Harm. The investigation of the norm of neglecting mosques' visibility relies on literature to collect data and analyse the visibility of a historic mosque, where the context embraced the mosque. Investigating the harm of neglecting mosques' visibility relies on observations, semi-structured interviews, and computational tools that mathematically measure the changes in visibility according to context location and closeness and generate view percentage studies. Harm on historical and contemporary mosques is investigated and compared.

Visibility is envisioned as an added layer for contemporary planning and an opportunity for responsive architectural expressions that get Islamic cities to the core of adequate contribution to Islam. Therefore, the study's results may provide practical and theoretical insights to influence urban planners and designers.

The paper is organised into four parts. The first section introduces the paper's background, argument, objectives, and expected contribution to urbanism and architectural studies. The second section discusses cases of the role of contemporary urban development in the visibility of historic Islamic architecture. Section 3 gives an overview

of the methods used and their objectives. Section 4 introduces the case study in which the investigation takes place. Section 5 discusses the results of the background of selected historical and contemporary mosques, their urban contextual development, their urban characteristics, and visibility to and from the mosque. Section 6 discusses the results of visibility, and section 7 concludes with main insights about the harm of mosques and suggests recommendations for better contribution to Islamic architecture.

## **2. Impact of contemporary urban development on the visibility of historic Islamic architecture**

Starting from the first most iconic building in Islam, 'Al Kaaba', a sacred place that has always had significance, the continuation of the 'Fareedat El-Hajj' might lead one to assume that the context is purely religious and spiritual until one finds out that it is currently under a certain dilemma.

In his book 'From Mecca to Las Vegas and Vice Versa: Critical Reflections in Architecture and Sacredness', Dr. Ali Abdul Raouf delves into the role of globalization and contemporary urban development in encroaching upon the sanctity of the Kaaba and the concept of 'holy architecture'. He laments the inadequate architectural typology of commercial projects and the overpowering architectural language of urban development, which, he argues, dilute the sacred, unified, and humble experience of visiting the Kaaba (A.Alraouf, 2012).

The misplaced and contradictory architecture of these developments leads to a series of contradictions, both socially and spiritually. While Muslims cross countries to get closer to Allah, visit his sacred place, and lift their heads to deliver Duaa, their sights soon drift to Makkah Clock Tower, which sits as a visual barrier to the sky. While Muslims celebrate their slow approach to the Kaaba during 'Tawaf' to touch its surface, the concern shifts to the rush of accessing one of the highest tower floors to see the Kaaba from the top rather than from the ground. While the Kaaba is the place where all Muslims gather equally, these development projects are a privilege that not every Muslim can afford. While the Kaaba used to be the dominant object in defining Mecca, as it has always been depicted, the towers stand as giant landmarks that became equally important to the context.

Another example of questioning the visibility of Islamic architecture is the Galataport waterfront development project located in the Karaköy district of Tophane, one of the most essential neighbourhoods in Istanbul. The Galataport project has been considered one of the tourist attractions since its completion in 2021; it hosts a mega cruise port and various shopping and entertainment facilities. The modern port and urban transformation project includes many hi-tech techniques and modern strategies, such as rich integrated lighting and an underground terminal with a unique cover system (Galataport, Istanbul • Helvar, n.d.).

Despite its significance, the commercial investments in the area created an urban, social, and cultural threat to the context of Islamic architecture behind the large-scale development project. The Nusratiya mosque, together with the surrounding traditional city prospect and the historical monuments, are now marginalized by the new context imposed by the project (Debold-kritter, 2006). The aesthetics of those architectural heritages experience visual pollution along with disturbances of historical harmony. The height of the established developments covers a huge portion of the large-scale mosque, which only keeps the dome and the minarets visible from the opposing Bosphorus strait. The mosque, as a result, has lost its visual connection to the coast. This associates a disregard for the mosque's value and history, both in the context of visibility from and to the mosque.

More studies brought up the impact of the Galataport project on the visitability of the cultural area. The establishment of the cultural area needed more infrastructure to host many visitors. Thus, the development project pushes the capacity more prominent than the context initially prepared for (Sevgi, 2013). Also, the placement of the project limits the ventilation and exposure to sunlight of the Nusratiya mosque, which certainly affects its preservation (Sevgi, 2013). Moreover, the project gained criticism for its impact on society. Although the project gained local and international recognition and media exposure, it is argued that these urban enhancements and privileges offer services for specific categories of financially lucky people, thus gentrifying society (Aydemir et al., 2015). This impacts the visitability to the mosque.

## **3. Material and Methods**

The paper relies on qualitative and quantitative resources to investigate the local historical and contemporary mosques of Nablus, Palestine, as shown in Figure 1. The paper selects Al-Nasr mosque as a historic mosque and the Kawthar Badran mosque as a contemporary mosque for the study. Data collection about the two cases is illustrated in resources of maps, drawings, images, and graphs gathered by two methods. First is the previous literature about the mosques, the historical framework of the old cities, and the contemporary city's planning. Second, site observations and interviews with shop owners beside the mosques. Two visits were conducted to the mosques during the daytime, which aimed at observing the formal and informal usage of urban space around the mosques and existing urban features around the mosques, the documented and the undocumented views of the mosques, and the harmony of mosques to their context.

Computational tools were used to scientifically measure the impact of the surrounding context on mosque visibility. Building spaces and forms observed from a specific location integrated into Isovist analysis. The analysis constructs a quantitative link between space visibility, perception, and usage (Ostwald & Dawes, 2018). Isovist is found as a tool in the DeCodingSpaces plug-in in Grasshopper. View percentage analysis is generated through the Ladybug plug-in in Grasshopper.

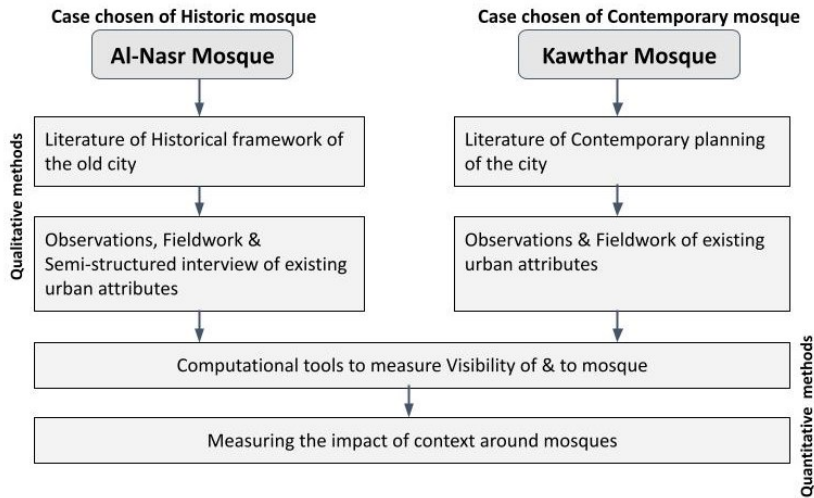


Figure 1. Methods used in the study (Developed by author).

#### 4. Case Study: Nablus mosques between old and new contexts

Nablus was originally a Canaanite city built by the Canaanite Arab tribes in 300 BC, particularly at the current location of Tell Balata (Assi, 2018). When the Romans occupied the city in 67 BC, they built the new city on the valley (now known as Old city) instead of its previous location (Kalbouna 1992; Al-Fanni 1999). Thus, Nablus followed the planning of architectural regulations and designs, as well as road networks of Roman cities. During the following Byzantine Period, Nablus was destroyed in 614 AD; however, it maintained its original Roman planning. Later events affected and deconstructed many of the city's buildings, such as the two earthquakes in 1153 and 1189, and the Period of Tatars in 1201. Many Byzantine churches in the Old City were converted to mosques during the Islamic Period. In 1260-1516, the Mamluk were concerned with constructing mosques surrounded by houses as a characteristic of the urban distribution. During the later successive periods of the Ottomans, the British Mandate, and the Jordanian Period, followed by the Israeli occupation, the city witnessed expansion beyond the borders of the Old City, mainly starting from the 1940s (Touqan et al., 2011). After 1945, the city of Nablus began to grow vertically up the slopes of Mounts Ebal and Gerizim. Construction continued vertically on the slopes of the mountains to the north and south during the Jordanian Period in 1950.

The eastward and westward expansion accelerated, especially after the 1947 disaster (Nakba), and resumed in 1963 when the structural/master plan for the city of Nablus expanded horizontally and started to include some villages and rural areas. After the PNA (Palestinian National Authority) was formed in 1994, the city experienced improved development and urbanization. Vertical expansions resumed due to the limited space available within the city's borders, and each building had many units or apartments (Touqan et al., 2011).

Those factors affected the urban development of the city and, therefore, the context in which contemporary mosques sit. None of the gradual formations of the city's growing border had neighbourhood planning, which is one of the reasons why the old town is different from how the contemporary fabric operates. The historical development of the Old City and its planning regulations formed a different context around old mosques.

## 5. Results

### 5.1 Local Historic Mosques

The Old City of Nablus is a reservoir of many splendid historic mosques. Ten historic mosques are remarked in the Old City's six quarters: Al-Gharb, Al-Qaryoun, Al-Aqaba, Al-Yasmineh, Al-Qaisariyya, and Al-Hableh Quarters, figure 2a. These blocks are divided by narrow, encircling streets. Despite the distinction between the quarters in terms of architectural features, civilizations, and communal differences, the urban fabric reflects the homogeneity and integrity of Nablus society. Mosques and other types of religious-use buildings reach a count of 22 buildings in the overall Old City (Touqan et al., 2011), which makes up 0.6 ratio per cent of the overall building type. Many of the mosques date back to different periods of history, as noted from the mosques' architectural forms and distinctive elements used. The mosques carry narratives associated with the historic conversion of their use, from being initially built for other religions to Islam (Arafat, 2012).

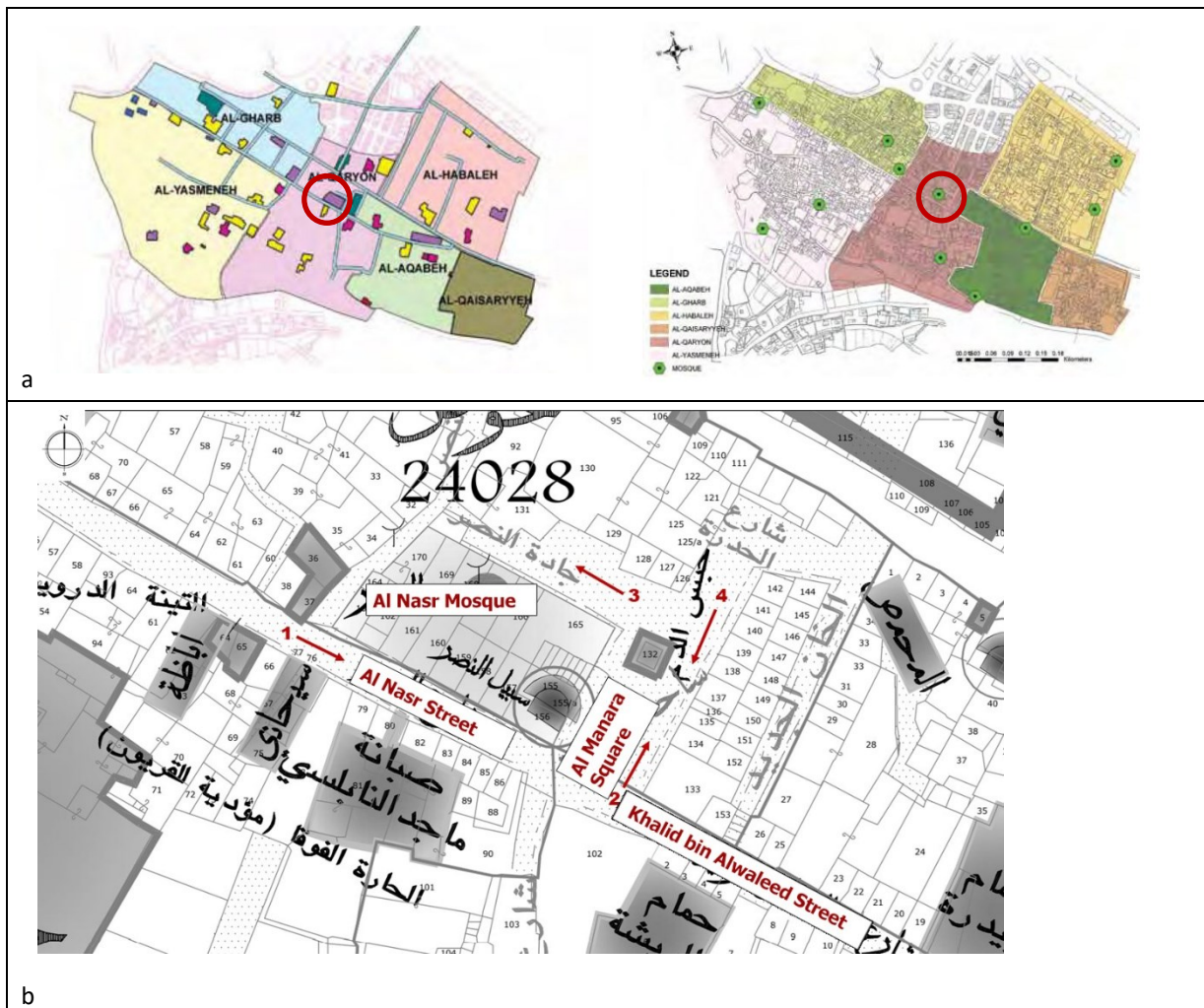
## 5.2 Al-Naser Mosque: Historic Mosque

### Background & Context

Al-Naser Mosque, or the so-called Jamie en Naser, is the most ancient mosque with a green dome in Nablus (Yousof, 1989). It is located in the centre of the Old City of Nablus, particularly in the Al-Qaryoun quarter, and surrounded by other mosques (Figure 2a). Initially, the mosque was a Byzantine Church from the second century. The church was converted to a mosque when the town was recaptured by Saladin for Islam in 1187. The mosque was rebuilt in 1935 by the Muslims' highest council after the majority of it was destroyed by an earthquake in 1927. Figure 3a shows the mosque after its completion.

Al-Naser mosque has always been a landmark, defining the Old City of Nablus in particular and the city of Nablus in general. Al-Nasr mosque has appeared in a series of publications aiming to narrate and document the major features of Islamic architecture in Nablus. Such is found in the book of 'Nablus. A City Tale', prepared by the Public and International Relations Division and supported by Nablus municipality, and in the locally and internationally recognized book of 'Nablus, city of Civilizations', written by the architect Naseer Arafat (Arafat, 2012).

The value of the mosque is not in the architectural output or the creation of the façade, but in the urban space it creates. The mosque is surrounded by active commercial streets from two sides, Figure 2b. The plaza beside Al-Nasr mosque (Figure 3b-3c) – also known as 'Bab al Saha' / 'Manara Square' / 'Saha of Al-Naser' – was a multiuse Roman Forum (Bishawi,1999). A Roman street was excavated and found at Al-Nasr Street, leading to Al-Nasr mosque and the plaza (Touqan et al., 2011). During the Ottoman period in the 1900s, the Ottoman Turkish government was building on the southern side of Al-Nasr mosque. The context around the mosque followed the subtle character of the dense Old City (Figure 3a). The dense urban fabric, minarets, domes, ahwash, and roofed streets contribute to the visual appearance of the Old City.



**Figure 2a.** (left) Al-Nasr mosque among the distribution of quarters in the old city. (right) Location of Al-Naser Mosque among the distribution of mosques in the old city. From: The Revitalization Plan of the Old City, map by Dr.Ali Abdel Hamid, copyright: Welfare Association, 2011.

**Figure 2b.** Map of the Old city. From municipality of Nablus.





**Figure 3a.** Image of the new mosque after completion, 1954, Jordanian Period. From Nablus City of Civilizations, by Naseer Arafat, 2012.

**Figure 3b.** Al-Nasr square, before the clock tower installation in the 1900s, From the article of ‘Bab Al Saha’ witness of Nablus Stories, ultra Palestine, 2018.

**Figure 3c.** Al-Nasr Mosque context before the new design in 1927. From the article of ‘Bab Al Saha’ witness of Nablus Stories, ultra Palestine, 2018.

**Figure 3d.** Al-Nasr Square before & after the Rehabilitation Project. Image collected during an interview with the architect Naseer Arafat, 2022, Unknown resource.

The urban value of the plaza extends to today's reality. The mosque's ground floor includes shops, elevating the users behaviour (Itma, 2023). The mosque has been included in many regenerations and urban improvement projects, such as the revitalization of Al-Nasr Square by the Welfare Association. The square converted from an open, informally-used area usually interfered with by vehicles to a more developed, furnished, open public place that replaces cars with people. Figure 3d shows the area before and after the completion of the project in 2019. Also, UnHabitat's Public space assessment of Nablus City labelled Al-Nasr Street as the fourth highest priority for improvement.

The contemporary significance of Nasr Square is proved in the local use of the area, formally and informally. The diversity of using the space imposes complexity that enlarges the dynamic and active use of the square across different times of the year and sometimes other times of the day (Zawawi & Itma, 2023). During the holy month of Ramadan, for instance, the square resumes being a centre of commercial activities in the daytime; on the other hand, it transforms into a much more liveable place at night. The square becomes an open-air prayer plaza, a stage

for Islamic performances, and sometimes a place for sharing suhoor and iftar. Unique lights and local decorations are added, thus transforming the square into a tool for locals to express their celebration and welcome of the holy month. At other times, those decorations get replaced with posters about martyrs, pieces from newspapers, and flags of specific political organizations. Such expands urban contexts' role as educational tools and culturally influencing methods for locals of multiple age groups.

### **Visibility of Mosque**

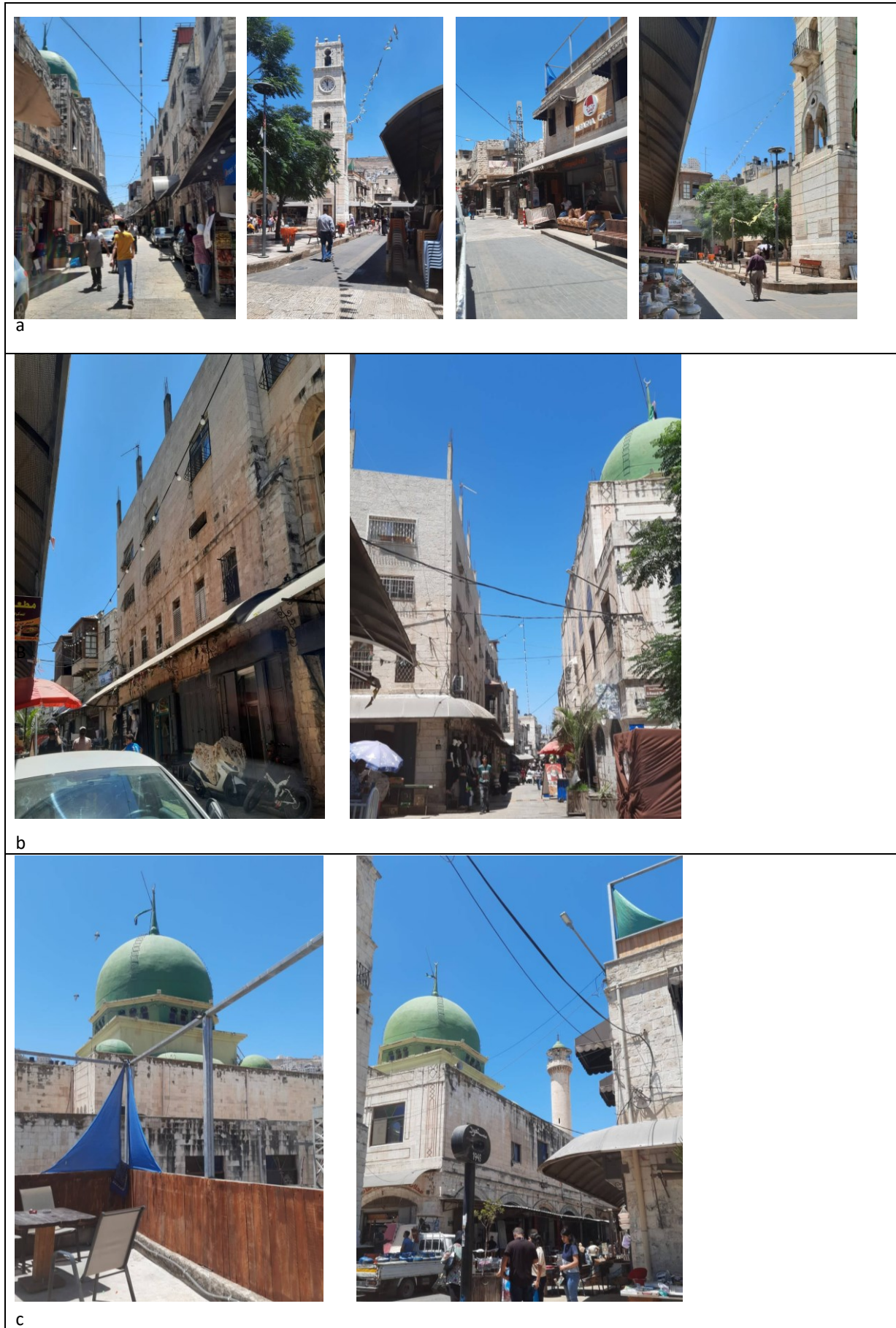
According to the fieldwork, the visibility of Al-Nasr mosque is strictly tied to its urban context. The plaza raises the activity around the mosque, creating diversity in the views around the mosque. When visiting the plaza and walking beside it, all that can be seen is the fabric of the old city. The visibility from the mosque to the city is shallow; barely a few views of the current fabric of the town are at the north (see Figure 4a, View 2). Buildings of the Old City are close and form one intricately built mass, which affects visibility from street levels.

The buildings surrounding Al-Nasr mosque provide an intriguing horizontal view of the mosque from their accessible rooftops. Generally, the buildings are similar to the overall context of the old city and are of average height to maintain neighbours' privacy and equal sizes. None of the buildings exceeded the dome's height; the mosque's minaret rose above them. Thus, the contemporary visibility of the mosque is controlled by the overall context of the Old City and the regulations ensuring it remains. While this hasn't been seen as a threat in the historical analysis of Al-Nasr mosque's urban development, observations have noted something significant in the contemporary context.

A building beside the mosque holds exposed construction columns that were suspicious in many aspects. They stand significantly in contrast to the other buildings and the construction methods that historically formed the area. The last two floors of the building are different in colour, texture, and opening type and size compared to the other floors. After asking neighbours and some owners of the shops at the ground level of the building, it was determined that the building owner added those two floors during the years 1990-1994 - before the establishment of the Palestinian National Authority. According to the municipality, those two floors and the roof are a violation; however, no action has been taken to remove the exposed columns. Those columns stand still as witnesses to the urban crime and a threat to a future vertical expansion that would transfer the horizontal visibility of the neighbours to the Al-Nasr Mosque, see Figure 4b. The building runs on the numbered parcels found in (Figure 2b), (84,85,86) located in the south.

From the north, a temporary steel structure is located on the rooftop of one of the buildings, which holds the shadings of a restaurant (see Figure 4c). The horizontal visibility of Al-Nasr mosque from the rooftop brought a view of the smaller domes of the mosque and a clearer view of the largest dome's base - views that cannot be seen from the street level.

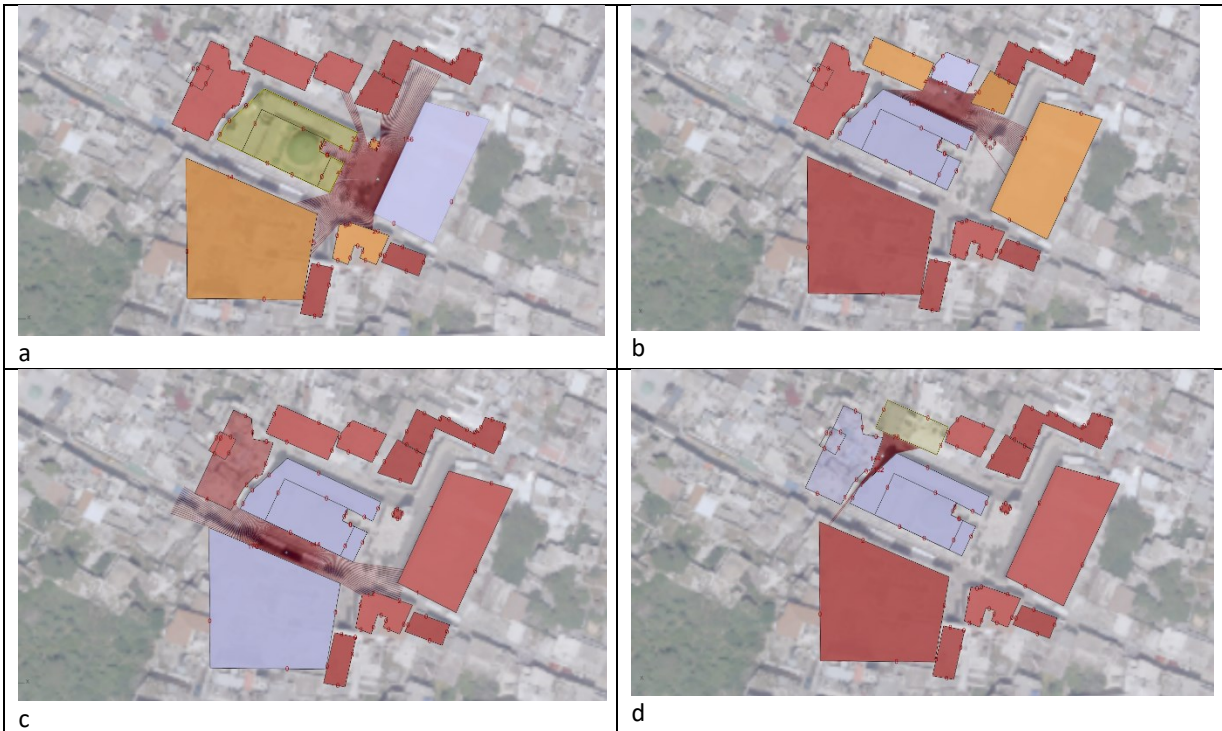




**Figure 4a.** Views around Al-Nasr mosque. From: Site observations, Diana Enab, 2022. **Figure 4b.** Urban Violation to the context of Al-Nasr mosque, exposed columns. From: Site observations, by Diana Enab, 2022. **Figure 4c.** Urban Violation to the context of Al-Nasr mosque, accessible rooftop. From: Site observations, by Diana Enab, 2022.

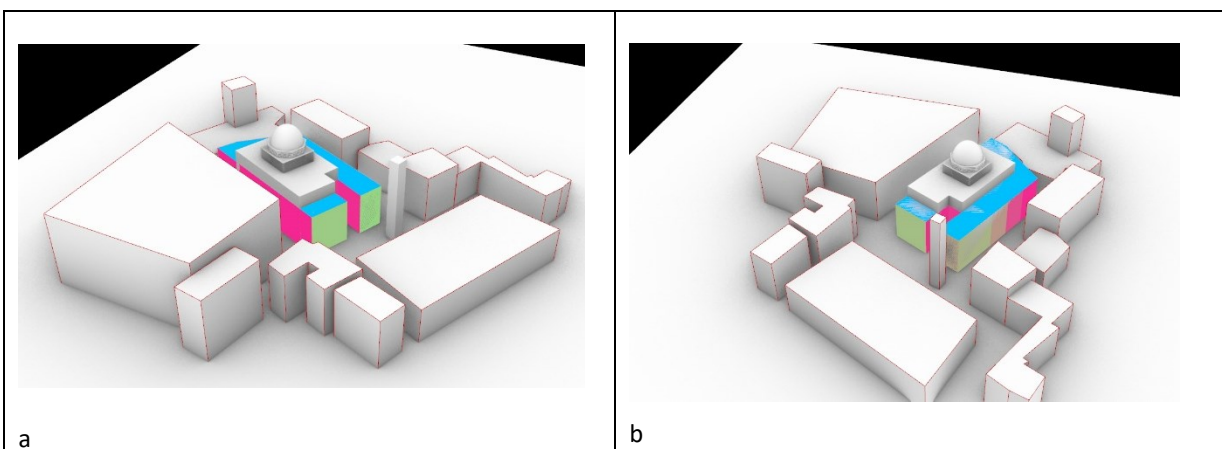
### Visibility from Mosque

In this paper, measuring visibility extends to consider the buildings seen from the mosque's location. Four locations are pinned around the mosque to measure the most and least visible buildings from a specific area. Results are presented visually and numerically. Buildings in purple are the most visible, followed by yellow/green, then orange, and red are the least visible to the pinned locations. Pinned points resemble the four facades of the mosque. The contextual model considered topography. Plugins are used to operate this type of isovist study. The intactness of urban fabric makes the buildings most visible or least visible, see (figure 5 –c & d). Wider streets or open spaces increase the visibility exposure of buildings (figure 5 –a & b). It is proven that views in the computational tool are restricted to the old city; rays barely extend to surrounding areas.

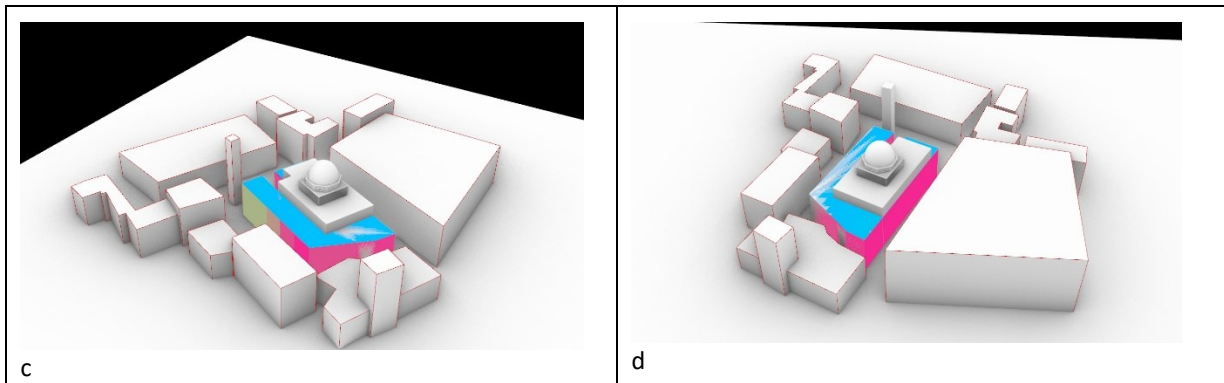


**Figure 5.** Visibility rate of surrounding buildings with four pinned points around Al-Nasr mosque. Source: Researcher, 2024.

Using the Ladybug plug-in showed that the mosque's highest visibility is on the roof. This is due to the vertical expansion and the use of rooftops of buildings around the mosque. The facade facing the plaza is the highest visible façade (Figure 6- a & b). The visibility of facades close to other buildings is at its lowest value (indicated in pink). The visual reference means that pink facades have the lowest values, green ones have higher values, and blue ones have the highest values. The average visibility value is 41.19 out of 96.70.







**Figure 6.** Visibility rate of Al-Nasr mosque façade to surrounding buildings. Source: Researcher, 2024.

### 5.3 Local Contemporary Mosques

Today, the number of mosques is expanding at a noticeable rate. However, mosque planning rarely responds to the development of the city and its community needs; instead, most mosques are built as Sadaqa after a martyr or a family member who passed away.

Contemporary mosques within the city are generally distributed in a dense fabric, where no buffer areas are located from the mosques. Mosques are placed in neighborhoods, disappearing in their overall high vertical distribution. The topography becomes a parameter for a design in which floors are added under one of the street levels to reach the other lower one, which controls the mosque's architectural massing and façade.

Although mosques in Nablus are usually designed on two street levels to respond to the topography, none use that factor to enhance spirituality or functionality or provide welcoming areas and open plazas. Instead, mosques are only used from one side for accessibility, and the other side is inaccessible.

### 5.4 Kawthar Badran Mosque: Contemporary Mosque

#### Background & Context

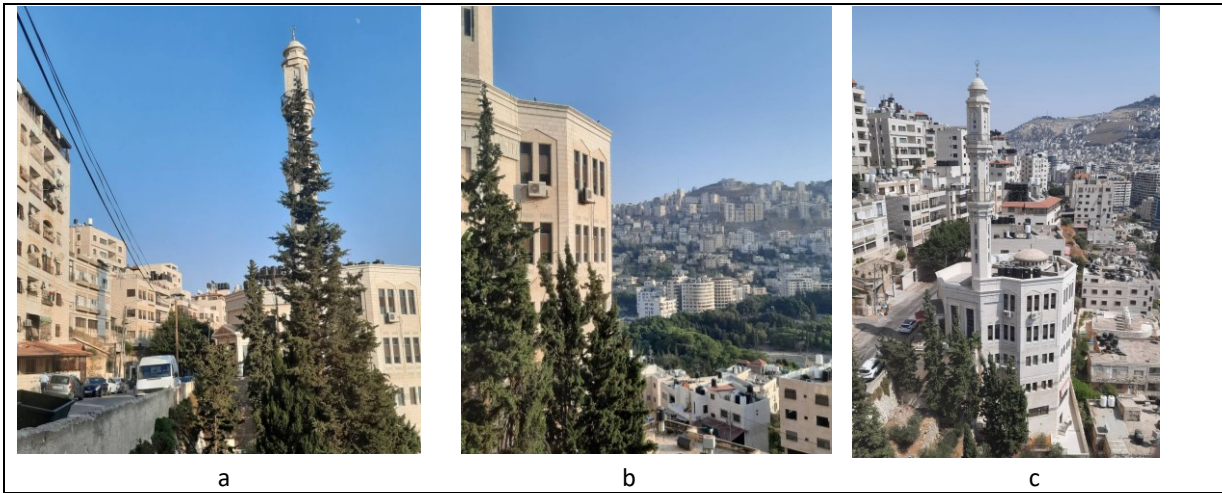
Kawthar Badran mosque is located in the Blebos Alawsat neighbourhood, one of the active areas in Northern Mountain, as shown in Figure 7. The context is purely residential; all surrounding the mosque are apartment buildings. Beside the mosque is vacant land that is not used or connected to the mosque in any way.



**Figure 7.** Location of Kawthar badran mosque. From:Geomolg, 2022.

#### Visibility of Mosque

The visibility of Kawthar Badran mosque is similar to that of many other contemporary mosques. The mosque overlooks the city's mixed-use urban fabric. In terms of heights and topographies, the mosque dominates the buildings on the street below and does the opposite to the buildings on the same street level. Thus, a dual, contrasting character of significance is attained (see Figures 8a & 8b).



**Figure 8a & b.** Context of the mosque: of the same street and the lower street. From: Site observations, by Diana Enab, 2022.

**Figure 8c.** Visibility to Kawthar Badran mosque. From: Site observations, by Diana Enab, 2022.

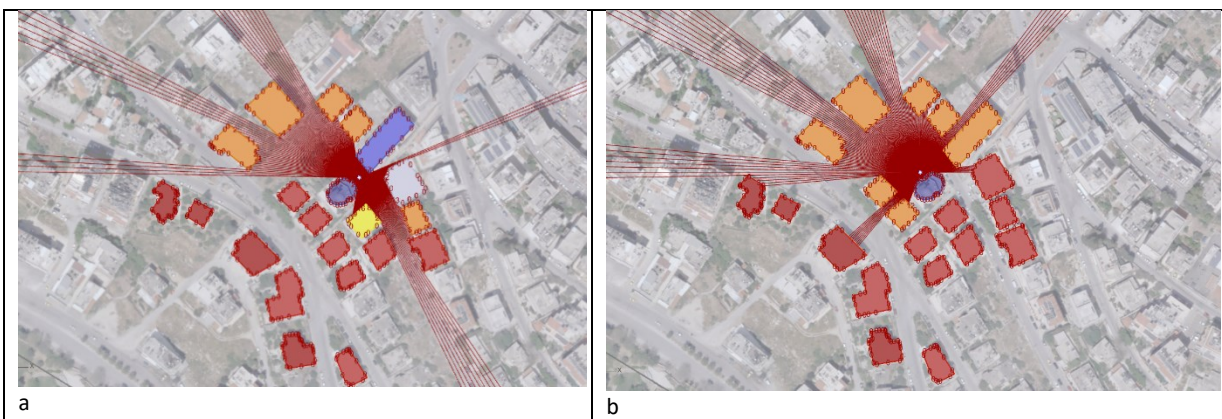
The city's urban development majorly affects the visibility of the contemporary mosque surroundings. Although the streets are wider than the streets of the Old City, the surrounding buildings are much higher, sometimes higher than the mosque. Some buildings overlook the mosque, giving a view of its dome and service roof (see Figure 8c).

Generally, most contemporary mosques are higher than other historic mosques (if considered from the lower street level). However, their impact on the surrounding context is not as powerful. Once the minaret is removed, one may imagine the contemporary mosque as an ordinary building.

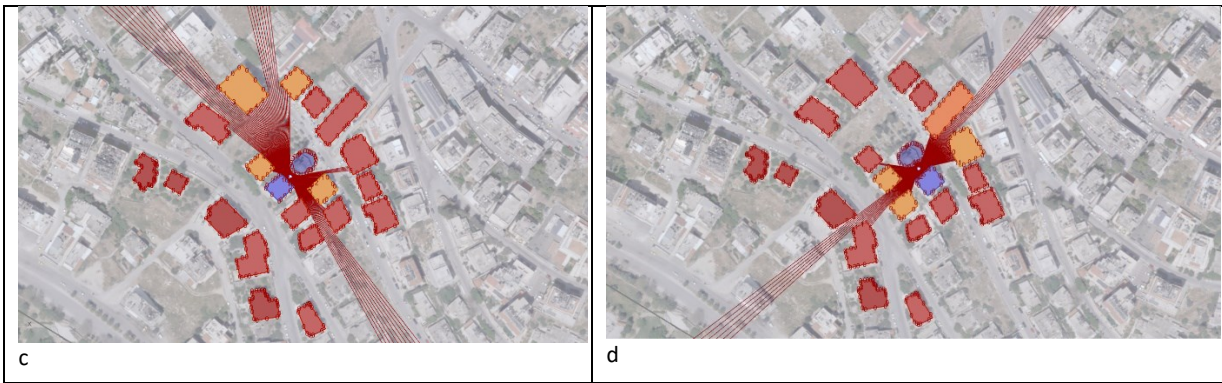
Rather than the horizontal visibility and single street-level view obtained at the historic mosque, visibility in contemporary mosques diversifies to multiple angles of multiple street-level views, including horizontal and aerial views. Mosques' entrances are scarce, and no open plazas or outdoor areas would function as open-air prayer or adequate space for socialising. The lack of open spaces/plazas in front of the mosque lowers the potential view of people using the mosque or passing by it.

### Visibility from Mosque

The results shown in Figure 9 illustrate and rate the visibility of surrounding buildings at about four pinned points. Findings showed that the horizontal distances (closeness to the mosque), the lengths and heights of buildings' façade, and the topography altered the values of the mosque's visibility. The closeness of buildings raises the visibility (figure 9 -a,c,d). The façade of direct view to the pinned point is of the most value; less and higher angles alter the result. Open urban spaces increase the number of visible buildings (figure 9- b).

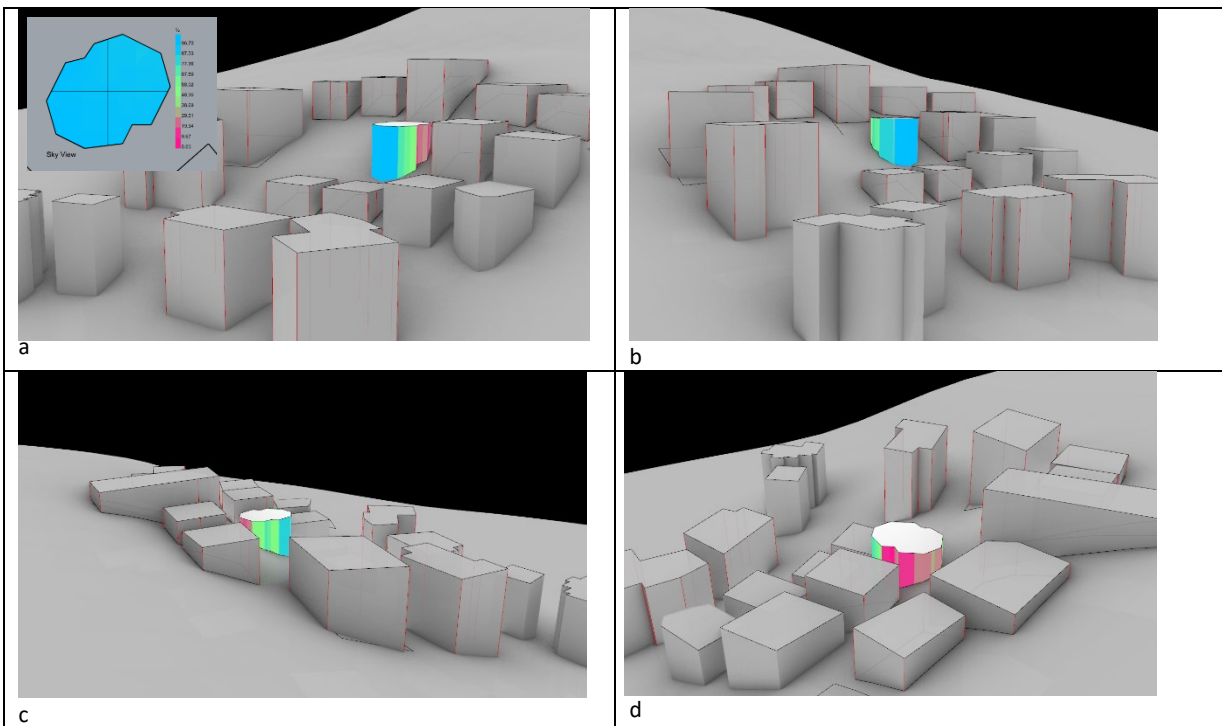






**Figure 9.** Visibility rate of surrounding buildings in relation to four pinned points around Kawthar mosque. Source: Researcher, 2024.

The façade of the mosque is computationally analysed. The sides facing the open urban space (figure 10- a) and towards the buildings at lower heights (figure 10-b) have the maximum visibility. The sides facing buildings close to the mosque and at lower heights than the surroundings have the minimum visibility (figure 10-d). The average visibility value is 34.57 out of 96.70.



**Figure 10.** Visibility rate of Kawthar mosque façade to surrounding buildings. Source: Researcher, 2024.

## 6. Discussions

The comparison of Al-Nasr and Kawthar mosques was valid for understanding the role of context in determining visibility and, therefore, the quality of space occupied by mosques.

The visibility of Al-Nasr mosque (41.19 out of 96.70) is higher than that of Kawthar mosque (34.57 out of 96.70) due to the intactness and closeness of the urban fabric. This shows a higher impact on the visibility of Al-Nasr mosque and, therefore, a higher potential for harm. In both mosques, visibility exposure is high (street level & urban level). However, the quality of visibility is not the same.



**Table 1.** Study attributes.

	Al-Nasr mosque (Old city)	Kawthar mosque (Contemporary context)
<b>Height of surrounding buildings</b>	Low	High
<b>Ratio of Height of surrounding buildings to the height of the mosque</b>	None exceeded the height of the dome	Higher and overlooks its dome
<b>Direction of visibility</b>	Street view & horizontal (from old city fabric) Diversifies to multiple angles of aerial views (from contemporary context)	Diversifies to multiple angles of multiple street level views, horizontal and aerial views (from its context)
<b>Exposure of visibility (urban level)</b>	Higher	High
<b>Exposure of visibility (street level)</b>	Higher	High
<b>Quality of visibility</b>	Higher - due to urban space	Lower - might be perceived as regular building
<b>Intactement of context to the mosque</b>	Higher	Low

The city's urban developments resulted from multiple political, social, and economic reasons. The organic growth of the population, reaction to a series of earthquakes, and additions of villages and refugee camps expanded the city's borders and redefined many urban aspects, including visibility. Those urban developments added a new dimension of visibility that was not in the flat urban fabric of the Old City. Some areas in the current scope of the expanded city have potential views of the Old City.

Due to the context of Al-Nasr mosque, the ratio of the horizontal dimension providing a ground-level view, and therefore the number of viewers, is theoretically less than the vertical dimension providing an aerial view of the mosque. This might assume that the horizontal visibility gained from the surrounding buildings of the mosque quarter remains fixed and that the vertical visibility gained from the vertical urban development of the city becomes dynamic. However, because of the urban characteristics around the mosque, the experience of street-level visibility remains extremely valuable. This resulting notion creates a paradox between the quality of visibility and the exposure of visibility. KawtharBadran mosque offers diverse directions, and visibility exposure is gained, yet it does not have a quality of visibility.

Evidently, the historic mosque of Al-Nasr had considered the human scale in relation to height and context. Over the development of its context, it was intended to 'blend' in with the context rather than 'dominate' the space. This symbolises the concepts of Islam expressed in tolerance and modesty and the social and cultural integrity expressed in urban unity and tightness. To maintain the urban connection, the regulations set by the municipality of Nablus to protect the old city restrict the building's height to a maximum of three floors. The paper has concluded that the application of those rules was to protect the general urban fabric of the old city in which historic mosques exist, but not a direct application for urban visibility conservation to historic mosques. In other words, no specific rules were dedicated to protecting mosques regarding their visibility, which was neglected in planning the city's new borders.

In the contemporary context, the green dome of the mosque is what makes Al-Nasr mosque distinctive from its surroundings, not its scale. Although this may seem sufficient as a visibility measure when looking at the mosque and its minaret, it is not considered a unique definition. Many other mosques in Nablus have green domes too. This reemphasises that the value of Al-Nasr mosque is in the experience around its context more than whether it is observed at a distance. This notion reflects the authenticity of Al-Nasr mosque compared to grand historical mosques in other countries of the historic Islamic world.

In the local contemporary mosques, the role of majestic or grande mosques disappears, too. Unlike Al-Nasr mosque, no urban elements are included to strengthen the experience. This results from a lack of consideration of the mosque's social aspect, adequacy to the culture, and spirituality. Also, no visibility nor connection measures are even taken between each mosque and the other. This is also a result of the poor planning of the city and the poor studies in determining the placement of mosques according to the neighbourhood, other surrounding contexts, and other mosques.

## 7. Conclusions

All in all, investigating visibility is paramount to the issue of missing the authentic production of Islamic architecture. The study validates that visibility is a dynamic aspect influenced by urban contexts and the population's economic, cultural, and social characteristics. Because of that, the study realizes that visibility regenerates mosques' spirituality, contributing to Islam's architecture.

In Nablus, the urban context influenced both historic and contemporary mosques. Computational tools were used for two reasons: measuring the impact of context around mosques and validating observations. Measuring visibility indicated the harm of the context surrounding mosques. Thus, it was more critical at Al-Nasr mosque. In the case of Kawthar mosque, some facades were more visible than those in Al-Nasr, but the lack of enclosures resulted in a low perception of space. Quantitatively, the harm of visibility is higher in Al-Nasr mosque due to the intactness and closeness of buildings. Still, qualitatively, the impact on visibility is higher in Kawthar mosque due to the lack of space quality. The study concludes that visibility is a numeric and qualitative measure.

This paper's results establish three recommendations. First, evaluate the quality and the quantity needed for visibility. It is paradoxical to choose which buildings to make visible or not. Since visibility is a design constraint, facades with high visibility should be reinterpreted. A future use of the computational tool is to filter how surroundings are generally placed. Second, the visibility of mosques should be relooked at by revising planning strategies, and urban elements and characteristics in contemporary mosques should be integrated to elevate the quality of street-level visibility. For instance, urban measures of building-to-street ratio, building closeness, accessibility and provision of enclosures are evident in elevating the quality of space. Third, allow explorations of what enriches mosque contexts. Contemporary mosques appear more like objects that host prayers for only a few minutes daily. Most connections to contemporary mosques are auditory rather than visual, except for the night green lights and minarets. Muslims' relation to mosques is turning to be "heard" rather than seen. This visionary image needs to be revised to understand its sacred role. Literature proved that Islamic values are interpreted as physical measures, which can be extended to the contemporary establishment of Islamic cities.

## Acknowledgements

This research received no specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## Conflict of Interests

The Author(s) declare(s) that there is no conflict of interest.

## References

- A.Abraouf, A. (2012). *From Mecca to Las Vegas and Vice Versa: Critical Reflections in Architecture and Sacredness*. *من مكة إلى لاس فيجاس وبالعكس: تأملات نقدية في العمارة والقداسة*. | Ali A. Abraouf - Academia.edu. [https://www.academia.edu/1904393/From\\_Mecca\\_to\\_Las\\_Vegas\\_and\\_Vice\\_Versa\\_Critical\\_Reflections\\_in\\_Architecture\\_and\\_Sacredness](https://www.academia.edu/1904393/From_Mecca_to_Las_Vegas_and_Vice_Versa_Critical_Reflections_in_Architecture_and_Sacredness)
- Abu Zer, M. I. M., & Reyhan, K. (2023). Reproduction of Architecture in Modernizing Local Architecture: The Case of Muqarnas. *Iconarp International J. of Architecture and Planning*, 11(1), 155–180. <https://doi.org/10.15320/iconarp.2023.237>
- Al-Fanni, I. (1999). Nablus in the two civilizations: The Greek & The Roman. Nablus Municipality.
- Ali, I., Khel, M. W., Shah, M., & Ahmad, I. (2021). Contemporaneity of Islamic Architecture and its Challenges. *International Journal of Applied Engineering Research.*, 6(2), 71–77.
- Arafat, N. (2012). *Nablus city of Civilizations*. Nablus CHEC.
- Amen, M. A., & Kuzovic, D. (2018). The effect of the binary space and social interaction in creating an actual context of understanding the traditional urban space. *Journal of Contemporary Urban Affairs*, 2(2), 71–77. <https://doi.org/10.25034/ijcua.2018.3672>
- Amen, M. A., & Nia, H. A. (2021). The Effect of Cognitive Semiotics on The Interpretation of Urban Space Configuration. <https://doi.org/doi:10.38027/iccaua2021227n9>
- Abdulla, K., & Abdelmonem, M. G. (2023). Mapping Safety, Security and Walkability of Historical Public Open Spaces in Post-Conflict Libya: Tripoli as North African Case Study. *Journal of Contemporary Urban Affairs*, 7(2), 85-105–185–105. <https://doi.org/10.25034/IJCUA.2023.V7N2-6>
- Afolabi, S. A., & Adedire, M. F. (2023). Adaptive Strategies Used in Urban Houses to Overheating: A Systematic Review. *Journal of Contemporary Urban Affairs*, 7(2), 106-126–106–126. <https://doi.org/10.25034/IJCUA.2023.V7N2-7>
- Aziz Amen, M. (2017). The inspiration of Bauhaus principles on the modern housing in Cyprus. *Journal of Contemporary Urban Affairs*, 1(2), 21–32. <https://doi.org/10.25034/ijcua.2017.3645>

- Aziz Amen, M., & Nia, H. A. (2018). The dichotomy of society and urban space configuration in producing the semiotic structure of the modernism urban fabric. *Semiotica*, 2018(222). <https://doi.org/10.1515/sem-2016-0141>
- Ho, T. P., Stevenson, M. M., & Thompson, J. J. (2023). Perceived Urban Design Across Urban Typologies in Hanoi. *Journal of Contemporary Urban Affairs*, 7(2), 156-170–156–170. <https://doi.org/10.25034/IJCUA.2023.V7N2-10>
- Assi, E. (2018). *Tel Balata Archeological Park*.
- Awawda, H. (2014). *Forming continuity and stability in contemporary Islamic architecture from the architectural concepts of the Islamic world*. International Islamic University Malaysia.
- Aydemir, P., Karadas, A., Gokse, G. F., & Demirel, O. (2015). Renewal And Gentrification Share For Coastal Settlements Through Urban Projects: Galataport Project. *Marine Coastal Development Sustainability*.
- Bishawi, Manal (1999). Nablus old city center (En-Naser Square) archeological and architecture study. Master thesis. Al Quds University- Higher Institute For Islamic Archeology.
- Debold-kritter, A. (2006). *Presentation of historic prospects , panoramas and view points by Melling ( 1819 ) , photo documentation and digital simulations from 2006. 1819*.
- Galataport, Istanbul • Helvar. (n.d.). Retrieved February 24, 2024, from <https://helvar.com/case-studies/marine/galataport-istanbul/>
- Geomolg Portal for Spatial Information in Palestine. Available online: <https://geomolg.ps/L5/index.html?viewer=A3.V1>
- Itma, M. A. F. (2023). Toward Sustainable Land Use of Urban Spaces in the Dense Areas: The Role of Organizing Activities in Enhancing the Flexible Environment in Palestine. *Civil Engineering and Architecture*, 11(5), 3036–3050. <https://doi.org/10.13189/cea.2023.110818>
- Kalbouna, A. (1992). History of city of Nablus (2500 BC – 1918).
- Lara, K. (2018). 'Bab Al Saha' witness of Nablus Stories,. Ultra Palestine. <https://ultrapal.ultrasawt.com/>
- Lynch, K. (1960). *The image of the city*. Massachusetts Institute of Technology.
- Ostwald, M. J., & Dawes, M. J. (2018). *Isovist Analysis, Theories and Methods*. 95–124. [https://doi.org/10.1007/978-3-319-71647-3\\_4](https://doi.org/10.1007/978-3-319-71647-3_4)
- Rabbat, N. (2012). What is Islamic Architecture anyway? *Journal of Art Historiography*, 6(June), 17–29. <http://arthistoriography.files.wordpress.com/2012/05/rabbat1.pdf>
- Sevgi, H. (2013, May 29). *The Galataport Project and Its Impact*. academia.
- Touqan, S., Abdul Hamid, A., Ghazal, S., & Anabtawi, N. (2011). *The Revitalization plan of the old city*. Welfare Association.
- Zawawi, Z., & Itma, M. (2023). Reconciling users and public space-relationship in historic squares: The case of En-Naser square in Nablus city. *Journal of Asian Architecture and Building Engineering*, 22(5), 3046–3064. <https://doi.org/10.1080/13467581.2023.2172325>
- Yousof, M. A. (1989). *General guidelines for developing and preserving the historic old city of "Nablus" - West Bank* [KANSAS STATE UNIVERSITY Manhattan, Kansas]. <https://archive.org/details/generalguideline00yous/page/n1/mode/1up>