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Challenges and opportunities of the urban structures of holy cities: the case of old Najaf, Iraq

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Abstract. This paper shed light on the historic urban structure that the city of Najaf has, and the current challenges and circumstances that are facing its unique urban centre, its traditional architecture, and its identity as a heritage Islamic city. Discussing Najaf as a pilgrimage city, that experiences seasonal pilgrimages to its holy sites, might force unusual urban conditions that are rarely found in other Islamic cities. These conditions enforce unique urban design, planning decisions, and actions that respect and improve the intangible and tangible heritage of the old city. Using an analytical approach, this paper analyses official documents and reports, maps, and archival materials that regard the unfortunate loss of the unique construction identity, which was part of its tangible and intangible features, and how they have been lost or neglected in the reconstruction of the urban structure of the old centre of Najaf, to illustrate how the city's identity has impacted by different approaches, changes, and decisions policies. The paper provides a closer look at understanding the city's urban transformations and explores the new challenges, tactics, and policies. The paper concludes by emphasizing the need to strengthen the traditional urban structure and control the improper changes and replacement procedures whenever it takes to cover the needs (facilities and commercial activities). In addition, to determine the locations that will be changed or allocated for the new projects, to ensure maintaining the identity of the city.

1. Introduction

Iraq acquires a special position among Islamic countries due to its important holy cities for both Shia and Sunni Muslims. Najaf as a sacred city has various layers of different spiritual, cultural, historical, and social values that have been developed, constructed, and survived over time, which made it a strong role in the Muslim community and a representation of the Shia cultural heritage's identity. The presence of Imam Ali's tomb was the main trigger that led to generating the urban city and empowering its position and making it one of the main historic Islamic pilgrimage cities in Iraq, and in the Islamic World. The Imam shrine fostered the development of the city, which was built on a high position from the ground and could be noted in the city centre of old Najaf where the Holy Shrine of Imam Ali was founded. The old centre of the city with its significant organic urban configuration has surrounded the Shrine by four mains residential neighbourhoods and a Souq; which are locally known as Al-Omarah, Al-Hweesh, Al-Mishraq, and Al-Buraq while the Souq is called the Great Najaf Bazar. These four residential neighbourhoods embody the traditional urban structure of the old city with its significant tangible heritage buildings such as the traditional houses, shrines, schools, and mosques, while their architectural

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details symbolize the main architectural language and elements that gave the old centre its identity. The sanctity of the shrine helped also to develop Wadi Al-Salam cemetery which extended from the centre of the old city to the far north-west to form around 10 % of the old centre. Wadi Al-Salam becomes the largest cemetery in the world and a witness to the unique and exceptional rituals of Najaf cultural tradition. The city's four main residential districts are surrounded by the round street that was developed to replace the historic city walls and is known as Al-Soor Street. In the 1940s, the cemetery has been surrounded by an external wall to isolate and define it from the city expansion and its four districts. Today this area considers the old city centre that expanded from the central region and represents around 2 % of the original size of the city. See Figure (1).

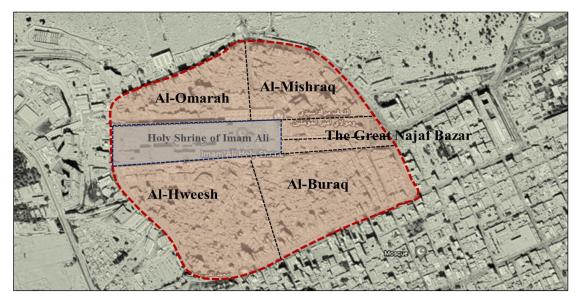


Figure 1. Neighbourhoods of the study area of old Najaf.

The deep interrelation between the urban structure constituents is considered the main reason that the old city had confronted, which changed its future toward destruction and vandalism. Destroying the walls that have been surrounding the old city is the main influence that impacts the urban structure, which represents an indication to feel safe and open toward the external world. This could be considered as the urban changes that shift from the inside orientation philosophy to being open toward the construction and expansion out of these walls. This kind of orientation created new routes for transportation toward the city centre of Najaf and impacts the city's urban morphology with the new networks that went against its urban traditional structure. This led to determining the community relations and modifying the urban morphology in addition to re-planning the traditional open spaces that were integrated with the transportation system. Therefore, the social-cultural system with its long traditional adapted roots had been impacted negatively to fit the new changes. In addition to what has been mentioned above, many new buildings with their different construction, functions, and architectural designs have extended and left behind the traditional centre of the city. Many of these buildings were unfortunately not only ignoring the urban characteristics but also impacting the urban demographical system that used to consist of residential districts that had urban language, which let these sectors lose many of their traditional communities and neighbourhoods due to the destructions and replacements. Moreover, during the last century and in many other cities in Iraq, significant consequences had happened that caused considerable damage and deterioration of many cultural and heritage features of old Najaf. These could be identified by firstly; demolishing the city walls, and the last one is the sixth wall that was replaced by the ring road. This weakened the old city centre's identity characterized by its significant towers, gates, entrance observations, and water canals and made it more exposed to the extension of the contemporary city of Najaf. Secondly, the random waves of decisions and policies led to destroy many historical and traditional places that were surrounding the Holy Shrine, which was in the past extended to the Holy shrine's wall (four sides) to facilitate transportation

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movements and the visitor's movements around the shrine. As a result, the holy shrine has lost many of its main characteristics such as its dominant position in the centre of the city, social status, and significant architectural features that had defined the shrine's historical and architectural value. In addition, during the 1950s, and as a result of the new road networks, the character of the urban traditional area in the old city centre has been changed and divided into separate small entities. These decisions generated many changes in the urban configuration and developed other transportation and accessibility problems, particularly the intersections between the pedestrians' and vehicles' movement during the ceremonies and the special occasions and rituals that impacted the city's structure and its traditional heritage values. However, it should be mentioned that even though the continuous changes, the urban structure of old Najaf was always capable of adapting to these changes throughout its history. The historical - social- cultural and religious values give the city the sustainability to adjust, manage and adapt to the contemporary challenges, particularly if they were studied and adopted according to integrated strategies. Though, we should emphasize that if the random urban changes have continued to neglect and adopt the same policies, the centre of the city will, unfortunately, going to lose its unique architectural characters and the vital heritage features that gave the city its cultural identity.

2. Methodology

This paper through its descriptive and analytical methodologies is highlighting and emphasising the importance of preserving the rich cultural and architectural heritage of the old city centre of Najaf. It focuses particularly on identifying the major issues that are threatening the traditional architectural and urban structure of the city. It aims to highlight the current situations and challenges that are facing the old centre and suggests integration preservation policies and plans. To achieve that, this paper is interpreting old Najaf and the history of its formation and then analysing and re-counting the current urban structure. This discussion is an essential step to identifying the main difficulties in the urban structure of the old city and defining the conceptual structures behind the radical urban transformation.

3. Urban structure of the old Najaf

The religious and spiritual characters played a major role in the city's foundation and gave it the feature of a religious city. Najaf gained this feature due to the holy shrine of Imam Ali and became one of the most important cities in the Islamic world, in addition to Wadi Al-Salam cemetery, the religious schools and the significant mosques which are in the old city. Yet, since its foundation, the city has encountered many cultural and political powers and agendas that influence and impact the city's identity and architecture through different stages. The holy shrine of Imam Ali and the area surrounding it has suffered from many unplanned policies, even though they work in general to develop the area, their agenda and programs were following western urban attitudes that led to creating great problems and destroying the surrounding districts, and totally isolate the shrine, which made many of the local districts lost its Islamic characteristics. This requires a comprehensive developing study that not only works on the holy shrine but also re-studies the surrounding area of the shrine to revive the architectural heritage and the identity of the city. Most religious cities are founded around the holy shrine, thus, defining and enhancing this node will be the spark to create the urban city and develop its commercial and industrial sectors. Establishing and building the souk in the city will work with time to develop the other sectors and encourage and attract people gradually, particularly if these functions are cornered local, traditional and cultural products in the name of the basic religious frame. These factors with time will be the centre of businesses, trade, and culture. However, it should be emphasised that in addition to the religious, cultural, spiritual and commercial factors there are other issues that sustain and develop the urban structure of this type of city, such as the location of the city. This was the case of Najaf, as many narratives indicated that Imam Ali was always finding calm, peace, and rest in the Al-Gheree area, stating that (It has the best view, and a good smell) and he prayed to God to be buried in this location from 660 A.D- 40 A.H when Imam Ali Martyred and buried in Najaf till 790 A.D- 170 H., It was barely a small village with the irregular figure and separated houses. Imam Ali was buried on one of the edges of this village, and his position was unknown for a period. In the era of Haroon Al-Rasheed, the shrine of Imam Ali was discovered, and orders were issued to rebuild the shrine again. Since that time, a new architecture was built around the shrine (Historians argued regarding this issue). Zain Al-Abdeen AlSherwani said (13): It was built in 771 A.D- 155 H., and Al-Mustawif said: It was built in 170-786 A.D which is the most accepted. After that, many Muslims began to bury their deaths around the holy shrine. Some followers of Imam Ali left their houses in Kufa and went to Najaf to live there since the 9th century.



Figure 2. The Historical city walls of old Najaf^[34].

In terms of the urban structure of the old centre, the area that surrounds the holy shrine is characterized by a solid correlation that depends on emphasizing the human scale and the local materials. Particularly, people's movements in these neighbourhoods are designed to be in zigzagged paths that not only respect the human scale but also traditional values such as privacy and spirituality. These paths expand significantly when the people reach the holy shrine, where they enter the central plaza (Sahan) that works as the gathering place. The hierarchy of the urban structure enhances the feeling of the required piety and reverence at the holy Shrines. In addition, it works to facilitate the movement flow and enhance the attraction and experience between the visitor and the shrine. This significant experience is rarely found in other locations within the city, the golden domes, and the beacons that may disappear or hide according to the different directions of paths that surround the holy shrine spaces. Thus, the urban spaces that surround the holy shrine are characterized by having spontaneous zigzag paths that are beautifully streamlined, and that expand gradually to adequate the shrine scale. Making the city's urban structure like a solid mass is engraved by many veins and voids that are directed towards the central shrine plaza as if everything were designed and planned intentionally. Thus, this traffic system with its different paths and routes works to facilitate the way to reach the holy shrine, and wherever the selected route, will lead the visitor toward the centre is where the shrine is located, see Figure (2). According to what has been discussed so far, the paper can conclude the following:

- The shrine's architecture was founded and developed in an integrated system with the surrounding urban spaces over time, to make it look like one part.
- The space of Sahan can be characterized as an urban space but not architecture interrelated with the surrounding space. All the religious, spiritual, social and instruction activities were practised here.
- Tension and attractive elements due to the people entrance from different allies, narrow roads and zigzagged roads toward the shrine to see the beacons and golden domes from different views and corners once appeared and once gone till reaching the shrine.
- The holy shrine is open from the inside ad closed from the outside, and all the technical and Architectural processing are done inside to increase the inside space importance of the shrine. There is a technical and beauty sense that can be remarked through the spaces rate and their

relationship with the domes and beacons and other front sides that overlook the Sahan, while the outside front parts are simple.

- The surprising factor exists when a person enters these narrow paths and urban districts, then enter the wide space (Sahan) and feeling of righteousness and submissiveness.
- The spaces that surround the holy shrine for planning activity made an essential change in its urban structure by removing the areas that surround the shrine (which represents the structure of the centre) and isolating them from their urban surroundings which are against the principles that had been designed for. In addition to all losses of the heritage structure, urban characteristics and historical values caused by such acts, these acts attracted car transportation around the shrine and caused visible pollution that is against the religious and spiritual standing of Imam Ali Holy Shrine. The construction of opened spaces around the shrine removed the most important attributes of that centre which are the domination of the space of Sahan on the city space structure, and the absence of the surprising factor during the transportation through the narrow allies with the simple outside fronts to the opened space of Sahan that is rich with decorations and Architectures which achieve self-comfortable, safety and submissiveness. The damage was not limited to that only, it extends to include the wall's front parts of the shrine, and the processing was to imitate the western designs, which required more destruction and creating new wide spaces to assimilate new front parts. The removal of areas that surround the holy shrine is considered a big loss to the spiritual site and urban Framework of the shrine. Also, we have to say, that isolating the holy shrine from its distinguished urban framework and making it separated can be seen from all sides depriving its traditional characteristics and the basic principles it was designed for.
- The accumulation of visitors in a great number on the walk sides around the holy shrine during the weekly or seasonal occasions, streets jam that leads and surround the shrine and cars parking near the shrine led to visual pollution with the improper scene. Also, the shortage of pedestrian roads, the shortage of roads that relate to the shrine with residential areas and shops that lead to the shrine and the great number of funerals lead to traffic jams, especially on days of seasonal occasions.
- The buildings that are surrounding the shrine are in bad structure, poor quality and inconvenient to visit the holy shrine requirements. Also, we can notice the new western decorations that are not fit with the area characteristics, local identity, and Architectural value of the shrine. All the mentioned above had weakened the shine domination on the city pace structure.
- The strange Concept of Influence on the Construction elements system: the traces of the west and rapid civilization on the urban structure created a random status due to the neglect, misuse and shortage of planning and design criteria. However, this historic centre in Najaf kept its Traditional Architectural identity, lately; many modern construction expansions were made and controlled the nature of this centre and other parts of the city with contradictions and different construction patterns. The main reasons for that change due to many factors:
 - 1. Adopting western concepts and inserting them within the architectural constitution for this city without any study or auditing of these concepts.
 - 2. Neglecting and active planning absence with the appearance of randomly construction led to construction problems.
 - 3. Concerns decrease of historical and religious features of Najaf City whether the planning was considered or not. Many attempts by previous systems to remove the distinguished identity of this city and the importance of confiscation were done.

The most construction common problem in the city of Najaf is the same problem in other Arab countries. But this city is considered one of the important religious cities. Ancient Islamic schools and religious schools were founded in this city, in addition to the holy shrine of Imam Ali which was followed by flowing of a great number of visitors from different spots around the world; finally, this city is becoming a religious one and a place to bury dead people. This factor prevented the city to be

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developed in the north and northeast. In addition to other directions except for the east, the city is suffering the here under:

- Bad planning administration with a lack of scientific experience in the planning cadres or expertise, and all that led to the absence of the construction system in the city.
- The rapid urbanism with the regular citizen attraction to the image of the West and trying to imitate that image and embody it through the construction reality which is neglected by the Government observation.

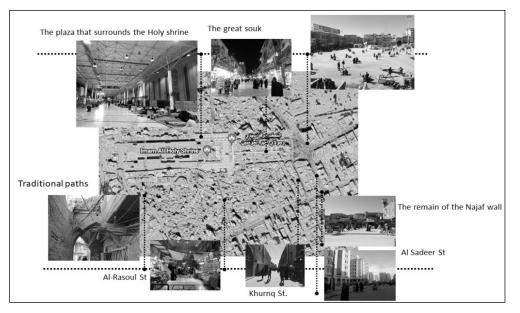


Figure 3. The Holy shrine and the main urban structure landmarks.

4. The old Najaf as a public system

Najaf's community and its social-cultural fabric consist of individuals who had come from the adjacency villages and loved Prophet Mohammed and also served the holy shrines and shrine visitors till they were buried near the shrine after their death. The foundation of the first religious schools, scientific schools, jurisprudence schools and humanity schools made it a very important centre that attracts scholars and students from different cities around the world. The visitors and the pilgrims, and those who are commemorating their dead in the cemetery near the shrine, activate the public facilities, attracting the professionals and experts to come to the city and make profitable work that includes professional, traditional crafts, cultural exchanges, and commercial service activities.

4.1. Apparent system: An organized rule to the urbanism committee

The city of Najaf like other Islamic cities has a spiritual centre represented by the Imam Ali shrine that is surrounded by many residential blocks in addition to the great market that extends from the holy shrine to the wall of the city till the wall's gate, which makes it as the controller to organize the commercial and service activities, the main axis to the people of the city and the city's visitors. The regulative element is the wall of the cities that determines the form and the activities between the residential units and uses each possible area and narrow allies. All the residential units have basements beneath the ground that exceeded the size of the house, and sometimes the basement is consisted of three layers with two above the ground to assimilate a greater number of populations in fewer sizes due to the wall's limit.

4.2. The new transformation explanation at the city of Najaf

The new planning acts that are represented in opening the new wide straight streets (Al-Sadiq St., Zain Al-Abeen St., Al-Rasool St., Al-Toosi St.) take damage to the center of the city only, but attracted

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different strange patterns in the urbanism structure which is mostly different of its urban identity in structure and content and led to the following:

- Decrease the Holy Shrine's dome and minaret domination in the sky of the city, where the new modern high buildings invaded the area and dominate the traditional structure, and the skyline seemed zigzagged and needs organization.
- Attenuating the holy shrine space (Sahan) toward the urban space of the city, and even the high of the shrine's wall disfigured human standards and visual attributes to enter and exit from the holy shrine's space (Sahan).
- Privacy absence is one of the basic principles of the residential traditional units that are located behind the high new buildings.
- Creating an improper environment for the shrine according to the current status of the area that surrounds the holy shrine that is not fit with the shrine's religious and historic position. Also, we can say it is environmental, visual, and functional improper.
- The independent characteristics of the urban structure of Najaf city and the basic formation of its urban structure are a response to many factors (environment factors, cultural factors, and nature factors) that are still effective and standing till now, and there is no reason to insert western construction patterns lead to an imbalance between the urban environment content and its independent components.
- Traditional urban patterns can stimulate contemporary development if accurate scientific planning is available.
- The city of Najaf however had been exposed to many changing factors, including destruction and losing the urban structure characteristics, but we can say the chance to keep the city structure, its characteristics and civilization communication are still on because it is considered a heritage, cultural treasure, part of the past and high degree of importance we proud with. The city is considered a national heritage source e. Feeling the glory of originality and the desire to keep the cultural heritage is not enough, but it needs to consolidate efforts and follow all the active procedures to control the change in the city. The required control in this city does not mean preventing and putting out development, and if the city stayed with no change this will lead it to be declined and a large population will abandon it. See Figure (4).

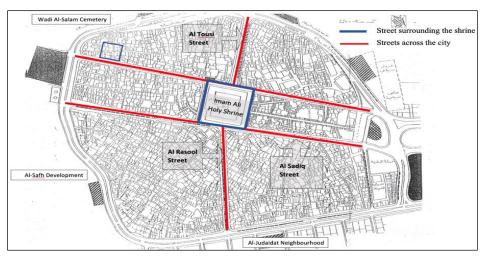


Figure 4. The main streets in old Najaf [32].

5. Conclusions

The field of urban design and planning has integrated two different urban systems of cities formation, the traditional and modern, while the traditional urban system refers to the special lifestyle of communities' heritage and culture, the contemporary urban form adopts modern planning practices

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(concepts and models) represents another lifestyle. So, many of the traditional historic cores in Middle Eastern cities have grown organically, and then they have developed and expanded based on modern planning practices. As a result of that path of growth, the overlap between the two different urban systems has revealed considerable challenges and potentials at multiple levels, spatial-physically, socioculturally, and economically. However, in conflict and post-conflict contexts, historical and heritage sites encounter significant urban changes and contradicted policies that could be overlapped between enhancing the heritage, commercial and political sectors, or removing the urban structure of the old city and rebuilding it again to fit new functions. This paper has analyzed the physical challenges and spatial opportunities that impacted the urban configuration of the historic center of old Najaf, the traditional fabrics, and the land uses. In addition, highlights all the challenges that face the city's form without considering the interests of the stakeholders and the heritage of its existing traditional communities. These communities were not involved, as they should be participated, based on achieving real public participation being a main part of the planning process. This case study indicates how commercial and economic pressures influenced the ambitions of the local heritage planning policy and thus led to the imposing of radical urban changes in the old city. The paper also considers that Najaf's old city center and its heritage is a renewable sustainable resource that preserves the people's identity and shapes their heritage. Thereby, reflecting the history and heritage assets of the local cultural values that as development imperatives have been the future trend of urban planning practices in the holy cities of Iraq.

6. Recommendations

These suggested recommendations and policies should be considering the legal planning disciplines and relevant codes and regulations that might be overlapped due to the emphasis on the traditional urban features and properties of Najaf city. To protect and preserve the city's authenticity, heritage, and identity, this paper suggests the following:

- Strengthening the traditional urban structure and reducing the impacts of imposing planning policy and practices that are well-put to meet commercial development and investment purposes. Furthermore, define the preservation areas in the master plan of the city to protect nature and the identity of Najaf city.
- Providing a full and detailed inventory of the heritage and the historical buildings in the city center through documenting, and reporting, determining the maintenance level, and enforcing the laws to limit the distortion and protect them in the future.
- Develop a comprehensive protection plan for old Najaf that would include addressing new strategies to protect the buildings and separated features, the adjacent areas that had significant attributes of the traditional urban identity of the city, and historic and architecturally valuable buildings, in addition, to suggesting new urban policies that would allow for rehabilitating these building or reuse them again in a way that would emphasize the importance and religious position of the city.
- Renew the city's identity by preserving the traditional architectural elements of the Islamic character and also improving the status of the existing urban public spaces. Furthermore, restoring the buildings that have historic and religious values in an integrated approach with its urban environment.
- Reforming the urban structure through re-connecting traditional and heritage neighborhoods together to evoke the identity and character of the historic center of old Najaf.
- Develop the local crafts', Souq, and tourism areas not only to boost the attention and awareness of the historic and traditional features of the city but also to develop a long-term sustainable economic approach.
- Revival of the intangible heritage values and activities and maximize its powerful impact in religious and socio-cultural studies.

Re-integrating the urban structure of the Holy Shrine with its nearby urban environment to emphasize the importance and spiritual value of the city; in addition, to host the large numbers of pilgrims who visit annually the city in specific seasons.

7. References

- [1] Sabrina Mervin, Yasser Tabbaa, Erick Bonnier 2014 (photographs). Najaf, The Gate of Wisdom: History, Heritage and Significance of the Holy City of the Shi'a. (UNESCO Publishing, World Heritage, 978-92-3-100028-7).
- The Unique Model of the Holy Shrine Cities, that have been developed as argued by Ali Al-[2] Ansari, R. M because of the existence of holy shrines built over the graves of the Imams who are the descendants of the holy prophet Muhammad (PBLJH), see, Ali Al-Ansari, R. M (1997) Holy shrines of Karbala : architectural study with a historical background of the area between and around the two holy shrines of Karbala-Iraq. (Doctoral thesis, University of Wales Trinity Saint David).
- [3] Dewan Company 2014 Stage One-The Urban Renewal Project of The City Center of Holy Karbala-The old Town.
- [4] Salama A M and El-Ashmouni M M 2020 Architectural Excellence in Islamic Societies: Distinction Through the Aga Khan Award for Architecture (Routledge).
- Hamid G-G, Mikhail S and Estamboli M J 2012 The position of Mosques in Islamic cities and its [5] location design in new cities in Damascus Univ. J. 28 49-67.
- [6] Ruthven M and Nanji A 2004 Historical Atlas of the Islamic World (Oxford University Press).
- Kamona H A 2010 Perception in the Reconstruction of the city of Najaf as a Capital of Islamic [7] Culture.
- Howard H N and Ali Z 1938 Islam in the World Books Abroad 12 504. [8]
- [9] Ruthven M 2006 Islam in the World (Oxford University Press).
- [10] Adelphi H S O, Farhan S L and Haitham A H 2021 Threshold of Urban Sustainability within the Traditional Cities: Traditional Alnajaf city as a case study in IOP Conf. Ser. Mater. Sci. Eng. 1058.
- [11] Paper C, Imperitives IF, View OS, Thesis D and View EUS 2020 KERBELA : A UNIVERSAL CITY 0–11.
- [12] Jasim I A, Farhan S L and Hasan H M 2021 The Impact of Transit on Sustainable Urban Form IOP Conf. Ser. Mater. Sci. Eng. 1058 12049.
- [13] Falah S M, Williamson R, Snadon P, Kickert C and Haug R 2018 The Shrine that Consumed Its Town : The Role of Religion and Politics in Reshaping the Iraqi City of Najaf 75-7.
- [14] Studio T U 2009 Holy City of Najaf : Master Planning Stage 4 City Wide Framework.
- [15] Farhan S L, Alyasari H I, Akef V S, Zubaidi S L and Hashim K S 2021 Analysing the Transformed Urban Patterns of Al-Najaf Historical Center: Urgent Issues and Possible Solutions IOP Conf. Ser. Mater. Sci. Eng. 1058 12052.
- [16] Farhan, Sabeeh Lafta 1; Nasar Z A 2020 Urban identity in the Holy Cities of Iraq: Analysis Trends of Architectural Designers in the City of Karbala J. Urban Regen. Renew. 14 Number 210-222(13).
- [17] Rüpke, Jörg 2020 Urban Religion: A Historical Approach to Urban Growth and Religious Change (De Gruyter).
- [18] Al-Hasoon N 2015 Fantastically High of Land Value in Najaf, Karbala and Baghdad.
- [19] Farhan S L, Samir H H and Adelphi H S 2021 Urban Changes and its Impact on the Tangible and Intangible Heritage of City's Centre: Najaf City as a Case Study IOP Conf. Ser. Mater. Sci. Eng. 1058 12070.
- [20] Tabbaa Y, Mervin S and Bonnier E 2014 Najaf, the Gate of Wisdom. History, Heritage and Significance of the Holy City of the Shi'a (Paris: United Nations Educational, Scientific and Cultural Organization).
- [21] Farhan S, Akef V and Nasar Z 2020 The Transformation of the Inherited Historical Urban and Architectural Characteristics of Al-Najaf's Old City and Possible Preservation Insights Front. Archit. Res. 9 820-36.

- [22] S. Farhan, T.Mutas H A et al. 2021 Digital Era Influence on Neighbourhood Planning *I O P Conf. Sci. Mater.*
- [23] Al-Jid H 2006 Visitors Accommodations: Khans between Najaf and Karbala *Yanabee Alhikmeh* 10 50–75.
- [24] Mohammed M and Hadi E 2011 The Best Way to Deal with the Centre of Najaf Old Town *Development and Planning* (Baghdad: University of Baghdad) p. 11.
- [25] Farhan S and Abdelmonem M G 2018 Navigating the Socio-Spatial and Planning Conditions of Traditional Public Spaces in Iraq's Holy Cities *Traditional Dwellings and Settlements Review* vol 30 (International Association for the Study of Traditional Environments (IASTE)) p. 81.
- [26] Hussein M 2013 From Courtyard To Monument: Effect of Changing Social Values on Spatial Configuration of The Cities of the Holy Shrines in *Iraq Proceedings of Ninth International Space Syntax Symposium* (Sejong University Press) pp 038:2-038:23.
- [27] Alobaydi D M 2017 A Study of the Urban Morphological Processes of Baghdad: Implications and Guidelines for Urban Design and Planning in Middle Eastern Cities *Kansas, US Fac. Univ. Kansas.*
- [28] Farhan S L, Alyasari H I, Samir H H, Zubaidi S L and Hashim K S 2021 Conservation Approach as an Architectural Instrument to reviving Historical Cities; technical analysis for multi international cases *IOP Conf. Ser. Mater. Sci. Eng.* 1058 12071.
- [29] Farhan S L, Abdelmonem M G and Nasar Z A 2018 The Urban Transformation of Traditional City Centres: Holy Karbala as a Case Study *Archnet-IJAR* 12 53–67.
- [30] Al Rawda Al Haidaria Library, archives, <u>https://www.haydarya.com/?id=259&sid=392</u>.
- [31] Mujtaba Husein U 2018 A Phenomenological Study of Arbaeen Foot Pilgrimage in Iraq *Tour*. *Manag. Perspect.* 26 9–19.
- [32] Orbaşli A 2018 Urban Heritage in the Middle East: Heritage, Tourism and the Shaping of New Identities *Routledge Handb. Tour. Middle East North Africa* 95–105.
- [33] Kadhem F J 1980 The Sacred and the Secular: The Ulama of Najaf in Iraqi Politics Between 1950 and 1980 1–394.
- [34] Al-Ansari R M 2013 *Najaf: Past and Present* (Baghdad: Al-Mamoon House for Translation and Publishing).