


Cultural Dynamics of Gendered Spaces: Behavioral Influences in Amman's Outdoor Areas

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ABSTRACT

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This research focuses on the anthropology of gendered spaces and their connection with cultural aspects. Reviewing previous literature confirms that the cultural dynamics of gendered spaces in Jordan have not been widely researched, therefore exploring this subject will contribute to knowledge. Theorizing the interpretation of gender in urban spaces can shed light on gaps among culture and urban theories and identify some crucial concepts in the cultural dynamics of gendered spaces. This research aims at exploring the influence of cultural aspects on the behavior of middle-aged users in outdoor spaces. The research highlights the importance of understanding the cultural dynamics of gendered spaces. A comparative study is conducted to compare the landscape patterns in the old parts of Amman with the modern parts. A mixed methods approach is used to increase the accuracy of the research outcomes. The research findings confirm that understanding the users' behaviors, perceptions, and activities is important when planning and designing outdoor spaces. It also confirms the influence of cultural aspects on the behavior of individuals, especially women. The Research findings will affect government policy, professional practice, and the quality of the built environment; it will add great value to the field of gender-sensitive planning.

1. INTRODUCTION

There is increasing evidence that gender-sensitive urban planning is needed because men and women experience cities differently. Previous studies confirm that the urban planning profession has usually been 'gender blind' [1]. Many forums discussed gender issues and different arguments developed in the related field because of women's troubles, especially in subways, enclosed paths, and covered parking [2]. Understanding the development of gender roles as a typology of procedures and products within the public/private domains in a specific period will help in identifying the logic of gendered spaces within a specific cultural and spatial organization. As a female researcher from the Middle East, I can represent women's perspectives and address their needs and motivations. I have a similar perspective and a better understanding of their behaviors, norms, customs, and traditions. Being a female researcher provides a unique access to female groups, engaging with someone who shares their gender and cultural background is more comfortable during field observation and data collection. This positively influences the research approach and findings.

Gender is relevant to various urban planning concerns such as housing, transport, employment, and public space. Accordingly, urban planners should include gender policies in their plans to achieve inclusive governance. Gender includes men and women, but this research is more focused on women's issues because various studies worldwide show that their status is worse than men. However, if women's policies are

included in a different code, such as the "Women Friendly Seoul Project Guidelines 2009"; it gives the sense to planners that women's issues are other. Thus, some women planners prefer to talk about planning for the majority rather than planning for women, they can never plan entirely separately for women or men, and it is a sign of polarization and dichotomized thinking to imagine so [2, 3].

According to Greed [3], women encounter many problems in the city of men because of the planning subculture's dichotomized public/private view. This spatial division must be altered to the advantage of women by making more connections between land uses and activities to create new spaces and possibilities for women. Therefore, physical segregation between public and private domains reflected in land use patterns must be avoided. The nature of land uses must be more realistic and re-conceptualized to reflect how women use urban space.

The land use separation caused by traditional planning has led to fragmented urban environments connected by street networks. This approach has drawn criticism for isolating women at home, restricting access to resources, and discouraging employment from home [3]. During the 1970s and 1980s, feminist academics documented their surprise at the absence of women in planning and other disciplines which means that they are unrecognized and unappreciated by decision-makers when shaping urban spaces [4].

Decision-makers tended to place women outside their concerns. Neglecting women in various areas has led to negative impacts [5]. Therefore, to help women and men live

comfortably and productively, planners must determine the ideal locations for facilities and infrastructure [2]; both should be equally included in shaping the future urban landscape. Inclusive gender planning means equally comprehending the viewpoints and needs of women and men when evaluating the physical and social infrastructure. However, safety, transport, and well-being are the primary considerations in different women's policies around the world, such as the "Women Friendly Seoul Project" and "UNIFEM regional program," to name some. Thus, city planning must promote safety; safety is an essential aspect, especially for women; to avoid crime and sexual violence. 'Safe' design can be achieved by applying adequate lighting, parks that are overlooked, secure subways and alleyways, and protected places to play and socialize. Likewise, transportation systems design is an essential feature of urban and regional planning. Accessible public transportation can increase job opportunities for women. Particularly in low-income areas, women mainly rely on public transportation. Women must walk a great distance and become exposed to crime when public transportation is located on the edge of residential neighborhoods [2, 3].

Local and international approaches are employed by anthropological theories to comprehend the connection between spatial organization and cultural aspects [6]. Based on gender and cultural practices, some literature divided society into two domains: the public domain for males; and the private domain for females and children who are insulated from participation in the social system [4, 7]. Other literature highlighted the importance of culture and religion in shaping individuals' perceptions [8]. Islam, for example, affected the cultural features of daily life in the city, customs and traditions, festivals and activities, dressing, and socializing. Islam regulations organized outdoor spaces to suit the conservative society and enhance privacy [9]. There are four spheres of privacy in Islam: Privacy among neighbors, privacy among females and males, privacy among family members at home, and individual privacy [4, 9], as shown in Figure 1. The traditional planning that called for a "gendered nature of urban space" restricted the women's mobility physically and socially; physically by imposing patterns of movement and behavior based on fear and restricted access ", and socially by dividing the society into two different domains [10].

Understanding these historical influences helps to contextualize the present state of gendered spaces when exploring the case study of Amman. It's essential to recognize the complex interplay of historical, cultural, religious, economic, and social factors in shaping the dynamics of gendered spaces in the city [11].

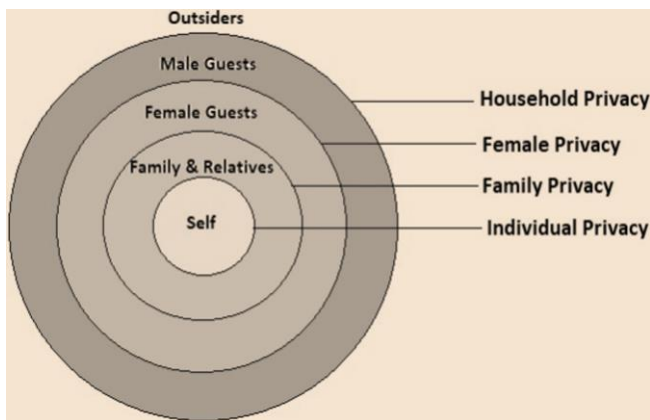


Figure 1. The privacy layers in Muslim society [12]

2. RESEARCH AIM

This research examined various approaches to place, gender, and cultural representation. It has an interdisciplinary approach that incorporates spatial aspects with cultural aspects of design. First, it aims at studying the transformation of the outdoor spaces in Amman during the last decade and its connection to cultural aspects, and then explores the influence of the cultural features on the behavior of middle-aged users in outdoor spaces, and if they prefer spatial segregation in different public spaces within the city. Reviewing previous literature confirms that the cultural dynamics of gendered spaces in Amman have not been widely researched. Amman has specific social dynamics related to gender, it has been chosen due to its cultural significance, urban context, diverse population, and various uses of its outdoor spaces.

To achieve the research aim the following questions will be addressed:

- How do cultural features influence the dynamics of Amman's gendered spaces?
- How does the spatial organization of landscape elements influence the users' behavior?

3. METHODOLOGICAL APPROACH

A mixed methods approach is used in data collection and analysis; it is implemented to achieve the research aims and increase the accuracy of the findings [12]. About 40% of the applied methods are quantitative (a structured questionnaire), and 60% are qualitative (a comparative study), as shown in Figure 2.

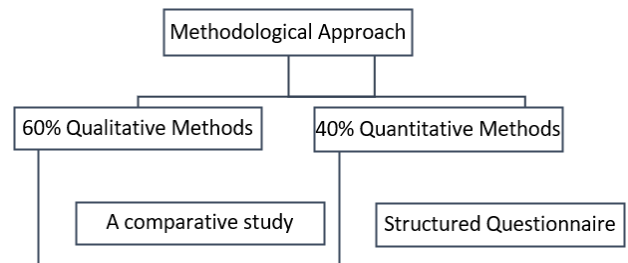


Figure 2. The methodological approach

The methodological approach contains three stages:

Stage 1: Analyzing the case study of Amman

(a) Qualitative methods: A comparative study

Amman's case study is analyzed to realize the evolution of gendered spaces accompanied by the change of gender roles and behavior in outdoor spaces during the last decade. Then, a comparative study is conducted within two different communities in Amman, old and modern. The field observation is necessary for realizing the gender behavior within Western/modern parts and Eastern/old parts of Amman to understand the influence of the spatial organization of landscape elements on users' behaviors. Two outdoor spaces are selected, the first is the *Marka roundabout*, located in the Eastern/old part of Amman and built in the 1950th near the Marka International Airport, and the second is the *Abdoun roundabout*, located in the Western/modern parts of Amman and built during the 2006th. The selection of these outdoor spaces is based on a thoughtful rationale that considers the historical, cultural, and urban characteristics of the city. By selecting one space from the old parts of the city and the other

from modern parts, the study can investigate how cultural context and spatial design choices impact the use of outdoor spaces in different ways. The choice of locations reflects the diversity and dynamics of both the old and modern parts of Amman, furthermore, both areas are considered as well-known nodes in Amman, and have similar urban layouts that are surrounded by commercial uses.

(b) Quantitative methods: Structured questionnaire

To achieve the research's aims of exploring the influence of the cultural aspects on the behavior of middle-aged users in outdoor spaces, their preference for the spatial organization of the outdoor spaces, and if they still seek spatial segregation among males and females in outdoor spaces. The researcher conducted an online survey to explore the preferred design of outdoor spaces that suit the individuals' needs and culture. A questionnaire was uploaded on "Google Forms", and the participants were randomly selected. The target group includes 52 females and 48 males; all are living in Amman. The participants' age varies from 20 to 55 years old to ensure diversity in desires, needs, motivations, and roles among middle-aged users who mainly use outdoor spaces. About 85% of the participants are aged from 36 to 45 years old, while 5% of them are aged from 20 to 35 years old, and the rest are aged from 46 to 55 years as shown in Figure 3. The questionnaire is divided into two parts: The first part includes general information such as age, gender, and religion. The second part includes ten closed-end questions that aim at exploring the impact of the cultural aspects on middle-aged users' behavior in outdoor spaces, and whether they prefer spatial exclusion in the public domain (Appendix 1).

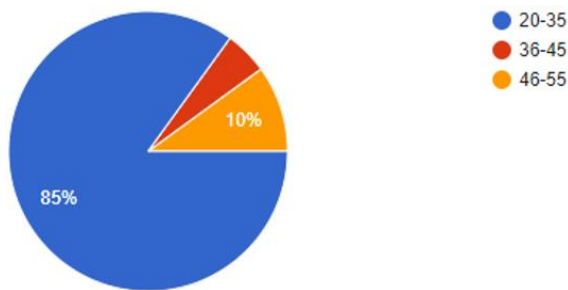


Figure 3. The participants' age

Stage 2: Analysis and evaluation

All data from various resources were further analyzed to identify the influence of the cultural aspects on the spatial organization of outdoor spaces. Finally, numerical and thematic analyses were used to analyze the collected data and present the findings.

Stage 3: Conclusions and recommendations

This stage represents the conclusions and recommendations that consider the relationship between cultural features and the spatial organization of outdoor spaces.

4. AMMAN CASE STUDY: GENDERED SPACES DURING THE LAST DECADES

The cultural features play a crucial role in shaping the current state of gendered spaces in Amman, therefore, it is essential to understand the historical contexts to comprehend the dynamics of gendered spaces. Amman, like many Middle Eastern cities, has a history deeply tied to its norms and

religious heritage. Islamic traditions and interpretations have played a significant role in shaping societal norms and gender dynamics. However, changes in education and awareness during the last decades contribute to evolving perceptions of gender roles and influence how individuals navigate outdoor spaces. Likewise, shifts in the economic roles of men and women lead to shifts in how public spaces are used and perceived.

These aspects have impacted the spatial organization of outdoor spaces in Amman [12]. When Amman was formally established in 1921 as the capital city of Transjordan, people gathered themselves into neighborhoods according to tribe, kinship, or ethnicity [11, 13]. The urban settled downtown near Amman stream on the eastern side of Amman; built their houses and worked in more stable professions, such as trading, crafting, agriculture, and the public sector [12]. The urban structure was affected by the Islamic beliefs that are imitative from the Holy Quran and Hadith (the words of Prophet Muhammad) [7, 10]. These beliefs controlled the design of outdoor spaces in Amman and were used to enhance privacy. Islam also affected all cultural features of daily life, traditions, customs, and socializing [9]. Accordingly, public spaces were designed to suit the conservative society, the separation between men and women in everyday life led them to socialize within two different worlds; women in the private domain and men in the public domain, consequently affecting their behavior. Photographs of the early modern urban areas in 1924 showed that the presence of women in outdoor spaces was not recognized while males dominated these spaces [14, 15].

Muneef [16] wrote that in spring and summer, older women distributed backless chairs made of straw on the public walkway near the front door twice a day, at noon and before sunset, sitting with their neighbors and preparing their pipes, and welcomed anyone walking in the street (Figure 4). Only older women were allowed to sit in front of their houses. However, young ladies were sitting on a semi-sheltered balcony and observing people from a distance. They were not allowed to go outside without accompanying their mothers or brothers. These cultural features affected the evolution of gendered space in the old part of the city to suit the conservative society.



Figure 4. Older women socializing and smoking on public walkways

During the 1970s and 1980s, the oil boom affected the city expansion, Amman grew towards its western side, and the city was divided along a socio-economic axis into two parts, old parts in the east and modern parts in the west. Amman's society transformed rapidly from a closed conservative to a more open liberal; women started getting a better education, going out to work, and achieving more in their careers; thus, their presence

in outdoor spaces was increased [15]. Furthermore, Amman was significantly impacted by the 1990 and 2003 Gulf Wars, the ways that young women view the world are significantly influenced by the roles they played within society. Today, women's roles have undergone tremendous changes; women have constantly adapted their behavioral strategies to suit the current state of affairs. Women have penetrated the public domain, but there has not been an appropriate change in men's roles and responsibilities in the private domain. The public/private dichotomy has not been broken down but is still full of power.

Understanding these historical influences helps to contextualize the present state of gendered spaces in Amman. It's essential to recognize the complex interplay of historical, cultural, religious, economic, and social factors in shaping the dynamics of gender in the city. Additionally, ongoing societal changes and contemporary movements contribute to the evolving nature of gendered spaces in Amman, realizing these factors will help in answering the research questions of how the cultural features influence the dynamics of Amman's gendered spaces, and how the spatial organization of landscape elements influences the users' behavior.

4.1 A comparative study between Amman's outdoor areas

To explore the impact of the cultural aspects on individuals' behavior when designing outdoor spaces, a comparative study was conducted between two commercial areas in Amman, these areas were chosen because they are physically similar, both of them have the same circular shapes, consist of almost the same urban features, plazas, sitting areas, monuments; and both are surrounded by shops, cafes, and restaurants. However, they are spatially and culturally dissimilar. The first area is the *Marka roundabout*, located in the Eastern/old part of Amman and built in the 1950th near the Marka International Airport, residents of this part are mainly locals, more conservative, and respect the old tradition, while the second area is the *Abdoun roundabout*, located in the Western/modern part of Amman and built during the 2006th, residents of this part are from different cultural backgrounds and less conservative.

Analyzing the *airplane square* known as *the Marka roundabout* which is located in the Eastern/old parts of Amman and surrounded by many facilities such as supermarkets, banks, restaurants, and cafés. The site analyses and field observations confirm that the square's design does not attract people to sit and socialize. The square is surrounded by a metal fence that physically segregates users and restricts them from sitting inside the square. The square is not furnished but there is an airplane monument at its center surrounded by various types of plantations (Figure 5). However, it is worth mentioning that this square was open to the public three years ago, till 2020, and it was attracting people, especially females, to come and sit. In the year 2020, females were seeking privacy within the outdoor spaces; sitting in groups at night, on the ground, behind planted hedges to hide from others; as they did four decades ago when they hid in the semi-sheltered balconies (Figure 6). Finding the same attitude within different time frames and spaces confirms that they are still affected by traditional beliefs. Today, the square is closed and the main activities occur in the surrounding areas; females come for shopping or sit with their families inside the restaurants, while males enjoy sitting on side parapets next to walkways, gazing

at people around them, observing others' behavior, and smoking; they enjoy dominating the public domain as they usually are. The surrounding places, such as cafes and restaurants are dominated by families and males. Females are not observed alone inside cafes which are mainly dominated by males, it is purely gendered spaces. One of the cafés near the square announces that females will have a special discount to attract them to come and smoke shisha, this behavior is unfamiliar in the Eastern parts of Amman where families are still more conservative. Females who live in the old parts usually go with their friends to the modern parts to enjoy sitting in cafes and smoking shisha. Thus, it is a spatial and cultural restriction anchored to the location. Similarly, in the morning, when waiting for the public buses, females buy some coffee and stand outside in small groups near the building's façade, while males sit individually outside on the building's stairs, to drink their coffee.



Figure 5. Marka roundabout where the airplane monument at the center surrounded by various types of plantations



Figure 6. Females are seeking privacy and sitting in groups behind planted hedges

The other public space that is analyzed by the researcher is the *Abdelmajeed Shoman Square* known as *Abdoun roundabout* which is located in the Western/modern parts of Amman and surrounded by many supermarkets, banks, restaurants, and café. The site analyses and field observations confirm that the square's design attracted people to come, sit, and communicate. The inner spaces of the square are open to public, and there is a central circular plaza that attracts children to play, this plaza is surrounded by steps that encourage people to come and sit (Figure 7). The square is well furnished with benches, bins, and lighting poles, moreover, the outer edges are planted with hedges and trees; the plants create a buffer zone and enhance the feeling of privacy and security for all users, especially children. Moreover, the lighting of the square is effective thus enhancing the feeling of security.



Figure 7. A central circular plaza attracted children to play, and encourage people to socialize

The presence of females in the square is similar to males, females gathered in small groups, each group includes three, and mainly sit on benches, others come with their families or children to play and enjoy, and some of them sit alone with their mobile phones on the steps (Figure 8), while the behavior of males at the square differs as most of them are working in the nearby shops, they come during their break time to sit on steps to relax and have snacks, the break time is about an hour maximum, and others come with their families and children (Figure 9).



Figure 8. The presence of females with families and friends at the Abdoun roundabout



Figure 9. The behavior of males at the roundabout

The surrounding places, such as cafes and restaurants are dominated by families, and they are open to males and females. The design of the pavements in front of the buildings and the distribution of tables outside the shops encourage people to sit outside (Figure 10). Women and young females are observed

alone inside and outside cafes and restaurants; some of them smoke shisha, drink juice, or have snacks. This behavior is familiar now in the Western parts of Amman, unlike the Eastern parts. Field observation confirms the influence of the spatial organization of landscape elements on the users' behavior. It highlights the importance of identifying the individuals' experiences and recognizing their behavior when designing outdoor spaces.



Figure 10. The design of the pathways encourages people to sit outside the building

4.2 Structured questionnaire

The results of the online survey show that, even in the twenty-first century, males and females, still prefer a high level of privacy and a clear division between public and private domains. However, the meaning of privacy varies depending on the user's age and gender.

About 59% of the participants believe that culture, habits, and traditions have a great effect on designing outdoor spaces while the rest believe that it has a medium effect (Figure 11). Moreover, 79% of the participants prefer creating more gendered spaces for females only, these spaces, according to them are mainly sports areas, followed by shopping malls, then public parks and plazas, and finally universities (Figure 12).

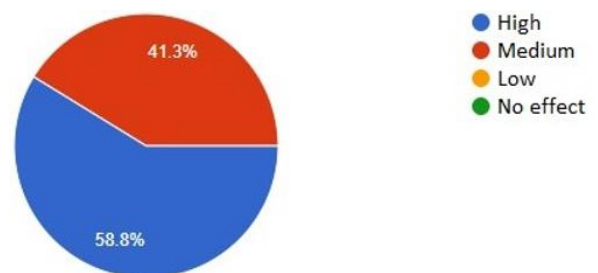


Figure 11. The effect of culture, habits, and traditions on designing outdoor spaces

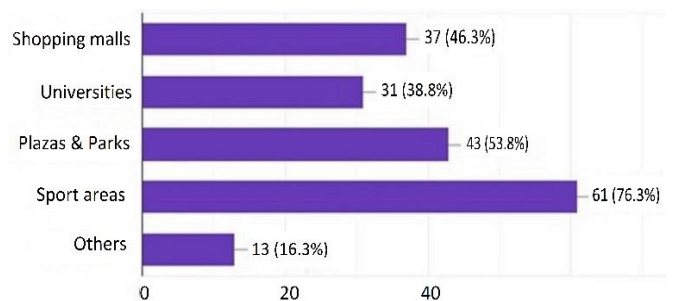


Figure 12. The proposed uses of gendered spaces for females

When asking the participants if their behavior is affected by the culture of space, 70% of them confirm that the local culture affects their behavior, however, 61% of them confirm that their behavior is the same and does not differ in Western and Eastern parts of Amman. Furthermore, most participants believe that the woman-friendly city should be safe, free of crime, and fulfill the users' needs (Figure 13) On the other hand, 64% of the participants feel that the society is divided into a private zone for females and public zone for males, similarly, 74% of them believe that this division should be removed.

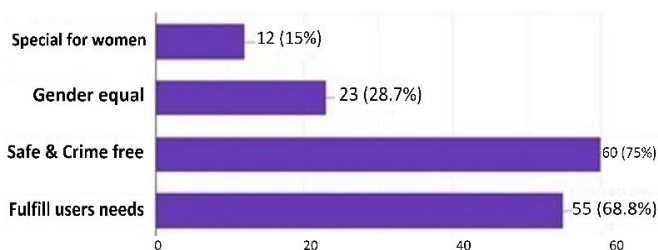


Figure 13. The description of a woman-friendly city

When asking the participants about the most important planning principles, they mentioned that public transportation is the most important, followed by safety, and then enjoyment (Figure 14). Regarding the level of privacy that they need in outdoor spaces, 65% of the participants prefer a medium level, 19% prefer a high level of privacy, 9% believe that there is no need for privacy in public spaces, and the rest prefer a low level of privacy (Figure 15).

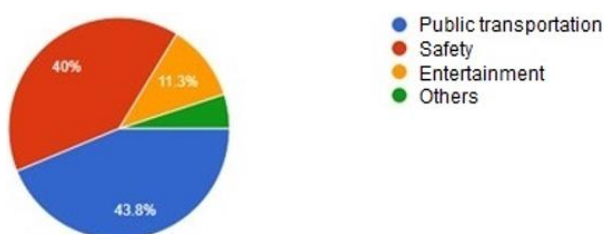


Figure 14. The most important planning principles in outdoor spaces

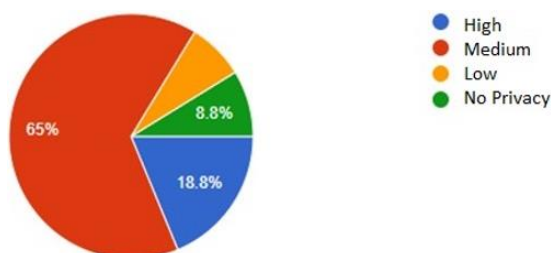


Figure 15. The required level of privacy in outdoor spaces

Analyzing the survey outcomes shows that the participant's gender and age affect the research outcomes. It confirms that even in the 21st century, spatial exclusion into the public/private domain is preferred, and the social traditions of privacy are a vital factor when designing outdoor spaces. However, over time, the logic of spatial segregation has transformed to suit the change of cultural standpoint of individuals, especially in the modern parts of Amman.

5. CONCLUSIONS

This research studies the cultural dynamics of gendered spaces, it explores the influence of cultural aspects on the behavior of middle-aged users in outdoor spaces and also explores the influence of the spatial organization of landscape elements on the users' behavior. The selected cases of the *Marka roundabout* in old parts of Amman and the *Abdoun roundabout* in modern parts of the city are just examples that reflect the city's need for more spaces that fulfill the individual's needs.

The research outcomes confirm that individuals' cultural beliefs and their established assumptions about the necessity of spatial segregation in outdoor spaces highly affect the design of these spaces. The results of the online survey show that, even in the twenty-first century, males and females, still prefer a clear division between public and private domains. They prefer applying religious principles and social traditions of privacy, however, the meaning of privacy varies depending on the user's age and gender. All of them seek privacy but they recognize it from diverse perspectives. In the conservative old part of Amman, the cultural beliefs control the females' behavior, they still seek privacy and are rarely observed alone without their family, unlike the modern part where females enjoy the public domain alone and with their families. This illustrates that terms like privacy and gender must never be used as a trans-historical concept. They need to be anchored in time and space; they mean different things to different people within a different cultural context.

The research confirms that privacy is connected with the cultural aspects that enforce public/private exclusion when designing outdoor spaces. However, the meaning of privacy and its application has changed over time. Analyzing the outdoor spaces in Amman shows that the public/private separation was followed for decades and influenced the spatial organization of outdoor spaces. Moreover, this research confirms that public/private exclusion in outdoor spaces has transformed from earlier concepts of rigid territorial to consider more comprehensive understandings connected with the cultural aspects. The research outcome illustrates the influence of cultural aspects on the behavior of individuals, especially females. Accordingly, this research recommends that instead of a private/public separation, it is necessary to consider these classifications as culturally constructed.

The survey outcomes confirm that outdoor spaces are already gendered spaces and highlight the importance of understanding the sensual experience and recognizing users' behavior when developing outdoor spaces that satisfy individuals' needs; these needs differ between males and females, children and adults, good health, and disabilities. The main recommendation to decision-makers and designers is to humanize the city by creating friendly spaces that suit males and females of different ages, day and night.

The research also explores the influence of the spatial organization of landscape elements on the users' behavior, it finds that when the outdoor space is physically segregated by any means of barriers, or when it is not appropriately furnished, it will not attract people, such as the *Marka roundabout*. In contrast, when it is integrated with the surrounding areas that offer various services, and when it is properly furnished, it will be attractive for all, such as the *Abdoun roundabout*. Moreover, the design of the pathways in front of shops, their widths, and pavements, encourage people to use these areas and socialize.

The Research findings will affect government policy, professional practice, and the quality of the built environment. It will enhance the designer's understanding of the individual's preferences. Gender-sensitive planning can lead to more inclusive policies and practices that take into account the diverse perspectives and needs of different genders within communities. Gender-sensitive planning serves as a foundation for evidence-based decision-making, enabling governments and professionals to design and implement policies that are more inclusive, equitable, and responsive to the diverse needs of all genders

A potential path for future research is suggested by examining the spatial and cultural aspects of the space. To understand the gender demands of contemporary communities that are appropriate for their present responsibilities and reflect on the spatial design of their outdoor areas, further study is required on the attitudes of females toward social traditions and how they cope with them in modern societies. Future research should take into account how Muslims' nature is always evolving and how Islam is practiced. Governments and organizations can use gender research to design targeted programs that address specific challenges faced by different genders.

Gender-sensitive planning research can profoundly impact government policies and professional practices by providing insights into the specific needs, challenges, and opportunities related to gender. Research on gender-sensitive planning can influence the development of cities and communities to be more inclusive for all. This might involve considerations for safe public spaces, accessible infrastructure, and transportation that cater to diverse needs.

6. LIMITATIONS

Although this study is essential for realizing the cultural dynamics of gendered spaces, it has some limitations. First, the study focuses only on two outdoor spaces in Amman due to limited resources and time. Second, all the participants in the questionnaire are Jordanians, and Muslims with almost identical cultural backgrounds which may affect the accuracy of the results.

Despite these limitations, the findings of this study will help in exploring how cultural features influence the dynamics of Amman's gendered spaces, and how the spatial organization of landscape elements influences the users' behavior.

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REFERENCES

[1] Malaza, N., Todes, A., Williamson, A. (2009). Gender in planning and urban development. Commonwealth Secretariat Discussion Paper, No. 7. <https://wiredspace.wits.ac.za/server/api/core/bitstreams/8d40660c-6438-4e84-80be-0189fc05c74f/content>.

[2] Areum, J., Lee, S.K., Kim, J. (2020). Gender gaps in the use of urban space in Seoul: Analyzing spatial patterns of temporary populations using mobile phone data.

Sustainability, 12(16): 6481. <https://doi.org/10.3390/su12166481>

[3] Greed, C.H. (2003). *Women and Planning: Creating Gendered Realities*. Routledge.

[4] Zalloom, B. (2018). Tracing the cityscape transformation under capitalism: The case study of Amman. *Journal of Urban Regeneration & Renewal*, 12(1): 54-71.

[5] UNEP. (2019). *Guidelines for social life cycle assessment of products*. <https://rb.gy/puwtdt9>.

[6] Low, S., Lawrence, D. (2010). *The Anthropology of Space and Place: Locating Culture*. Blackwell Publishing.

[7] Othman, Z., Buys, L., Aird, R. (2014). Observing privacy, modesty, and hospitality in the home domain: Three case studies of Muslim homes in Brisbane, Australia. *International Journal of Architectural Research*, 8(3): 266-283.

[8] Altman, I., Rapoport, A., Wohlwill, J.F. (1980). *Environment and Culture*. Plenum Press.

[9] Al Husban, S.A., Al Husban, A.A., Al Betawi, Y. (2021). The impact of the cultural beliefs on forming and designing spatial organizations, spaces hierarchy, and privacy of detached houses and apartments in Jordan. *Space and Culture*, 24(1): 66-82. <https://doi.org/10.1177/1206331218791934>

[10] Mortada, H. (2003). *Traditional Islamic Principles of Built Environment*. Routledge. <http://doi.org/10.4324/9780203422687>

[11] Madanipour, A. (1996). *Design of Urban Space: An Inquiry into a Socio-spatial Process*. Chichester: John Wiley & Sons.

[12] Zalloom, B. (2020). Gendered spaces: The impact of the cultural aspects on the spatial organisation of spaces inside the houses of Amman during the last century. *METU Journal of the Faculty of Architecture*, 36(1): 203-222. <http://doi.org/10.4305/metu.jfa.2019.1.5>

[13] Bryman, A. (2015). *Social Research Methods*. Oxford: Oxford University Press.

[14] Pilder, A. (2011). *Urbanization and identity: The building of Amman in the twentieth century*. Master Thesis, Miami University.

[15] Potter, R.B., Darmame, K., Barham, N., Nortcliff, S. (2009). "Ever-growing Amman", Jordan: Urban expansion, social polarisation and contemporary urban planning issues. *Habitat International*, 33(1): 81-92. <https://doi.org/10.1016/j.habitatint.2008.05.005>

[16] Muneef, A. (1994). *City Story: Amman During Forties*. Amman: Dar al Faris publishing (Arabic version).

APPENDIX

Appendix 1. The online survey

Gender	Male	Female	Age	25-35	36-45	46-55
Religion	Muslim	Non-Muslim				

Q1- I believe that the impact of the cultural aspects on the spatial organization of outdoor spaces is:

a) High

b) Medium

- c) Low
- d) No impact

Q2- I prefer creating more outdoor spaces for females only.

Yes No

Q3- I prefer to have female-only places for (you can choose more than one)

- a) Shopping malls
- b) Universities
- c) Plazas and Parks
- d) Sports areas
- e) Other

Q4- I feel that society is divided into a private domain for females and a public domain for males. Yes No

Q5- I think the spatial division between males and females in outdoor spaces must be broken. Yes No

Q6- In my opinion, the most important planning consideration is:

- a) Privacy

- b) Safety
- c) Transportation
- d) Entertainment
- e) Other

Q7- My behavior in outdoor spaces is affected by local culture. Yes No

Q8- My behavior in Eastern parts of Amman differs from Western ones. Yes No

Q9- A WFC should be (you can choose more than one)

- a) Special for women
- b) Gender equal
- c) Safe and crime-free
- d) Fulfill users' needs

Q10- In outdoor spaces, I prefer to have

- a) High privacy
- b) Medium privacy
- c) Low privacy
- d) No privacy