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This is the Published version of the following publication

Hammad, Ahmed, Li, Mengbi and Vrcelj, Zora (2024) The Rise of Gated Communities in Amman from the Old to the Modern: Socio-Spatial Impact on the Surrounding. *International Journal of Sustainable Development and Planning*, 19 (2). pp. 433-442. ISSN 1743-7601

The publisher's official version can be found at
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The Rise of Gated Communities in Amman from the Old to the Modern: Socio-Spatial Impact on the Surrounding



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<https://doi.org/10.18280/ijstdp.190203>

ABSTRACT

Received: 5 October 2023

Revised: 19 January 2024

Accepted: 2 February 2024

Available online: 28 February 2024

Keywords:

gated communities, urbanism of Amman, Arabian neighbourhoods, historical Morphology, social and spatial impact

The spread of gated communities in Amman calls for a nuanced investigation as they increasingly become the preferred housing choice for middle and upper-middle residents. This article attempts to correlate the social and spatial characteristics of Arabian neighbourhoods with the implications associated with gated communities, such as fragmentation and seclusion. The investigation employs a descriptive-analytic method and historical inquiry, including the evolution of Amman's master plan. In addition to case study observations and analysis of Al Andalucía being the first gated community developed in Amman. Findings suggest that separation and segregation can be achieved without affecting the quality of life, as walls, historically, played a vital role in encouraging interaction. Notably, gated communities show no correlation with the historical morphological context as they symbolise segregation, fragmentation, and exclusion. This paper contributes to a better understanding of the pragmatic notion of gates and walls in history and how people interacted spatially and socially, which can be echoed in modern gated communities aiming to reduce their impacts on the surroundings.

1. INTRODUCTION

Since the Middle East's real estate boom in 2003, Gulf Corporation Council (GCC) countries have been developing mega projects to attract international investors and tourists [1, 2]. The competition has spread to neighbouring countries, including Jordan, with developers' appetite to explore new areas and expand their investments. As a result of this expansion, an investor from a neighbouring country developed Al Andalucía as the first gated community in Amman in 2015 [3]. However, to our knowledge, there are no comprehensive studies that discuss the emergence of gated communities in Amman in the context of Arabian neighbourhoods and the evolution of Amman's master plan. Researchers have argued the impacts of gated communities, such as fragmentation, seclusion, and isolation; however, this article will discuss the connections of these terminologies with the social and spatial aspects of old Arabian neighbourhoods.

Building on several studies of gating and gated communities in the Middle East [3-8], this article seeks to demonstrate the historical backgrounds of contemporary gated communities in Amman by investigating the reasons and motives that fostered their development, then investigating their social, economic, and spatial impact on the surrounding neighbourhoods based on a case study analysis. As gated communities seek seclusion and isolation, in addition to other issues such as segregation, fragmentation, and exclusion [9], interestingly, these features

can be traced back to old Arabian neighbourhoods. As explained by Bianca [10], cities were divided by narrow alleyways as walls surrounded houses, creating gated interconnected neighbourhoods through narrow streets and alleys. Furthermore, separation and seclusion in Arabian cities have been a manifest feature of neighbourhoods and social groups. Researchers have widely studied the socio and spatial fragmentation of Arabian cities as the main characteristics that distinguish them from other liveable cities. These characteristics were derived from the ramification of sacredness and privacy, which has protracted over to houses and residential areas as traces of walls were found in most of the old Arabian cities [10]. These walls were part of the master plan features, enforced by privacy and hierarchy, as the notion of seclusion of social groups was derived from the old Arabian cities [7, 11].

By tracing the characteristics of Arabian neighbourhoods and then by analysing the development of Amman's master plan from the founding of Transjordan in 1921 until the recent master plan of 2009, this paper relies on descriptive-analytic methods and historical inquiry representing the Old Arabian cities utilising archives, historical documents, and case study observations, in the attempt to examine how modern gated communities in Amman can effectively utilise and implement the cohesion and social interaction features of the Arabian neighbourhoods.

2. LITERATURE REVIEW

The planning of Arabian cities was based on a multifunctional core structure identified by an unlimited number of nodes and individual buildings; therefore, there was no conventional grid of streets or plazas, and this pattern created homogeneity and coherence between neighbourhoods, which allowed for social harmony [10]. As this article attempts to investigate the impact of gated communities on the surrounding neighbourhoods in Jordan, the literature review will be divided into three sections: the first section will present a historical review of walls and gates and the relationship between gated communities and closed neighbourhoods in ancient cities. The second section will review the emergence of modern gated communities in Jordan, as the selected case study is considered the first gated community developed in Amman. The third section will review the social, spatial, and economic impacts of modern gated communities on the surrounding neighbourhoods.

2.1 Gated cities in history

The way Gated cities and walls were predominant in pre-modern cities as a universal phenomenon and a symbol of security, law, and order [11]. In China, for example, gates and walls were a distinct feature of its urban landscape as cities were surrounded by walls [12]. The concept of gated settlements is embedded in Chinese society, where walls had an essential role in creating a distinct environment. Furthermore, Li and Xie [13] suggested that the structure of neighbourhoods in early China was likely to be enclosed with a boundary around the community. Thus, in Chinese literature, some scholars argued that the emergence of gated communities is a continuation of the enclosed urban colonies since enclosed forms of closed suburbs are deeply rooted in Chinese society [14]. Similarly, houses in Arabian cities were protected from the main roads and outsiders by walls and gates, with a visual hierarchy that segregated visitors from private areas [10]. Various researchers have argued that gated communities in the Arab world were related to the planning of old cities and the concept of closed neighbourhoods. For example, Glasze [7] and Abu-Lughod [15] identified two main reasons for social segregation in the Arab world: a) The introduction of courtyards as an extension of the private and sacred spaces, and b) these courtyards served as the first line of defence since they were accessible through one gate which can be seized at any point of time. Furthermore, Glasze [6, 7] also argued that the introduction of contemporary gated communities in the Arab world, especially in Saudi Arabia, resulted from the integration between the Arab traditions of privacy and sacredness and the Western types of gated communities. Nonetheless, Touman [16] has counter-argued this assumption and suggested that gated communities in Saudi Arabia may not be considered an urban solution as they were found primarily to serve a specific layer of residents temporarily. Furthermore, Giddings et al. [17] discussed that gated communities in GCC are new housing concepts imported from the U.S. and have greatly contradicted traditional houses.

Most of the old Arabian cities had walls and gates as part of their embedded history, where walls performed a significant role in creating their environment. In addition, some scholars link the emergence of gated communities to the history of enclosed urban areas. More needs to be known about how

walls and gates encouraged community interaction and contributed to a sense of community.

2.2 Gated cities in Jordan

Amman had an organic planning pattern with narrow streets and closed alleyways that functioned similarly to the courtyards [18]. Additionally, the city was surrounded by gates and walls in 1880 to protect people and trade from intruders, aligning with the thematic elements of the old Arabian neighbourhoods [19]. Over time, walls were removed, and new linear urban patterns started to emerge, creating new commercial spaces, public services, and multi-story buildings, in addition to the rapid movement of immigrants from surrounding countries. This transformation has enforced radical social changes that split the city into two nodes, which resulted in the fading of the organic pattern and the rise of a more organised grid [20]. Several articles argued the reasons behind the emergence of gated communities in Amman; they concluded that their initiation was mainly due to socioeconomic changes and the demand of the newly formed social group of the middle and upper-middle class seeking seclusion and a luxurious lifestyle imitating the Western gated communities [4]. The outcome of their study accentuated the lack of strategic planning necessary to regulate gated communities, as the unregulated growth of gated communities might affect the natural resources. Furthermore, Al-Homoud and Al Aswad [3] conducted a questionnaire to understand the reasons and motives of residents living in gated communities in Jordan. They found that regulations, feasibility, security, and lifestyle are the predominant reasons people select this type of housing over others. The study concluded that such developments have created inequality between people living inside the walls and the surrounding neighbourhoods. In addition, Abed et al. [21] conducted a study on gated communities in Jordan to investigate the social sustainability within residents of gated communities. Their study concluded that policymakers should regulate the spread of these developments in order to provide integrated urban.

The socioeconomic changes, along with the rise of affluent social groups seeking symbolism, facilitated the emergence of gated communities in Amman, and they do not correlate with the historical morphological context in the old Arabian cities. Yet, the historical demographic changes played a significant role in their development. Further studies of the evolution of Amman master plan are required to link modern gated communities with socioeconomic factors.

2.3 Social, spatial, and economic impact

Several researchers have argued the social, economic, and spatial impacts associated with developing gated communities. For example, Roitman et al. [22] argued that developing gated communities for the rich in poor areas will have an economic integration between both, as these communities may offer job opportunities for the poor people living outside the walls. On the social aspect, Rafie Manzelat [9] suggested that gated communities foster segregation, fragmentation, exclusion and lack of sense of community. She concluded that gated communities have several impacts on the surrounding neighbourhoods, such as access limitation and social inequality. From the spatial aspect, Wang et al. [23] discussed the factors that motivate residents of the gated communities to open up with the surroundings. Their argument was based on

a study carried out by the central government of China in 2016, which called for the suspension of developing gated communities and then gradually opening the existing gated communities. The article discussed several impacts of gated communities, such as the increase in walking distance, the impact on public life, the sustainability of public spaces, and the imbalance in the housing policy. Their study showed that private equity, safety, and property management were the main reasons for people to open their gated communities. The study also proposed that opening gated communities should be approached cautiously, highlighting the importance of coordinating with government authorities to address residents' concerns.

In conclusion, the historical literature in the Arabian cities suggests that walls and gates were part of their deep-rooted history, and gated communities are associated in a way with the concept of enclosed urban areas; however, further studies are required to investigate such assumptions. In addition, although Jordan was part of the Arabian cities' setting, the emergence of gated communities had no relation with the historical context, and their emergence was due to the socioeconomic changes that took place over time. To bridge this gap, more research is needed to investigate the historical evolution of Amman's master plan that resulted in the appearance of gated communities. Finally, while existing studies have discussed the social, economic, and spatial impacts of gated communities in specific settings, further exploration is needed to explore these impacts within the gated neighbourhoods in history.

This study contributes to understanding the historical background and contemporary manifestations of gated communities in the context of Arabian cities and Amman's master plan, aiming to shed light on the positive attributes of walls and gates in history and to reflect them in modern gated communities.

3. PLANNING OF URBAN SPACES IN THE ARABIAN CITIES

During the spread of religious life in 610 CE, starting from Saudi Arabia and then spreading out to the Arabian Peninsula and the rest of the world, Arabian cities shared common arrays of religious, social, and even geographic factors, which led to the introduction of similar urban fabric as shown in Figure 1 [24]. Thus, the main elements of urban Arabian cities are the residential neighbourhoods, courtyards, private houses, mosques, open areas and retails, gates, towers, and walls.

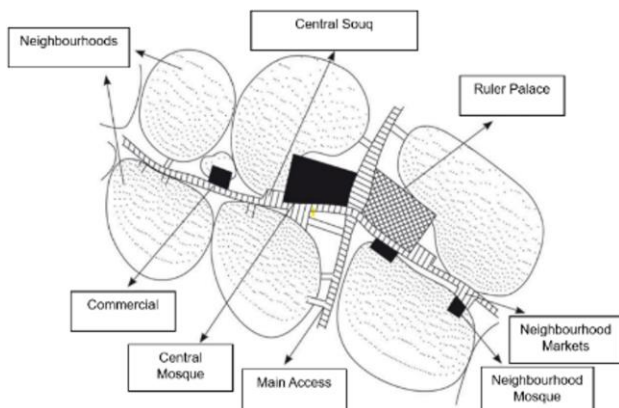


Figure 1. Diagram – typical Arabian city [24]

Furthermore, as religious life impacted many cities, the land-use pattern focused on the distribution of nodes within the city. These nodes were functional activities such as the central mosque, open spaces for prayers, markets, and retail outlets, which were embedded within the city's urban space and organised the master plans [10]. As explained by Bianca [10], the sacredness of these nodes had imposed their powers and predominance on the master plan through the alignment and orientation of roads, streets, and alleyways towards these nodes. In addition, the effect of sacredness has impacted the design of houses and residential dwellings and created the notion of courtyards, as shown in Figure 2.

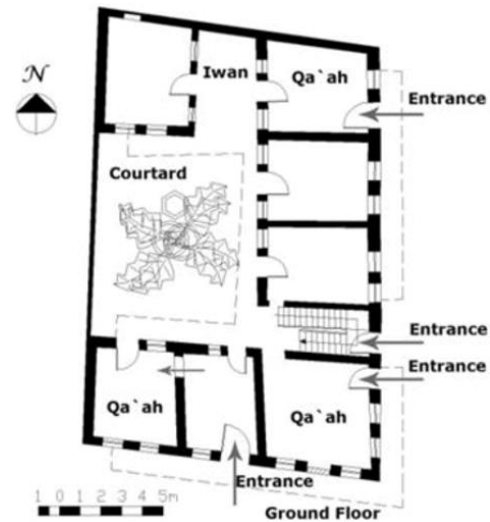


Figure 2. Typical courtyard house design [25]

Since houses were opening inwards, the periphery walls have created narrow alleyways that, in some areas, narrowed down to two meters. In some places, the expansion of the second floor had created covered and shaded alleyways where people and neighbours used to meet during hot days. Houses were away from the streets with no windows opening to streets or alleyways, or if a house had openings to an alleyway, the opposite house was not allowed to have openings on the same alleyway to ensure privacy, which resulted in an organic form of the urban fabric [24]. The distinctive features perceived in the urban designs of Arabian cities, including narrow alleyways, shared open spaces, inward-facing houses, gated neighbourhoods, courtyards, and quarters, may be seen in the designs of contemporary gated communities but in a different form, shape, and motivations. However, the evolution of the design features in the Arabian cities was natural and organic, which might be related to geographic, religious, and social aspects. Whereas in modern gated communities, exclusion and isolation often result from deliberate planning strategies. The emphasis on community interactions and shared spaces as extracted from the Arabian cities may contradict the privatisation and closing of some gated communities, which may question the social cohesion between insiders and outsiders of the walls.

Furthermore, by examining the defensive requirements that led to the construction of walls and gates around many old cities and capitals, it was noticed that walls surrounded most gated communities and had security rooms and guards. However, their motivations for security have extended beyond defence reasons to include exclusivity, prestige, and seclusion.

Investigating the historical phenomenon of Arabian cities and their features provides a further understanding of the social bonds within the community despite the presence of gates and walls, which may lay the foundation for resolving such dynamics in modern gated communities.

4. PLANNING PATTERN OF AMMAN

By tracing Amman’s urban evolution, the historical features of old Arabian cities, such as narrow streets, closed alleyways, and organic patterns were noticed in the overall planning of the city [25]. Historically, Amman city centre was surrounded by gates and walls to protect people and trades from intruders, and these walls dwelled as a key feature of the city centre until the overruling of the Ottoman dynasty between 1516 -1918 CE [19]. The introduction of the main train line in 1903 provoked the disappearance of these walls and fences and led to a linear planning approach represented by wider roads and streets and regression from the organic pattern with narrow streets. Amman's growth, prompted by the numerous immigrations from the surrounding countries from 1948 until the recent movement of refugees in 2009, witnessed an unplanned expansion of its master plan driven by housing and infrastructure demands [19, 26]. The city's image, as it is perceived nowadays, reflects the mass movement of people and efforts of the city master plan to cope with such an increase in population, infrastructure, and other utility demands. Despite the articulation of numerous master plans between 1955 and 1990 on all levels, the implementation of these master plans was challenged by the complicated geopolitical aspects and the rapid population growth [27]. The uncontrolled expansion has affected land prices, distribution of urban developments, and decreased the agriculture area. This immense population increase has forced homeowners and investors to seek alternative lands outside Amman's outskirts, searching for cheaper prices. Also, to better understand the retro plan of the city, it is essential to point out that the city has witnessed the highest urban growth among other cities in the Middle East between the years 1972 and 2009, which has negatively impacted agricultural lands and created traffic jams which had affected the city environmentally and socially [28].

In Summary, Amman’s planning experienced multiple impacts, including historical and geopolitical aspects, which formed a layer in the society seeking seclusion, better environmental ambient, and peace, which may have resulted in the emergence of gated communities as a housing solution.

5. URBANIZATION OF AMMAN

The historical evolution and transformation of Amman, from its origins in Rabbath Ammon all the way to Amman, which is the present name of the capital, has influenced the urban fabric of the city [27]. This historical timeline has delineated Two precincts in Amman; The West and East, where the East part has lower population density compared to the West precinct. With the political changes, including the influence of the Ottoman Empire in 1516, social segregation and inequality started to unfold in different areas in Amman, distinguishing between poor and rich areas as the case of West and East of Amman. The formation of two precincts may be regarded as the first attribute that shaped the city, which may have potentially contributed to the socio-economic

segregation. Hanania [29] identifies the substantial influence that forced the formation of Amman and affected the urban planning response as the mass migration of humanitarian refugees between 1948 and 2019. The excessive flow of the population in a short duration has forced the city to grow in multiple directions. Thus, the emergence of gated communities in Amman may be considered as an urban design solution that can create a resemblance of seclusion, or a response to the historical factors that led to the demographic shifts and socioeconomic divisions.

In summary, the urbanisation of Amman has been influenced by manifold historical factors, socioeconomic divisions, and the challenges inflicted by the mass movement of immigrants, which have contributed to the formation of Amman's distinct urban form. Therefore, the emergence of gated communities in Amman may be considered a nuanced response to the historical challenges and revolutions.

6. INSTIGATION OF GATED COMMUNITIES IN AMMAN

In order to investigate the reasons and motives behind the emergence of gated communities in Amman, it is crucial to understand the Jordanian housing sector review initiated by the World Bank [30]. The housing demand is primarily driven by the significant arrival of refugees from the surrounding countries, which resulted in unexceptional population growth. In addition to the increase of population concentration in the core urban areas including the capital, Amman, where approximately 75% of the residents live in these core areas as in Figure 3.

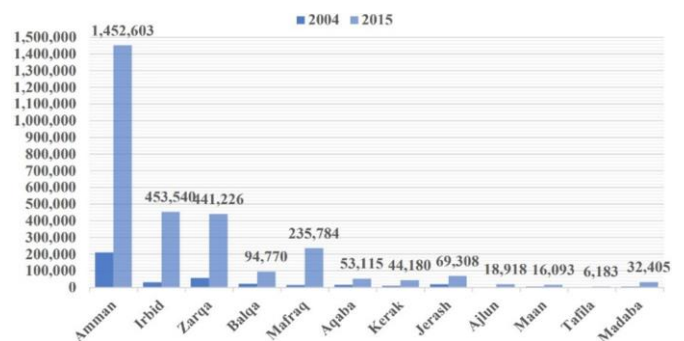


Figure 3. Population growth of non-Jordanians 2004-2015 [28]

Several motives have impacted the urbanisation of Amman and ultimately increased the residential costs. Starting from the concentration of the population in certain areas accommodated the regulatory challenges that faced the private sector, including coordination, authority approval, lack of sufficient project categories regulations, and changes in municipal codes. Furthermore, the structural shortage in residential plots is associated with complex zoning regulations and building codes, which resulted in low-density housing products. In addition to the fragmentation of Amman caused by the formation of two precincts, the West and East of Amman, has pushed the middle and upper-middle class of the society to favour the western part of the city, which puts more pressure on the city's growth and infrastructure and causes inflation in land prices and ultimately caused inflation in houses prices. Due to the increased land prices, a new concept of

decentralisation of the city centre has started to take shape with the growth of new developments away from the congested areas along the main roads and axes towards the northern and southern parts of the city. This created new nodes and centres away from the crowded areas [28]. These nodes and centres have created an opportunity to develop residential offerings that provide competitive and affordable housing products, seclusion, independence, and privacy. On the other hand, with changes in the socio-economic framework in recent decades, a new layer in society emerged, which is the middle and upper middle class seeking different types of residential products that fulfil their requirements [4]. As discussed by Al Omari and Al Omari [4], the term ‘conspicuous consumption’ refers to the needs and motivations for people to relocate to gated communities hoping to achieve social status. In other words, cultural segregation is based on financial and cultural powers as the rise of a wealthy society seeking social distinction and seclusion from others has created an opportunity for a new housing utopia. Lifestyle and prestige are predominant factors influencing people's decision to move to gated communities outside the crowded city [31]. The general understanding of the people of Amman is that gated communities are a luxurious utopia that provides security, privacy, and sophisticated infrastructure offered for a specific category of powerful society [4]. Alongside the socio-economic changes that influenced the people of Amman with the increase in housing prices, the surrounding countries, mainly the GCC, were competing to attract international investments and tourists, which spread out to Jordan and led to the development of the first gated community in Amman [3].

Thus, this paper suggests that the emergence of gated communities in Amman may be related to a combination of reasons, including socio-economic changes in the structure, which impacted the land use, socio-spatial changes in the society, which led to the appearance of affluent people who seek symbolism, the concentration of people that led to overcrowding in Amman, the immense increase in land prices, and lastly, the thriving real estate market and investment opportunities. The combination of these reasons may have collectively contributed to the decision of individuals and developers to seek such a housing solution.

7. THE CASE STUDY

7.1 Introduction to the project

Al-Homoud and Al Aswad [3] pointed out that the Al Andalucía project is considered the first closed community built in Amman City between 2009 and 2015, although there were previous attempts since 1990. Those attempts were on a smaller scale and represented a private or family product that did not have the scale of magnitude. Thus, Al Andalucía can be considered a relatively sizable scale development that can be further studied and analysed. Based on a review of the most recent gated communities developed in Amman as shown in Table 1 [32], the selection of Al Andalucía as a case study was based on criteria related to a) plot area where the selected case has the largest land area of 800,000m², b) number of units, as the total number of units is 588 villas, and c) the location of development was at the outskirts of Amman occupying an agricultural land, due to the land cost, which is in line with hypothesis of this article.

Table 1. List of gated communities in Amman [32]

Gated Community	Area (m ²)	Number of Units	Units Type	Construction Date
Green Land	400,000	147	Apartments	2008
Al Andalucía*	800,000	588	Villas	2009-2015
Saraya Dabouq	6,000	10	Villas	2011
Panorama Villas	3,500	10	Apartments	2013
Green Valley Villas	4,277	10	Villas	2014
Green Village	22,000	30	Villas	2016
Black Iris	13,550	18	Villas	2016
Al-Kursi Compound	2,900	5	Villas	2016

The project is located approx. 20km from Amman towards the southern part of the city on the main road leading to the airport. This project is close to Amman International Airport, which is in the south part of the city, towards the new nodes and centres. This is in line with the hypothesis argued by Makhmreha and Almanasyeha [28] vis-à-vis the decentralisation of the city nodes along the significant axes towards the northern and southern parts of the city and the emergence of modern centres, which met the needs of the new social class on the other hand. The selection of such a location, which is far from the city centre and the crowd, suggests that such seclusion may be a response to a particular layer of people who are seeking social distinction and segregation. The project was developed by TAAMEER Jordan as a response to the socio-economic growth in the city, as proclaimed by the company website. The developer's vision was to create a modern, luxurious lifestyle, private ambient, refined furnishings, dedicated green areas and water features, in addition to high-quality building materials [32]. In addition, the master plan of Al Andalucía incorporated a central multi-function recreational area which was located on the main paths where residents can meet during their movement. Furthermore, the concept of a cul-de-sac or closed roads, as discussed by Hammad and Hammad [33], suggests that this concept may reduce the crime rate and increase security levels since strangers' movement is limited. A similar concept of closed roads is seen in the development of Al Andalucía, which may help in addressing the security aspect. Furthermore, houses' orientation towards the internal roads may suggest that social interaction between residents is increased as residents can practice their daily activities of walking and meeting. On the other hand, the project was developed in an agricultural zone as the Department of Land and Survey categorised it at one stage in time. Figure 4 is a map captioned from the land department website, demonstrating the subdivision and the surrounding agricultural areas. As discussed by Makhmreha and Almanasyeha [28], between 1972 and 2009, Amman's population increased approximately 480 times, and the urban area by 595 times. This means that the impact on urban areas has been significantly excessive by taking over agricultural lands. This was observed in the case study, where the development was constructed on agricultural land. Furthermore, the construction works commenced in 2005 and were stopped during the global financial crisis, which has impacted the real-estate sector globally. The construction works resumed in 2009, and the development was ready to receive residents starting in 2013 [3]. Since the development was constructed on agricultural land with no local regulatory

plans, the designs were flexible and subject to the developer's/ designer's requirements. However, the development has improved the overall image and land prices of the area, which can be considered a positive impact, and this may put pressure on the planning authorities to replan the surrounding area to accommodate the new gated community and to ensure the capitalisation on such development to improve the overall area.



Figure 4. Aerial map for the case study

7.2 Project details and boundaries

The project was built on an area of approximately 800,000 m², with a total of 588 double-story villas. The project included a central recreational area with a clubhouse, clinic, shops, restaurants, cafes, side roads, and parks [3]. The built area of each villa averaged between 312 m² and 637 m² on a land area between 496 m² and 1,020 m². Using these numbers, the plot area coverage is approximately 27%, leaving 73% for open spaces. The development is entirely enclosed and inaccessible to the public, with private access surrounding the development. A private gate is located at the northern side, which is controlled by security guards with a physical concrete barrier surrounding the development, as shown in Figure 5.



Figure 5. Main entrance

The development is surrounded by farms and agricultural lands with minimum service offerings, including basic amenities such as groceries, markets, laundries, and other services. Nevertheless, the development is in proximity to a city called Madaba, which is approx. 9.7 km (6 mi) away. This suggests that residents of the development need to travel to the nearest city to obtain other daily needs, which can be considered a positive economic impact on the surroundings. Furthermore, two international schools were built in the

surrounding area: Kings Academy, which is approx. 3.7 km (2.32 mi) away and was founded in 2007. The school was built on 144 acres of land and comprises education and accommodation buildings as boarding facilities. The second school is Eagles Academy, which is also in the same proximity of 3.5 km (2.2 mi) and was founded in 2013. Several other schools are available in the city of Madaba, which can be an option for the residents of the Al Andalucía community.

The case study may be considered a response to the socio-economic changes that impacted the city of Amman, such as the increase in population, rise in land prices, and demographic changes. In addition, the selection of this case was due to its size and design characteristics, such as central recreational area, cul-de-sac concept, modern and luxury living, green areas and water features. The walls surrounding the development and security gates suggest symbolism and isolation from the surroundings, with limited or even no interaction expected between people inside and outside the walls. The secluded location has economically supported the neighbouring areas as residents need to travel to the nearest areas for daily needs, schools, and other requirements. Al Andalucía 's case study provided insights into the evolving urban situation in Amman, and the same can be attested in other similar case studies for gated communities built on the outskirts of the city centre.

8. STUDY FINDINGS

To better understand and investigate the impact of such development on the surroundings, this paper will analyse the positive and negative impacts of this development on the spatial, economic, and social contexts.

8.1 Spatial impact

From the spatial impact, negative and positive impacts were argued between researchers. The subject case study provided compatible services and infrastructure within the development, which may positively influence people to relocate there. Nevertheless, this positive impact was within the walls and has reconfirmed the lack of adequate infrastructure for the surrounding areas. On the other hand, the negative impact, as identified by Landman [34], is the closure of streets, which shall impact emergency services and the disruption of footpaths and walkways. These impacts are invalid in the subject case study as the surrounding lands are currently unoccupied. This can put pressure on the planning authorities to implement a well-studied master plan on a macro level to integrate this gated community within a bigger master plan, avoiding negative spatial impact.

8.2 Economic impact

The second impact is the economic impact. This argument has always been on the developers' side, as gated communities may provide a positive economic impact internally and externally. Internally refers to within the walls, where jobs are created for multiple services such as cleaning, security, maintenance, and other supporting services required within the gated community [35]. Externally refers to the support services provided by neighbouring areas such as markets, kindergartens, and other amenities. This impact was positively reflected in the subject case study, as residents are urged to

travel to the nearest developed area for shopping, and this approach will support the economy in the surrounding areas. In addition, such developments may improve and increase the property value of the surrounding areas. However, Le Goix [36] has proposed a different analysis of the economic impact where he believes that gated communities might reduce the property value of the surrounding areas or in non-gated surroundings due to the decrease in affordability levels in the surrounding areas. This assumption requires further investigation in the subject case study to test its viability, as this might have a revolutionary impact.

8.3 Social impact

Finally, the most vital impact is the social impact, as this has been argued at length by several researchers and master planners. The discussion of social impact refers to urban social segregation and gated communities' role in social life and relations [37]. Few researchers have argued that gated communities create positive social relationships among residents and their surroundings as they encourage a sense of community [5]. However, this might be applicable within the walls and between residents and neighbours of the gated community. The social impact investigated in this article is associated with a much broader understanding of social relationships and interactions, which creates social homogeneity and, subsequently, a more robust social fabric [38]. On the other hand, the negative social impact is associated with segregation on the whole society, which might lead to social exclusion and disintegration [37]. One additional social impact identified by Low [39] is that people living outside the walls will feel that they pose a danger to people living inside the walls, which will undoubtedly prevent any interaction between the two communities. In addition, the impact of gated communities has protracted to impact the social environment where the location and distribution of these communities have detrimental effects [4]. By investigating the social impact on the subject case study, the predominance of Al Andalucía development reflects a symbolic barrier between the insiders and the outsiders, which may emphasise social segregation. Based on a questionnaire carried out by Alkurdi [32] with Al Andalucía residents and the surrounding neighbours, the majority of the surrounding neighbours feel that Al Andalucía development, in particular and gated communities in general, implies segregation and separation.

The study outcome is in line with the analysis suggested in this paper, as gated communities may support socio-spatial fragmentation and inequality. Furthermore, the general outcome from the case study analysis can be summarised as follows:

- The isolation of a particular layer of society from the wider community can contribute to social segregation and separation.
- The symbolism that gated communities impose with their walls and gates may influence urban growth and the natural urban spread.
- The luxurious lifestyle and safety provided by gated communities are exclusive for the residents within the walls.

The economic aspect is supported by the development of gated communities as the land prices of the surrounding areas may increase, as well as the economic opportunities in the surrounding areas, such as schools and markets.

8.4 Summary of key findings

To address the study findings on the three aspects: Spatial, Social, and economic, analysis of the impacts of gated communities are summarised below:

Spatial impact findings:

- Positive impact: local infrastructure, amenities, facilities, and services within the walls.
- Negative impact: lack of adequate infrastructure for the surrounding areas.
- Recommendation: a need for a master plan on a macro level to integrate gated communities aiming to prevent any negative impacts.

Economic impact findings:

- Positive impact: This may be considered as an encouraging investment opportunity for both sides of the walls as they may enhance the property values, internally and externally.
- Case study impact: economic support for the surrounding areas, such as shopping and schools.
- Negative impact: due to the increase in property values of the surrounding areas, a decrease in affordability levels in the surrounding areas may be noticed.

Social impact findings:

- Positive impact: community cohesion between residents within the walls.
 - Impact on the surrounding: potential social segregation and inequity.
- Case study insights: the walls and gates of the case study were identified as a symbol of segregation and seclusion.

9. DISCUSSION

The review of literature suggests that social and religious factors played significant roles in characterising the urban fabric of Arabian cities. Hence, this was noticeable in the design features as most Arabian cities had walls and gates that either surrounded the whole city as a defensive requirement or walls that surrounded houses and created courtyards. Therefore, the concept of walls and gates was remarkably seen; nonetheless, walls played a vital role in encouraging community interaction and contributed to a sense of community. Meanwhile, walls and gates of gated communities may influence segregation, fragmentation, and exclusion, which was not seen in Arabian neighbourhoods. Nonetheless, the findings extracted from the case study of Al Andalucía development synthesis with the literature review on old Arabian cities and provide valuable insights into the broader understanding of gated communities, especially in the Middle East, on the social, economic, and spatial, as follows:

Spatial impact:

By reviewing the social characteristics of neighbourhoods in the old Arabian cities, we found that community interaction was greatly encouraged. In contrast, modern gated communities introduced challenges related to segregation and fragmentation, as seen in the Al Andalucía case study. This may be considered a departure from the traditional planning of old cities and suggests a different approach to integrate gated communities within the urban to reinstate spatial interactions. Urban planning policies need to review and consider this departure and explore policies that may reintegrate gated communities into the broader community, aiming to enhance community interactions.

Economic impact:

The economic aspect had different viewpoints and opinions among researchers. Developers promote this type of development as a successful investment opportunity, as well as their impact on job creation within the walls, such as service jobs, maintenance, and security. However, as argued by Le Goix [36], the economic impact of gated communities on the surrounding plots may decrease the affordability of people to purchase since the increase in prices was irrational.

Further investigation in the context of the subject case study's influence on the surrounding neighbourhoods may be required to test the viability of this assumption by introducing urban planning policies and strategies that sustainable urban development.

Social impact:

The discussion on the social impacts relates to the complexities of social life and community relations. Some researchers argue that gated communities may create a sense of community, which may be seen within the walls and between the residents of the gated community [5]. However, the residents' survey carried out by Alkurdi [32] indicates that neighbouring communities feel the segregation and separation from the community of Al Andalucía. This understanding contributes to the ongoing debates on social interactions and community cohesion and calls for further urban planning strategies to regulate their spread and maintain an integrated society.

Future studies and recommendations:

The historical inquiry in the literature review synthesises the transformation and progression of social and spatial interactions with the old Arabian cities. As presented in the case study, the emergence of gated communities in Amman is a response to the socio-economic changes, which conflict with the historical background. Figure 6 is a proposed illustration by the author on the subject case study inspired by the characteristics of the Arabian cities in an attempt to create an integrated gated community with the surroundings.



Figure 6. Proposed illustration by the author

This aligns with the literature review and the emphasis on coherence and integration, where the development can be integrated and share common facilities. Future studies could focus on integrating gated communities into the existing urban fabric, aiming to create a harmonious and integrated environment. The finding from the case study emphasises the need to develop an integrated planning approach that incorporates social, spatial, and economic aspects that emerged from gated communities. The implications discussed in this article aim to contribute to a broader understanding of

the impacts of gated communities on the surroundings and recommend urban policies and strategies that reduce these impacts.

10. CONCLUSION

The historical evolution of Amman's urban planning, influenced by internal socio-economic changes within the community and external factors that impacted the real estate market in the surrounding countries, led to the emergence of gated communities. Those developments contributed to the economic aspect towards investors, as well as the surrounding areas, in addition to the internal amenities and facilities offered to the residents of gated communities. This paper aimed to correlate the characteristics of Arabian cities represented by gates and walls in history and how people interacted spatially and socially with the features of modern gated communities extracted from the case study. The findings of the study suggest a re-evaluation and assessment of the urban planning policies in Amman and other cities with similar historical backgrounds in order to encourage community integration, social cohesion, and economic affordability and inequity.

Recommendations:

- This article recommends developing urban planning strategies that can assist in integrating gated communities into the broader community, fostering cohesion and integration.
- Involve the broader community in the planning process of newly developed gated communities in order to ensure the concerns and needs of both communities are accommodated.

This article indicates that gated communities may significantly impact urban areas, affecting spatial, economic, and social aspects. Despite the positive features they provide, such as security and privacy for particular people in society, they also raise concerns about social integration and inclusivity. The case study of Andalucía highlights the need for future urban studies while the area is still developing to promote integration and cohesion. Future research may investigate the long-term effects of gated communities on Amman's urban fabric and socio-spatial dynamics.

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