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### ORIGINAL RESEARCH PAPER





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Street character and current practices influence

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#### **ABSTRACT**

Rapid development has affected the elements of urban spaces adversely, particularly streets. These changes produce faceless cities with high dependency on vehicles for transportation to key 'consumers' aside from buildings that are not designed for the local environment and local needs. In urban design, concerns on character affect the sense of place. Thus, this paper assesses the crucial element of streets with respect to design and character in the urban setting, the subsequent issues, and the recommended solution. This study focuses on the scenarios that threaten today's street design. This work will discuss the advantages of traditional streets, which could be a potential solution to the issues mentioned earlier. Finally, a street design based on the traditional street model is proposed to fulfill the criteria necessitated by the local community.

#### **KEYWORDS**

street, urban design, traditional street, design, character

### 1. INTRODUCTION

A good city establishment requires the harmonious existence of a number of key elements, including people, neighborhoods, streets, parks, government, and economy. These elements can be likened to the organs of the human body. These organs are connected with each other. Streets, which are one of the crucial elements in the formation of city or town, establish settlements with respect to urbanization [1]. Streets are regarded as major public spaces in the context of urban fabric, as these structures comprise more than 80% of public space in cities [2, 3], and provide for the functional, social, and leisure needs of users [4].

Streets constitute a significant part of the public open spaces and are described as the bones of the city [5]. These structures are not merely a channel of movement; streets also connect different areas and buildings [6]. Streets also serve as a venue for social interaction via different types of human behavior, including talking, playing, observing, and lingering. Streets are a gathering space for families and friends and sometimes a living room or a dining room for city dwellers [7]. Streets symbolize the public realm where people spend a majority of their time [8, 9]. Similarly, street manifests local, cultural, religious, and social activities, and in turn, these activities dictate the street's liveliness, uniqueness, as well as its success as a public space. Streets shape the urban living environment and create a city's image [10–12].

Studies mentioned that the city and the society can be understand in which the street is located by examining a street [7]. These studies indicate that to study the formation of streets,

- (i) a researcher must understand the larger context of the street because of the intertwining of the city and streets;
- (ii) the type of user and local society that form the activities, culture, and beliefs, which show the special identity of street environments, must be studied.

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First thing come to minds when thinking about any cities is the streets, if the streets are dull the city looks dull, but if the streets are attractive the city looks attractive [12].

However, a remarkable difference exists between streets and roads. Roads propose movement to a destination and offer a transportation system that accommodates the movements of motor traffic. Streets also include these features but usually appear cater to slow movement and are inclined to public spaces and buildings catering to pedestrian activities. Streets can be referred to as a public arena that caters to various activities and users. Thus, streets are described as the spine of life for the cities is the place where all people come together [13]. Streets are social settings, and their names and functions come from being accepted by communities. Streets have their own architectural identities, as well as economic function and social importance [13], In other hand the culture artistic appear in the streets, reflecting the spiritual pursuit of the locals, and its model is in a stage of continuous development and transformation [14].

Thus, streets have a crucial function and play a critical role in the context of urban areas. Street designers must ensure that a street will fulfill its primary function, that is, as a place or public realm that fulfills the needs of users and exhibits character at the same time. A number of datagathering techniques could be employed in ascertaining a sound street design. Among these approaches is behavioral observation, as well as data from public perception. These approaches aim to scrutinize a street with respect to its appearance and function. Therefore, this paper elaborates on the significance of street design and character in urban settings. Furthermore, the problems that occur in current street design, which dictates the character of a street, will also be addressed. A solution will be proposed.

### 2. STREET DESIGN AND CHARACTER

"Character" is a combination of qualities in a person or a place that makes them different from others. In the context of place, character refers to the elements that make places different from others and recognizable or unique [5, 15]. Character provides life to a place and gives it names, and makes it recognizable to the rest of the world [16, 17].

Character is a matter of history as a place is built by "time" and every town has its own story during that time, which generates its distinctive character. However, the character of a place would be felt for a long time [5]. The image of a town or place grows in the human mind and forms the unique sense of a place. The character of a place is associated with its history, regardless of how short the history is [18, 19]. Thus, understanding a place's character and how it was formed is essential before planning a street design or management to reinforce the sense of place and conserve its unique character.

Qualities of the historic character of a town or urban area as streets consisting of tangible and intangible elements [15]. Tangible elements are categorized in two forms

- (i) natural elements (topography, open spaces, and green structures); and
- (ii) man-made elements (streets, ports, and buildings (age, type architectural forms, and material) [19].

Intangible elements express cultural activities, religious traditions, and lifestyle in a city that contribute to the visual and sensory elements that identify the character of a place [15].

However, streets mainly define the character of urban areas; streets mirror a city's image [20]. These structures are a place of interaction between all these elements (tangible and intangible) because most people in urban areas live in streets and pass through them daily [21]. Each street has its own character depending on the particular role it plays in a town at different times [5]; shopping streets are lined with many shops and are full of users during different times.

The elements that create a street character (tangible and intangible) must be considered in street design, which consists of the relations of all components and physical environment elements that create a street. This step ensures that the unique character that generates the identity and local uniqueness of a street is preserved for future generations [19]. These elements shape the quality of a street, which in turn helps create a good town or city with character and consequently affect a city's identity. Thus, fostering a street character identity that showcases local assets is a key to a successful street that can

- (i) attract more users;
- (ii) provide people with a safe and welcoming place;
- (iii) create different local activities;
- (iv) attract all types of users; and
- (v) is accessible to all users.

Thus, approaches to urban development should differ, and its historical and local values should be considered [22]. A good street design benefits the community and the image of a city while preserving its sense of place and its identity. Therefore, street designers should emphasize these elements in designing and developing streets.

## 3. SITUATION FAÇED BY TODAY'S URBAN STREETS

The significance of streets as a public space that mirrors the city image is already discussed above and considered street function as a public open space, and one of the most crucial characteristics within cities' public realm [22]. People socialize on streets and in cities. This phenomenon is becoming increasingly essential [22]. In fact, these social environments are given more emphasis. Then, modern movements, as highways and high-rise buildings, destroy the traditional urban fabric and harm urban quality [23].

Modernization adversely affected the key role played by traditional streets as a public space that enhances city appearance. When urban design focuses on motor vehicles, lost local character must be identified [22, 24]. Nonetheless,



the aforesaid scenario is common. In fact, it occurs at both a local and global scale and can be classified into physical aspects, including

- (i) landscape; and
- (ii) building, which directly affects the pattern of a street or city.

Across nations, the issues, as well as problems related to street design as a public space can be perceived from the physical aspect (building). For instance, a new urban project was launched in Beirut, Lebanon to reform the center of the city Solidare. This reformation aims to reorient the city center's local identity from being a small scale, low-rise, and indigenous area into an international city with a distinctive global business district appearance [24]. However, the 'new' Beirut project caused dissatisfaction and disillusionment among many of the residents because it destroyed the image of the center [25].

In Malaysia the a new architectural style was irresponsive to existing buildings [26]. In particular, the architectural style was monotonous and inappreciable to people walking by; poor contextual response creates a chaotic street frontage, and the dominance is of signage and billboards reflect a consumer society. In the physical aspect, sidewalks do not have continuity. Thus, sidewalk patterns are unclear [27].

Therefore, changes in street design have occurred on a global scale. These changes are manifested by the modifications and the physical appearance of streets, particularly with respect to their landscape, buildings, and street pattern. Thus, streets now cater more to motorist activities rather than those of pedestrians. The next section will discuss the issues and problems in the context of Jordan.

# 4. IMPLEMENTATION OF STREET DESIGN IN JORDAN

Amman, the rapidly developing capital city in Jordan, also faces the same issues. Similar to the streets of Iran, Beirut, Malaysia, and globally, the streets of Amman are also progressively transforming into highways. In other words, the function of streets in Amman is slowly changing from a public and pedestrian space to a motorized vehicle-passing space. Amman streets are moving from localized architectural identities to globalized identities to fit within global development [22].

### 4.1. Situation in terms of physical appearance building

Globalization culture threatens the architectural scene of streets [28]. In Amman, the new architectural style appears to be irresponsive to existing buildings, particularly in terms of scale, material, and shape of the built environment of the city. According to studies the architecture in Amman is transforming; buildings are being made of new materials, as aluminum and glass rather than stone [29], as it is shown in Fig. 1.

Furthermore, the recent materials do not respond to climate, social and cultural needs, as well as to the traditions and economy. Instead, the city has begun to change its appearance and material to achieve a glossy and globally reflective look [28].

Nonetheless, the primary material used for buildings in Amman is stone. Amman is known as the 'white capital', which refers to its distinguished local stone dress because local masons have a widespread reputation in distinct stone manipulations [30]. The use of stone mirrors provides a harmonious and unique character of local architecture. Stone blends well with the natural geological and topographical features of the city and helps preserve the city's local character. However, Amman's special, small, and human-scale harmony that can be experienced in the entire urban fabric is changing because of development. This development, which is manifested in the new architectural vocabulary, the city's skyline and buildings on a large scale, has significantly influenced the relationship between the dwellers of Amman City and Amman's urban built environment [28, 31].

The transformations that occurred in the urban built environment of Amman are dramatic and affected people's way of interacting with their built environment. These transformations form new identities that influence the shape or appearance of a city (refer to Fig. 1) [32]. In relation to the transformations in Amman, the low-rise buildings are comfortable, encourage personal interaction, increase outdoor activities, and brighten up streets [30].

### 4.2. Situation under the physical appearance landscape

Walking in Amman city has become challenging, uncomfortable, and unsafe because some streets have a problem in the continuity of good and comfort sidewalks as it is shown



Fig. 1. New building material used in Amman: stone vs glass (Source: author)





Fig. 2. Example of unmaintained dangerous sidewalk in Amman (Source: author)

in Fig. 2. Also, sidewalks in Amman are not properly maintained.

The poor maintenance of streets and sidewalks can also be observed in other cities in Jordan, as Az zarqaa. Some places have street pavements of varying heights (blocks have different levels as a result of many factors, as rain), which affect the safety and comfort of pedestrians. In addition, many low-branched trees exist in their center, which causes difficulties for street users. Many traders showcase their goods in the middle of sidewalks located in front of their market. As a result, users could not use sidewalks comfortably and are forced to use vehicle paths, which are unsafe [29]. Heavy traffic usually occurs in streets, which makes crossing challenging and dangerous, particularly when reckless drivers use the street.

Tourism development projects for historic urban places, as al-Salt City, did not consider the specifics of the social, cultural, historical, and economic identities of places and were reduced to superficial beautification and surface treatments that prioritize a fleeting visual experience for tourists.

Changes were adopted in street furniture, building signage doors, and commercial front to adhere the new standards ones that never existed in al-Salt in the past, as it is illustrated in Fig. 3. The homogenized façades reduce the distinctiveness of the historic character of the urban land-scape in Salt City [33].

Thus, when streets change, the entire character of the urban pattern also changes. Rapid development, which occurs both locally and globally, have detached the town and street design from its pedestrians. New designs do not prioritize pedestrians' needs. When designers choose a style and design that does not cater to the local context, the



Fig. 3. Standardization of façades in al-Salt (Source: author)

appearance and function of streets as a public realm also change. These changes can be observed in newly designed buildings and landscapes that do not represent local needs and contexts.

### 5. SOLUTION

Streets should fulfill their function as a public space. Thus, some scholars proposed the use of traditional streets as a model in designing new streets because these structures fully represent the people, nations, needs, and cultures within which it exists [32]. The traditional street model was successful on its function and appearance. Also, traditional environments grew gradually in accordance to peoples' needs. Traditions are the most important source of people knowledge and serve as the basis for our thoughts and actions [28].

The findings indicate that a strong attachment to traditional streets exists. Traditional streets affect the perception of users on the identity of places as streets highly crucial in sustaining economic activities. The authors also considered streets as a crucial element that could exude the identity of self and group identities, as well as the diversity of culture [34]. Studies finds that traditional streets stand out in a sense that they function as a public open space creates social interaction among the users, embodies a space of human scale, and has unique local architectural character.

Traditional streets are characterized by density and diversity of their activities, which reflect and represent genuine local social life. Thus, traditional streets attract users from all walks of life. Choosing traditional heritage street as the concept of heritage in its fundamental definition, stimulates a certain sense of belonging, recalling a shared memory that relates nations to their past and create a strong image for places [35]. Traditional streets are viewed as the best manifestations of social civilizations established through time. This study encourages capitalizing on the cultural pulling power of traditions and translating it into both social and economic outputs.



### 6. CONCLUSION

The purpose of this paper is to demonstrate how the construction of streets to function as a public space, which could transform the meaning of a street from "a space that is dull, only for vehicles" to "a lively and active space for people." A good street design produces streets with character. The traditional street model is a useful reference because it caters to the need of local communities. A designer must have ample knowledge on demographics and location, as well as the social and cultural values of a future street. These steps help create a successful design, and the new street will contribute towards a good urban design by increasing economic, social, and environmental values while preserving local identity. Thus, the function of streets, in addition to visual appearance, must also be considered. In summary, the current study attempts to characterize the physical elements of streets', namely building, landscape, and street pattern, which affect the character of a traditional street.

The approach of street design based on traditional streets as a model for future or existing development can contribute towards a design's uniqueness that enhances local communities. A unique street is created based on local identity and character distinctiveness. This model can contribute to a sustainable built environment by preserving cultural values and heritage and creating a great or successful street design. A successful street contributes towards a good urban design by expanding economic, social, and environmental values. As a result, new streets will be beneficial to investors, developers, residents, and the community in general, and local authorities.

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