

The Interrelationship between the Design of House Facades and the Architectural Identity of the City: Amman City as a Model

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Abstract

Objectives: This study aimed to investigate the evolution of architectural identity in Amman's house facades, emphasizing the reciprocal influences between these facades and the city's overall architectural identity.

Methods: The study employed a historical overview of Amman, examined the evolution of residential facades, and incorporated insights from pioneering architects through research and interviews. Analysis focused on a set of multi-story residential facades sharing certain characteristics but differing in construction stages and city locations. The goal was to understand mutual influences between architectural identity and dwelling facades.

Results: The study revealed Amman's residential facades evolved from spontaneous beginnings to controlled designs influenced by local architects and municipal regulations. This led to a distinctive Urban Cubist character. Mutual influences between dwelling facades and city identity were identified, shaped by political, economic, social, and cultural factors, as well as materials. Global capitalism and new market mechanisms contributed to diverse intellectual styles, influencing the city's architectural identity.

Conclusions: The study recommends reevaluating regulations for architectural facades to boost place identity for new architects. Additionally, it suggests establishing the architectural identity of the city, understanding Amman's urban growth, exploring the city's architectural identity in relation to Jordanian societal perspectives on buildings, and promoting architectural culture in academic settings.

Keywords: Identity, architectural identity, building environment, façade, Amman City.

التأثيرات المتبادلة بين تصميم واجهة المسكن وهوية المدينة: مدينة عمان نموذجاً

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ملخص

الأهداف: هدف هذا البحث إلى استعراض لتطور الهوية المعمارية لواجهة المسكن في مدينة عمان، وتحديد العوامل التي أثرت في تشكيل الهوية المعمارية، وتبسيط الضوء على التأثيرات المتبادلة بين واجهة المسكن والهوية المعمارية للمدينة. المنهجية: اعتمد البحث استعراضاً تاريخياً لمدينة عمان، وتطور واجهة المسكن المعمارية، وعرض آراء الرواد المعماريين في أبحاثهم ومقابلاتهم الشخصية. كما اعتمد البحث التحليل والوصف في اختيار مجموعة من الواجهات السكنية متعددة الطوابق التي تتشابه في بعض الخصائص، وتختلف في المراحل الزمنية لإنشائها ومناطق تواجدها في المدينة، وذلك بالرصد والتحليل وصولاً إلى التأثيرات المتبادلة بين الهوية المعمارية وواجهة المسكن.

النتائج: أظهرت نتائج البحث أن مدينة عمان مرّت بمراحل متعددة في تطور الواجهات السكنية، فكانت تلقائية في البدايات وتطورت تطوراً عفواً، ثم وضع المعماريون الأوائل الأسس المعمارية لتتناسب مع المجتمع المحلي، وبفضل التشريع الذي فرضته أمانة عمان جرى ضبط العملية التصميمية مما جعل المدينة تتمتع بخصوصية ذات طابع عمراني تكعيبي رائع التكوين. وهناك تأثيرات متبادلة بين واجهة المسكن وهوية المدينة بفضل العوامل التي حددها البحث، مثل: الظروف السياسية والاقتصادية والاجتماعية والثقافية والخامات المستخدمة. كما أنتجت آليات السوق الجديدة أنماطاً فكرية مختلفة وأثرت الرأسمالية العالمية في تشكيل الهوية المعمارية للمدينة.

الخلاصة: خلص البحث إلى ضرورة إعادة النظر في الأحكام والتشريعات المتعلقة بتصميم الواجهات المعمارية، وذلك لتعزيز مفهوم هوية المكان عند المعماريين الجدد. إضافة إلى العمل على وضع أسس للهوية المعمارية للمدينة، ووضع تصور دقيق للنمو الحضري لمدينة عمان، وإعداد بحوث تتعلق بالهوية المعمارية للمدينة، ومدى علاقتها بفهم الفكر المجتمعي الأردني للمباني، وتعزيز الثقافة المعمارية بالأكاديميات المعمارية. الكلمات الدالة: الهوية، الهوية المعمارية، البيئة المبنية، واجهة المسكن، مدينة عمان.



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Introduction

The designs of building facades contain a vocabulary of formative values rich in composition and include a set of distinctive architectural features that act as assets to reflect a distinctive language for society. Thus the designs of building facades must be taken into account to preserve the value of the so-called architectural identity; no matter how, simplified, and abstracted this vocabulary, it is the tool that must be preserved (Yusuf, 2009: 10)

The architectural identity of a society is the primary indicator of uniqueness and architectural excellence. It is affected by surrounding factors such as political, economic, environmental, social, and cultural factors, which reflect the nature of society.

In the city of Amman, the capital of Jordan, we find most of its public and private buildings covered with white stone, which gives it an exceptional uniqueness and an identity that distinguishes it as one of the Arab cities. (Ph.D. Vlada Melnik, 2019: 72)

This research will attempt to examine this statement by analyzing samples of facade designs in Amman city. Despite its administrative and urban history dating back to only the beginning of the last century, the historical heritage of Amman dates back thousands of years. The city of Amman witnessed a continuous change in its architectural character during the past decade. It turned from residential communities to small settlements to a sizeable urban city in a rapidly growing geographical area. The architectural movement and horizontal expansion continued, which showed successive developments in its architectural identity, which was reflected in the designs of its architectural destinations. One of the critical influences that affect the architectural design of the facade is the physical dimension, represented in the raw materials, the used building techniques, legislation, and market mechanisms. All those factors include the activities, behaviors, and design personalities of individuals loaded with the unique character of each society, and some may think that the word character and identity are specified to the historical and archaeological building. However, it is inaccurate to characterize an identity of a city based on only the complex relationships between historical buildings and ordinary buildings. We can say that the identity and visual character of the city can be determined through the assembly of many buildings rather than individual buildings. (Yusuf, 2009: 142)

The architecture of Amman experienced a struggle between the trend of modernity and the cultural and architectural heritage of the city, and it retained its distinguished social and urban character in its ancient and modern architecture. The research will attempt to explore that by reviewing the beginnings that represent ancient architecture and modern architecture and the factors that affected its architectural identity through monitoring and analysis through a formative vision of the city of Amman.

Literature review:

Many studies deal with the topic of research from multiple axes; on the axis of architecture in the city of Amman, there is a study on the pioneer's generation. This study aimed to document the local architecture in Amman since its beginnings in the mid-twentieth century and investigate the works of a group of Jordanian architects by analyzing various designs, building renovations, and architectural results that serve the local Jordanian community. Moreover, consistent with the quality of building materials available in the local community. (Abu Ghanima, 2002)

Another study on architecture in Amman between local and international; referred to the architectural experience of Sharif Fawaz Muhanna and Dr. Sayed Karim. That study dealt with the architectural trends of the city of Amman in the last century by studying the architectural outputs of the most prominent Arab and local architects. Some leaned toward local and regional architectural styles, and some leaned toward modern architecture. (Alaa Gammoh, 2016)

Concerning the architectural identity of the city of Amman, there is a study dealing with the transformation of the architectural identity, especially in the case of Amman since the Second World War, which aims to answer the following questions: What are the effects of the transformation on the urban identity of cities? What are the consequences of this on social life? A case study of the city of Oman explores the contributing factors to the historical formation and transformation of Oman's urban identity since the post-World War II era. It critiques rapid change over the past three decades and its impact on Omani society. And the cultural environment. (Prof. Dr. Abu Al-Turabi - Dr. Zalloum, 2019)

The same topic also dealt with a study entitled Amman's Architectural Identity (Dialogue between Tradition and

Modernity). This paper discusses the main problems of identity and planning in modern Arab architecture. At the same time, it highlights the merging of the historical and cultural heritage of Arab countries with the example of Jordan and its relationship to contemporary architectural trends that violate local identity. The case study of the Jordanian capital Amman reveals the essence of some concepts such as tradition, integrity, composition, and connection with urban principles in the design of modern Amman. (Ph.D., Vlada Melnik, 2019)

A paper presents a theoretical framework for forming architectural and national identity and deals with the impact of local culture on architectural identity. As for the dialectical dimensions of identity in heritage preservation, the city of Amman is one of the case studies presented. Relying on the cultural and historical concepts of meaning as a theoretical framework and shedding light on the architectural identity of Amman, and reading and analyzing previous studies on the identity of Amman to elicit the main reason for the architectural style of the city and the reason for the difficulty of that and creating a unified architectural identity. (Dr. Jawdat Qusous, Darren Kashmar, 2019)

As for the axis of urban pollution and its impact on architectural thought, a study presents modern methods that produced formal architectural formations devoid of rationality. The method followed the comparison with the previous architectural designs, which are characterized by architectural uniqueness. Moreover, it explains the inconsistency in the prominent architectural practices of the city of Amman. Current proposals lack existing academic references; This led to an intellectual architectural crisis and the emergence of another intellectually isolated architectural approach in line with the tyranny of the global economy and the requirements of the free market. (Matrouk - Ghanima, 2010).

One of the most important topics addressed by studies is the use of raw stone, where the research focuses on the raw stone as one of the most significant raw materials that had a vital influence on the architectural identity of Amman. The clarification of the characteristics of raw stone and its importance in the interior designs of various facilities led to a balance between the physiological and emotional influences of building materials. The results showed the effect of introducing natural stone into the interior architecture of different facilities. (Dr. Raed Al Shaer and Others, 2012).

From the above, we can derive some results related to the research topic; many factors affect the design of architectural facades, which in turn affects the formation of the architectural identity of the city of Amman. Previous studies have addressed each of these factors. Some dealt with the pioneering generation of early Jordanian architects who shaped the city's architectural beginnings. They developed new architectural concepts that suit the needs of the local community and have been credited with shaping and crystallizing the city's architectural identity. Other studies have focused on the dialogue between ideas and design visions between Jordanian, Arab, and foreign architects. They showed the dialogue between traditional and modernist architectural trends and their impact on the architectural identity of the city of Amman.

One of the previous studies discussed the problem of architectural pollution and its impact on design through building facades and its impact on the architectural identity of the city. Others discussed Amman's architectural identity transformation after World War II and pointed to the economic and social transformation in the past four decades and its impact on Amman's architecture and the social environment. The study focused on the period that followed the urban boom in Amman and concluded that globalization and free market economies negatively affected the architectural and urban identity of the city.

Another study discussed the relationship between cultural heritage and identity, its impact on the city's architectural identity, and the reasons for the difficulty of finding a unified architectural identity.

As stated in the results of previous studies, each of them investigated the different aspects that formed the architectural identity of Amman and discussed the extent to which architectural trends were affected by these factors, which in turn affected the city's identity.

The Research Problem

Although there are features of distinct architectural identity in Amman city, manifested in the formations and designs of the architectural facades of the city, some Western architectural styles have begun to influence the city's architectural character. This research explores the interrelationship between housing facade design in Amman and the city's architectural identity in general.

Research Objectives

- Explore the development of house facade designs in Amman city and their design patterns.
- Investigate the factors that influenced the architectural facade designs in Amman and the interrelationship between them and the identity of the city of Amman.
- An attempt to determine the most significant architectural characteristics and features to preserve the architectural identity of dwelling facades in the city of Amman.

Research Methodologies

The research relied on the qualitative approach in a set of procedures that it followed, and they were as follows:

- A literature review is one of the tools that the research relied on to analyze the factors that affected the design of facades and their impact on the city's identity.
- The research adopted the historical approach of the theoretical framework in the review of the historical background of Amman.
- The views of some pioneering architects on the identity of the city of Amman were referenced through reviewing articles and personal interviews.
- The research relied on the descriptive-analytical method in analyzing the study sample from the residential facades in the multi-story city of Amman. The sample of the selected facades varies in historical construction stages and locations in the city.

Building info (date of the establishment - location - the type of construction - facade model - materials and colors used - plastic and design analysis of the facade - general observations) were collected through field visits, photography, and drawing analysis by the researcher.

Architectural Identity

There is a reciprocal effect between the architectural identity and the physical formation of the urban fabric. The facades of the grouped and contained buildings give each urban content its distinctive character. The facades are considered one of the most critical components of the comprehensive urban system, including facades, architectural blocks, and urban spaces. (Akram, 2009: 142)

Hence, the importance of studying Amman's architectural facades and the reciprocal relationship between them and the city's identity. The nation's identity is also reflected in architecture, arts, and heritage. The city's identity is linked to the old traditional architecture, which showed a distinct architectural style connected to time and place .

The architectural identity is also associated with cultural expression and what the building leaves with feelings and mental images stuck in memory, and thus the architectural identity of the city can be Reading it through the architectural features that express the city (Murad, In Search of Identity Architecture, 2020). Afif Al-Bahansi says, "We have to admit that a long-term estrangement occurred between our culture and our history, which bequeathed ignorance and rejection of heritage and created opportunities for the infiltration of foreign cultures that changed the shape of our modern culture and tampered with its essence . Thus, our architecture became alien to us, and we became strangers in our stripped cities. We became in a hybrid environment about its original identity that changed our habits, tastes, and culture" (Al-Bahnassi, 1998: 25).

In the past, the architectural identity was clear and reflected those peoples' environmental and social characteristics. Today, the architectural identity has vanished due to Western concepts, so architectural identity has disappeared, just as the traditional culture in aspects of life has vanished (Hilal, 2004: 45).

This research investigates the issue of identity and character in architecture and urbanism to define a contemporary Arab character in the face of international architecture currents coming from the West with its various forms and schools. Which have abandoned identity and cultural privacy, which led to the existence of two opposing architectural currents, one of which defends the cultural privacy of our Arab societies, rejecting all that is modern. The other sees that the logical alternative is to follow the currents of modernity and post-modernity, and between the two opposing currents, there can be a middle thought that does not abandon the Arab and Islamic cultural identity and privacy and crystallizes a

contemporary Arab architecture that carries the same social or environmental implications and is compatible with Arab societies (Murad, in search of identity architecture, 2020). Architectural identity plays a significant role in defining the architectural features that express society, as it is the main criterion for measuring the community's success. (Abd El Salam, 2002: 22)

Architectural beginnings in Amman.

The facades constitute a transitional element between the two components of the built environment, namely the built blocks and urban spaces (Youssef, 2009: 71). The architectural facade of the city of Amman is linked to the development of architectural beginnings. Many buildings were built at the beginning of the twentieth century by experienced engineers, few of whom obtained Arab and foreign university studies in the fifties; they worked within government institutions and on sound engineering foundations. They laid the foundations for the architecture of Amman that suits the local Jordanian community and the quality of the available building materials such as stone, and the adoption of a structural style is the load-bearing walls system and the construction style with both standard and reinforced concrete. They developed the two systems and created a new architectural-structural style specific to Jordan based on the construction of load-bearing walls and stone in the external facades. Then the use of these two systems became common, and the use of regular concrete for stone walls led to the lightness of the building and the possibility of improving the facades and increasing the number and height of floors (Abu Ghanima, 2002: 134). Moreover, since the architectural facade is one of the essential basic vocabularies that express the built environment, the city's architectural development in the beginning stage was reflected in the design of the architectural facade and its relationship to the architectural identity.

The built environment of Amman

the built environment in Amman can be classified into two main historical phases, the first phase: is traditional architecture, from the early 20th century to the end of the sixties and the second phase is contemporary architecture, from the beginning of the seventies to the 20th century until now.

Architecture in old Amman

The old residential architecture in Amman includes heritage buildings dating back to the beginning of the 20th century with different neighborhoods and varying social levels. It represents one of the buildings dating back to the founding of the Kingdom in 1921, and (Figure 2) shows one of the heritage buildings dating back to the architectural beginnings of the "Diwan Al Duke" Hotel, a heritage landmark in the heart of the capital. The architectural nature of the region is very similar to the cities of Nablus, Jerusalem, Jaffa, Mount Lebanon, Tripoli, and Damascus .

We find the art of architecture in old Amman, such as old houses and palaces, distinguished by Roman, Greek, Ottoman, and Arabic architectural styles with their different decorative schools. (Figures 3) and (Figures 4) represent two examples of heritage buildings in Jabal Al-Lubdeh that date back to the architectural beginnings of the city of Amman.

The use of stone is noticed in the old architecture of the cities of Ma'an and Nablus, with its different colors, tiled roofs, attention to decorative details, gardens, and balconies. All of which gave the old part of the city extending from "downtown" up towards Jabal Amman and Jabal Al-Weibdeh. This unique character place expresses the identity of pure subjectivity (Old Amman Houses, 2017).



Figure (1): The "Diwan of the Duke" hotel building, a heritage landmark in the heart of the capital (photographed by the researcher)



Figure (2): A building dating back to the beginnings of the kingdom's founding in 1921 <http://www.rasseen.com>



Figure (3), (4): One of the heritage buildings in Jabal al-Lubdeh.

<https://ealaftrip>

<https://alghad.com>

Contemporary architecture in Amman

Contemporary architecture developed in the seventies and eighties of the last century until now, and this group can be divided into two parts, The first: carries aesthetic values that contributed to forming a unique architectural identity for this city. The second represents globalization and the free market's general concepts and manifestations.

First: Architecture styles that contributed to the formation of specific identity by providing a variety of designs for residential buildings that manifested on the economic boom in the country in the late seventies and encouraged considerable architectural experimental innovations; some were distinctive, others were poor. The city of Amman retained a unique architectural language and prominence, based on the availability of Limestone material as an essential element in local architecture, mainly for residential buildings (Matrouk, 2004: 89).

The eighties witnessed outstanding architectural designs; some were derived from the vocabulary of the Islamic heritage, and others were unique in adapting a distinctive architectural language. Other designs turned to international

architectural styles (Matrouk, Abu Ghanima, 2010: 3) .

There are many examples in Amman of excellence in architecture in this period, including (Figure 5 , 6) of the Amman Municipality building from the works of the architect Rasem Badran and the architect Jaafar Toukan, which manifest the trend of postmodernism.



Figure (5), (6) : The Amman Municipality building - from the works of the architect Rasim Badran and the architect Jaafar Toukan, from the results that express the trend of postmodernism.

<https://www.ammancity.gov.jo/>

Second: Architecture styles that reflected the manifestations of globalization and market requirements, the new architectural concepts manifested in new architectural styles, destining from the heritage of architectural references. In many cases, the Jordanian public could not sympathize with those new architectural styles. (Al-Naeem, 2005: 50).

The built environment of Amman is evident interdependence thanks to the use of white raw stone in construction. Multiple public and private buildings achieve the most significant financial gain due to being subject to market mechanisms and resulting in multi-story

residential complexes, which are called (housing), are characterized by a mixed architectural identity, Figures (7), (8), and (9) illustrate these models.

Some architectural styles were characterized as modern designs that kept pace with the architectural language of the era and the use of contemporary building materials. In other cases, the utilization of Limestone represented the link that bridges the gap between the traditional architectural heritage and the modern architectural styles.



Figure (7), (8), (9): The reflection of the economic factor on the residential buildings, the so-called (housing) (photographed by the researcher)

Factors affecting the formation of the architectural identity of the city of Amman

The city of Amman derived its identity from its spatial, local, and social character, natural resources, mountainous terrain, the built environment, and its stone-clad architectural character (Zalloom, 2015: 35). Several factors had the most significant impact on the city's architectural identity, and they can be summarized as follows:

a) Building legislation

Legislation is one of the most important determinants that have a fundamental role in shaping the identity of cities. Amman developed spontaneously at the beginning of its architectural inception. All the city components were spontaneous for all houses covered with stone, without considering specific standards and requirements (Ph.D, Vlada Melnik, 2019: 70). Over time, Amman became the administrative capital.

- Some areas of Amman have been allocated as the high-rise building sector to meet the investment needs within suitable sites where the roads, transportation, and infrastructure network is available, Figure (10) shows the Abdali area, which was specially designated for this sector of buildings.
- The legislators implemented requirements to preserve heritage, provide green spaces, and maintain the city's appearance and character by encouraging distinctive architectural designs.
- For instance, the residential areas must comply with the maximum limit of the regulatory building height. The height of residential buildings may not exceed four floors. Also, there are regulatory codes for the architectural design of the facade of the buildings.
- It is necessary to maintain the cleanliness of the external architectural facades, the type of exterior cladding and painting, and the use of natural stone material. And 20% can be used in any color of paint or any other stone color, provided that approval is obtained. It is also prohibited to use light-reflecting materials that disturb neighbors and pedestrians, not to extend or install any mechanical devices or equipment on the front facades of the building, and not to open the lines of water networks. And sanitation or electrical or mechanical installations should not be visible on the external building facades (Building Regulations for the year 2011)



Figure (10): shows the Abdali area, which was specially designated for this sector of buildings.

<https://www.worldbank.org>

b) Market mechanisms and the economic factor

The economic conditions are reflected in the built environment of the city, the transformation of economic growth in the past four decades, manifested in the capabilities of the local market, and the new mutations of the cityscape that does not reflect its historical background. The new realities of global capitalism forced the local authorities to adapt to urban planning and development changes without the usual concern for maintaining the architectural characteristics of the community (Prof. M. Aboutorabi1 & Dr. B. Zalloom, 2019: 112).

The city responded quickly to the new increasing consumption pattern by meeting market demands. Similarly, the growing demand for residential and commercial real estate led to a boom in Real estate and investment in developing the western parts of Oman (United Nations report, 2005), Figure (11) and (12) illustrate examples of distinguished residential buildings by design and the influence of the economic factor on construction.

The city expanded since the late 1970s and developed the form of high-rise buildings and shopping centers with elegant services and excellent infrastructure for the wealthy social class, which is a clear example of urban restructuring and development of the form of spatial arrangement (Al-Faouri, 2011: 65), Figures (13) and (14) illustrate the urban development, high-rise buildings, and shopping centers in the capital.

Amman established Abdoun Bridge in 2006 in the West of Amman to face traffic congestion, which is considered a contemporary landmark in Amman's cityscape (Potter, 2009: 88). These developments have affected its social and spatial polarization since the increase in land and property prices that residents derive from the city's outskirts (Zalloom, 2015: 48).

These economic developments contributed to the general character of the city and changed its architectural character. Several high-rise buildings appeared to replace the traditional four-story buildings, changing Amman's unified scale. Thus, the contemporary history of Amman illustrates the impact of global capitalism in shaping the city and its architectural identity. Modern Amman is a mixture of state-controlled and economic liberalism, where urban development focuses on attracting foreign investment and reducing restrictions on free projects. (Dr. Jawdat Goussous¹ , Dareen Qashmar², 2019 : 30)



Figure (11), (12) : Modern residential buildings, distinguished by their design manifest the impact of the economic surge

<https://small-projects.org>

<https://qoshan.com>



Figure (13), (14): high-rise buildings, and shopping centers of the capital

<https://jordantimes.com>

<https://principles-me.com>

c) Social Factors

Social factors include the change in customs, traditions, and values of society. Under the influence of social globalization, Amman's urban environment is affected, which provides for the construction of highways, high-rise glass towers, shopping centers, and patterns of copying some international architectural styles. As a result of the new trend of replacement of historical architectural characteristics with contemporary global identity, Amman's architecture became a homogenous (a hybrid mixture) of urban modernity and its traditional heritage. That encouraged entire societies to uproot their social-historical and cultural roots. All these changes affected the social status of the old part of the city, as most of the units and shops began to move from the old eastern Amman center to the modern western Amman. The same relocation applies to most government buildings and companies' central offices and commercial establishments (Prof. M. Aboutorabi1 & Dr. B. Zalloom, 2019: 112).

d) The Political Factors

The political changes that the region has undergone since the mid-twentieth century have had a practical impact on architectural identity. The city's rapid expansion since the late 1970s may be due to the regional political environment, including the Gulf War and the arrival of immigrants, which led to the purchase of real estate, business investment, and the introduction of consumption patterns New. (Prof. M. Aboutorabi1 & Dr. B. Zalloom, 2019: 113). Many Iraqis settled in Amman from 1990 to 2000, and more than a million Syrians have moved to Jordan since the start of the Syrian war in 2011. The war in Yemen Many Yemenis moved to live in Amman despite the state's dependence on aid from the international community to provide a decent living for the refugees (Ph.D, Vlada Melnik , 2019: 71) . All these factors led to the diversity of the citizens of Amman and created different social, ethnic, and cultural layers, whether they were immigrants or non-immigrants. What is surprising is that the city accommodated all the different classes but gained a new development from the experience of immigrants. (Dr. Jawdat Goussous1 , Dareen Qashmar2,2019 : 31).

e) Urban planning and cityscape

From the researcher's point of view, one of the essential features of the city is the cityscape, which is distinguished and completed by the city's urban planning. At the beginning of the inception of the city of Amman, there was no clear master plan nor a plan to develop its planning, and the absence of parks and sidewalks, and sometimes you feel that you live in a rural settlement. The government could not unify a specific structure for the city because of the inability to purchase privately owned land, but there Underdeveloped areas not connected to highways. (Ph.D., Vlada Melnik, 2019: 71), people were settling on a mountain and building houses on a slope, which led to the presence of stairs and sloping neighborhoods, which grow around these vertical directions to live (Dr. Jawdat Goussous1, Dareen Qashmar2, 2019: 34). In the northwestern part of the city, there are residential suburbs that create a different impression of multi-story buildings, which appear at sunset against the background of tall buildings, (Ph.D , Vlada Melnik , 2019 : 72), Figure (15) and (16) illustrates the essential characteristic of the city of Amman, which is the city's distinctive scenery.



Figure (15), (16): show The most significant characteristic of Amman is the distinctive cityscape.

<https://www.circleofblue.org>

<https://www.istockphoto.com>

f) Climatic and topographic studies

The city is distinguished by its topography and climate, which have given it a unique condition that has contributed significantly to forming Amman's identity. The gradual expansion of the city center in the valley along the Amman River in the surrounding mountainous sites has led to the construction of public stairs along pedestrian routes (Prof. M. Aboutorabi1 & Dr. B. Zalloom, 2019: 113, and given the country's natural and climatic conditions characterized by the presence of plateaus, valleys, deserts, semi-deserts, limited water resources, natural landscapes, dry and hot summers, relatively warm winters, and a relatively favorable environment in the Jordan Highlands region, where The population is concentrated in the capital(Ph.D , Vlada Melnik , 2019 : 72) . All these geographical and climatic factors have given

Oman a unique nature in its architectural identity. The use of white stone and tiled roofs in winter, with the beautiful topography, and the contrast of the cubic blocks on the slopes of its mountains in the shade of summer led to a beautiful uniqueness in the city's formations, Figures (17) and (18) illustrate the beautiful topographic nature and the contrast of the unique cubic blocks of Amman city.



Figure (17), (18) : illustrate the beautiful topographic nature and the contrast of the unique cubic blocks of Amman city. (photographed by the researcher)

g) Architectural Cultural factor

The architectural transformation of Amman after World War II began due to the development of two schools of idea. Jordanian architects who studied in Europe tried to apply contemporary architectural principles to develop a modern style based on the international style. On the other hand, Jordanian architects who studied in Jordanian universities associated Jordanian architecture with Arab culture and used Islamic architecture as a reference to develop local architectural style (Prof. M. Aboutorabi1 & Dr. B. Zalloom, 2019: 114). The cultural approach of the two schools manifested in their architectural styles; however, the Islamic traditions of the society managed to consolidate its identity in the city by providing a degree of social cohesion and distinctive forms that can become a source of pride for the community (Pider, 2011: 68). On the other hand, the modern architectural style, especially the commercial buildings, followed the international Hi-tech methods and the irregular cubed glass, which affected the transformation of the local architectural identity to try to fit in with the comprehensive global development (Potter, 2009: 91), Figures (19) and (20) illustrate some architectural designs manifest by the trend of modernity, a reflection of the architects who followed the international pattern that dominated architectural thought in the middle of the twentieth century.



Figure (19), (20): Some of the architectural designs that manifest the trend of modernity (international style and Bauhaus school)

<https://www.7iber.com>

h) The raw materials

The abundance of natural Limestone is a decisive factor in forming the architectural identity of Amman. Archaeological studies indicate the emergence of Limestone utilization in Jordan in the ancient and modern Stone Age. The Roman period showed man's ability to creatively accurately and wonderfully express civilization and its advancement, among the most beautiful examples of the Nabataean cities in Petra and Madain Saleh. The use of Limestone extended in the Byzantine and Islamic periods, including Al-Mashta Palace and Al-Hallabat Palace. The use of stone in construction has continued since then until our time (Abaza: 1995: 4).

Jordan relies on stone as one of the richest natural resources in the public and private sectors, and modern techniques and mechanisms have expanded its manufacture. The types of natural stone have varied, such as Limestone, granite, and marble, and each region has used the type of stone available to it. The western parts of Jordan used Limestone, while the northeastern regions used basalt, and sandstone was used in the southern regions of Jordan (Raed Al-Share, WM, 2012: 84).

According to the regions from which they were extracted, many names are given to the building stones. Stone names include (Ajloun stone - Hayyan stone - Ma'an stone - Ruwaished stone - Qatrana stone - Samik stone - Azraq stone - Hallabat stone - Dabaa stone - Hajar stone Al-Bayer or Al-Jafr - the yellow stone). Each of the previous types has physical characteristics that distinguish it commercially from others. These differences are related to the geological conditions that contributed to its formation (Abdul Qadir, 2017: 45).

Natural stones in Jordan are engraved in different shapes to be distinguished by their aesthetic appearance and get rid of traces of cutting and preparation. In the manufacture and extraction of natural stone, where the stone is mechanically sawn and polished, as well as modern technologies in manufacturing, decoration, and artificial stone. (Abaza: 1995: 6), Figure (21) shows some of the stone carvings with distinctive features that were used in the architectural facades.

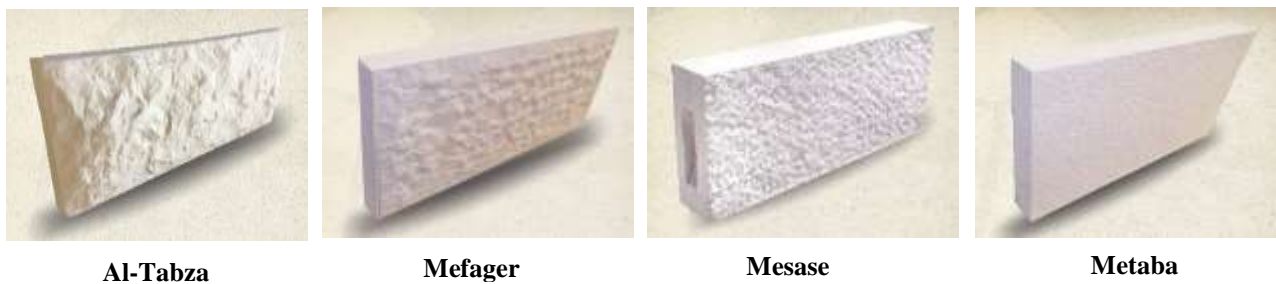


Figure (21): shows some of the stone carvings with distinctive features that were used in the architectural facades.
<https://www.kamen.hr/en>

The opinions of some Jordanian architects and academics about the origin and identity of architecture in Amman:

This is their opinion of the architectural identity of the city of Amman Jordanian architectural community is distinguished by statures and creative architects in the academic and advisory fields, headed by Rasem Badran, the late Jaafar Toukan, and many Jordanian architects. The architectural character of the city.

Architects' and experts' opinions are gathered from various sources, including personal interviews and articles. These statements represent their opinion of the architectural identity of Amman, and the most significant architectural characteristic of Amman.

Architect Prof. Dr. Ali Abu Ghanima

Forming the identity of the recipient of the residential environment is central to the development of any architecture. We need a society aware of the value of excellence in architecture in general. Architectural designs interact with our life, particularly in homes. The growing desire to have Distinctive homes and extravagant spending is one of the reasons for establishing architecture incompatible with our environment. With the absence of seriousness in dealing with urban projects and the lack of understanding, many distort our buildings and cities by isolating them from our heritage, civilization, and traditions. An expression of the community's identity and its declared privacy, architecture in Jordan needs buildings that meet the needs.

It will only come with the availability of the architect with a heritage reference in his architecture and building materials, drawing inspiration from our history and developing them to serve our present and future.

The first pioneers of the architecture profession began to develop new architectural concepts that suit the Jordanian community and are commensurate with the quality of the available building materials such as stone by adopting a structural style that is the system of load-bearing walls. With the entry of cement and concrete into Jordan, they developed the two systems. They created a new architectural and construction style specific to Jordan based on load-bearing walls and stone structures in the external facades. The use of these two systems became common. Another joint development they made was the use of regular concrete as a cladding for stone walls, which led to the lightness of the building and the possibility of improving the facades and increasing the number and height of floors.

Architects and engineers presented a set of renovation attempts that impacted the city's architecture, including the diversification of the use of stone in building the facades. Various engraving types were used, including the tab, sesame, bump, barrel, and detonator. Other trends such as the ung stone dimensions in the facades use different stone materials such as marble, metal, concrete, and fresco. The use of colors in the shows, especially blue and red, and the installation of bricks on reinforced concrete surfaces added unique characteristics.

Most architects who worked in Jordan from the forties to the twentieth century were primarily graduates of Fouad 1st University in Egypt, currently Cairo university. They were influenced by the School of Modern Architecture and its pioneers, such as Le Corbusier, Frank Lloyd Wright, and Gropius. Others studied at European and American universities,

adopted Western architectural thoughts, and resisted traditional architectural styles. They used some standard vocabulary, such as arches and fresco, and other heritage elements without actual knowledge of the concept of heritage and how to deal with it, so their attempts to present new solutions to the idea of heritage Arab architecture were unsuccessful.

The first generation of practicing architects gave a lot to the architectural development process in Jordan; They were the first building block that laid down new rules and concepts for architecture and the profession of practicing architects. They were the base on which the basics of the work were based. But with their attempts, they were the first to think about the importance of heritage, highlight the local identity, and deal with it, which helped later generations develop this concept more maturely.

Architect Prof. Dr Kamal Mahadin

Mahadin believes that the place is the soul of the human being with its geographical, cultural, and social depth. The emergence of individual interaction with the world, especially in our Arab region, is the product of urbanization interacting with the land and functionality and the simplicity of society and its economic condition. The ancient traditional Jordanian villages, from the elements of the simple house that extends to the yard that contains several functional spaces adapted to the way the farmers work, and by the extension of a residence for his children—emphasizing the idea of the extended family to be around him for help from his children. It produced architectural cubes that connected the land uniquely and without any complications.

Mahadin does not Believe that Amman is without an identity and does not suffer from a distortion of identity because he does not see a difference in the style of architectural work in it. The uniqueness comes from culture, civilization, and art. When it mimics the vocabulary of the local community, a kind of identity emerges. The architects contribute to deepening the identity of the Jordanian place by making memories of the site an integral part of the architectural design by following the elements of simplicity and the use of materials, The locality, and the preservation of the visual identity. Adopting the site's architectural features provides meaning for regional architecture, the topographic architecture. Architecture in Jordan is modern science that did not exceed forty years, and for a long time, civil engineers had control over it. Mahadin believes that our most significant concern becomes the renewed architectural style and construction as an alternative to architectural Design. Moreover, when the urban plan contains some laws that were followed in the urban systems of European countries as it was in the fifties of the last century, and we are still applying some of them, the urban space becomes meaningless. Because we are thus designing a place to live in, not to live in, we moved away from entering the yard, then a hall, and then moving to integrated urban spaces. The other element is the lack of connection between the interior and the exterior.

Architect Bilal Hammad

Architect Bilal Hammad believes that if the current commercial and consumer architectural pattern continues at its current pace and form, it is expected that the cities in Jordan, particularly the Arab world, in general, will be without soul and personality and lack an identity of their own.

He sees that the Jordanian except for the city of Aqaba is similar to the architectural style in the Jordanian cities, trying to simulate the Omani experience. White limestone in Aqaba, the way to pave streets and sidewalks, the type of trees on the roads, focusing on palm trees in Aqaba, for example, allocating lanes for pedestrians, The newly built streets in the cities of Jordan, especially the commercial ones, are very similar. There is no privacy for any of them, except for the town of Aqaba, from this generalization. You don't know if you are in Zarqa, Irbid, Mafrqa, or Ma'an. The street appearance is one.

He believes that the city of Amman enjoys enviable aesthetics and privacy qualities among its peers from Arab cities and capitals. Not because of the buildings and streets, but rather because of the cultural, civilizational, and social content.

It is noteworthy that Amman is a modern, urban city no more than a hundred years old, but it has historical monuments. Then short, this is called urban space that allows human interaction between the city's residents and wishes to increase greenery on the city's horizon. This massive amount of stone must be grafted with some trees and shade. Fortunately, the Jordanian government has specified the allocation of specific areas for tall buildings, which preserves the identity of the city of Amman in its unique form. He believes that the stone has become a distinctive feature of the city of

Oman, and there is no harm in its repeated use. However, we have recently begun to see some experiments introducing new materials to bring some color to the overall Omani image. Still, in the end, the situation must be mastered.

Study and analysis of the plastic vocabulary of multi-story residential buildings

This part of the research investigates some of the common styles of architectural facades of multi-story residential buildings in Amman.

These models were selected based on their compatibility in some determinants such as (a residential building - multi-story - the function of the building) and their difference in some determinants such as (their presence areas in the city of Amman - Social and economic level - raw materials - time stages of its construction - architectural designs for facades).

The study and analysis were carried out on two axes, and the first: was buildings information such as (description - location - construction date - the type of construction - materials used - colors used). The second axis is related to the plastic and design value of the facade, which is evident in the facade model and design analysis with mentioning notes that are Important and different from each other.

The data was collected through field visits, photography, and the researchers drew sketches for the analytical studies.

Study and analysis of visual vocabulary for multi-story residential buildings (first model)

- **Model:** (the first model) is a multi-story residential building, and Figure (22) shows a realistic picture of the building.
- **Creation date:** at the beginning of the second half of the twentieth century
- **Location:** it spreads in the areas (Jabal Al-Qalaa, Jabal Al-Qusour, Shill Al-Nuzha, Jabal Al-Taj, and some areas of Jabal Amman), all of which represent the downtown area, and Figure (23) shows the general location and the topographical nature of the area and the city's scenery.



Figure (22): Shows the realistic picture of the building (photographed by the researcher)



Figure (23): shows the general location, the topographical nature of the area, and the city's landscape

- **construction type:** Most of these buildings were built with a system of load-bearing walls (it is locally called a deck). In some of them, the load-bearing and structural wall systems were combined
- **the number of floors:** Basement and three floors
- **Facade model:** It is characterized by simplicity in the design of the facades and does not belong to a specific style, and it bears the characteristics of construction in this period of time, which depends on flat facades with small openings
- **The materials used in the process of the facade design:** Building with bricks or stone as the available material in

this period, and cladding the front facades with plasterwork (Casara, which is a mixture of cement and sand) and it is possible to keep the cement or paint some of its plaster

- **Used colors:** The paints of the buildings were transparent, and the Amman Municipality distributed free pigment paints to unify the color (light yellow of natural stone), and preserve the visual identity of the city.
- **General Notes:** These areas were built in the mid-seventies of the last century, primarily random; due to the absence of legislation related to construction in this period, there are no setbacks or legislative laws governing building patterns in this area.

The social factor is considered one of the most critical influences on the architecture of this area, as most of the residents of the area are from the middle class, while others are from the city of Amman. A family owns each detached house, and they can complete the upper floor of the dwelling in case of an increase. The family or the marriage of one of its members.

- **Visual Analysis of the Façade:**

- The architectural facades of the area are characterized by simplicity. The facade is mostly smooth, and it has three openings (windows) that are relatively small in size to the facade's surface. The windows are surmounted by a protrusion that does not exceed 30 cm, called a "brusha" or also a "netting clamp." Most likely, this protrusion has no function other than aesthetic formation.
- One of the most beautiful features of this area is the cityscape; it has wonderful composition and formation of the structures of the cubic blocks. That gave the city an extraordinary artistic formation, and this area is also characterized by the skyline, which gave the area distinct privacy and gave it a unique identity, Figure (24) shows a sketch of the original facade of the dwelling and illustrates the beauty of the architectural composition of the built environment. Figure (25) shows the relationship of the facade with the neighboring buildings and the skyline of the architectural composition of the area.



Figure (24): A sketch shows the facade's relationship with the neighboring buildings and the skyline of the architectural composition of the area. (Researcher's work).



Figure (25): Sketch A sketch of the facade of the dwelling and the beauty of the architectural composition of the built environment (Researcher's work).

- The area has unique geological features, and the stairs play a crucial role in connecting different district levels, but it lacks infrastructure. The Municipality of Amman is working hard to solve the problems facing the district, given that it was built before adhering to building laws and regulations.

Study and analysis of visual vocabulary for multi-story residential buildings (the second model)

- **Model:** (the second model) is a multi-story residential building. Figure (26) shows a realistic picture of the building.
- **Construction date:** it was built between 1998 to 2000
- **Location:** Al-Rasheed neighborhood - Jubaiha - Jordan Street, Figure (27) shows the general location, the topographical nature of the area, and the city's scenery.



Figure (26): Shows the realistic picture of the building (photographed by the researcher)



Figure (27): It shows the general location and the topographical nature of the area and the city scene (photographed by the researcher)

- **Construction Type:** structural building
- **Number of Floors:** Ground floor and three floors
- **Facade Style:** Modern (the facade does not have a specific style)
- **Materials Used in Façade execution:** Al-Ruwaished natural stone is one of the most common stones for its moderate price (rough and smooth - blasted and porous). Bricks are installed on a wooden frame, aluminum window openings, and glass installed with dimmers for sunlight (lamps a local term). Iron installed on windows and balconies
- **Used Colors:** The color of the natural stone is white to yellowish - the brown color of the brick - the color of the natural wood - the white color of the iron windows and balconies.
- **General Notes:** The model is a type of multi-story residential building referred to in the research as (housing), which has emerged due to the economic factor and market mechanisms. Real estate investment activity at the beginning of the third millennium encouraged the accompanying emergence of this type of building. These models of residential buildings reflect political and economic factors. They are the product of real estate investment for capital coming from abroad from immigrants from the Gulf War and the immigration of citizens from neighboring countries who depend on bank loans to own housing units. We find many similar buildings belonging to a specific company in modern areas
- **Visual analysis of the façade:** The architectural design of the facade is relatively simple, based on a symmetrical balance, Figure (28) shows a sketch of the architectural design of the facade, and Figure (29) shows the design analysis of the facade based on design symmetry.
- The main facade tops, the entrance in the middle, and the windows and balconies are symmetrically located on both sides of the entrance. This model is considered distinct to some extent, there are smooth buildings in terms of blocks in the facade, and there is no protrusion or mass discharge of the Design. The design was executed with natural stone (smooth and rough - sesame and blaster) and there are no other color values in the Design. The additions on the ground floor are often made from tiles installed on the wooden structures added by the owners of the floor. The

balance is evident from the red lines expressing the horizontal direction in the Design and the blue lines expressing the vertical direction in the Design.



Figure (29): A sketch showing the design analysis of the facade based on design symmetry, (Researcher's work).



Figure (28): A sketch showing the architectural design of the facade, (Researcher's work).

Study and analysis of visual vocabulary for multi-story residential buildings (the third model)

- **Model:** a multi-story residential building. Figure (30) and (31) shows the realistic image of the building.
- **Construction date:** 2020
- **Location:** Al-Siddiq Suburb - Marj Al-Hamam - Airport Road, and Figure (32) shows the general location, the topographical nature of the area, and the city's scenery.
- **Type of the Building:** multi-story residential
- **Construction Type:** Concrete structural building
- **Number of Floors:** Ground floor and three floors
- **Façade Style:** Modern
- **Materials used in executing the Façade:**
- Khalili stone of two types (smooth polished - coarse). Ironworks on balconies and cladding installed on the facade of various sizes. Aluminum window openings in brown with double-glazed glass.
- **Used Colors:** Khalili stone with its distinctive color (light beige). Iron and aluminum works and wooden doors are brown.
- **General Notes :** The Design employs lighting to create a wonderful atmosphere at night. Plants added a distinctive color situation. Repeat design in multiple areas The designer was able to add various design situations using lighting and plants.
- **Facade Visual Analysis:** The Design was based on a set of design values and principles, such as free balance, rhythm, and unity. The facade is characterized by symmetry. The staircase appears in the middle of the building, on both sides are regular window openings, and on the sides are regular balconies. The designer tried to change this symmetry and made a visual focus on the clear square at the top left, which changed the symmetry in the Design, Figure (33) is a sketch showing the architectural design of the facade (the researcher's work), and Figure (34) is a sketch that shows the design analysis of the facade, which relied on the designer's attempt to change symmetry and create a visual focus with distinct vertical and horizontal rhythms.



**Figure (30): It shows a realistic picture of the building,
(photographed by the researcher)**



**Figure (31): It shows a realistic picture of the building,
(photographed by the researcher)**

**Figure (32): shows the general location and the topographical
nature of the area and the city scene, (photographed by the
researcher)**

- Facade Visual Analysis:

- The Design was based on a set of design values and principles, such as: free balance, rhythm, and unity. The facade is characterized by symmetry. The staircase appears in the middle of the building, on both sides are regular window openings, and on the sides are regular balconies. The designer tried to change this symmetry and made a visual focus in the clear square at the top left, which changed the symmetry in the Design, Figure (33) is a sketch showing the architectural design of the facade (the researcher's work), and Figure (34) is a sketch that shows the design analysis of the facade, which relied on the designer's attempt to change symmetry and create a visual focus with distinct vertical and horizontal rhythms.
- The facade was characterized by horizontal and vertical rhythms in the facade through metalwork in dark brown with a background of natural stone color. The designer kept emphasizing the irregular sky line.



Figure (34): A sketch shows the design analysis of the facade. the designer attempted to change the symmetry and create a visual focus with distinct vertical and horizontal rhythms. (Researcher's work).



Figure (33): A sketch showing the architectural design of the façade, (Researcher's work).

Study and analysis of visual vocabulary for multi-story residential buildings (the fourth model)

- **Model:** A multi-story residential building. Figure (35) shows a realistic picture of the building.
- **Construction date:** Built-in 2021
- **Location:** Shafa Badran area - north of Amman, and Figure (36) shows the general location, the topographical nature, and the city's scenery.



Figure(35) : It shows a realistic picture of the building, (photographed by the researcher)



Figure (36): It shows the general location and the topographical nature of the area and the city scene (photographed by the researcher)

- **Construction Type:** Concrete structural building
- **Number of Floors:** Two-story private residence
- **Facade style:** Classic
- **Materials Used in executing the Façade:** Natural stone (glitter stone) and artificial stone hangings from GRC, including many classic elements (Corinthian columns - cornices - ornaments - plumes) , Double glass window openings – aluminum

- **Used Colors:** White



Figure(37) : A sketch showing the architectural design of the façade (Researcher's work).

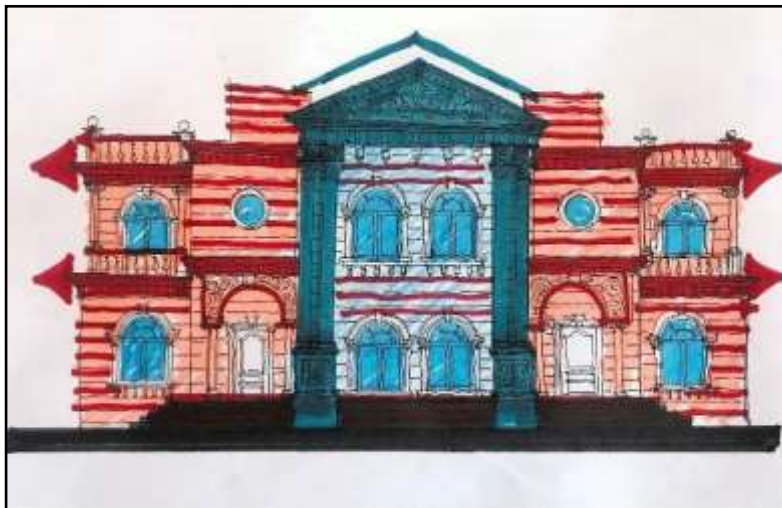


Figure (38): A sketch illustrating the design analysis of the façade, based on adherence to the classical values of composition in the architectural façade (Researcher's work).

- **General Notes:** The neighborhood is newly built and is designated for private housing (villas) with multiple design styles and trends, as it varies between classic, modern, and hybrid between various design styles. Based on the legislation of this type of building, we find a commitment to the materials used and the building laws regulating this category of facilities, which gave the built environment a unique distinction.
- **Visual Analysis of the Façade:**
- The Design demonstrates Commitment to the classical values of composition in the architectural Façade through the fundamental values of classical styles, such as symmetrical balance, rhythm, and repetition, Figure (37) is a sketch illustrating the architectural design of the façade (researcher's work), and Figure (38) is a sketch illustrating the design analysis of the façade, which relied on adherence to the classical values of composition in the architectural façade.
- Classical architectural elements were employed, including arches, columns, hallways, cornices, lamps, and closed panoramic decorations.
- There is strong emphasis non-relationships between the vertical lines in the columns and openings, and the horizontal lines in the stone courses, cornices, and hallways
- The use of decorative and architectural styles widespread in the local market may be irrelevant due to their belonging to different styles.
- Some classic designs of private residential facades relied on architectural vocabulary and elements only, so we find their architectural formations with modern designs in terms of composition while preserving the value of symmetrical balance.

Conclusion:

The architectural facade has an influential role in the process of physical form within the urban context. It can be considered one of the main tools controlling the visual message the individual receives within his urban content.

The architectural identity reflects the nation's identity in architecture, arts, and heritage, from which it is possible to read the architectural features that express the city and reflect those peoples' environmental and social characteristics.

There is a reciprocal relationship between facades and the architectural identity of the city, and between them, a set of factors. The research tried to reach some results in specific topics (specific axes) to clarify this reciprocal relationship, which is as follows:

The axis of the development of the architectural facade and the architectural thought of the city of Amman:

- The designs of the architectural facade of Amman went through multiple stages, and there was a reciprocal relationship between them and the architectural identity. Downtown Amman is fragmented, and scattered structures result from the influence of historical, climatic, social, and demographic conditions with simple design interfaces. Amman developed spontaneously and not through a systematic strategy.
- The first pioneers of the architecture profession laid the architectural foundations of Amman architecture commensurate with the local Jordanian society and the available building materials such as natural stone. The future of the city's architecture includes diversifying the use of stone in the facades with various patterns and techniques.
- Architecture in Amman developed by being influenced by the global trend of modernity and the adoption of Western architectural thought. Facade designs were influenced by the international style and the trend of modernity, and creative models appeared in the architectural facades of the city. This development was supplemented by the emergence of the postmodern trend and its reflection on architectural destinations. Some architects played a significant role locally and globally and put Jordan on the map of the architectural personality expressing a self-identity. They were able to develop contemporary local architecture and integrate it with the spirit of heritage, such as Rasem Badran and Jaafar Toukan. They attempted to mimic the traditional local architecture and use some vocabulary Heritage in the design of facades, which gave importance to heritage and highlighted the local identity.
- The urban environment, including the architectural facades at the beginning of the twenty-first century, was fast-vibrating and could not be monitored, and there is a role for architects in accessing the city's architectural image by setting determinants of architectural identity and activating the role of legislation in making directives to achieve a special spatial identity for the various areas in the city of Amman. Legislation has a major role in directing design processes in order to formulate spatial identity.
- Many researchers believe that the city of Amman enjoys aesthetic and private qualities among Arab cities and capitals. The design of the architectural facades by the proportion and sizes of cubic buildings merges with the mountainous nature of the city, giving it dimension, spirit, and distinction. However, if the consumerist commercial architectural style continues, Amman is expected to become a city without a personality that lacks an identity of its own.

The axis of Factors affecting the architectural identity of the city of Amman:

- Multiple factors affect the visual and architectural identity of the city of Amman, including the political, economic, social, and cultural conditions. The new market mechanisms also produced different intellectual patterns in terms of their quality in terms of design. However, thanks to the legislation, modern places in the city remained confined to specific areas, which contributed to preserving the city's personality and architectural identity.
- Global capitalism has also influenced the formation of the city's architectural identity. Amman Municipal authority has paid more attention to the developers' benefit than the citizens', lacking a clear vision for the city's development that corresponds to its historical context and contemporary life.
- At the end of the last century, as a result of being affected by political conditions, migrations, the displacement of some of the neighboring countries, and the emergence of capital from abroad, the real estate market flourished,

and the emergence of a new type of multi-story residential buildings, the so-called (housing as a local term), far from the architectural identity of the Jordanian society.

- Natural stone has been used throughout history in Amman and has become a city covered with stone. It is considered one of the essential elements of its architectural identity. The stone has become the link between the architectural heritage that derives from the architectural character of the region and neighboring countries and between contemporary architecture and the emergence of modern and postmodern trends. Natural stone remains one of the most vital building material options .
- We must pay attention to natural and artificial stone and modern techniques and mechanisms in manufacturing technology for modern building materials. We must continue to use it despite introducing other new building materials to bring about a change or renewal of the color in the built environment. However, the stone must be predominant as the distinguishing feature of the architectural identity of the city of Amman.

The axis of architectural identity and its impact on the architectural heritage of cities:

- Preserving the architectural identity is a complex task that requires attention to cultural heritage, reviving heritage places, and supporting the distinctive character and identity of the region .
- Develop awareness of the historical values of the city, attracting institutions, residents, and tourists following the comprehensive vision of sustainable development.
- There is a need for comprehensive change and improvement of architectural design for our Arab cities to enrich the aesthetic aspect and communicate with the architectural identity, considering national traditions and local customs to make the city an attractive place for human life. Modern Arab architecture must also link heritage and modern life, which leads to the preservation of the architectural identity and character of the place.
- Considering the issue of forming the recipient's identity is a central issue in developing any architectural vision. We need a society aware of the value of excellence in architecture and for architectural designs that interact with our reality and lives. Excessive financial spending may be a reason for building an architecture incompatible with our environment. Designers must understand their role as architects in the formation of the city and its buildings.

Recommendations:

- Adjusting and reconsidering the provisions and legislation related to the design of architectural facades and the search for an architectural style that matches the goals and needs of society.
- Strengthening the concept of place identity among the new architects and working on laying the foundations for the city's architectural identity and its reflection on the architectural facades to achieve the requirements of the times.
- Develop an accurate visualization of the urban growth of the city of Amman and the distribution of uses based on societal needs within the same urban space.
- Preparing scientific research related to the architectural identity of the city and its relationship to understanding the Jordanian societal thought of buildings and linking them with their individual needs to explain the approach adopted in the design process in urban expansion areas.
- Enhancing the architectural culture in the architectural academies by providing resources to refine the design process and linking ideas with community studies.
- Increasing public awareness and involvement, educating the community, strengthening the population's affiliation, and increasing the general level contributing to forming a united architectural identity.
- Establishing an architectural pattern for the architectural designs to be followed by the real estate developers to avoid irrelevant design works.
- Unifying the architectural elements of the facades and reflecting the architectural identity in the public areas to be entrenched in the minds of passers-by.

Future Studies and Implementations:

- The research faced some limitations regarding documenting the architectural facades of the city of Amman at different stages of time.

- it is suggested to conduct research studies for researchers and students of architecture and interior design using technology and modern digital systems in documentation and monitoring, especially in heritage areas.
- Finding participatory and interactive research platforms aimed at fruitful cooperation between the academic sector and the executive authorities in the field of architecture and urbanism to find mechanisms and frameworks regarding legislation and laws regulating the construction, not only at the level of administrative procedures but at the level of the design and aesthetic aspect as well.
- Developing integrated plans (research - community - educational - cultural) that promote a culture of community awareness and consolidate the concept of cultural identity for our Arab cities.
- Conducting workshops between specialists and the local community in the field of architectural heritage, as well as inviting universities and relevant bodies to conduct scientific competitions to promote the concept of identity and heritage.

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