

NARRATIVE ARCHITECTURAL INTERIOR DESIGN AS A NEW TREND TO ENHANCE THE OCCUPANCY RATE OF LOW-CLASS HERITAGE HOTELS

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Abstract. *Introduction.* In recent years, the suffering of hotel buildings in historical and heritage cities has been observed, many of them have become neglected significantly, due to the reluctance of tourists in hotels of low-class, which has a heritage character in Amman historic Centre. It has been noticed their desire to stay in hotels of higher categories within the new neighborhoods of Amman. *Purpose-* this study aims to raise the efficiency of the occupancy rate for low-class heritage hotels in downtown at the lowest economic costs, focusing mainly on hotel interior architecture and the role it plays in tourism development. *Methodology-* questionnaires were used as a tool for data collection, obtaining general information. Besides that, interviews were carried out with Downtown low-class hotel stakeholders to find out the most important aspects that reflect the interests of the guest loyalty to the hotel. Based on the evaluation of indicators from hotel guests 'and stakeholders' perspectives, proposed re-design of selected existing hotel was actually implemented using the narrative approach. *Findings-* narrative design", is an ideal solution for low-class heritage hotels, in terms of low financial cost of rehabilitation, improving the appearance of hotels, while preserving the heritage value of the building.

Keywords: *Narrative design, heritage buildings, low category hotels, occupancy rate, economic experience.*

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1. Introduction

Culture and heritage are a means for sustainable regional economic development as well as a source of national uniqueness. The concept of heritage is not granted but created by a community, by, rites, oral traditions, lifestyles, monuments, archaeological sites and historical buildings (Riganti & Nijkamp, 2004). Architectural heritage is one of the most important attractions for global and local tourism alike. The buildings and sites of heritage and historical value are considered a national wealth and existing resources that are easy for investment and economic exploitation, which increases their historical value.

Architecture and tourism work in a complementary way to each other to get rid of the knowledge lack of any culture and present the original content of a place, its culture, and its evolution through time. There has been a huge spike in "Heritage Tourism", which has seen sudden interests in ancient history and the heritage (AlMasri & Ababneh, 2021).

Architecture is of particular importance, beside any kind of tool, to attract tourists and advertising to enhance the statistics of tourists in any country. All architectural activities affect the development of tourism statistics.

The heritage and historical buildings, including hotels, constitute an interconnected and integrated urban fabric with important heritage sites and landmarks for tourists. So that this infrastructure contributes to the revival of its built environment, but these heritage hotel buildings in most cases are considered separate from their surroundings and lost their cultural and heritage spirit due to lack of interest in them, so that they became deserted and dilapidated in terms of aesthetics, construction, and services, which made many tourist guests unwilling to stay in them.

Today, historic buildings are not just proposed as revenue generators by hotel owners and developers, they are also demanded by the customer as a concept of unique travel experiences (Nikolić *et al.*, 2014).

The presence of this relationship in heritage sites often ensures its preservation indirectly, because leaving the building abandoned or neglected without performing its functional role in community service effectively exposes it to neglect. "Historical urban areas are part of the history and memory of a city, and history would be discontinuous without them (Irmeili & Çağlayan, 2022). As a result of deterioration, isolation, and independence without linking it to the urban fabric, the functional continuity of the building will give it reasons for care and maintenance, and the concept of functional continuity can be dealt with as a concept opposite to neglect.

On the other hand, many designers and researchers dealt with the subject of designing hotel buildings from the vision of purely architectural composition, functional relationships, and neglected many factors and aspects that contribute to the success of the functional technological process for it, such as the aspect of quality service and factors of occupancy rates, the relationship of the hotel with spatial surroundings heritage and urban fabric (Cetin & Dincer, 2014) and (Lin *et al.*, 2018) discuss that the physical environment is a dimension of hotel experience quality.

The economic return of the use of the heritage hotel building depends on the extent to which its potential is exploited, and its historical and artistic value is used in a way that provides a financial return for the continuity of maintenance and preservation of the building. However, the use of the heritage hotel building in a way that is not commensurate with its artistic and historical value often causes its failure, no matter how high its return, because it eliminates the original value for your use, which is the building itself.

The lack of a clear architectural vision in the principles and standards of modern design for heritage hotel buildings, and its direct impact on the extent to which guests are attracted and comfortable stay physically and mentally, causes the failure to attract tourists to these buildings, regardless of whether they are of international brand. Which in turn leads to a deterioration in its operational process, causes its ineffectiveness, a decrease in the number of inmates residing in these buildings, and consequently a loss in financial income.

But the important question that arises is, why was the focus most of the time on the development of these sites - which is necessary - and the neglect of the importance of service hotel buildings for these sites? and the impact of neglecting the study of their needs and restructuring them on tourism! Increasingly, tourists are interested in more than seeing heritage sights, they may also need new abilities in the operation and

management of tourist attractions that involve display of intangible factors requiring storytelling, show craft skills, and co-creation of experiences.

2. The study problem

In the recent years, the suffering of hotel buildings in historical and heritage sites has been observed, a noticeable decrease in their number, and the continuity of their work, many of them have become deserted, neglected, or dilapidated significantly, due to the reluctance and lack of resident tourists in hotels of the first and second stars (low-class), which has a heritage character in the historic center of Amman. Thus, hotel guests do not perceive these hotels in historic buildings as places just to sleep at but consider them as places to experience a sense of the scenery and facilities (De Klumbis, 2002, Kim, 2009).

Although (McCleary *et al.*, 1993) claim that hotel location is of paramount importance to travelers and tourists, it has been noticed their desire to stay in hotels of higher class within the new neighborhoods of Amman, with a relative geographical distance from the historical and heritage tourist attractions, despite the high prices of these rooms, based on the data of the Ministry of Tourism and Antiquities for the year 2019 and beyond as shown in table 1. The number of tourists in the city of Amman in 2019 was approximately 1810032, which is an average of 33.08 percent of the total number of Jordanian tourists, according to the statistics of the Jordanian Ministry of Tourism and Antiquities - Planning and Studies Department. Table 1 shows a decrease in occupancy rates for one and two-star hotels compared to the higher categories.

Table 1. Occupancy rate & classification of Amman hotels 2019

Amman	No. of Hotel	Suite	Room	Bed	Room Occupancy
Five Stars	18	490	4,757	7,365	33.08%
Four Stars	25	232	2,483	4,544	38.35%
Three Stars	40	201	2,082	4,087	42.26%
Two Stars	44	168	1,380	2,801	30.56%
One Stars	31	26	663	1,368	20.60%
Total	158	1,117	11,365	20,165	17.67%

This case, especially in Amman downtown that has a historical depth and a distinct traditional heritage, has led to a significant decrease in occupancy rates in these hotel buildings, and a lack of financial returns for them, forcing many of them to close. On the other hand, the inability and willingness of hotel owners to make improvements, modifications, and rehabilitation in its internal structure due to the high economic cost.

The continued low occupancy rates for these buildings poses a threat to their existence in this important historical center, which directly affects the vitality of the city center and life in it on the near future perspective. However, little attention to the role of architecture vision in the design of heritage hotels has caused decreasing numbers of tourists who are residents at these hotels.

It is not possible to rely on traditional architectural solutions in the rehabilitation, or re-design of these buildings, especially since the economic cost is very high compared to the financial income of these hotels, which cannot be justified in terms of economic feasibility.

Therefore, it was necessary to search for ways to find new and unusual architectural solutions that correspond to the requirements of the promotional tourism

market on the one hand, and the functional aesthetic and spatial on the other hand, at the lowest costs in a short period of time. Using sustainable design for the aim of attracting visitors results in expanding local spatial features and turning them into tourist destinations. Accommodations for visitors should take natural and local areas and historic architectural heritages into consideration (Al Fahmawee, 2018).

There are unremitting government efforts - initiatives and recommendations from the Ministry of Tourism - to support low class hotels, by reducing taxes and subsidizing electricity bills, and banking facilities to maintain the continuity of these hotels. However, these temporary and superficial solutions do not justify the high operating price compared to the low financial profitability resulting from weak occupancy rates.

Studies show the necessity of integrating the influence of other factors such as architectural and interior solutions as well as service quality in improving hotel occupancy rates as an integrated and not separate factors (Al Fahmawee & Jawabreh, 2022).

Research Objectives

This study aims to fill the knowledge gap by proposing guidelines based on the evaluation of indicators from hotel guests' perspectives and classifying them into principal components for more efficient low class hotels occupancy, by finding a mechanism to attract tourists to stay in this category of hotels, and thus raise the efficiency of the occupancy rate for them at the lowest economic costs.

Research Hypothesis

The researchers assumes that the interior architectural characteristics, then service quality, are the main factors in reluctance guest to stay in downtown heritage hotels.

Research Importance

The research focuses mainly on hotel architecture and the role it plays in tourism development, by investigating the important factors in hotel designing, to attract tourists to low-class heritage hotels in city centers. In other words, recognition of effective factors in hotel architecture designing which will influence on choice of tourists.

Research limits

Temporal search limits: from 2019 to 2021. Spatial search limits: Downtown core in Amman-Jordan.

3. Theoretical framework of Narrative design

Narrative is a relevant and important methodology for inquiry in the fields of architecture and interior design. It has a role to play in enhancing our understanding of what it is that designers actually design when confronted by the task of creating an interior or a building (Smith, 2001). Architecture including interior design can be advanced with narrative as a means to give it meaning based on guest experience (Coates, 2012) .

“Historical narrative allows an architect to design, conceptualize, formalize and materialize in a way that gives a sense of place and character to a new building, connecting it with the antique fabric” (Gangey). That means, the narration is a powerful tool to share knowledge through memorial experience, narratives are one way of

capturing our experiences of and within the environment. Where experiences are spoken about, written about, or performed as part of our everyday existence (Smith, 2001).

The tendency to study and understanding of narrative is consistent with the trends of contemporary architecture that called for openness to various fields of knowledge, especially literary fields, including narrative, to expand the means and methods of architectural creation, by investing the methods, means and intellectual energies of those fields and employing them in interior architecture (Al Dein, 2022). Finally, the use of such sustainable designs for the aim of attracting visitors results in expanding local spatial features and turning them into tourist destinations (Al Fahmawee & Jawabreh, 2022).

Narrative design approach is the linking between ideas and spatial experience through construction methods, it helps to develop exclusive ideas, suggest memorable experiences, and create a new insight of space with deeper meaning and identity. Narrative design, based on memorable experiences, is an important trend to improve the field of tourism and hotels. Stories, memories and experiences enrich narrative identities and turn guests into storytellers who share their stories through the social media (Page, 2013).

This trend has witnessed the removal of tourism itself from the service sector, and the trend towards the so-called "experience economy" and a departure from the norm, which is based on the concept of story, narrative, and exploited through design.

According to Lonsway "contemporary architecture of theme-based design leads to a new understanding of architecture's role in the increasingly diversified consumer environment. It explores the "Experience Economy" to reveal how everyday environments strategically and opportunistically blur our leisure, work and personal life experiences." (Lonsway, 2013).

Today the concept of the *experience economy* covers much broader sectors, such as tourism, architecture, urban planning. An experience occurs when a company intentionally uses services and goods to engage individual customers in a way that creates memorable events. Experiences must be memorable. For this reason, tourist managers try and develop experiences that enhance these memories (Chen & Rahman, 2018).

As a result of the anarchy of the place with the interior artistic aesthetic treatment, many of the present heritage hotel buildings suffer from stagnation, boredom, and eventually becomes a place without a story, empty and without a soul, and a lack of individual identity and narration. Only with narrative design solution can heritage hotels building withstand time and be endless.

This paper presents two case studies of hotels that "tell stories and design experiences", where experiences are the result of narrative design. The criterion for selecting these case studies is that each one of them possesses special characteristics that could enrich the typology of the narrative design to which we have already referred and which we remind is based on narrative design and emotional experiences.

Lacanda boutique hotel which located in the heart of Amman's cultural center. The building is considered one of the oldest buildings in the surrounding area as a cultural, entertainment and hospitality landmark in Amman. It was converted and used as a hotel at the beginning of the seventies of the last century, it was completely rehabilitated and renovated in mid-2015, while preserving the architectural and historical identity of the building.

The first boutique hotel in Jordan, it has become known as a vibrant center for the visual and performing arts as well as hospitality. Which carries a cultural message that aims to introduce the heritage of Arab music and Arab musicians. The building includes 14 rooms named with famous Arab singers of Arab music who had a contribution to the development of Arabic music. Where each room is named one of the Arab musicians, as each room has its own design inspired by the history and personality, and the musical contribution made by each of the Arab musicians who were selected, and its interior design reflects the colors and furniture of the personality and life of the musician whom it is named as shown in figure 1.

Individuality is the term used in depicting the different designs of each room in a narrative hotel (Lim & Endean, 2009). A room for its guest a unique cultural experience, it is a serious attempt to redefine the heritage hotel experience by creating its own version as a cultural haven where travelers, culture seekers, and neighbors converge happily to enjoy thoughtful contrasts.

The traditional residence style and spirituality of the historical figure culture attract tourists who are interested in learning the history and stories about these historical figures (Wang *et al.*, 2019).



Fig. 1. Lacanda boutique hotel rooms design inspired by Arab musicians

The design is contemporary and exotic, with a traditional Arab flavor that is different from the usual, as it reflects to the foreign visitor the culture of the region in a beautiful manner. The functions of the hotel have been expanded by adding a cinema to show Arab concerts and films.

Charles Street Jail was completed in 1851, 120 years after some of Boston's most notorious criminals resided, prisoners revolted over poor living conditions and declared the prison unfit and a violation of inmates' constitutional rights and in 1990 closed the prison. In 2001 the site was converted into **Liberty Hotel**, where a team of designers and architects working collaboratively with historians to ensure that the result is a delicate balance between conservation and dynamic new use.



Fig. 2. Charles Street Jail converted to Liberty Hotel

<https://libertyhotel.com/gallery/>

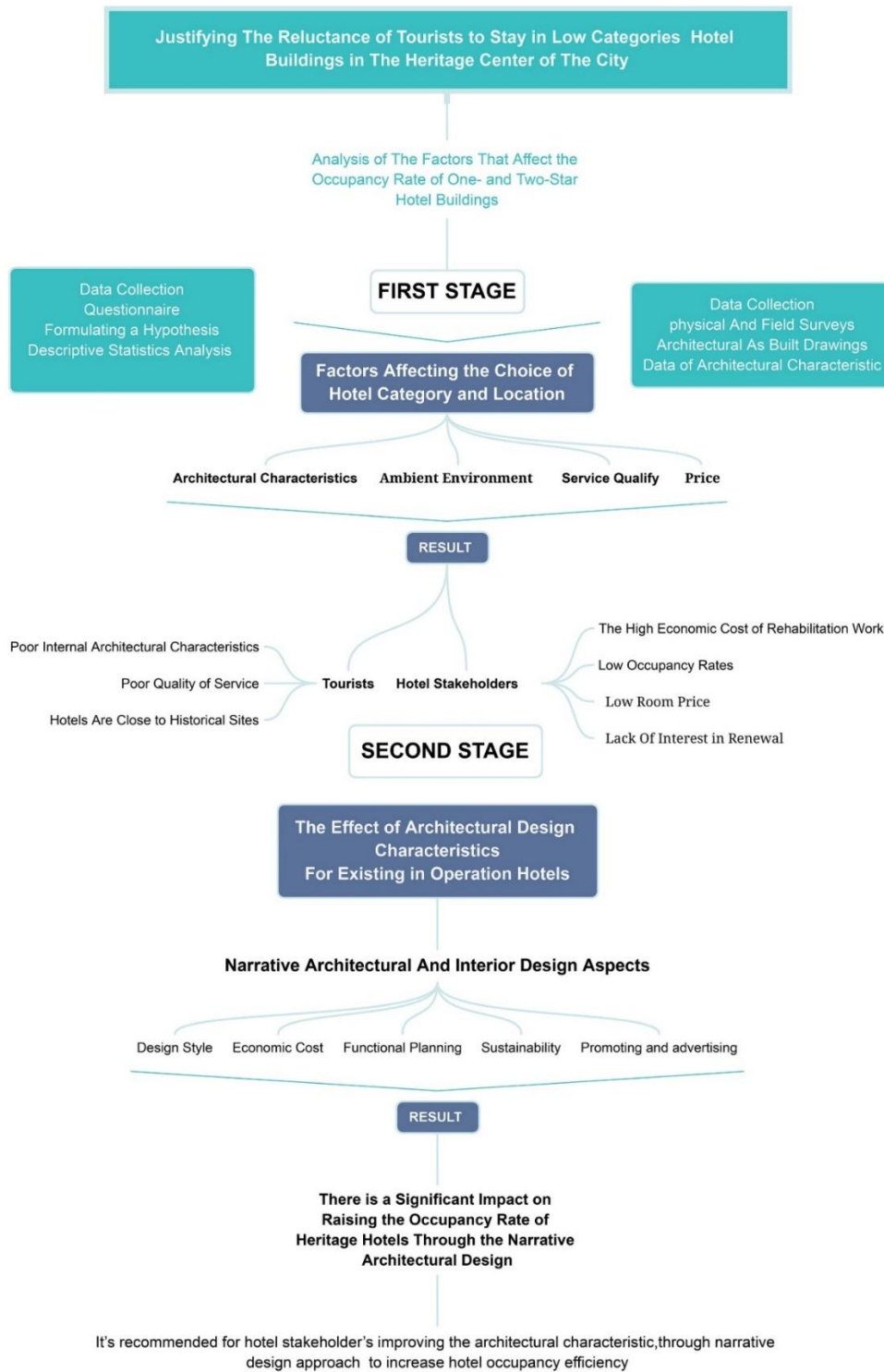


Figure 3. Methodological framework (by authors)

The interior design team was tasked with instilling a distinctive character for the hotel that honors the building's rich history while bringing a contemporary vibe. To this end, the hotel's elegant reception desk is made of pine wood with lacquered patterns reminiscent of the 1850s embroidery work of the building's exterior. The rugs recall Old New England crew work, expanded, contemporary, and American Colonial prints in

historic colors such as maroon, Gray, and purple, creating an updated take on the traditional look.

Finally, exposed brick walls and a striking wrought-iron chandelier add visual interest to the hallway while emphasizing a commitment to historic and simple materials. The preserved prison cells inside the hotel restaurant and the wrought iron work on the windows are just two souvenir examples as it clears in figure 2. The former prison exercise yard is now a beautifully landscaped private yard.

4. Methodology

The research applied a mixed approach to collect data and analyze the research problem comprehensively, the researchers collect quantitative and qualitative data simultaneously and then integrate the information into the redesign stage of an existing hotel based on the analysis of collected data in the first stage as shown in Figure (3). Thus, the study was conducted in stages.

4.1. First stage: analyze the factors affecting the choice of hotel category and location

4.1.1. Study area

The study area includes the Downtown core in Amman, as represented in figure (4), which is the historical heart of Amman. This area represents the origins of Amman, and it is considered a tourist attraction because of the presence of important historical sites, such as the Roman Amphitheatre, the Citadel (Temple of Hercules), the Al-Hussein Mosque, and the Nymphaeum (Al Dein, 2021). In addition to the heritage hotels around the vicinity of these landmarks, which are distinguished by their proximity to each other.

The downtown area, which dates to about 12 thousand years and bears witness to many ancient civilizations that passed through Jordan. Historic sites and heritage buildings have been identified in the Downtown as a study area, due to the lack of tourists to stay in its low-class heritage-style hotels despite their importance, based on the supported data taken from the statistics of the Jordanian Ministry of Tourism and Antiquities - Planning and Studies Department, which shows the occupancy rates for these hotels. As heritage buildings constitute 45% of the area, 15% are abandoned buildings and the last are multi-use buildings. Figure (4) shows the extent of the proximity between the historical sites and historical buildings, as the farthest point does not exceed 700 meters, and here the research problem arises.

4.1.2. Context analysis of the Downtown

Field survey

A survey was conducted with tourists visiting the Downtown core of Amman to find out their reactions regarding accommodation in its hotels ,questionnaires were used as a tool for data collection, in which every respondent was required to respond to a same set of questions that was in a predetermined order, to obtain general information about the tourist, to determine factors affecting the choice of hotel category and location, involving demographics and personal characteristics.

The questionnaire was distributed directly and manually in the heritage and historical sites in the Downtown core, where the presence of tourists of different nationalities. A random sample of 400 tourists was distributed, the number of tourists

who responded to the questionnaire and was valid for statistical analysis was 280 with a rate of 70%. The data collected from the questionnaire was analyzed using descriptive statistics and one way analysis of variance (ANOVA) using SPSS (Ver. 24).

Besides that, a semi-structured interviews and questioner were carried out with Downtown low class hotel stakeholders to find out the most important aspects that reflect the interests of the guest and affect loyalty to the hotel. Data were collected about the general conditions of the hotel and the variable factors affecting their desire for rehabilitation, where feedback from the owners will be formulated.

The total of low-class hotels with is 75 for the year 2019, according to the statistics of the Ministry of Tourism and Antiquities. The number of questionnaires that were conducted was 50, the number of responses was 33. Most of the questioners were located around the archaeological site in the Downtown core.

The reliability of the questionnaire was measured by testing its consistency with the Cronbach's alpha test in SPSS. The Cronbach's coefficient alpha statistic is generally used to indicate the reliability of tests questionnaire that have been used in the study is suitable for purpose. The analysis is done by indicating that the same response pattern is shown by the subjects over the course of the questionnaire, reliability is measured between 0 to 1. The table below shows the reliability test of the questionnaire survey in this research.

Table 2. Reliability analysis using Cronbach's alpha value

Questioner	Frequency
First Questioner	0.91
Second Questioner	0.86

Physical survey

This survey is related to revealing the importance of studying these hotels, which represent an important architectural and visual interface to the city center due to their connection with the archaeological and heritage sites spatially and visually as a spatial-connected urban fabric.

Physical survey was conducted to collect data about low class hotels condition in terms of building size, spaces, functional components, architectural and interior design solutions for hotels. Then assessing their structural condition within three levels: bad, acceptable, and good, which contributes to knowing the hotels that need rehabilitation and that mainly affect the attracting guests.

4.2. Second stage - A narrative in architectural interior design

This part of the research based on analysis exploratory theoretical framework of narrative design examples of existing local and international hotel buildings as described above, as well as an example of a heritage hotel building that was rehabilitated, designed, and implemented, where realistic results were obtained on it.

Case Study and research design

The questionnaire and the interviews were conducted in 2019 and based on the results and the desire of one of the most important heritage hotels in the downtown to rehabilitate, the researcher was assigned to find rational, logical design solutions at the lowest costs to raise operational efficiency.

A proposed design was made by the researcher and implemented in the period between 2020-2021. Art hotel was adopted as a model for research design, which a rehabilitation was carried out, the architectural and internal characteristics were analyzed.

The effect of the architectural modification and interiors solutions on the occupancy rates of the hotel was determined, then compared it with other hotels that were maintained without any modification. In addition to studying the total economic cost of the renovation process for it.

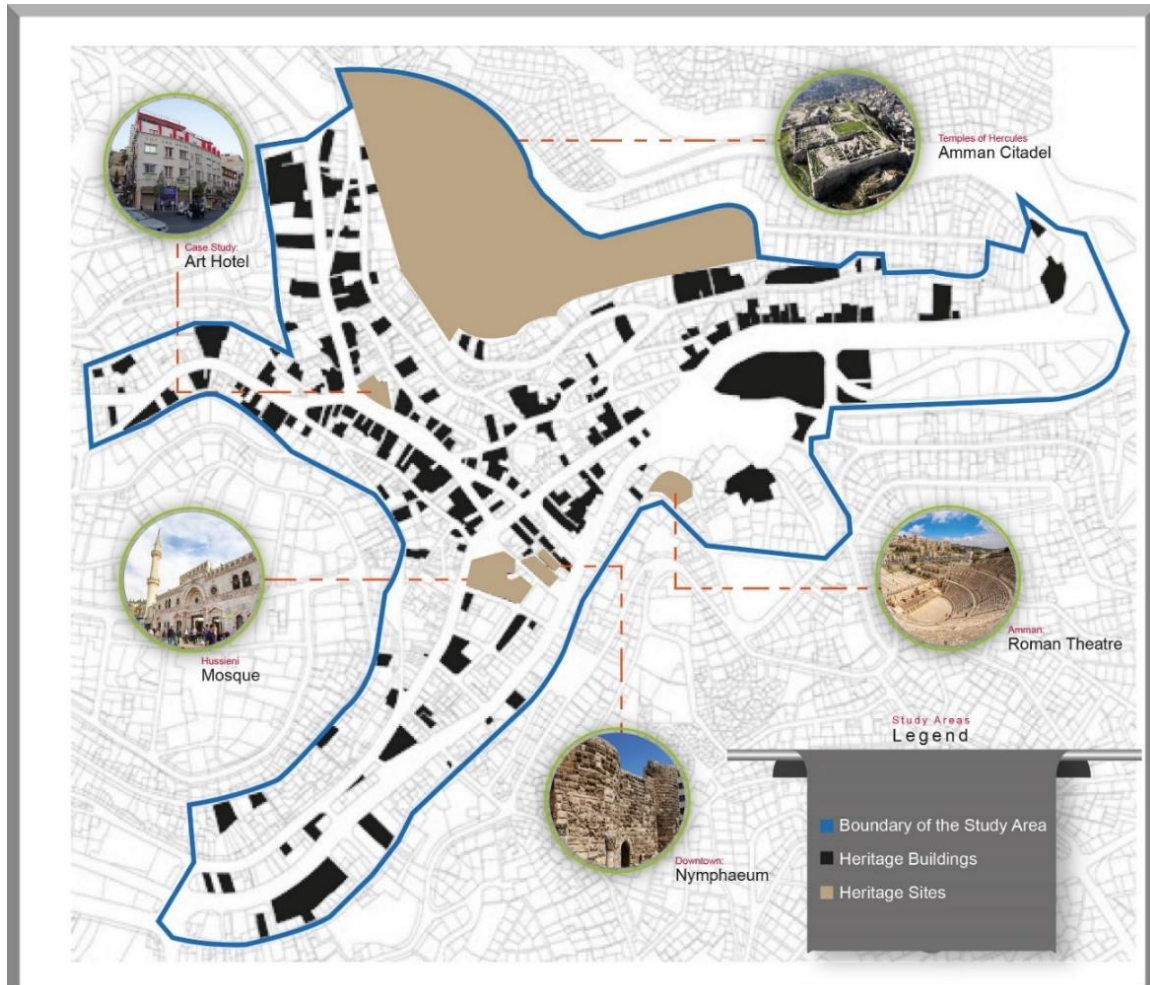


Fig. 4. Study area for the Downtown including historical sites and heritage buildings.
(Source: own elaboration)

5. Result and discussion

5.1. Factors affecting the choice of hotel category and location

To accomplish the results of what variable factors affecting the choice of hotel building category and location in the downtown, guest loyalty, and consequently the occupancy rate in these heritage hotels, the main concern was to analyze the demographic characteristics of the sample, also measuring the trends of the sample for the different factors affecting guest accommodation, and finally test the statistical

differences for the discrepancies in their places of residence and the reason for choosing the location and class of the hotels.

Table 3. The demographic characteristics of the sample

Demographic Characteristics		Frequency	Percent
Age	18- 28	60	21.4
	29- 39	129	46.1
	40 – 49	57	20.4
	50 – 59	28	10.0
	60 or more	6	2.1
	Total	280	100.0
Sex	Male	208	74.3
	female	72	25.7
	Total	280	100.0
Income	Less than 500\$	16	5.7
	500\$- 1000\$	86	30.7
	More than 1000\$	178	63.6
	Total	280	100.0
Nationality	Jordanian	3	1.1
	Arabic	63	22.5
	Other nationalities	214	76.4
	Total	280	100.0
Duration of stay	Less than 7 days	65	23.2
	7- 14 days	187	66.8
	More than 14 days	28	10.0
	Total	280	100.0
Residence place	Downtown	50	17.9
	New Amman	221	78.9
	Other	9	3.2
	Total	280	100.0
Reason for visit	Business	32	11.4
	Tourism	231	82.5
	other	17	6.1
	Total	280	100.0
How to get to know the hotel	previous experience	73	26.1
	social media	96	34.3
	promotion through people	54	19.3
	reputation	30	10.7
	other	27	9.6
	Total	280	100.0

As it clears in table 3, the largest percentage of tourists in Jordan according to age of 29 to 39, with a percentage of 46.1, while the lowest percentage was for tourists aged 60 years or less, with a percentage of 2.1. The sample components were distributed over males (74.3%) and females (25.7%). Most of the tourist's income was (more than

1000\$), with a percentage of 63.6, while the lowest percentage for tourists whose income less than 500 \$, with a percentage of 5.7 .

Concerning the nationality, most Downtown visitors are non-Jordanian. The period of stay of visitors from 7- 14 days was the biggest percentage of (66.8%), and the least was for the stay more than 14 days (10%).

Most of the tourist's residence in new Amman with percentage 78.9, while the percent of the tourist's residence in Downtown was 17.9. The reason for their visit varied the dominated reason was for tourism (82.5%). Most of the tourists indicated that they knew about the hotel through social media with percentages (34.3%) as shown in table 3.

Table 4. Factors affecting the choice of hotels class and location in the Downtown core

Factors	Frequency	Percent	Chi-square test	Sig.
Poor internal architectural characteristics of these hotels	97	34.6	32.085	0.000
Bad Service	95	33.9		
Price	42	15.0		
Location	31	11.1		
Other	15	5.3		
Total	280	100.0		

As shown in table 4, there's a statical significant between the factors affecting the choice of hotel category and location due to two main factors, the poor internal architectural characteristics of these hotels with percentage (34.6%), followed by the poor service with percentage (33.9%), with chi-square equal 32.085, and sig 0.000. For Downtown hotels with low class, the price and location relative to the poor internal architectural characteristics and poor service did not affect the desire of tourists to stay outside the vicinity of the historical city center.

Table 5. Demographic characteristics of the low-class hotels in the Downtown

Demographic Characteristics	Frequency	Percent	
Hotel class	One star	14	41.2
	Two stars	19	58.8
	Total	33	100.0
Classification of the hotel architecturally	heritage	30	91.3
	modern	3	8.7
	Total	33	100.0
The number of times the hotel has been renewed	Once	12	35.0
	more than once	3	10.0
	has not been renewed	18	55.0
	Total	33	100.0
Evaluating the hotel from a structural point of view	Good	25	75.0
	Medium	7	20.0
	bad	1	5.0
	Total	33	100.0
The desire for rehabilitation	I would like	5	15.0
	I wouldn't like	28	85.0
	Total	33	100.0

The table above shows that the percentage of hotels rated as two stars was higher than hotels of one star in the rate of (58.8%). Most of hotels classified as heritage with percentages (91.3%), (55%) of the hotels has not been renewed. Most hotels evaluated from a structural point of view as good, with a percentage of (75%), followed by hotels evaluated as medium, then bad.

Most of hotel owners have no desire to rehabilitate their hotels, due to the high economic cost of the renovation and rehabilitation works that cannot be justified compared to the poor occupancy and the low room price, and therefore the futility of the renewal. There are other factors such as regulatory laws, construction condition of the hotel, etc. that influence their unwillingness to renew.

Interviews were conducted with six hoteliers whose time allowed to do so, to identify and understand the physical and environmental factor in the design characteristics of each individual hotel as an important factor in attracting tourists. In addition, what are the most important key of improvement for each hotel.

The survey included the hotel's exterior, interior design, space allocations, public areas that attract the guest, the number of times of renovation and rehabilitation of the hotel. The content of the written reviews was analyzed based on the physical aspects of architecture mentioned to determine their indicators.

Based on the available documentation and observation of the hotel facilities from the interviews, whether positives or negatives, formed the additional data sources. The findings from each data source provided the basis to develop the main themes for the study.

5.2. Explorations of narrative factor in architectural interior design

Narrative design is usually used frequently in museum buildings, and in this study, we will experiment with the narrative design of hotel buildings, especially heritage ones. The main objective of the design proposals is directly related to the research objectives, which is to show how hotel design by testing the effectiveness of narrative design interventions can improve the efficiency and profitability of the hotel, through a strategic design response that improves efficiency of the hotel properties and motivates tourists to accommodate in these categories of hotels.

5.2.1. Process for creating a narrative design

According to (Chang, 1997) heritage hotels hold great potential as a sustainable tourism commodity in its several uses as “a tool to promote civic glory, local identity, and cultural capital.

The process of the proposed re-design of the hotel - which was implemented according to the data of the research - begins by working with the conditions and provisions of the site, and creating rebuilding program of architectural and administrative requirements, closely related to the idea of narrative design as an attempt to find a rational architectural solution compatible with the challenges of the market.

The aim of narrative hotels with a unique concept is to distinguish themselves from other conventional hotels (Franchetti & Forsgren, 2005). A narrative approach focuses on continuity through time-a key concern of living heritage – and provides apposite account of change to historic buildings as a sign of life, not an admission of failure (Walter, 2020).

The case study of Art Hotel can generate an in-depth understanding and an analytical vision of the subject of narrative design and its positive impact on heritage hotel buildings.

Project assignment

One of the owners of the dilapidated heritage hotels in the center of Amman - Art Hotel - was interviewed, where a physical survey was carried out. And that attempt to fully understand the tangible and intangible conditions of the hotel, all the obstacles, the possibility of saving the hotel in terms of the deterioration of the profit-material income, and the lack of occupancy, which did not exceed 35%.

The researchers were assigned by the hotel owners to develop the appropriate design and scientific solutions so that the economic cost factor is considered during the rehabilitation process.

The project Idea

The idea of the project, which was re-designed by the researchers, is based on the narrative of the Jordanian heritage place for spatio-temporal considerations of the hotel. Where basic determinants were set for this by reaching the lowest economic cost of construction, modifications and restructuring using a new design methodology - the narrative - that to making the guest live in a comfortable spiritual vacuum, that reflects the spirit of heritage and history in Jordan in the simplest way.

Considering the tourism promotion of heritage and historical monuments in Jordan by making models and drawings that express them in the lobby or rooms. With absolute attention to the principle of sustainability for the environment based on all levels of energy, materials, re-refining etc. The integration of these parameters contributed significantly to raising the occupancy rate nearly three times.

Project background

Downtown core was the hearth of an active public sphere represented by the formation of several hotels, books and journal shops, and cafés such as The Arab League Café, to mention a few. Politicians, poets, novelists, journalists, and other momentous figures formed the nucleus of an active Jordanian public sphere. It housed the Post Office and many Banks. The architecture of the downtown is very diverse, as it represents the evolution of architecture in the city from early 20th centuries.

The emergence of many heritage buildings in the Downtown is associated with the establishment of the Jordanian state at the beginning of the nineteenth century, where the Art Hotel is classified as a heritage building in downtown Amman.

Where the hotel was established in 1922 as a residential building from a ground floor and then expanded vertically to four floors in the sixties, and it was occupied as the first branch of the Bank of Jordan, where the building retains the steel gate of the safe for now as a heritage element that has been preserved.

The building was modified at the beginning of the nineties to the lawyers' offices and then it was modified to a two-star hotel in 2010 to 2018, new plans were made by the researcher to rehabilitate the hotel that met the research goal in 2019, and the project was implemented in 2021. The floor area of the building is 500 square meters, and the total area is 3060 meters.

The ground floor includes the main hall, which is directly connected with the 6 shops, and in the middle of the building is the open courtyard - according to the traditional Arab system - where rooms are distributed around it.

5.2.2. *The narrative design process of the Art hotel*

The analytical study of a variety of instance of selected heritage hotel buildings showed a new style of design at the level of the design idea, which is the so-called "narrative design", as an ideal treatment for low-class hotels.

Which meets the requirements of the business owner in terms of the financial cost of modification and the attractive interior appearance of the hotel, in addition to its impact on attracting tourists and improving the appearance of hotels at the urban level in the Downtown area. While preserving the architectural and external heritage value of the building within the ecological urban fabric.

The narrative design process of the hotel consists of five main aspects:

Style and design aspect

The researchers adopted the idea of the Arabic urban city fabric narrative to express the idea of design, so that the treatments, the technical and architectural elements of the interior are compatible with the spirit of the place, for the time in which the hotel was established figure 5.

The basic structural elements, mattresses and anything related to the history and heritage of the place were preserved, such as internal stone facades or ceiling plaster - where they were left as they were - dispensing with the gypsum board and preserving the safe gate of the bank, seats, tables and others, improvements were made and maintain her. The modern culture of rehabilitation tends to respect the material evidence that history left to the present-day generations with minimum intervention measures in building components (Romeo *et al.*, 2015).



Fig. 5. Arabic urban fabric

Here, the modern, classic styles, and frameworks that are common and well known in design, which in many cases have become monotonous and boring for many guests, have been completely removed, and instead of relying on the concept of "retrofit", where a modern 'distinguishing, but complementing' element is added to

ancient heritage structures, thus preserving the old, and giving it the new vitality, it needs with an element of surprise and distinction.

The fabric of the Arab city is considered an irregular ramification, characterized by the presence of a network, which has no specific direction, and its main paths branch into secondary paths and sub tracks branch off into lower alleys and lanes, closed or open ends branch into lower paths as it is prominent in figure 5.

The functional planning (fabric building) aspect

The new experience in integrating the narrative design in this type of heritage hotel is considered a logical and rational way to restructure the internal spaces of the hotels, in line with the spirit of the heritage place with the lowest financial costs and without violating the design doctrine, and raising the operational function of the spaces, which is reflected positively on the personal experience of the guest, the occupancy rate and the financial return of the hotel.

Built heritage can become a valuable and sustainable resource when it is converted for tourism uses. Restoring and maintaining the original designs of historic structures provide opportunities to create place distinctiveness and a promotional brand for the destination (Henderson, 2011).

The user feels the narrative design impact directly and noticeably on the aesthetic treatments, but it is also important to note the functional impact, as the story produces new functional components that reflect the design idea and add richness to the functional structure of the hotel.

Therefore, it was important that the functional planning and texture of the building be in line with the basic idea of the project, which expresses the Arab-Jordanian heritage, so the shape of the spaces with straight and regular lines was redesigned, and transforming it into irregular lines and alleys, similar to the old Arab buildings and cities, which were embodied in the main corridors of the hotel and the shape of the irregular rooms, so that the guest feels the spirituality of the unconventional heritage place.



Fig. 6. Typical plan for guest room. **Left.** with irregular lines and shapes. **Right.** irregular shapes represent narrative of Arab cities fabric. (By Authors)

The narrative idea contributes to finding and creating new jobs that are compatible and integrated with the content of the narrative, which is what enriches the building with new facilities. Here a popular Arabic Cafe has been added as an inherited heritage also as a place for entertainment and recreation, and a prominent mark in the Arab community, and an important one of the vocabularies of their lives, and old brushes and tools were used.

Any hotel should use its space well. The secret is to plan the inter-relationships between the various functions within the hotel and ensure that the correct space allocation has been made for specific areas.(Kerr Forster Associates, 1993).

Sustainability aspect

Sustainable interior design is defined as "interior design in which all systems and resources are designed with a focus on integration into the whole to reduce negative effects on the environment and users, and maximizing the positive effects on environmental, economic and social systems (Winchip, 2011) .

One of the sustainable key solutions is the using of used materials in old building, that is, reviving the use of locally available materials and that would engage to decrease the negative impacts on the environment and decreasing costs considering heritage and cultural dimensions.

The choice for homemade materials (local materials) would achieve harmony with the surrounding environment, which means increasing the operational life of these materials, in addition to supporting the local product and enhancing the heritage design identity.

The most used material in Art hotel rehabilitation is the upcycled and reused materials whether for its original purpose or to fulfil a creative function, the original piece is left mostly intact, using its shape, form ,and material for a different purpose without reprocessing, helps save time, money, energy, and resources. All local materials were reused and upcycled to treat the interior design of the heritage. The reuse process takes place through repair, upcycle, conversions and additions while preserving those criteria which carry historical, cultural or architectural values of buildings (Tam & Hao, 2019).

The selection of surface finishing materials in Art hotel with different interior space components, including surfaces, furniture, and lighting system, must take into consideration the standards of sustainability by selecting durable materials that do not cause consumption of natural resources and do not harm human health.

In lighting units, upcycling of old car filters remnants and their use as a chandlers and floor lamps, through simplicity of design, using recyclable industrial materials, and reducing the use of termination materials as shown in Figure 7.

For ceiling, the false ceilings were removed, and the old plaster was preserved without any decorative additives, such as gypsum board, nor finishing materials were used to reduce material use, and left it in its simple texture nature that give traditional eco style. Sustainable furniture is defined as furniture that, when designing and manufacturing, takes into account the use of recycled or upcycled materials, taking into account the potential of re-disassemble it and reassemble it with another component after their useful life (Cargo, 2013).

In Art hotel design, old furniture units were reused, and homemade furniture was produced using traditional manufacturing techniques. For example, the local traditional stone walls were preserved, decorated, and highlighted in an aesthetically decorative

way through lighting methods, the surfaces of the service tables were covered with remnants of porcelain tiles artistically, also using disposal wood slices and making partitions from them as it clears in Figure 8.



Fig. 7. Upcycling of old car filters remnants and their use as a lighting unites. (By Authors).

Wood conservation can also be used to reduce waste disposal problems by recycling wood as a way of reducing the volume of waste to save on storage and haulage costs (Tam & Hao, 2019). An environmentally friendly, VOC-free paint was used. All paint and primers are free of VOCs, solvents, heavy metals, chemical residues, and formaldehyde.



Fig. 8. The preserved and reused material and furniture. (By Authors)

Generally, through the reuse of old tools and collectibles in furniture elements and using them again in restoring the heritage architecture and interior design of hotels can give design a very specific look. Narrative design should develop solutions to raise the aesthetic and performance level of sustainable materials, as well as encouraging stalk holders to provide materials and furniture that comply with the concepts of reuse and recycling, to increase the level of environmental sustainability of interior spaces in heritage hotels, and achieve the health and wellbeing of guests, building a better and more sustainable future.

Promoting and advertising aspect

Today we see the ever-increasing use of storytelling and the narrative identities that are created, and its formation in the development and promotion of tourism at multiple levels. The concept of narration is considered not only to promote and

introduce the tourism product, but also to create sympathy and participation among the guests, the thrill of seeing the place, and it is considered a modern method of promoting.

The proposed design of the hotel focused on highlighting this dimension through the implementation of abstract drawings inside the hotel rooms, reflecting the tourist attractions in Jordan, in addition to making miniature models of them as Petra in the hotel lobby, using paintings, Arabic writings and heritage folklore, the rooms were painted with colors inspired by Jordanian nature as in Figure 9.

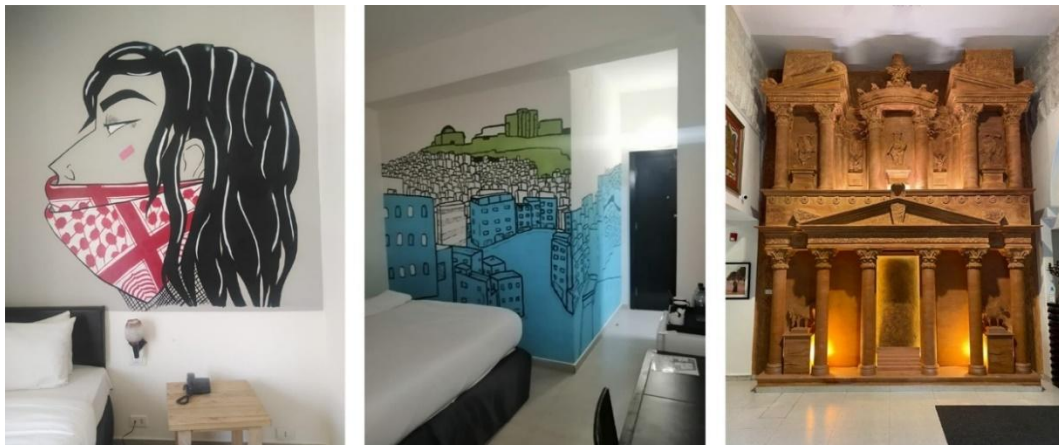


Fig. 9. The use of Promoting and advertising elements for tourist attractions in Jordan. (By Authors)

Economic aspect and rehabilitation cost aspect

This is the most important and strategic aspect for hotel owners, and the main knot around which the idea of feasibility of modification and rehabilitation revolves, as the high financial cost, especially the prevailing trend of design modification. It is focused within the style, whether the modern trend or the well-known classic models.

Therefore, the owners of these hotels avoid any modifications to not justify these expenses in the future with the desired income, especially since the prices of these hotel rooms are usually low compared to four- and five-stars rooms.

The proposed design treatment through narration is more expressive, fun, attractive and less expensive in terms of implementation, as this trend emerged as an alternative to modern and classic design models, which are very expensive compared to the narrative.

The results of the physical survey show that the cost of the narrative design does not exceed 120 \$ per m², compared to the modern design of 300 \$ and the classic 360 \$ per m², as the cost ratio constitutes less than half, which is considered logical and encouraging for this type of building.

Finally, based on the main objective of this study that is to explore how architectural design can improve low-class heritage hotels performance, the final redesign process of Art hotel has tested how the narrative design of hotel has the potential to improve hotel performance, by allowing the hotel property to be adaptable, more effectively and efficiently accommodate changing demand conditions. Moreover, the occupancy rate was raised from 38% before the rehabilitation up to 94% after it, based on the data that was provided to us by the hotel management.

Narrative design converts the hotel to a unique place where tend to be stylish, trendy and provide a warm ambience and original cultural or historic experiences, and

delightful services to hotel guests. Furthermore, the research confirms that a hotel with the unique strategic design, right facilities, and at the right price can attract more customers when demand is low.

6. Conclusion

This study provides new insights into heritage hotels practices based on architectural aspects of rehabilitation using sustainable “narrative design”, as an ideal solution for low-class hotels, in terms of low financial cost of modification, improving the appearance of hotels, while preserving the heritage value of the building. Moreover, it is a contribution in improve occupancy rate and enhance tourism industry of the heritage hotels in historic cities.

The inferred aspects could be implemented for the improvement of heritage hotels in operation using narrative design process because these aspects determine the order of priorities from the viewpoint of hotel stalk holders. According to the findings, five main aspects to consider which include "style and design aspect, the spatial schematic aspect, sustainability, promoting and advertising and economic aspect & rehabilitation cost". The needs of hotel guests and the architectural spatial relationships, besides the aesthetic sustainability and conservation aspects, should also be emphasized in heritage hotel rehabilitation process.

The results, through the application of the concept of narrative design on one of the low-class heritage hotels in downtown Amman, which was carried out by the researchers, proved the extent of the clear difference in the functional efficiency of the building and its impact on occupancy rates, through a comparison work before and after the rehabilitation, where the occupancy rates increased by an average of 94%.

The research shows that making any rehabilitations to the hotel buildings by traditional methods - the modern or the classic design models - are very expensive compared to the narrative design model, which does not exceed 120 \$ per m².

This research recommends guidelines, including principal components and their sub-indicators that should be considered in the rehabilitation of heritage buildings by investors and hoteliers for more user-friendly heritage hotels.

Finally, this research is a model that simulates many countries and international tourist cities with a historical character, such as Egypt, Tunisia, Greece, Italy, and others, through adopting the “**narrative interior design**” as a trendy and a modern hotel rehabilitating methodology, in line with the spatial and temporal characteristics of the area and at the lowest costs.

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