Potentials of Built Heritage as Opportunities for Sustainable Investments

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Abstract

Investing in the field of architectural heritage is a critical aspect that has received attention in the debate on preserving cultural heritage for sustainable urban developments. Many studies have shown that sustainable investments can provide social, economic and environmental benefits. They have also discussed ways to attract investors to allocate funds for the built heritage. However, few studies have focused on the potentials inherent in heritage buildings themselves, derived from their architectural and spatial qualities and their relationships with the context, which can make these buildings attractive for sustainable investments. In this context, the aim of this paper is to build a comprehensive framework to understand the potentials of heritage buildings as opportunities for sustainable investments.

Starting with the exploration of previous literature on architectural heritage and its relationship with investment and the opportunities presented to investors, the paper follows a qualitative method to present the concept of sustainable investment and its role in preserving the architectural heritage. Subsequently, the theoretical knowledge on the characteristics of heritage buildings that could be considered attractive for investment are analyzed and supported with examples from projects worldwide. It produces the theoretical framework of the relevant indicators. The framework is a tool that helps investors evaluate opportunities inherent in heritage buildings, while assisting the authorities concerned with heritage preservation in presenting and promoting these opportunities to investors.

The research concludes a set of indicators that represent attractive qualities in the heritage buildings. These exist at three levels: the level of materials and architectural elements, the level of the building and its spatial characteristics and at the level of the building's relationship with its surroundings.

Keywords: Architectural Heritage, sustainable investment, Built Heritage Reuse, Heritage Walks, Spolia.

Introduction

In the discussion of cultural heritage, the costs and advantages of historic preservation are frequently questioned. Economic justifications often dominate public discussions of historic preservation. It is widely recognized that the process of preserving heritage areas should be sustainable and meet the principles of sustainability (environmental, social, economic), and this does not depend on maintenance, protection, restoration, re-employment,

reuse, and other conservation policies, but rather extends to preserving the structure of the buildings and the economic return. Sometimes even more difficult questions are raised, such as if a historical preservation of a site is more valuable economically than alternative investment (Mason, 2005). Such questions might be purely economic, but they represent the situation in which any investor would find himself when heading towards investing in architectural heritage.

Many studies, such as Bowitz & Ibenholt (2009), Belkassy (2011), Morris (2012), Rizzo & Mignosa (2013), Muhammed (2014), and Youssef (2014), have explained the necessity and importance of investment in architectural heritage. Others, such as Licciardi & Amirtahmasebi (2012), Lourenco, Branco & Coelho (2015), Nassir & Faleh (2017), and Hassan (2018) have also showed the aspects of economic, social, and environmental sustainability and the concept of environmentally sustainable or ecological development (often referred to as ESG) that investment should be concerned with in architectural preservation. Several suggestions to attract investment to heritage vitalization and activation have also been laid out (Elmenshawy, 2012;Sigmund, 2016). The partnership between public and private sectors has been a focus as one of the successful methods in attracting investment towards the built heritage (Jelincic et al., 2017;Allegro & lupu , 2018).

However, very few studies have focused on the aspects inherent in heritage buildings themselves which can make them attractive for sustainable investments. Kincaid (2002) provides an extensive range of physical and locational characteristics that can be considered in a systematic way to provide guidance on what uses are best suited to an existing redundant building. Sanchez (2019) has showed how the spatial qualities of an existing building affect the successful development of the adaptive reuse process. Both studies are of great relevance to the current research. However, there are certain aspects that still need to be examined to achieve a more comprehensive framework.

Thus, the aim of the research is to present a comprehensive framework for the opportunities inherent in built heritage through its architectural and urban qualities to provide successful opportunities for sustainable investments.

Literature Review

Heritage is frequently called upon to perform many instrumental roles in largely local economic development strategies as a commercial activity in itself, as a location factor for other economic enterprises, as a contributor to environmental amenity and local identity, as a constituent of place image promotion and branding, and as a frequently catalytic element in neighborhood regeneration (Rizzo & Mignosa,2013). In this regard, Bowitz & Ibenholt (2009) and Belkassy (2011) have demonstrated the importance of linking investment in built heritage with tourism, where investment projects succeed in attracting tourists through the reuse of inherited buildings in various functions, creating jobs and providing economic and development returns**.** Morris (2012**)** also has added the concepts of property value stabilization and smart growth of heritage areas. Rizzo & Mignosa (2013) have shown that architectural heritage may be used as an economic project, that is, as part of a broader group of cultural industries that create distinctive cultural goods and services for sale.

Thus, in addition to or sometimes even in direct rivalry with artistic, social, and political goals, heritage buildings provide various economic prospects for investment and work in local economic growth. On the other hand, studies confirm that improving the environment and ensuring the reuse of buildings of historical value can make an important contribution to the renovation and stimulation of urban areas. They also show that the renovation of one building or one collection of historic buildings and public spaces can improve a wider urban area (Muhammed, 2014;Youssef, 2014).

Licciardi & Amirtahmasebi (2012) has drawn attention to the comparison between sustainability of natural and cultural resources. He adds that the idea of environmentally sustainable development (also known as ESG) has a parallel in the idea of culturally sustainable development. An economy can be determined if it suggests a culturally

sustainable growth pathways. Lourenco, Branco & Coelho (2015) have emphasized that intervention in heritage buildings is an important part of sustainability policies, with a focus on building materials, the methodology for interventions and the application of life-cycle assessment tools to existing buildings. Hassan (2018) has shown that investing in urban heritage assets may have a significant positive impact on the economy, society, and culture through rehabilitation and employment projects. Similarly, Tariq & Hussein (2017) have shown that the aim of the investment process in heritage areas is not an economic question of mere profit, but to revive and sustain the societal values of these environments, which is the ethical commitment to sustainable investment.

Interestingly, Burham (2019) has summarized factors that are considered as obstacles to investment funds for sustainability of built heritage, and these factors are as follows:

- **Institutional**: Lack of integration between cultural authority and other public agencies, a linear worldview, complex regulatory frameworks, and a dearth of effective instances of integrated public actions.
- **Financial**: The necessity for upfront financing, High transaction costs and long development timetables that require a long term commitment without solid guarantees of return on investment; countered by a range of risks; the absence of indicators proving financial viability
- **Social**: A lack of knowledge or sense of urgency that heritage is assuming risks; resistance to change; the exclusion of heritage revitalization from most cities' circular planning strategies.
- **Technical**: Goals for environmental and cultural preservation are not integrated. There is a lack of information interchange, and there are few criteria to assess the circularity and positive environmental effects of cultural asset protection.
- **Commercial**: Lack of knowledge and a lack of a legislative framework allowing governmental institutions to collaborate with the private sector on a variety of projects to assist conservation, whether through grants, licenses, concessions, or other methods.

Facing the above-mentioned obstacles, other studies have discussed the required and possible methods to attract investments. They have indicated that the most crucial steps needed to encourage investment include a legislative framework that is friendly to investments and ensures transparency and regulatory preservation policies, clearly stated development goals, and streamlined planning and execution procedures. In addition, tax deductions for financial incentives like grants, low-interest loans, and guaranteed loans, as well as policies for historic adaptation and renovation, are all pertinent. Tax breaks and credits for income, incentives for paying property taxes, VAT and transfer tax exemptions, and exemptions from inheritance and capital gains tax are all pertinent. These studies have stressed the necessity of public sector interventions through planning procedures and the requirement for a basic grade of infrastructure that is guaranteed, or at the very least supported, within historic environments are needed (Sigmund,2016;Belkassi, 2011 and Al-Minshawi,2012). While Jelincic et al. (2017) and Allegro & Lupu (2018**)** have shown that the partnership between the public and private sectors is one of the most successful methods in attracting investment towards the built heritage.

In the context of attracting investment to built heritage, studies dealing with the potentials of heritage buildings as a means of encouraging investments have remained scarce. In this regard, Kincaid (2002) was concerned with the refurbishment and adaptive reuse practice of heritage buildings in the UK. He raised the question about property's basic capacity to accommodate change, particularly its 'adaptability potential'. He claims that it should be expected that many property characteristics will be largely neutral, with little measurable effects one way or the other on project viability. However, many factors can have a positive influence, in that they promise to increase or enhance the opportunities for adaptation. The main physical factors relating to the structural, constructional, spatial,

environmental, and servicing characteristics that need to be examined for their potential positive or negative effect on "change of use" viability were identified by him as the general building stock characteristics that can, in theory, influence decisions about renovation, conversion, and "change of use". The study identified architectural character, historical elements, floor-to-ceiling height, and window size as the most significant physical variables determining the marketability of a restored house. The study also included traits that were described in detail based on a questionnaire and field observations, which the author referred to as "physical profiling." They included the state of the site, the peculiarities of the space, and the fabric and structure (Kincaid, 2002).

Sanchez (2019) aimed at determining the conditions that must be considered to successfully carry out an adaptive reuse project. He proposed an experimental method for the qualitative and quantitative analysis of the adaptability and flexibility of spaces in existing buildings. This was carried out in order to understand to what extent these could be transformed and adapted to new requirements, regardless of their typology and previous usage or size. For this, mathematical procedures and diagrams representing this potential was used. However, Sanchez's study was restricted to abandoned industrial buildings in the two main structural types; multi storey and wide span trussed buildings.

Nevertheless, very few studies have focused on the aspects inherent in heritage buildings themselves which can make them attractive for sustainable investments.

Research Methods

The intention of this paper is to identify the indices for the potential of heritage buildings in providing successful reuse opportunities for sustainable investments. It does so by examining published material—literature and documentary research of heritage investment case studies around the world—as a methodology. The indices are framed under three levels of built heritage preservation as will be shown.

To achieve this goal, the research examines previous studies that have dealt with the relationship between investment and architectural heritage and methods of attracting investments. Afterwards, a definition for sustainable investment and the nature of its activity in preserving the built heritage is presented. The research turns then to the analysis of the theoretical discourse and worldwide experiences to build the framework that expresses the potential of architectural heritage in creating investment opportunities that could enhance its preservation, activation and sustainability. This framework would be a tool that could help investors in recognizing and evaluating the investment opportunities inherent in the heritage buildings. It could also help the conservation authorities to present these opportunities and highlight heritage qualities to all kinds of investing parties.

Theoretical Discussion

It might be useful here to adopt a procedural definition of the concept of sustainable investment. Freedman (2015) defines sustainable investment as a set of strategies that integrate economic considerations with ESG (Environmental, Social, Governance) sustainability considerations that pursue these objectives along with financial returns, thereby reducing investment risks (Freedman, 2015). Thus, Sustainable investment is ethically concerned with taking into account the economic, social and environmental development in the areas of heritage, and consequently it is linked to the concept of sustainable conservation. It is one of the most important means to achieve it. There is a set of criteria against which the investment project is evaluated in preserving the cultural heritage. These might include (Licciardi & Amirtahmasebi,2012)

- Efficient creation of stakeholders' material and non-material well-being..
- Upholding the ideals of intergenerational equity by protecting cultural assets in ways that benefit coming generations.
- Ensuring that members of the current generation receive an equitable share of the advantages of legacy.

• Observing the precautionary and safeguard principles.
• Being particularly mindful of the long-term preservation of the cultural values included in heritage and the services it offers.

To examine the qualities of heritage buildings, we can refer to levels of sustainable heritage preservation identified by Al-Ahbabi (2014). These include four levels: preserving the city level, preserving the urban level (neighborhood, the street), preserving the single building, and preserving the heritage elements (Al-Ahbabi, 2014). Since the Present research is concerned with the scale of buildings, which represent specific investment opportunities that can be pilot projects to stimulate projects of a larger scale, three levels for investigations can be followed here:

1. The level of materials and architectural elements.
2. The level of buildings and their spatial Qualities.
3. The level of the building's relationship with its surroundings.

These levels will be explored below for the purpose of extracting the main indicators of the framework.

Level of Materials and Architectural Elements (Spolia)

Architectural elements and construction materials are considered the smallest scale of the built heritage. These architectural elements and fragments extracted from heritage buildings can represent valuable opportunities for investment and reuse in other places or in other buildings. These are referred to as “Spolia”.

The term "Spolia" is an artistic historical term for the recycling and utilization of pre-used parts or architectural elements that are suitable for use in other buildings, and benefit from them (Brilliant&Kinney, 2011). The word "Spolia" originally meant "spoils" or "spoils of war," and since antiquity, reuse of these items for new purposes, whether symbolic or material has been a part of building culture and tradition. However, this is especially true of the Roman Empire and later cultures that are most closely related to Rome (Frangipane, 2016). Perhaps the first practice of reusing materials and architectural elements appeared in the Arch of Constantine which reflects the desire to adhere to the ancient Roman tradition of triumphal arches (Fig. 1) (Pensabene, 2017).

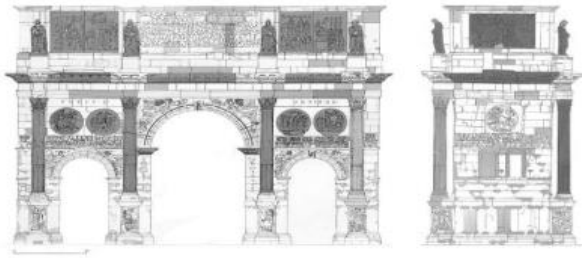

Fig. 1: The Arch of Constantine
Source: Pensabene, 2017

Ali & Magdi (2017) explains that "spolia's motivations vary to both extremes: on the one hand, architects employed old features as a confession of technical weakness. On the other hand, it was used as a statement of superiority over the pre-existing culture or religion. Additionally, it is impossible to ignore economic factors. Economic feasibility is anticipated to be eventually impacted by elements such as a lack of competent labor and the need for speed to complete projects with limited resources (Ali & Magdi, 2017). Therefore, both the symbolic meaning of spolia and the idea of recycling were built-in motivators for the practice of reuse. In the end, this contributes to sustainability in the sense of protecting both tangible and intangible resources for coming generations. (Frangipane, 2016)

It can be imagined that the use of architectural elements comes with several options, each of which achieves different design goals, as follows:

1. The use of homogeneous elements in a new building or a new employment, so that they all work as one idea, whether it is the reuse of materials or architectural elements.
2. Using different elements in a new location or building. These elements can be different in their architectural style, either they are collected in one place, or distributed in several places, making each of them achieve a single focus of interest within the new place in which it is reused.

The reuse of heritage architectural elements is of great interest to those concerned with investing in heritage. Dismantling these elements has become a profession that requires high craftsmanship. Some companies - such as ROTOR (https://rotordc.com/) specializes in this industry and provide the elements that they dismantled for investment by designers and those interested for the purpose of using them in the designs of new buildings. The company seeks to obtain items with cultural values, whose materials are durable and in a condition that allows them to be rehabilitated by repair and restoration for the purpose of re-use.

A contemporary example that shows the reuse of homogeneous heritage elements, in a sustainable manner, is the project of De Ceuvel (Fig. 2). It is a former industrial plot located in the North of Amsterdam that has been transformed into a sustainable area, thanks to the use of innovative technological solutions. The main peculiarity of the De Ceuvel project is the use of house boats, associated with Dutch culture and with the city of Amsterdam in particular, where these boats are usually used as pontoons. In De Ceuvel, the boats were placed on land and used as spaces with various functions for a period of ten years. Among the different uses in which these boats were employed were the popular cafes. The boats may also be reused as hotel rooms.

It is also possible to rent the site for one-day events, and use the warehouse and exhibition space as a hall for public meetings and as a work space. An 'Urban Metabolism Lab' as well is another space known as a 'Crossboat' exist which can also be rented to organize creative events, workshops, trainings and hands-on learning master classes about the techniques applied in the area, in order to promote awareness. These actions have increased the participation of the local community, because they are all major actors in the transformation of space (Gravagnuolo, De Angelice& Iodice, 2019)

Fig. 2 : reusable elements (boats) for various purposes in the project De Ceuvel
source: https://deceuvel.nl/en/

Level of Buildings and their Spatial Qualities

It is evident that the interest in heritage buildings by the investors is related to what these buildings can carry for new functioning opportunities, i.e. attractive re-use. When the reuse may be occupancy for the same previous function and without the need to make changes in the building, this is expected to attract investors if the original function yields a

reasonable income. However, the real attraction is when there's more scope for choosing between the right functions, and as Bilkassy (2011) has shown, when there is flexibility for some changes in the spatial characteristics to a minimum to support or extend the selected function by compensating for the space deficit (Bilkassy , 2011).

Adaptive reuse is suggested for a building that no longer fully performs the functions it originally performed or was supposed to perform, resulting in its abandonment and leaving it vacant for a period of time (Fig. 3). It outlines the possibilities and basic options of dealing with heritage buildings depending on the studies (David, 2002; Nart Stas, 2007, and Bilkassy, 2011)

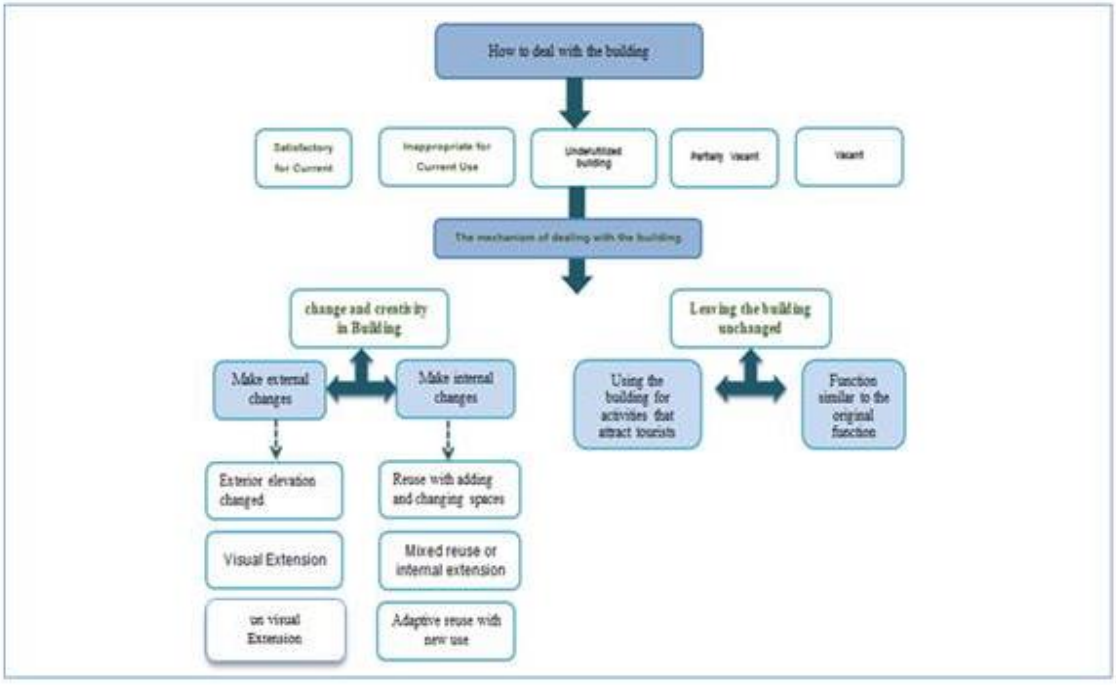

Fig. 3: Types of potential and basic options for dealing with a heritage building
Source: Author, based on David (2002, Nart Stas 2007, and Bilkassy 2011

Hence, it seems that at the level of buildings, there are two influential aspects for investment interest. The first is the potential in the architectural spatial qualities. The second is that there is a set of qualities that qualify a heritage building to be vital and be well known in its surroundings, that is, what may be called urbanity value. The two aspects are investigated below.

The Potential in Architectural Spatial Qualities

The potential comes with two main alternatives as follows:

1- Reuse while preserving the existing characteristics: When the building is in a good condition and there is no room for interference, the option goes to operating the building in the same original function, but in a modern way, after conducting maintenance and refurbishment. The other option comes in adding and creating new functions that increase its effectiveness and generates a profitable return. The building can also be used for tourism purposes, such as being a heritage building for a visit, or reusing these buildings as museums (Al-Bilkassy, 2006). Intervention here is only at the level of functions and services required. Hence, such buildings are profitable investment opportunities as the needed expenses are relatively limited compared to buildings that need more invasive intervention.

The Sinnary House is an example that illustrates adaptive reuse without changing the architectural spatial characteristics. One of the first grand houses constructed for the aristocracy of the Ottoman Empire in the heart of Cairo is this residence (district of Nasiriyah - Elsayeda Zeinab.) The ornate architecture on its walls and ceilings serves as an example of the beauty of this design, and the facade that faces the main street displays its distinctive *mashrabiyas*. The restoration of its architectural features was given to a group of skilled craftsmen, and the street level next to the house was lowered; to return it to the same level as it was in the last century. The old structure has been restored as a gallery and bookshop, and its courtyard is utilized for symposiums and other cultural events (Fig. 4). It is clear that by prolonging the usable life of an existing structure, the adaptive reuse of the building satisfies a fundamental sustainability principle. When compared to the construction of new buildings, this reuse reduces the expenses associated with the materials, transport, energy, and pollution. (Okba & Embaby, 2013).

Fig. 4: House before & after Restoration
Source:Okba & Embaby, 2013

2- Reuse with changes in architectural spatial characteristics

Making changes in the building for reuse and re-assignment can follow one of two directions depending on the structure's state of the building. The first is the internal change in spaces, which includes several options: either arrange and repurpose these spaces to match the new function, or resort and make internal extensions to obtain larger spaces. This can be done in various ways; using underground areas of a courtyard, or adding additional levels inside when ceiling is high enough, or even using the roof if this is possible. There is also the option of making a comprehensive change in the internal structure while preserving the outer shell and parts that do not conflict with the change. As for the second approach, it is the external change, it can be by changing some of the external elements of the facade or by masking the original facades with external visible extensions. However, it is always possible that one project can combine more than one of these options (Al-Bilkassy, 2006).

An example of change with the visible extension above the building and with a sustainable approach is the Casa Patron Building in Lebanon, which dates back to 1930. It is a 100m^2 house that has been preserved and reused with the same function, having been restored as a model for environmentally friendly heritage building and to remedy one of the most important impediments to use, namely space constraints, with the inability of external walls to withstand an additional second floor to increase space (Fig.5 A & B). A new independent wooden structure has been constructed, creating different levels of ventilation, easing summer heat and reducing the winter heating. The house is unique in combining the old sandstone and wood with the building's total dependence on Nature.
(http://ecoconsulting.net/www/Seminar_Series_Lebanon_Nov%2017.htm)

Fig. 5 A: casa patron before reuse and restoration.
Source: Eco consulting group,2014

Fig. 5 B : casa patron After reuse and added the wood structure.
Source: Eco consulting group,2014

Fig 5: the Casa Patron Building in Lebanon

As for the change with invisible extension, it is one of the most important solutions, and it calls for creativity in design, because in this case, the extension disappears, sometimes, under the surface of the earth (Al-Balkassy, 2006). The expansion project of the Louvre Museum in Paris designed by I.M.Pei is an example of such an extension. As it is well-known, the idea of expanding the Louvre Museum depends on the exploitation of the main courtyard between the two wings and the creation of a full underground floor that increased the display area and also served as a link between the different wings (Fig. 6)

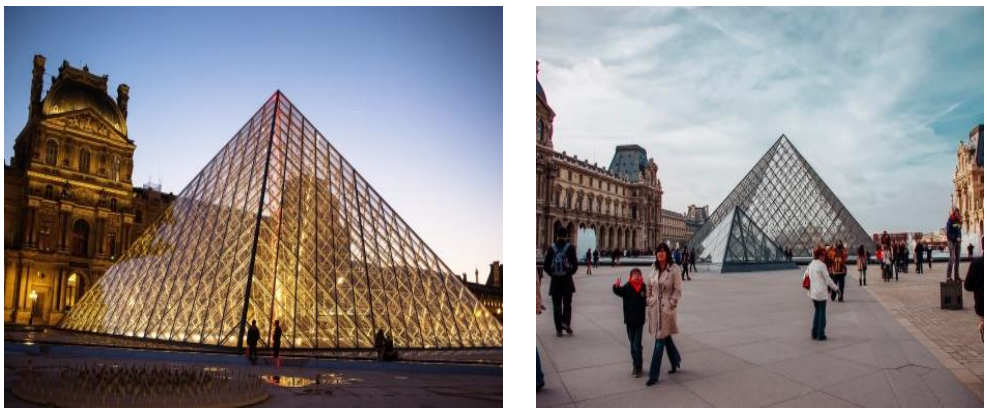

Fig. 6: The Louvre Museum
Source: https://ar.tripadvisor.com/

Urbanity Value of the Building

There are a set of general principles that represent the new urban orientation and include building walkable, mixed-use neighborhoods The concepts of new urban design apply to a variety of scales, including buildings, lots, and blocks as well as neighborhoods, counties, roads, and eventually entire cities. There are qualities that combine various social-spatial aspects, urban planning and the urban value of the building. These qualities do not show their impact directly and cannot be clearly measured, but they constitute an analytical network through which urbanity can be distinguished and depicted. The most important of these qualities are centrality, diversity, interaction, accessibility, and adaptability. (Sanchez, 2019)

1- **Centrality**: It is an essential characteristic of everything that is described as urban, the more people need a place in their daily life and visit the place, the more central this place is.
2- **Diversity**: It means that the different uses, types of users, social circles and spatial characteristics are present in one place.
3- **Interaction**: It means that different people interact and influence each other productively.
4- **Accessibility**: It is the ability to visit and stay in a place at different times.
5- **Identity**: It is the extent to which a person can identify or remember a place as distinct from other places - such as having a living, unique, or at least unique personality.
6- **Adaptability**: This means that the building and its surroundings can be adapted with the greatest possible flexibility to the changing requirements of different user groups and uses.

These qualities can be used to describe adaptable and flexible spaces and at the same time strong identity that people can live and work in (Sanchez,2019).

In view of the above, and with regard to heritage buildings, this research suggests that the characteristic of centrality is concerned with the nature of use, and that the chosen function fills an actual need of the community around it. It can be concluded that stimulating the centrality of a particular building is possible if it is located close to vital activities in the area around, which suggests the possibility of rehabilitating it to be a new vital part in the same area. As for diversity, it refers to the diversity of the spatial characteristics of the building which qualifies it to receive a variety of events that attract diverse categories. The above mentioned interaction characteristic depends on the people inhabiting the building and not any of the architectural characteristics. As for accessibility, it can be indicated by the multiple entrances to the building itself, as well as the flow of pedestrian routes around it and public transportation centers. The identity of the building is indicated through its recognized cultural values, as a historical or heritage building. As for adaptability, it overlaps with the architectural characteristics and the possibilities of addition and extension that were previously explained and taken as indicators in the two paragraphs of reuse. Thus, the research ends with determining the indicators of the urban value of the building with centrality, diversity, accessibility, and building identity. Here, diversity and identity can be considered as belonging to the level of the building itself, while centrality and accessibility belong to the level of the building's relationship with its surroundings.

An example of the analysis of the four attributes of urban value is the vanilla factory building, located within the Robewalks area in Liverpool (Fig. 7a), which is composed of a contextual tissue preservation dating back to the eighteenth century, The building overlooks Fleet-street, which is a very active axis in the area. In addition, other public buildings are located close to it. Here, the possibility and ease of access to the building was achieved (Fig. 7b). The building occupies a privileged position within the urban fabric of the area. apartments for rent, as it is considered a magnet for the robewalks area, thus achieving the identity and diversity of spaces in it, as it consists of three Victorian buildings that were

rehabilitated and assembled by adding a glass structure with contemporary details as in Fig.7c and materials that contrast with its surroundings, thus becoming a distinctive sign of the area and here the centrality was achieved. The center for the old fabric encourages investments and the introduction of other uses, and it has an urban identity that encourages the spirit of the age within the preservation fabric. The Vanilla Factory is an exciting part of Liverpool's growing creative and cultural district, which is dominated by the Ropewalks regeneration district. https://www.urbansplash.co.uk/

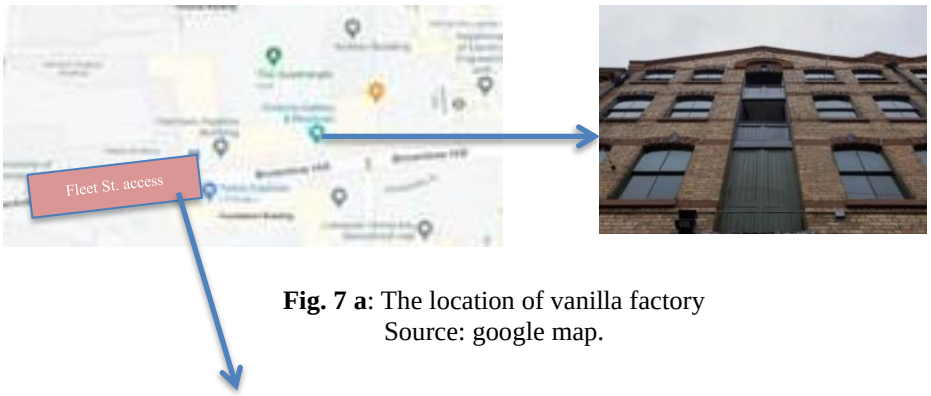

Fig. 7 a: The location of vanilla factory
Source: google map.

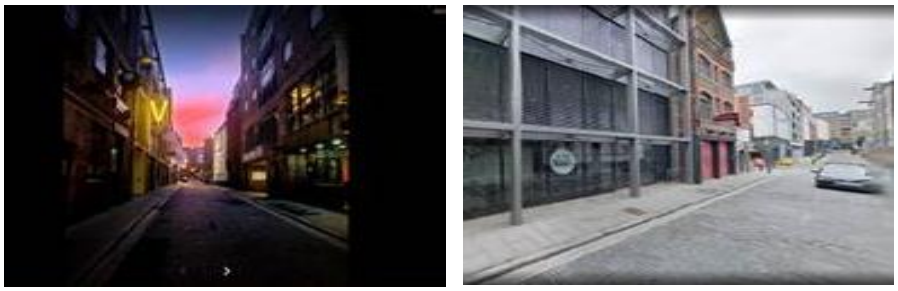

Fig. 7 b: The access of Fleet street
Source: https://www.rightmove.co.uk/

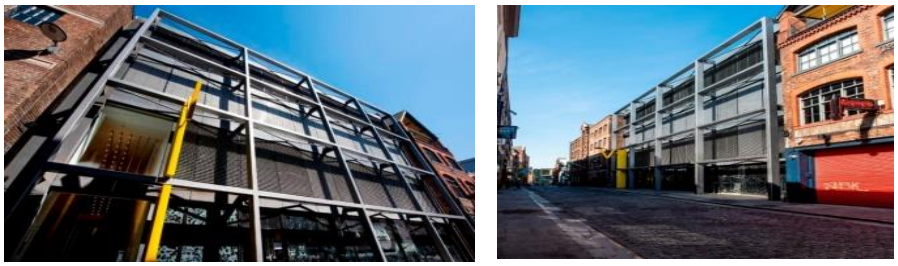

Fig. 7 c: The building after adding glass structure
Source: https://www.rightmove.co.uk/

Fig. 7:The Vanilla Factory Building

The Level of the Building within its Context

This level includes two main aspects as follow**s**

1.Availability of supporting spaces and buildings

In some areas of heritage, additional operating potentials appear in the building's urban surroundings that can support the activation of the building itself and increase its pioneers, including the following (De Ascaniis, Barbas & Cantoni, 2018)

- Establishing service and commercial centers nearby, the investment of which is considered one of the best opportunities available to the private sector, especially that construction costs are relatively low and in such employment, the expected return on investment is relatively high due to permanent demand.
- Employment for recreational and cultural activities. Some urban heritage sites provide the private sector with the opportunity to organize and develop squares and corridors between the urban heritage fabric for a small fee in addition to obtaining some services.
- Work as sites for practicing folk arts, which are characterized by a great popular demand, which requires sufficient spaces during the performance of artistic movements.
- Creating heritage events, activating public squares, and creating heritage kiosks.

Thus, this research shows that the presence of such spaces around a heritage building increases its attractiveness for investment, as these external spaces are considered an enhanced extension to activate the building.

An example of activating the spaces outside the building is the Emirate Palace in Saudi Arabia, where it demonstrates the cultural value of the building by holding events outside the building, thus defining the identity of the heritage building in the region. It was rehabilitated and invested as a museum, a cultural headquarters, a tourist attraction, and cultural forums. As for the outer perimeter, it was used for cultural events throughout the year, thus achieving flexibility in the building and its surroundings (Said & Al-Sakkaf, 2018,) Fig. 8

Fig . 8 : The Emirate Palace in Saudi Arabia.
Source: .Said & Al-Sakkaf, 2018

An example of the availability of supporting adjacent spaces is A Fire Hall Reused for Windsor Public Library's John Muir Branch in Ontario, Canada (Fig. 9 a). The Windsor Public Library Board (WPLB) acquired an abandoned historic fire hall and stable in 2016; after a lengthy and difficult adaptive reuse project, the space now offers distinctive acoustics and contemporary aesthetics that respect the original character of the heritage building while accommodating library patrons of the 21st century. Its conceptual design pays close attention to detail, taking cues from the fire hall and stable's original materials and architecture (Hauke et al,2021)

The conceptual design approach was challenging since a modern architectural component required to link two structures of a contemporary architectural piece. After a great

deliberation, a contemporary bridge was built to connect the structures (Fig. 9 b). A new foundation was built to address the floor elevation issue and a suspended walkway on a small inclination connected the upper levels of the two buildings. The solution made use of the empty space between the two buildings (Hauke et al,2021).

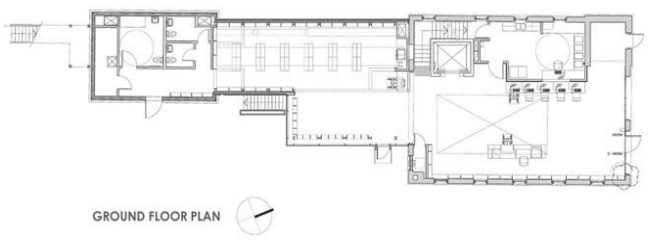

Fig.9 a: ground floor plan and elevation of building
Source: Hauke & others,2021

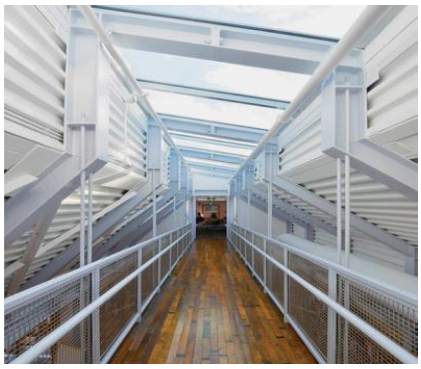

Fig. 9 b: The design fused the two buildings with a modern addition.
Source: Hauke & others,2021

Fig. 9: A Fire Hall Reused for Windso Public Library's John Muir Branch in Ontario,Canada

2. The cultural tourism walks through the heritage areas

The study of Potter (2014) and Thomas (2010) refers to the concept of the cultural or tourist walks or trails in the heritage, as a tool to preserve these areas and activate them in a sustainable manner. The idea of creating a cultural path in a historical or heritage area within the city depends on the presence of several convergent landmarks worthy of attention and visit. The visit to these landmarks is planned according to an interesting sequence that takes into account linking them in an integrated narrative manner. What helps in the success of such visits is that the path passes through areas characterized by a clear identity that can be enhanced by displaying types of local crafts and products, or by artistic performances bearing the character of the region (Thomas, 2010; Potter, 2014)

The renovation of Al-Mutanabi Street in the center of Baghdad city with the reuse of two historical buildings is an example of the idea of activating the cultural trail. This site was distinguished by the two main buildings from the Ottoman period, the Qishla Building and the Courts Building (Fig. 10 a) which are close to each other. The site is also characterized by a number of other landmarks and attractions such as the Al-Wazir Mosque, the Saray Market and the Shabandar Café, as well as the open space near the river, which was used as a stop for a riverboat trip. The whole area has a clear identity as it is part of the old historical center of Baghdad, which made it possible to visit the area according to diverse and interesting walking options with its cultural and artistic activities. Although the funds allocated to renovate the area was provided by the public sector, the success of the project in providing job

opportunities and activating many small investments, in the form of cultural activities and services in the area, is a lively encouraging experience for more investment in the existing small buildings within the same area (Fig. 10 b).

Fig. 10 a: The Plan of Almutanabi St. with famous building& Landmarks .
Source: . google map)

Fig. 10 b: Almutanabi St. with famous building& Landmarks .
Source: (author)

Fig. 10: Almutanabi Street in Baghdad

Findings

In the previous sections, the research explored a set of characteristics that can be adopted as attractive indicators for investments stemming from the qualities of the heritage buildings and their relationship with their surroundings. Table 1 presents the final findings of the extracted framework with all indicators and sub-indicators.

Table 1: The theoretical framework
Source: Author

Main vocabulary	Main Indicators		Sub- Indicators	
The level of materials and architectural elements	Construction material		Durable	
			Recyclable	
	Similar or different architectural elements		Repairable	
			culturally valuable	
The Building level	The Potential for Change in Spatial Characteristics	Without physical change	creating activities inside the building	
		With physical change	Internal change	Vertical addition when height allows
				Horizontal rearrangement
			External change	Change of facade
				Visible extension
				Non-visible extension
	Urbanity value of the building		Identity: Retaining Cultural Values	
			Centrality : close to important sites	
			Accessibility: Multiple entrances, pedestrian access, proximity to transportation centers	
			Diversity: Spatial diversity in the building in terms of sizes and shapes, and in terms of interior and exterior	
The building within its context	Availability of supporting spaces and buildings		The presence of vacant non-heritage buildings	
			The presence of public squares and gardens near the building	
			Availability of empty spaces for new construction, or parking, near the heritage building	
	The cultural tourism walks through the heritage areas		Proximity to important landmarks	
			Proximity to or presence in an area with a clear architectural identity	
			Availability of public spaces for artistic	
			Availability of stops and rest areas	
			Flexibility and accessibility	
			Providing a focal point for organizing relationships within urban spaces	

Conclusions

Investment is a powerful driver of sustainable development in the field of built heritage. This research has highlighted the range of potentials that makes inheritance attractive to successful investments that meets the requirements of sustainability and adheres to its ethics. Thus, the paper sought to build a theoretical framework that surrounds these potentials, at three levels.

The first is the level of materials and architectural elements, including whether it is possible to reuse homogeneous or heterogeneous components. In order for these elements and materials to be attractive to investment, two variables are required: Firstly, it must be of cultural value, and secondly, it must be repairable and maintained in a way that qualifies it for reuse. As for the second level, it is the level of buildings and their architectural space characteristics, which include the potential of visual and invisible expansion and expansion, as these spaces represent attractive opportunities for the investors to add profitable activities that support the initial use. This level also include the urban value of the building, represented first by its cultural values that make it clear identity, as well as the characteristics of centrality, diversity and accessibility. As for the third level, it is the level of the building's relationship with its surroundings, which included the availability of squares and gardens near the building site that allow for the establishment of vital collective activities, as well as the availability of non-valued buildings that the investor can exploit to complete supporting requirements for the use in which the building is employed. In addition, the possibility of creating the cultural path is considered an enhanced opportunity to attract investment in the heritage areas and make them live through the narrative interconnection between the path points.

The totality of the indicators that came out of the research are useful in promoting the architectural heritage in order to attract investments to it, and it is useful for the concerned authorities to examine what they have of architectural credit and evaluate its capabilities. The research does not consider this framework as being final, but it can be developed and added to by looking at creative experiences in the field of activating heritage.

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