

# Paper Trails

Imagem: Aspecto exterior da fábrica de papel de Marianaia, Tomar © Renata Faria Barbosa.

## Evaluation of social and economic values in textile manufacturing heritage sites: the case of Yazd

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**Abstract:** This paper aims to explore the social and economic values of textile manufacturing heritage sites in Yazd (Iran). A critical literature review was made to address the values of heritage. Then, the values of heritage were scrutinized based on industrial heritage sites in Yazd through the case study method. In-depth interviews with 12 experts were conducted, and the results showed that prior to reusing industrial heritage, its historical and cultural value should be recognized. The results also revealed that the holding of events at these sites with an impact on the collective memory should involve people. Moreover, adaptive reuse has had an impact on urban macroeconomics and created economic value added for locals. The results also confirmed that having multiple buildings inside a factory might help with the restoration phasing plan

**Keywords:** Extrinsic value, Revitalization, Adaptive reuse, Textile factory, Yazd

### Evaluación de los valores sociales y económicos de los sitios patrimoniales de fabricación textil: el caso de Yazd

**Resumen:** El objetivo de este artículo es explorar los valores sociales y económicos de los sitios patrimoniales de fabricación textil de Yazd (Irán). Se realizó una revisión crítica de la literatura para abordar los valores del patrimonio. Después se analizaron los valores del patrimonio basándose en los emplazamientos del patrimonio industrial de Yazd mediante el método de estudio de casos. Se realizaron entrevistas en profundidad a 12 expertos y los resultados mostraron que, antes de reutilizar el patrimonio industrial, hay que reconocer su valor histórico y cultural. Los resultados también revelaron que la celebración de actos en estos lugares con repercusión en la memoria colectiva debería implicar a la gente. Además, la reutilización adaptativa ha tenido un impacto en la macroeconomía urbana y ha creado un valor económico añadido para la población local. Los resultados también confirmaron que tener varios edificios dentro de una fábrica podría ayudar con el plan de fases de restauración..

**Palabras clave:** Valor extrínseco, Revitalización, Reutilización adaptativa, Fábrica textil, Yazd

### Avaliação dos valores sociais e económicos em sítios patrimoniais da indústria têxtil: o caso de Yazd

**Resumo:** Este artigo tem como objetivo explorar os valores sociais e económicos dos sítios patrimoniais da indústria têxtil em Yazd (Irão). Foi feita uma revisão crítica da literatura para abordar os valores do património. Em seguida, estes foram analisados com base nos locais de património industrial em Yazd através do método de estudo de caso. Foram realizadas entrevistas aprofundadas a 12 especialistas e os resultados revelaram também que a realização de eventos nestes locais com impacto na memória coletiva deveria envolver os residentes. Além disso, a reutilização adaptativa teve um impacto na macroeconomia urbana e gerou valor económico acrescentado para os habitantes locais. Os resultados também confirmaram que a existência de vários edifícios no interior de uma fábrica pode ajudar as fases do plano de restauro..

**Palavras-chave:** Valor extrínseco, Revitalização, Reutilização adaptativa, Fábrica têxtil, Yazd

## Introduction

Heritage is now generally viewed as a contentious field made up of various ideals and practices (West 2010). Before the 1990s, values in heritage management were mostly centered on the resources' historical significance. This has changed, though, as these days, heritage values are frequently classified as intrinsic, extrinsic, or instrumental. Intrinsic values are those that naturally exist in historical property and do not require reformation in order to be realized (Clark and Maer 2008). Extrinsic or instrumental values, on the other hand, rely on human evaluation of the asset and often require some kind of modification to the resource in order to be achieved. In light of the fact that extrinsic or instrumental values are evaluated from a variety of individualized, cultural, and social viewpoints, they are essentially subjective (Chen and Chen 2010). In terms of aesthetics, culture, and economics, heritage buildings are seen as reusable resources, and revitalizing them would give a city and neighborhood more character and a more human scale (Adiwibowo *et al.* 2015).

Industrial heritage values are linked to a number of characteristics that are not always related to physical or aesthetic attributes (Veljković and Kaptı 2021). Interestingly, little research has been carried out on the extrinsic value of industrial heritage sites. For example, in the perspective of value universality and variety, Lu *et al.* (2020) explored the reproduction of the discourse on industrial heritage with reference to a wider spectrum of social and cultural imperatives in China. In another piece of research, Veljković and Kaptı (2021) examined industrial heritage in the Tuzla municipality (Bosnia and Herzegovina) and holistically assessed its cultural and historical relevance for conserving the identity of its inhabitants, guided by international norms for the valorization of cultural and historical heritage.

With the creation of huge textile factories, Yazd became acknowledged as the primary textile production centers in Iran. However, most textile factories have been shut down since the 1990s, due to the territorial development of cities and wasteful textile imports. Starting in the 2000s, in some of these buildings, due to the obsolescence of the original function, there have been new uses (Dehghan Pour Farashah 2023). This article aims at identifying and expressing the extrinsic value of the new functions of textile manufacturing sites in Yazd. The main contribution of this study is to re-evaluate the values of textile manufacturing heritage sites after adaptive reuse beyond the regular definitions and characteristics of industrial heritage and to highlight these values in Yazd.

The article is organized as follows: The methodology section describes the three-phase data collection process. The next section summarizes the critical literature review on the revaluation of industrial heritage after adaptive reuse. The case studies section presents the textile manufacturing heritage sites in Yazd. It then provides a summary of the new uses in these textile factories and their values after

adaptive reuse. The results and discussion section are based on experts' shared understandings of industrial heritage values in Yazd. The final section restates the research topic and states the implications of the research. The limitations of this study are also reported in the conclusion section.

## Research methodology

The study adopted a multi-method approach to collecting data. The present study had three phases: (1) the critical literature review; (2) case study method; and (3) Semi-structured interview.

Phase 1. This is an analytical technique in the qualitative research method that comprises in-depth study and critical assessment of material gathered from many sources in order to provide new and richer insights in research (Raimi *et al.* 2021). Through this approach, the existing research will be enhanced and challenged (Weatherall 2019). This will be accomplished by taking a fresh look at critical literature reviews, evaluating how they have been performed, and presenting a fresh viewpoint on how the art of writing and reviewing them might be improved (Wright and Michailova 2023). This phase addresses the values of heritage.

Phase 2. In architecture, the case study method is often employed as an episodic research tool. Typical outcomes of such research include precedent buildings, typological concerns, or technological techniques (Bachman 2007). Also, the case study method in heritage studies has the potential to provide an important critique for the revaluation of heritage sites (Jones *et al.* 2016). In this phase, the values of heritage will be scrutinized based on Yazd's industrial heritage sites. The selection criteria relate to the area and new uses of these sites (because they are likely to be appreciated for their physical characteristics and preserved from any material modification). Hence, the factories that are larger than one hectare were investigated.

Phase 3. Semi-structured interviews were conducted for obtaining several perspectives about the same topic. Hence, the benefits of Semi-structured interviews include gaining insights into experts' shared understandings of industrial heritage values, which were elicited in the second phase. The participants were familiar with textile manufacturing heritage sites in Yazd. An in-depth interview was conducted with the first interviewee followed by the gathering of data until redundancy was attained (Ghaderi *et al.* 2022). After conducting 9 successful interviews, it was concluded that the new respondents were simply echoing what the earlier respondents had said (Newhart and Patten 2023). However, three additional interviews were performed to bring the total to 12 cases in order to be sure there was no more information remaining to be discovered. A period of time between 35 and 65 minutes was allotted for each interview, which took place at the respondents' offices at a time of mutual convenience. Of these 12 interviewees, three were female and the rest were male [Table 1].

Respondents	Gender	Age	Educational level	Occupation
R01	Male	45	Master	Interior designer
R02	Male	40	Bachelor	Conservation architect
R03	Female	33	Master	Conservation architect
R04	Female	33	Master	Conservation architect
R05	Male	31	Ph.D.	Consulting firm
R06	Male	29	Master	Urban engineer
R07	Male	57	Master	Consulting firm
R08	Male	35	Master	Instructor
R09	Female	32	Master	Architect
R10	Male	44	Ph.D.	Assistant professor
R11	Male	56	Ph.D.	Associate professor
R12	Male	53	Master	Consulting firm

**Table 1.** - Profile of the respondents. Source: Author.

An interview guideline was prepared based on the critical literature review and in line with the study's research problem and objective. To discover the primary themes, ideas, and concepts, the interviews were recorded, transcriptions were made, and the transcripts were then analyzed and coded (Taylor *et al.* 2015). The computer software program Atlas.ti version 8 was utilized to analyze data through coding.

### Critical literature review

Heritage values are diverse by nature and frequently at odds with one another. Usefulness and advantages are implied by value. Heritage is valued for its practical, symbolic, and other social roles rather than for its intellectual merits (as one element of material culture) (Mason 2002). In the past, the value of heritage has most frequently been associated with values related to history and aesthetics. However, there has been a change in the heritage sector, and there is now more social value being associated with historical settings (Walter 2014; Jones 2017). The extrinsic value of heritage has recently been based on its economic and social importance (Bedate *et al.* 2004). As argued by a number of academic and business studies (Kim *et al.* 2007; Darvill *et al.* 2018), if properly managed, heritage can have a positive impact on society and the economy. In terms of the economy, heritage can foster job possibilities, promote local, regional, and national economies, and develop tourism (Jeonglyeol Lee *et al.* 2007). The social worth of heritage can also be seen in its capacity to increase social cohesiveness, create intercultural communication, empower local people, foster a feeling of community, and improve quality of life (Pendlebury *et al.* 2004; Khirfan 2014). Additionally, adaptive reuse is a significant conservation strategy that recycles previous resources and turns them into experiences for the present (Hong and Chen 2017). Everywhere and at various scales,

adaptive reuse can enhance the cultural atmosphere of today's historic cities and buildings (Remøy and van der Voordt 2014).

The idea of industrial heritage is broadly accepted throughout the world. Different academic fields, including cultural studies, architecture, the arts, urban planning, and history studies, have acknowledged this idea (Han 2023). It is undeniable that the importance and worth of industrial heritage are continually being reexamined in light of new circumstances, and as a result, conservation efforts have expanded to encompass a wider range of issues and context-specific social and cultural demands. Within an extensive framework of urban development, the discourse on industrial heritage is frequently reproduced by relying on various values and interests (Lu *et al.* 2020). Unexplored cultural potentials of settings are revealed when the cumulative values of industrial heritage sites are assessed, which may not be apparent when looking at each site separately (Veljković and Kapti 2021). Reusing industrial heritage has great economic possibilities. The historic industrial area is currently largely found in the city center of numerous urban settings with favorable geographical circumstances from the standpoint of urban location and land value. It is also the perfect place to build high added value, contemporary cultural and creative enterprises. The reuse of industrial heritage buildings and investments in industrial construction are utilized to determine the economic value, with the index of reusability being comparatively more significant (Yao *et al.* 2019). The term "social value" has been used in a variety of contexts to refer to some or all of the following: social capital, symbolic worth, spiritual linkages, attachment to location, and community identity (Jones 2017). Therefore, it is becoming more and more crucial to take into account the opinions of the local population before beginning the development of



a cultural heritage site (Barile and Saviano 2015). In practice, Herman *et al.* (2023) proposed the aspects of social value of industrial heritage as follows: promotion of the region's industrial heritage, serving as a local symbol; management of tourist traffic to ensure the preservation of the industrial heritage; engagement and activation of the neighborhood; and diversification of economic possibilities.

The above exploration of the revaluation of industrial heritage values shows that extrinsic values are also inevitably associated with sites. Indeed, there is an emphasis on a set of values (e.g. the economic and social significance) that have become the aspects of extrinsic value. Thus, these values [Table 2] show the aspects of extrinsic values of industrial heritage that were articulated in the critical literature review.

Extrinsic value of industrial heritage	
Economic value	Social value
<ul style="list-style-type: none"> <li>• Creation of job opportunities</li> <li>• Economic stimulation on a local, regional, and national scale</li> <li>• Tourism promotion</li> <li>• Land value, good site characteristics, and the majority of the historic industrial areas are now found in the city center.</li> <li>• Ideal setting for the development of contemporary cultural and creative industries with high added value</li> <li>• The excellent index of adaptive reuse in the revitalization</li> <li>• Increasing economic potential through diversity</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing public inclusion</li> <li>• Enhancing the standard of living</li> <li>• Encouraging cross-cultural dialogue</li> <li>• Displaying the region's symbol(s)</li> <li>• Encouraging community involvement in the area</li> <li>• Encouraging social cohesiveness</li> <li>• Representing local identity</li> <li>• Bonding social capital and spiritual affiliations</li> <li>• Promoting adherence to place</li> </ul>

Table 2.- Extrinsic value of heritage. Source: Author.

**Case study**

—Yazd

The province of Yazd [Figure 1] is situated near the Silk and Spice Roads in Iran's center. It is evidence of how scarce resources were used to survive in the desert. The cultural heritage of Yazd has hardly changed over the years. At the 41st session of the UNESCO World Heritage Committee, held in Kraków, Poland, from 2–12 July 2017, the historic city of Yazd [Figure 2], which covers an area of 195 hectares, was inscribed as a World Heritage Site. Prior to this, Dolat Abad Garden and Zarch Qanat in the historic city of Yazd were also inscribed in 2011 and 2016, respectively (UNESCO 2023).



Figure 1.- Location of Yazd province in Iran. Source: (UNESCO 2023)

Over the centuries, people with spinning wheels in traditional workshops produced diverse and beautiful textiles such as "Karbas" and "Termeh" for courtiers and governors in Yazd. Industrial form predominates in textiles at the beginning of the 20th century due to the importation of industrial machinery from Europe and the United States. With the construction of huge factories, Yazd became known as one of Iran's major hubs for the production of textiles and, for more than 50 years, it played a significant role in the city's economy (Ramazankhani 2016). These factories [Table 3] were built as structures with distinctive patterns and buildings during their time. Unfortunately, this sector of the economy has been in decline for decades due to factors like excessive textile imports and a lack of competitiveness. As a result, the majority of textile factories have been closed (Dehghan Pour Farashah *et al.* 2019).

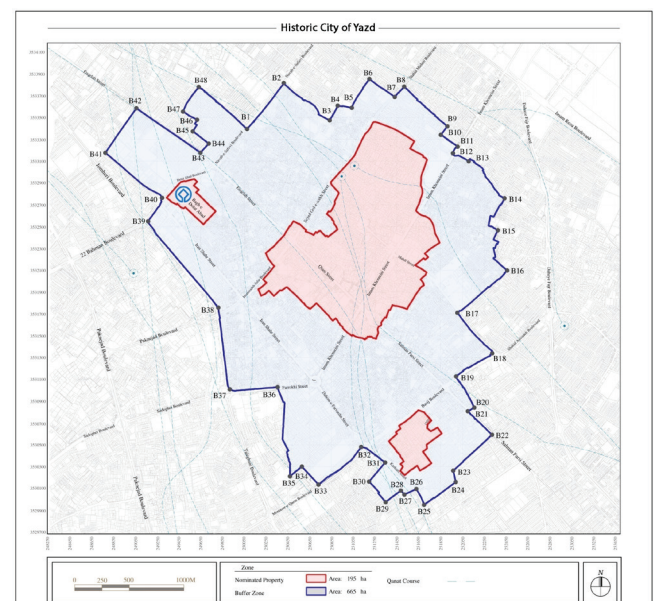


Figure 2.- Area of the Historic city of Yazd. Source: (UNESCO 2023).

F. No	Name of Factory	Establishment Year	Current Condition	Area (Hectare)
1	Eghbal	1931	Reused (Yazd Science and Technology Park)	3.65
2	Saadat Nasadjan	1934	Under restoration (Hotel since 2020)	10
3	Dorakhshan and Herati	1935	Reused (Innovation Factory)	4.1
4	Seyed Moammad Agha	1948	Abandoned	8.47
5	Dastbafan	1948	Abandoned and school	1.16
6	Yazdbaf	1956	Active	14
7	Jonub	1959	Reused as seasonal exhibition venue and museum	5.37
8	Afshar	1963	Abandoned	12.1

**Table 3.-** List of textile factories of Yazd. Source: Author.

These buildings, due to their large dimensions, their desirable urban locations, and the flexibility of the plans due to the modular structure, have a great ability to be converted into various uses, especially cultural uses. Iran, despite having textile factories that are among the best and most beautiful examples of industrial architecture, gives the destruction of such spaces more priority than its protection and restoration. Only a few examples of former industrial buildings have been restored and changed; fortunately, Yazd is one of the few cities in Iran whose textile factories have been preserved. The approach to changing the use of these factories in Yazd is to preserve the structure but change the shells. Also, the issue of reversibility in restoration has been considered in the implemented projects.

Following the approval of the government in 2003, Eghbal factory [Figure 3] was handed over to the Science and Technology Park of Yazd province to set up a technology center. Considering the need to preserve this valuable textile manufacturing heritage site as the first factory in Yazd, an attempt has been made to restore and revitalize it, while preserving its structure and traditional identity, to turn this complex into a center of science and technology. Based on this, with the help of qualified consultants, the design of the site was carried out and the restoration activities started at the beginning of 2004 and were completed in 2008. The Jonub factory [Figure 4] consisted of different parts, and its private guest house became the museum of light and illumination in 1998 (Pahlevanzadeh 2015). Also, in 2017, a part of the spinning hall of this factory



**Figure 3.-** Exterior and interior view of Eghbal factory, Yazd © Mohammadhossein Dehghan Pour Farashah





**Figure 4.-** Exterior and interior view of Jonub factory, Yazd © Mohammadhossein Dehghan Pour Farashah

has become a museum of historical and classic cars in Yazd, while another part is used as a seasonal and temporary exhibition space.

Yazd Innovation Factory was launched in 2022 on an area of 1.7 hectares in the form of two halls at the location of the Dorakhshan and Herati factories [Figure 5]. The Innovation Factory is a platform where many tools and resources needed

by entrepreneurs, from infrastructure, mentors, and advisors to venture capital investors, accelerators, and service providers, are granted to startups and businesses. The idea of setting up innovation factories in abandoned sites in the heart of cities was a solution that worked for the first time in Paris in 2019. When the French transformed the old Paris railway station into a dynamic space for the development of innovation ecosystems and start-ups, this idea soon found



**Figure 5.-** Exterior view of Dorakhshan factory, Yazd © Mohammadhossein Dehghan Pour Farashah.

fans in other European cities such as Berlin, Lisbon, etc., and now it has become a model for the development of innovation spaces (Derakhshan Innovation 2023).

Saadat Nasadjan factory, which is located in the Buffer Zone of the historic city of Yazd, after being abandoned for several decades, is being revitalized with a new use since 2020. The establishment of the first factory hotel in Iran and the largest factory hotel in the Middle East in the heart of this industrial factory is a valuable action that not only helps to preserve this industrial heritage and the industrial history of Yazd, but it also fosters the seeds of entrepreneurship and economy grow from these abandoned sites, while creating employment for more than 300 people. (Yazd CHTO 2020).

## Results and discussion

### — *Textile manufacturing heritage at first glance*

As there were no defined criteria pertaining to textile manufacturing heritage, respondents were asked to explain what came to mind when they mentioned textile manufacturing heritage and how it is differentiated from other types of heritage. One respondent declared 'I remember the Eghbal factory and the adaptive reuse of the first factory in Yazd' (R01). Before the reuse of industrial heritage, it should be first recognized the historical and cultural value of this property (Han 2023). Another respondent who was working in the field of adaptive reuse said, 'I remember the first time I went to visit Saadat factory about 20 years ago. The magnificence of this factory was very attractive to me, and I felt proud of this heritage' (R02). It also connects to "place attachment," which describes the social cohesiveness, sense of belonging, or other sentiments of connection that social groupings acquire from a particular history (Mason 2002).

The definition of industrial heritage refers to tangible heritage, e.g., buildings and machinery, as well as intangible heritage related to tradition and industrial culture (Herman *et al.* 2023). In this regard, one respondent confessed, 'regarding value, apart from the architectural and physical value, I often think of the social and economic values of factories. People trying to improve the industry in Yazd have made the city dynamic. Also, people from different parts of the city worked in these factories, and their livelihood was provided through these factories' (R07). Likewise, factories being active was valuable for some people, as one commentator specifically explained, 'factories that were working then and are still working now. For example, the Yazdbaf factory, which my father represents, is still working after about 70 years' (R08).

### — *Creative industries and textile factories*

According to the respondents, textile factories should distinguish themselves by becoming involved in the local

community. The overall sense was that including cultural and creative industries in their adaptive reuse process makes them unique for locals. Innovation factories are now one of the fastest-growing parts of the economy (Yao *et al.* 2019). Some respondents attributed the social values to them. A respondent (R12) declared: 'A series of companies where young people can find themselves and interact with each other. I think it has a lot of social value'. This resulted in a more cooperative workplace, which is in tandem with the discussion of Pendlebury *et al.* (2004) who noted that the social value of heritage is also manifested in its ability to encourage social cohesion. However, the negative point of the innovation factory, as observed by one respondent, is that 'This use has little connection with the public, and only certain people are involved in the innovation factory. There are also restrictions on the visits of people who worked in the factory' (R08).

### — *Diversification of economic potential*

Integrating adaptive reuse within regional economic development initiatives raises awareness of local governments' obligations to offer suitable solutions for industrial heritage that is in danger (Yao 2014). One respondent noted that 'in terms of the urban economy, it can prevent the suburban sprawl of the city and somehow help the public's interests' (R06). This is consistent with the results of Yao *et al.* (2019) study that the industrial heritage sites are now mainly located in the center of the city with appropriate location positions. Respondents felt that the existence of several uses together in a factory could attract many people. The amount of welfare that heritage creates for society can be used to define the economic value of a cultural heritage. In addition to this value, heritage also promotes welfare when it is appreciated by recreational users, even though there is no direct financial cost (Ruijgrok 2006). Although the change in land use has had an impact on urban macroeconomics. For instance, in some factories it has succeeded in creating economic value added for the local community. One informant highlighted 'Dorakhshan factory was a place of drug addicts and criminals before the change of use, but when it has been changed, it will increase the security of the region, increase the value of the land use for the neighborhood, and be effective for the development of tourism' (R10). These findings are consistent with the results of previous studies in the critical literature review (Lu *et al.* 2020; Han 2023).

### — *Social value and community benefits*

One of the factors that has made the adaptive reuse of factories successful is social values. According to Darvill *et al.* (2018), when people get to experience significant sites or historical landscapes in specific ways, for example by combining elements of tangible and intangible cultural heritage, it can have positive effects and improve one's mental well-being. One respondent said that 'when a factory is converted into different uses such as a shopping mall, cinema, museum, or restaurant, people come for entertainment and shopping,



and this creates a space for social interactions. And most importantly, the presence of people in this factory makes them more familiar with the textile factory' (R11). Another respondent pointed to the combination of events with other uses as the main characteristic of social value and stated, 'it will be better if the factory has a use that the public can use. And I think it is good that the memories of textiles come alive in people's minds. A use that attracts the public on all days of the year. For example, it is an event venue or a shopping center where people visit these factories every day for shopping. Because the large and integrated spaces of the factory are suitable for such uses' (R03). As Walter (2014) and Khirfan (2014) mention, social values are usually connected to an individual's emotional, spiritual, and intellectual experience of heritage, and they represent some form of communal memory or propose inspiration.

Regarding the views of the local community, one informant proclaimed that 'people's participation in changing the use of factories has not been used as an investor. For example, the factory shares should be bought by the people who used to work here, because these people feel attached to this place and remember their past occupation. This approach should be considered in initial studies of adaptive use' (R05). This result is in agreement with Barile and Saviano (2015) and Hong and Chen (2017), who state that when starting the development of a heritage site, it is becoming more and more crucial to take the local community's opinions into account. In Iran, many factors, including politics, are influential on adaptive reuse. For instance, one respondent said, 'political, cultural, and religious factors prevent some uses. There are a series of uses that have been copied from European countries, and those uses have been based on the needs there, but the feasibility has not been assessed here, and the needs of Yazd city have not been taken into account' (R06).

#### — Index of adaptive reuse

Hong and Chen (2017) believe that the recycling of historical materials into experiences in and for the present through adaptive reuse is a crucial conservation intervention. The majority of respondents asserted that textile factories have high potential for adaptive reuse. In this regard, one participant said, 'factories have a high ability to change use and are diverse. Like other heritage buildings, there are no restrictions on changing their use. The presence of several buildings in a factory can facilitate the phasing of the restoration plan' (R04). The same respondent added, 'the large area of the factory creates the context for an architect's design that can meet the needs of a new use. For example, adding a building as an accommodation or using the old green space of the factories, considering the lack of green space in Yazd city'. This finding should be important for local authorities, who should familiarize hotel operators and investors with the concept of factory accommodations. Similar to Remøy and van der Voordt (2014) findings that adaptive reuse on different scales could contribute to the cultural ambiance of today's cities and buildings.

Another line of investigation was sustainability in the adaptive reuse project to protect the environment. In supporting this statement, one respondent stated that 'an important point is the issue of sustainability in the construction industry, where the consumption of materials is lower. Installation space has been seen in factories before, and this can be very helpful for new uses' (R09). The heritage buildings are regarded as reusable assets in the field of economy, and in maintaining their appearance, they enhance the splendor of a city (Adiwibowo *et al.* 2015).

#### Conclusion

This study aimed to investigate the extrinsic values of textile manufacturing heritage sites in Yazd, Iran, after their adaptive reuse. Semi-structured interviews were conducted with experts. Several results emerged from the study which provide implications for practitioners and policymakers. First, the results revealed that prior to reusing industrial heritage, its historical and cultural value should be recognized. This result of the study is in agreement with Chen and Chen (2010), who state that values are evaluated from a variety of individual and cultural viewpoints. Second, textile factories should identify themselves by getting involved in the neighborhood. In line with Jones (2017), it can be concluded that these values refer to symbolic worth, spiritual linkages, and community identity. In the process of adaptive reuse, the cultural and creative industries make textile factories unique for locals. Therefore, as Herman *et al.* (2023) express, aspects of social value promote the region's industrial heritage and serve as a local symbol. Third, the local governments should concentrate on integrating adaptive reuse within regional economic development initiatives. For example, since these factories are large, revitalization would cost less to demolish and build a new building. Moreover, changes in land use have had an impact on urban macroeconomics and created economic value added for locals. This finding implies that heritage can support local, regional, and national economies and provide employment opportunities (Jeonglyeol Lee *et al.* 2007).

Fourth, textile factories were regarded as a significant part of social life in Yazd. Hence, for the success of an adaptive reuse project, the local community should participate in the process. This statement means that the opinions of the community should be taken into account throughout the entire process of the adaptive reuse project (Darvill *et al.* 2018; Barile and Saviano 2015). Furthermore, the holding of events at these sites with an impact on the collective memory should involve people (Pendlebury *et al.* 2004). Political, cultural, and religious factors confine some uses in Iran, which is a big dilemma for investors. This study also shows how having multiple buildings inside a factory might help with the restoration phasing plan. On the other hand, the large area of the factory paved the way for the architect's design to add various buildings to the site. Regarding sustainability in the construction industry, adaptive reuse of textile factories would decrease material consumption. This finding confirms the previous studies that



the index of reusability is comparatively more significant in the reuse of industrial heritage buildings (Hong and Chen 2017; Adiwibowo *et al.* 2015).

This study has limitations that must be acknowledged. It is confined to textile manufacturing heritage sites, which restricts the ability to generalize to other industrial heritage sites. Future research might focus on adaptive reuse at different industrial heritage sites in Yazd or Iran. This study focused on the views of experts in adaptive reuse, provides extrinsic value for the revitalization of textile factories in Yazd, but not on the viewpoints of users. Hence, future studies should focus on the understandings of users regarding the adaptive reuse of textile factories. More extensive research is needed to validate some of the results of this study and allow more substantive conclusions to be drawn. And finally, this study did not compare investments in non-historic sites. A future investigation might shed light on the comparison between historic and non-historic sites.

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