

Spatial Experience of Museum Spaces: Insights from the Qal'at Al' Bahrain Museum in Bahrain

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Abstract

Museums are the best narrative presentations of the ancient history of the world. Therefore, they adopt a form of architecture that represents history and expression of the past while employing different presentation techniques and designated spaces. Although there are many different types of museums around the world, all of them have the same fundamental function: to present materials representing the past to the visitors. However, the spaces in which they are presented and the experience of the spaces they offer could be vastly different. In this context, this paper examines how the spaces in museums are designed and how the visitors feel towards the presented elements and their stories.

This research employed case study as a method: the Qal'at Al'bahrain Site Museum in Bahrain being the case study. Data gathering involved interviews with the museum authorities represented by the manager of the museum, and a selected group of visitors. It explored the real-world experience of the people while visiting the museum and reveals the effect of their spatial experience manifested through the spaces of the museum.

The paper shows different research outcomes of the literature review that explain some of the most notable research around together with the experts who are interested in studying museums. Based on the data gathered, it concludes that museum has presented and designed the spaces in an entertaining way for the visitor journey through the five stages. It employs different levels and different presentation techniques that always grab the attention of the visitors. It has also used interactive screens at all the levels which really attract the visitors to come and see the information displayed and engage with the information through the screen. Thus, it concludes that the museum Qal'at Al'bahrain produces some of the unique spatial experiences as relevant to a museum.

Keywords: Spatial Experience, Museum spaces, Qal'at Al'bahrain, Bahrain

Introduction

Studies on museum experiences offer great insights into understanding how the museums affect the visitors. However, most studies focus on museum types in relation to the objects presented and the visitors the museum might attract. They show that even the location might affect the spatial experience of the visitors inside a museum. Nevertheless, studies that examine the spatial experiences of museums particularly in the non-western contexts are rare, if not almost absent.

In Bahrain, a number of museums exist. From the National Museum of Bahrain to the Qal'at Al'Bahrain museum in Karbabad and the other museums in the South, a number of museums work hard with elaborate architecture and carefully orchestrated interiors housing creatively curated exhibits and exhibition spaces to incite the general public to understand and immerse in the experience of their historical past. In these endeavours, the spatial experience of the museum spaces themselves matters as same as the exhibits and the settings.

However, not many studies have been conducted about the quality of these interiors. Recently, the museum authorities and the Ministry of Cultural Affairs have noted that the numbers of visitors to these museums have dwindled. Undeniably, there exists a dire need to investigate the ways in which the interior spaces as well as the exhibits are experienced by the people and determine whether design of the interiors attract them or not.

In this context, this paper examines the spatial experiences of the Qal'at Al'Bahrain museum in Bahrain. Its aim is to understand the complexity of people-object-place interactions in museum settings and gain insights into what may be done to promote and enhance such experiences. The paper examines different viewpoints about what the visitors might experience when they visit the museums and cultural spaces from their first-hand experiences.

Its objectives are as follows.

1. To ascertain the spatial experience of the museum of Qal'at Al'Bahrain.
2. To identify the museum exhibits that attract them the most.
3. To reveal the effects of the spatial experience manifested through the spaces of the museum.

Theoretical Background

A museum is a physical building with materials and objects inside its spaces that have a historical relation to people most likely to visit it. McIntyre (2009) says that those who visit museums aspire to experience history come alive through the objects in display infusing the significance of that history. In fact, a museum is a place where people interact with the history through the spaces and objects. According to Ahmad (2014), this is a transactionist and reciprocal interaction. The objects displayed contribute to the ambience and the experience of the visitors and the visitors invest values in the exhibits. Indeed, according to Packer (2008), they produce life of the history together.

However, experiences in cultural spaces like museums is determined by the spaces and the spatial relationships created by architecture. Visitors are offered opportunities for dimensional imagination of being as time-and-space-dreamers. McIntyre (2009) argues that museum spaces should have different space types, in relation to the visitor groups such as adults and children as much as men and women or the locals and the foreigners. He points out that they should be constituted of warm spaces for supporting adult experience, and cold spaces to permit to facilitate their feelings, reflections and relaxation. Thus, both the cold or warm spaces contribute to museum experiences, and the spaces have different effects on the visitors in relation to socio-cultural temptations. Needless to say, architecture has a huge role to play in museums.

In this connection, Witcomb (2003;2010) suggests that there is also what he calls 'a free space expression' in museums. This refers to the production of neutral settings within a specific space to digest everything and to reflect what the visitor would think in relation to the space. In fact, he says that emotions as well as knowledge are exchanged because they feel and think about the spaces and the spatial characteristics of where they are simultaneously. In fact, as Dudley et al. (2011) point out, they produce two different potentials. They are the informative potential and the musicological potential. They differ in terms of the dynamic relationship of form and content, as well as the spatial organization.

Hillier et al. (2006) contends this idea. They posit that these spatial gaps or the 'free spaces' gather the architectural and artistic spirit of the spaces experienced by the people. Therefore, the conceptualization of the physical space must be derived from the intended polysomic developments of the spaces with their potential interpretations and meanings.

Undeniably this involves symbolism. Articulating this, Bal (1996) splits these relationships onto three by employing a symbolic framework: They are the museum, the visitors and the materials. He says that these contribute to what lies behind the observations and the experiences of the visitors.

Undeniably, spatial experience of a museum arises from an inner impulse triggered by both the museum space as well as the exhibits. In this connection, Johnson (2005) points out that spatial experience of a museum reveals itself as a feeling toward something. However, Schorch (2012;2013) says that, it represents the internal understanding of the display objects as placed. In fact, Bennett (1995) adds that, it might be represented even as a spatial feeling related intimately to a theoretical understanding about a specific space. The reason for its spatial movement is replacing the sequential motion with an unusual movement of people.

Adding to this, Doering et. al. (2001) shows how to facilitate the visitor experience and how the things must be displayed to affect their experience. Since the public nowadays are also exposed to educational leisure situations, such as the museums, they contribute enormously to lifetime learning of the communities. As a result, these organizations are under tremendous pressure to prove their effectiveness on the communities. However, even the most well-defined learning outcomes may not be able to value the beneficial outcomes of the museum experiences.

Nevertheless, the researchers study all the valuable outcomes of visiting a museum in addition to their social and learning values. For example, Falk et al (2008) argue that museums have a tendency to focus on and study the ways of displaying objects, how to collect, how to preserve and how they could educate the public with them. However, Doering et. al. (2001) suggest that these varied studies can give clues on different attitudes of the visitors. Sometimes, they might feel like strangers and sometimes they may feel a sense of belonging and familiarity. However, it is the guests who appreciatively receive what a museum proposes and provides for them. Indeed, it is they that the museum is obliged to serve. Therefore, Doering (1999) has established a list of experiences that satisfy the persons expectations for experiences in museums. These have been categorized into four categories as follows (Doering, 1999).

- **Experiences of the Object:** This emphasises on something outside the visitor feelings including observation of the real thing and seeing treasured objects while being affected by its beauty.
- **Cognitive Experiences:** These emphasise on the interpretive or knowledgeable information related to the experience visitation including the knowledge gained and materials and how the visitors might understand them.
- **Introspective experiences:** These emphasize on the feelings and experiences of the visitors; for example, their imaginations, reflections and connections of ideas and materials.
- **Social experiences:** These emphasize the exchanges of feelings and knowledge of the visitors with their families, friends, and other visitors or museum supervisors.

The first entity is the objects and their characteristics; particularly authenticity (Hedes,2014). She argues that it is necessary to create environments that are observed as authentic needs incorporating the production and consumption. Pine et al. (1998) propose that museums generate these environments by having exhibitions and the stories that they narrate. These create and expose credibility for the museums as much as the stories they present. Moreover, Chhabra (2008) says that the museums have become highly accessible as public institutions and this has attracted closer examinations of authenticity and criticisms by people. However, Bal (1996) suggests that authenticity of museums should be judged by how they develop the spaces and produce exposure and how they share knowledge with the visitors in a truthful and open manner.

The second entity is the visitor and his or her perception of authenticity. In this connection, Grayson et al. (2004) suggest that the level of product contribution has a bearing on their standards and expectations in relation to authenticity. Further, Prentice et al. (2003) argue that the contemporary role of museums have a vision of inviting the visitors to explore and discover the places by themselves to find the hidden surprising world of the museums while

seeking adventure. They seek to share the hidden secrets and uncover the stories of mysteries. By creating such environments, they argue, that it is possible to create the best hand for the visitors to become actively involved in the visitor experience, taking the full benefit of what the museum provides.

In contrast to the above two, the third entity is the materials and its inherent authenticity. That helps a museum to narrate the story and the visitor to understand that story. According to Grayson et al. (2004), materials are the central domain of the museums. A semiotic explanation of indexicality, suggests that indexically, authentic items have some link with its origins. On the other hand, a catalogue is provided to distinguish the fake items from the originals. For example, indexical authenticity is present if an object, which is supposed to be from the 80's, should have the characteristics of that era. This means that if mockup materials are used in the museum, they should be acknowledged as such, because the visitors should not be betrayed. Indeed, they should not hesitate about the authenticity of the materials.

Grayson et al. (2004) further explain that the interaction with displays means the ability to appreciate them in a personal way by focusing on both the visual and the sensual nature of a visitation in relation to imagination. In fact, he further says that the perfect way to achieve this is by developing and enhancing the contextual nature of spaces, materials and exhibits while trying to preserve and enhance the exclusive collection and its surroundings. Grayson et al. (2004) also mention that the exploration of the self-meant: a journey of discovery purpose, in dialogue and narrative, is held to be internalized, in relation to having the visitors searching for an interesting experience in an authentic environment. These visitors are not waiting for mentors to narrate stories for them but they desire to be part in a self-exploratory manner.

The area that they desire to discover is indeed their 'self'. This is to be reached via imaginative collaboration with the minds of others as exemplified by the visitors and the surrounding environment (Grayson et al., 2004). Adding to this, Henderson et al. (2007) point out that the use of technology in the presentation and display of objects and moving away from the static display with moving forward to active, cooperative and experiences of museums is very important to attract visitors and draw their interest to visit the space and see the space. Therefore, the use and implementation of technology in the presentation and narration of the items in museums is very important to attract the visitors. Attraction like the audio tours, which can be very useful to use with those visitors that have young children or elderly relatives and those that might be handicapped or have seeing difficulties, gives people the good information about the material and space of the museum. In fact, they won't miss any information, data or story, although it might be disturbing for some people in area.

On the other hand, Pekarik et al. (2010) assume that the visitors most of the time enter a museum with an entry narrative and these tend to be self-reinforcing, directing learning behavior and perceptions of satisfaction. In this connection, Falk (2008) says that identity is a combination of external and internal social effects on people or as cultural organizations. People's identity is continuously subject to be influenced by characteristic of the physical environment. This leads to a concept that self-identity formation is a nonstop process, with no limitations. The identity occurs as a flexible, constantly constructed matter. He points out that each human doesn't have a sole identity but a combination of several identities, that are affected by different times and locations and can be expressed collectively or separately depending upon need and conditions.

Falk (2008) further says that by visiting a museum, the visitors tend to provoke the main "I" which represents the identities. That means that the visitors visit the museums to provide the identity with what it might need. For example, this may be to be a supportive parent for their kids or to treat their sense of curiosity. However, these factors don't have any motivations for the visitors to visit the museums, science hubs or the zoos (Falk, 2008)

Maryland (2001) thus argues that museums need to connect with the visitors mentally and emotionally, by providing different views that will achieve this interface. Therefore, museums have to provide the visitor first with the objects or archives and secondly with facts or stories. Those two together create the meanings. However, on the other hand, Hooper-

Greenhill (2000) says that meanings are constructed in museums in relation to the elements of a museum. As seen, elements as collections in museums are gathered to have mainly visual impact, which create visual narratives, and this means that museums have to use different display techniques.

These different meanings of spatial experiences of museums can arise as a feeling toward something but on the other side, Hede et al. (2014) point out that it could be represented from each person's internal understanding of the objects in the museums. However, all of them meet at a point that each space can produce different feelings in people, and each person can have different feeling in exchange.

More importantly, Bal (1996) highlights the second most important idea of the symbolic framework of any museum. He shows that there are three entities interacting with each other to produce such spatial experiences, interests and soul-searching interactions: the museum, the visitor and the materials. Indeed, each one of them has an impact on the other, and they have to be connected for the visitor to have a successful visitor-experience.

In the end, as Maryland (2001) and Hooper-Greenhill (2000) show, the exhibits displayed and the created views are what produce meaning in any space of a museum. Therefore, a museum has to be well-designed to attract the visitors and give them the archive and story behind each object to feel the relationships and the meanings.

Review of Literature

Many have examined spatial experiences of museum spaces. Among them, Bal (2015), Doering (1999), McIntyre (2009) and Schorch (2013) are notable. They have examined the meaning and relationships of the museums and the visitors particularly in the West. However, they can relate to the museums and visitors of the Arab East too.

For example, Bitgood (2013) points out that museum layouts and the spatial arrangement of exhibits significantly impact how the visitors move through and engage with space. However, his attention is to the physical factors such as the placement of exhibits, signage, and sightlines. He argues that people are naturally drawn to areas that are easily accessible and visually engaging. Falk (1993) confirms that the physical arrangements of the exhibits are the major influencing factor on the engagement of visitors. According to him, careful exhibit designs can also enhance the experiences of the visitors.

Bitgood (2010) points out that confusions caused by inadequate signage or tight pathways can result in missed opportunities for learning and engagement, as visitors may skip key displays in favour of navigating spaces more quickly. Such negative experiences can diminish the overall value of a museum visit and discourage repeat attendance. Bitgood (2013) thus argues that effective wayfinding systems not only help visitors move efficiently through the spaces but also encourage further exploration by offering hints about what lies ahead, such as upcoming exhibits or themed sections. As Bitgood (2013) notes, when museums are designed with the movements of the visitors in mind, it enhances both engagement with the exhibits and overall satisfaction, making the museum experience more enjoyable and fulfilling. Falk (1993) adds by demonstrating that, in addition to navigation, eye-catching and visible exhibits attract the attention of the visitors. He talks about grouping the themed exhibits and advises avoiding the cluttered exhibits that cause cognitive loads.

In contrast, Robinson (1928) and Rabineau (1995) point out the importance of exhibit layout and the signage that impact the behaviour and learning of the visitors. In this connection, the American Association of Museums (2007) emphasizes that museums should create environments that facilitate movement and interaction, allowing the visitors to engage with the exhibits at their own pace. It points out that open designs contribute to a more relaxed atmosphere, reducing the likelihood of visitor frustration and promoting a positive museum experience. However, studies that examine the spatial experience of museum spaces is rare. In this sense, this study contributes to the gaps in research by focusing on the quality of spaces rather than the museum objects.

Research Methodology

This research adopted three methods. First, it employed a survey of documents to gain an understanding of the current knowledge about museum spaces and peoples' relations with them. They revealed how people react to the designed spaces, the reasons to visit museums, and the relations that may occur between the visitors and the museums spaces. They unearthed the meaning of the museum spatial experience to visitors and how it can affect their experience or feelings through the designated spaces and materials used and the presentation techniques used in presenting and narrating the stories of the elements of the museums. Most of the research were conducted through internet searches, through Google Scholar and some books.

In the second technique of gathering data, interviews were conducted with the museum managers and the visitors. First was an interview with one of the museum officers from the Bahrain Authority for Culture and Antiquities. It was conducted to gather information about the museum and opinions of visitor feedback about the Qal'at Al'Bahrain Museum in Manama.

Finally, it implemented unstructured interviews with the visitors, visiting the museum. These interviews were conducted in the evenings of March 2024, winter time in Bahrain when the weather was fine and people could be outdoors. Interviews lasted 15-20 minutes and the respondents were allowed to speak as they wish, but were requested to express their feelings about the experiences of visiting the place as well as being through the museum. Visitors were randomly picked up after they exited the museum and were in the lobby getting ready to leave. Hence, they have had the exposure to both the interior as well as the exterior of the museum. A total of 28 visitors were interviewed over a period of four weeks in March 2024.

Introduction to the Case Study: Qal'at Al'Bahrain Site Museum

The Qal'at Al'bahrain Site Museum, has been constructed opposite the Bahrain Fort (Fig. 01), after it was recognized as a UNESCO World Heritage Site in 2007. Opened in 2008, it has been built to present the valuable findings and ancient monuments unearthed from the Bahrain Fort. This houses the remains of a 16th-century Portuguese fort on an archaeological site with the museum displaying the artefacts unearthed from the site.

Exhibits are presented to the visitors and narrate the stories and facts while maintaining the ancient historic features of the site. In addition, it also records the archaeological eras by preserving the artifacts found at the site. The museum is designed by Danish architects known as Wohler Architecture.

The museum has five historical periods which are organized chronologically at different levels to explain and tell the stories about the five stages that the fort has been through the years. The exhibition is focused upon previewing each element with its story of origin and the date of finding. It has been created in terms of linear corridors with small staircases and handicap lifts for easy movement through the mezzanine levels, with leaner clear story windows and windows overlooking the castle (Figs 03-05)



Fig. 01: Location Plan

Source: Google

Findings

Articulating the Spatial Sequence

The design unfolds in two floors and reflects the strong relationship established between the interior spaces and the exterior spaces. The museum has a courtyard from the entrance gate leading to a Darssen Café overlooking the seaside opposite to the Fort in addition to several lecture halls and gift shops (Fig 10)

The entrance to the museum is through the left side of the courtyard, and then there is a reception with ticketing counters. Afterwards, the visitor can take the journey through the two floors, five periods, and exit through a long corridor, over the court yard, leading down stairs on the right side, returning to the café area. The visitors can grab a cup of coffee or visit the gift shop and leave.



Fig. 2: The View of the Building from the Seaside
Source: Author

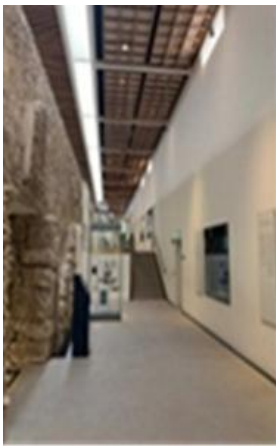


Fig. 3: Central Walkway at eye level
Source: Author



Fig. 4: Central Walkway above eye level
Source: Author



Fig. 5: Windows to the outside with views blocked
Source: Author



Fig. 6: Courtyard and the Lightwell bring light
Source: Author

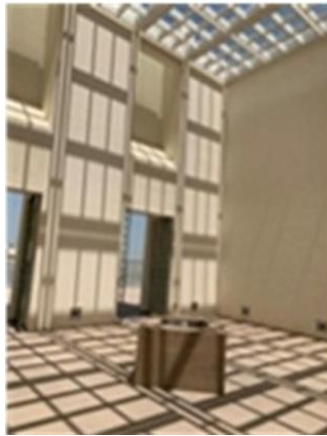


Fig. 7: Shades in the Courtyard celebrating light
Source: Author

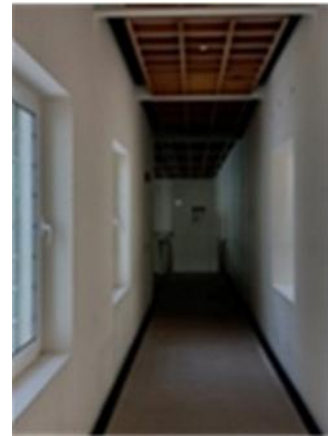


Fig. 8: Dark interior walkways infusing mysteriousness
Source: Author



Fig. 9: Spatial Relationships
Source: Author

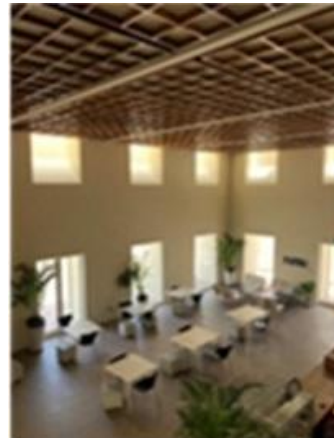


Fig.10: Spatial Relationships: Café overlooking the Fort
Source: Author



Fig 11: Exhibits with Different Presentation Techniques
Source: Author



Fig. 12: Use of Interactive Techniques
Source: Author



Fig. 13: Display of a Real Wall as an Exhibit
Source; Author

Findings from the Interviews

As mentioned, 28 interviews were conducted with a random sample of visitors. Visitors were randomly picked up after they exited the museum and were in the lobby getting ready to leave. Hence, they have had the exposure to both the interior as well as the exterior of the museum. Interviews lasted 15-20 minutes and the respondents were allowed to speak as they wish, but were requested to express their feelings about the experiences of visiting the place as well as being through the museum. Following are selected quotations from the interviews.

Visitor 1 says,

“Bahrain Fort is a beautifully preserved UNESCO World Heritage Site that offers a glimpse into the island's rich history. The fort is peaceful, with stunning sea views, especially at sunset, and the museum adds fascinating context to the experience. A must-visit for history lovers!”

Visitor 1: Interview: March 2024

Visitor 2 says,

“Beautiful place, free of charge and a UNESCO heritage site. Lots of visitors walking and exploring. Great set-up and in my opinion a must see in Bahrain (Manama). Go at sunset to get some beautiful light and a great view of the Manama skyline”.

Visitor 2: Interview: March 2024

Visitor 3 says,

“What a beautiful experience! The Fort is huge, and there is so much to explore. The history here is amazing. I definitely recommend visiting the museum as well

Visitor 3: Interview: March 2024

These are representative quotations of the 28 respondents almost all of whom appreciated the interior experience of the museum. Having just concluded the journey within the space, they all appeared to be exhilarated at the experience and the ways in which the journey had been orchestrated within the space. Indeed, these responses demonstrate that the museum design produces a unique experience at the Qal'at Al'bahrain Site Museum in Bahrain.

In terms of the unique experiences, numerous qualitative expressions have been made. They include, indications of the interior spaces being 'mystic' to begin with and 'exploratory' at times. Moreover, some responses mentioned that they were 'orderly,' 'systematic' as well as 'well-organized.' Few referred to the overall atmosphere being 'colourful' meaning that there was a variety of ambiances created by dark spaces, and illuminated spaces as well as small nooks and corners as well as large volumes. Colours were also referred to in terms of being 'neutral' and 'persuasive' as well as being 'seductive' and suggestive of mysticism and curiosity.

In fact, these expressions of the qualitative evaluation of the ambience was in keeping with the experiences of the researcher herself and affirms that despite individual and personal differences, there appears to be common perceptions and experiences produced within the interior spaces that contributed quite positively to making the museum a place of 'exploration' which is what it ought to be.

Findings from the Observations

According to the observations, the museum opens from Tuesday to Sunday from 8am to 8pm, and is closed on Mondays for maintenance. It has a nominal entrance fee of 1 Bahraini Dinars. Museum staff divulged that from November to April, it received a lot of cruise group visitors. In fact, mostly, the museum attracts visitors when the weather is cool in winter. There are kids' activities outside the museum and movie nights in the weekends. Moreover, the people who come to visit the café or the fort become curious to see the museum, as the design attracts them to enter and explore the precious exhibit. During the research, it was observed that there were lot of visitors during occasions and holidays such as EID (an Arabic Holiday season spanning a week) and the "national-day". The visitors often come between 4pm to 8pm.

Most of the visitors reacted positively to the modern design of the museum as a creative, simple, linear orientation, and always talked and took pictures of the different levels through the five stages while experiencing the chronological story. They also appeared to like the different orientations and different presentations of the exhibits (Fig. 11) and the use of technological presentations and the interactive screens all over the spaces (Figs12 & 13). They also valued the fact that the museum had linear windows in the roof and the windows that overlooked the Fort next to its model or plan with all the information about it. It is noteworthy that the visitors complimented about the entry ticket, which is in fact a post card which serves as a souvenir.

Conclusions

This research thus concludes the following.

1. As Maryrand (2001) and Hooper-Greenhill (2000) have emphasized on the importance of presentation of the exhibits, this museum has presented and designed the space in an entertaining way for the visitor journey through the five stages. It employs different levels and different presentation techniques that always grab the attention of the visitors.
2. The museum has used interactive screens at all the levels which really attract the visitors to view the information displayed and engage with them through the screens. This is in accordance with what Ryan (1990) said about the use of technology in the presentations being very important for the visitor experiences in museums
3. In the symbolic framework of Bal (1996), he explains about the First person (the Museum and its authenticity). Munoz (2006) argues that 'generating environments that are observed as authentic needs to incorporate the production and the

consumption.’ However, Bal (1996) argued that authenticity of a ‘museum’s should be judged by how it develops the spaces and exposure and how they share the knowledge with the visitors in a truthful and open manner’. In the case of the Qal’at Al’bahrain Site Museum, it has been placed in the perfect site location opposite to the Bahrain Fort, to have the real place of all the elements presented just few steps from the museum, for the visitors to relate the stories and facts of the objects in relation to the Fort. The visitors can see the fort from the inside through the windows that overlook the fort.

4. Grayson (2004) mentions in the Bal (1996) symbolic framework about the ‘Third person which is the materials used in the museums which helps it to narrate the story and the visitor to understand that story’ in the Museum. Indeed, the architects have used real walls from Bahrain Fort to create the same feelings in the visitors as the feeling of the real fort corridors and the rooms.

It is understood that visitor spatial experience in museums can differ from one museum to another and from one visitor to another but as a meeting point, the museums objects and material can have a huge impact on imagination of the visitors and feelings of the authenticity of the museum.

It is acknowledged that this research is carried out with a small number of respondents and that it does not specifically record the experiences in detail. Therefore, its conclusions cannot be generalized. Nevertheless, it is one of the first research activities that have examined the unique spatial experience created at this museum.

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