Trends in organisation of interactive exhibition spaces. A modern example of revising the interaction of the exhibition space and the visitor

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Abstract The paper explores exposition/exhibition spaces on the basis of interactivity and analyses the principles of interaction between a museum visitor and the exhibition space. The authors describe several cases of interactive exhibition environment. The main task of the architect is to create an environment in which one not only receives information but also can interact with it, change its structure, control the forms and methods of communication with it and thus be involved in the process of creating and changing the environment.

1 Introduction

Architecture and art have long been constructed in such a way that the viewer is completely subordinated to a work of art or its space; it dictates its terms, scale and time. “It is necessary to let the viewer gain footing by recreating an individual experience”, proclaims Bonami, curator of Venice Biennale exhibition; “the viewer must dictate his/her own terms to the exhibition – own time and own scale. In practice this means that the viewer must proceed from one work to another, each time building a personal, intimate relationship with the artwork anew.

The world architectural practice has been enriched with the term “augmented reality”. Being in the space of augmented reality, we can control the real environment with the help of virtual elements. New digital technologies have made it possible to combine the real architectural environment with virtual environment; thus, the new architectural environment has become easily manageable, flexible, able to respond to the needs of its inhabitant; it has acquired a completely new quality: interactivity [1].

But one should not forget that most contemporary interactive exhibition spaces and multimedia exhibitions try to position their expositions as a completely new, fresh approach to presentation of art; however, it often turns out to be an attempt to use the name of some great artist or cultural figure for commercial purposes – these exhibitions may lack the functions typical of classical museums: artistic reconceptualisation, recontextualisation, attempts to introduce the visitor to the author’s works. Exhibition spaces just draw upon images recognisable in pop culture and turn them into a big photo zone for social media.

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All this looks as if exhibition visitors are essentially manipulated, being sold a simulacrum of interaction with real art.

2 Materials and methods

The “dead” exhibits in modern exposition/exhibition practice have given way to “live” installations living in real time and reacting to viewer’s behaviour. The augmented reality space means the expansion of physical reality in which a person lives: it is impossible, being in such space, to see the boundaries of real virtual space. A completely new space containing a single artistic image is formed in a subject’s perception. In the augmented reality space we can control the real environment with the help of virtual elements.

When designing an interactive space we need to understand the computer principle of its modelling. Modern methods of creating virtual interactive environments are based on the use of high-tech methods and techniques; one of them is the object-oriented approach (OOA). The object represents a basic construct in OOA [2]. The objects interact with each other, sending and receiving messages by analogy with a living organism consisting of cells that exchange information. The purpose of applying OOA is the creation of architectural environment with recursive design where even its minutest part repeats the capabilities of a system as a whole and evolves through successive changes of its state.

3 Results

Based on the principles of object-oriented approach to design, as well as the analysis of the architectural practice of designing interactive environments, an interactive space construction model was formed:

1. Space architecture: architecture of real and virtual space (appearance, construction).
2. Space formula (its behaviour).
3. External events: messages to which the space responds.

The present paper deals with the study and analysis of exposition/exhibition spaces on the basis of interactivity. Their classification by interactivity level is presented in Table 1.

Table 1. Interactivity levels.

<table>
<thead>
<tr>
<th>No.</th>
<th>Type of interaction</th>
<th>Principle of interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Passive interaction</td>
<td>The viewer is able to perceive the information without any possibility to change it. The transmitted message is not linked with previous messages.</td>
</tr>
<tr>
<td>2</td>
<td>Active cooperation</td>
<td>The viewer gets an opportunity to interact with the content without changing its structure. The transmitted message is linked only with a single, immediately preceding message.</td>
</tr>
<tr>
<td>3</td>
<td>Interactive cooperation</td>
<td>The viewer’s reaction to previous actions creates a context of subsequent actions. The message is linked with a set of preceding messages and relations between them.</td>
</tr>
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4 Discussion

A vivid example of passive interaction between the visitor and the space is the exhibition “Finding Banksy” held in St. Petersburg. According to the description, this exhibition is dedicated to one of the most controversial artists of street art. One could suppose that the exhibition visitors would see many artworks based on Banksy’s creative products, authentic
copies of the artist’s paintings and most striking sculptures, realistically reproduced graffiti walls, etc. But in fact this exhibition represents a total photo zone. Some reproductions located closer to the exit zone have sign plates telling about the work, introducing one into the context; but after one has walked through a couple of halls, the signs with description of works disappear, leaving “bare” reproductions (Fig. 1-2). This example of organising the interactive exhibition space can be attributed to passive interaction of the viewer with the space: the viewer just gets an opportunity to perceive information without any possibility to change it (Table 1).

Fig. 1. “Finding Banksy” exhibition. Exhibition space.

Fig. 2. “Finding Banksy” exhibition. An example of reproduction.

Most museums and exhibition spaces nowadays design their expositions on the basis of active cooperation between the visitor and the exposition, by introducing the principle of interactivity; the viewer is given an opportunity to interact with the content without changing its structure. A transmitted message is related only to a single, immediately preceding message. Interactivity is understood as close work of the museum staff with the visitors, when the guest becomes the main actor during the visit to the museum, staying in the mode of conversation or dialogue.

Modern museums and museum complexes predominantly adhere to the idea of interactive cooperation between the viewer and the exhibition space. The Museum of Urban Culture in Ningbo, China, represents a modern museum that actively adheres to the principle of interactive exhibition space. Its exposition is organised with due architectural planning in mind. The building has 4 floor levels connected by a pedestrian ramp in a recreational atrium space; each floor contains several halls with permanent and temporary exhibitions; the main theme thereof is the city. The main idea of the museum was to create an attractive and accessible public space in a new district and thereby to facilitate the
dialogue between the citizens and the officials in charge of decisions regarding the development of the city. The examples of public spaces are given in Figures 3, a, b.

**Fig. 3.** Examples of public spaces.

The exhibition halls are located on the upper floors of the building. The ground and first floors offer a variety of public spaces. The permanent exhibition of the museum comprises five halls, each of them being a hall with a permanent exhibition having its own theme – “City of the Future”, “Green Urban and Public Spaces”, “Ecological City”, “Happy City” (Figures 4, a-d) [3-7].
The artificial environment around us is a “collectively created project”. Sometimes it includes heterogeneous elements that contradict each other and to logic. On the one hand, the space around us is constantly transformed through multiple engagement; on the other hand, it affects people directly on a daily basis. The Museum of No spectators organised at the Burning Man Festival in the USA, at the heart of the Black Rock City desert, is a striking example of revising the modern concept of a museum. The Burning Man Festival is an annual event defined by its organisers as an experiment – not as a festival – aimed to create a community of radical self-expression (Fig. 5).

This museum is the most striking and exclusively modern representative of “adaptive architecture”, an example of organisation of interactive exposition. The museum visitors are in the role of active participants setting not only the theme of the exposition, but also the exposition material as such. The exposition gets changed and transformed within a week. (Fig. 6)

The Museum of No Spectators (MoNS) is a radically inclusive and interactive museum without spectators that creates a space where anyone can produce art and become an exhibit.
The museum makes an emphasis on inclusivity, drawing away from “art as an elite sport” [8]. This challenges the concept asserting that museums are neutral spaces to showcase what artists do. Whilst many museums are actively seeking change, many of them are still perceived as exclusive [8].

The museum creator describes the ideas underlying this collaborative project as follows: “The Burning Man Festival as an event inviting you to experience art not just as something you might contemplate passively but as a collaborative activity unlocking your own creative potential. That is why the creators hit upon the idea that the museum to be created within the framework of this festival, which would encourage all those willing to create artworks in an unsupervised and spontaneous environment, would be a perfect way to reconceptualise the museums’ functioning options. This also raises some interesting issues connected with cultural integration scope and the ways it can affect the society on the whole” [9].

The museum with no spectators wonders about the role and nature of a museum in today’s society. What would you do there? What is the role of art, what is the presumed role of the society, what is the role of a visitor as such? The museum shakes up the conventional concept of museums and exhibition spaces by creating a public forum for participation, encouraging the visitors and their initiative in shaping contemporary culture. The visitors begin their journey of this museum with a ‘gift shop’ where the visitors are invited to make a ‘gift’ (any gift) before exploring the exhibition. After that, the visitors can walk through eight galleries that offer intriguing ways of interaction – whether you paint the museum walls or stand on a pedestal as an exhibit or bring your own sculpture; the choice is yours. Here art and exhibited materials will be permanently changing. The final exhibition hall represents a forum space that opens access to a dialogue between the passing visitors, “live” exhibits and artists that participated in the museum’s cultural activities [10].

5 Conclusions

Thus, new architectural “interaction systems” represent a space where collaborative democratic projects are able to bridge the differences between the spectators and performers, users and developers, tenants and architects; enable the development of individual creative power and encourage people to create their own spatial programmes, to invent own logic. In fact, “adaptive” architecture does not exist without people who inhabit it, perceive it, interact and transform it. As a result, spaces not only allow people to develop their own ways but are enriched with them. Architecture becomes a performance, a conversation, a “living game” that continues throughout the existence of the architectural environment.

As a result, the economy of impressions, being a basis of modern post-industrial society, dictates new forms of public life organisation, affecting the sphere of architectural typology and the general domain of public spaces. The transition to the information society changes the modern museum trends towards creating more tangible interaction with the guests and acting as a modern visitor’s educational partner. The mainstream exposition styles are receding to the background and are developing towards introducing advanced technical innovations, being focused on close interaction with man.

References


