

THE EXHIBITION DESIGN IN POLISH MUSEUMS – THE LAST THIRTY YEARS OF DEVELOPMENT

Beata WAWRZECKA

*Strzeminski Academy of Arts Łódź, Faculty of Design Arts,
Institute of Interior Design, Poland*

<https://doi.org/10.18485/smartart.2022.2.2.ch15>

Abstract: The methods of designing museum exhibitions have changed very dynamically in recent years. Multimedia and interactive elements enter the exhibition halls with great panache. Thanks to their application, the possibilities of transmitting information increase. This applies to all fields, even traditional ones such as numismatics, archaeology and ethnography. While visiting museums we not only look at the exhibits, but also touch, listen, sometimes smell and interact directly with many elements of the exhibition.

Exhibition designers must balance with great sensitivity between the use of multimedia and other artistic means, so that the designed exhibition meets not only the needs of the contemporary recipient but also the museum's mission.

Customer expectations have changed a lot. For visitors, a visit to a museum is not the same experience as several years ago. Designers are constantly trying to respond to these changing expectations. This affects the shape of exhibition projects as well as entire museums.

Another element influencing design decisions is the theme of the exhibition. Design accents are distributed differently at historical exhibitions than at, for example, ethnographic or archaeological exhibitions. Depending on the amount of multimedia elements, several types of exhibitions can be distinguished. Applying this criterion, we can observe traditional, transitional and multimedia exhibitions in Poland.

The paper is a summary of research and an analysis of the sustainability of design and exhibition elements currently used in museum spaces in Poland. It also aims to determine how this sustainability can meet the needs and expectations of today's visitor.

The research covered 95 permanent and 25 temporary exhibitions in 30 thematic museums in Poland.

Keywords: sustainability, exhibitions, multimedia, design

INTRODUCTION

The article was written on the basis of conclusions resulting from research¹ conducted in selected thematic museums in Poland. The world around us has been changing dynamically since the spread of the Internet and mobile phones. The new generation can already be described as the information society. Such a society is used to the omnipresent information and its constant selection and verification. Therefore, it is not surprising that the methods of presenting valuable exhibits have undergone equally dynamic changes in recent years, unprecedented before and subordinated to new expectations of recipients. These changes are possible thanks to the availability and rapid development of new technologies, the availability of modern exhibition systems enabling a completely new approach to the created space and a huge amount of information that can be presented in an exhibition arrangement.

Shaped by the new reality and pampered with commonly available technical solutions, the modern visitor has also changed his expectations of the exhibitions presented by museums. He expects museums to do more than just offer seeing valuable objects. He would like to have access to extensive information about the times from which the exhibits come, to feel the atmosphere surrounding them. Not only to see and contemplate but to become part of the world and time from which the exhibits come. Moreover, visitors expect that the information contained in the exhibition will be presented in a way that will not bore them, but rather encourage them to stay at the Museum as long as possible.²

The creation of a completely new philosophy of designing exhibitions is based on a balance of three elements: technology, information and an exhibit in contrast to the old philosophy of showing as many exhibits as possible with very limited descriptions. In the past, the visitors were invited to see the precious artifacts and they were to speak for themselves. In the present, the whole history of the time of origin of the exhibit is presented.

TYPES OF EXISTING EXHIBITIONS

There are many museums in Poland presenting exhibitions from many fields of science and art.³ These exhibitions have been created over the last 30 years. Thanks to this, we can trace the changing themes of the exhibitions as well as trends in the methods of presentation.

Most of us still associate the museum with quiet rooms filled with cabinets full of various items. Here and there you can find discreet signatures or simple information boards. Separated from the exhibits usually by glass panes, we can only watch in silence and imagine a wider context related to the history of the times from which the object comes. Our reception of the exhibition depends basically on the

¹ “The use of modern media and the latest digital technology in the design of museum, permanent and temporary exhibitions, and the possibility of adapting these technologies to the needs of temporary exhibitions in the field of archaeology, numismatics, based on the analysis of existing solutions used in Polish and European museums.” B. Wawrzecka, *Museums in Poland, research*, Strzemiński Academy of Arts in Łódź, 2018–2019.

² B. Wawrzecka, “Meeting with exhibitions”, re-FORMA 2019 conference, Wrocław.

³ The basis for the analysis was a total of 120 exhibitions, including 95 permanent and 25 temporary exhibitions located in 29 museums in Warsaw, Gdańsk, Gdynia, Słupsk, Łódź, Kraków, Toruń, Katowice, Wrocław and Jelenia Góra. All museums were thematic museums covering very different fields such as: archaeology, geology, ethnography, numismatics, history and 9 others, from very different fields. Due to different ways of presenting images, art museums and galleries were not included in this analysis.



Fig. 1

knowledge we have acquired earlier. However, there are very few such exhibitions nowadays. Designed several dozen years ago, they are usually located in historical buildings, the renovation of which is very expensive, which makes it impossible to redesign the exhibition in a more modern way. There is also resistance from the professional community dealing with exhibitions on behalf of museums to change the way of presentation and opening to new technologies. Sometimes there is no will of cooperation with architects and designers in creating a new type of exhibitions. However, the biggest problem stopping the changes is money, or more precisely, the lack of it. I called these exhibitions **traditional**.⁴ They lack multimedia in any form. There are few descriptions, usually on boards placed on the walls next to the showcases. The main and most important element is the exhibit itself, and they are placed chronologically or thematically in showcases or spaces generated by the landings. Sometimes exhibits are shown surrounded by small arrangements of other objects to explain the cultural context from which they come. At such an exhibition, we always have the feeling of being in the museum building. Examples include: the Geological Museum in Warsaw, the Ethnographic Museum in Słupsk, and the Ethnographic Museum in Krakow. (Figure 1)

At that point, it is also worth mentioning the temporary exhibitions that have been created in the recent years, without the participation of multimedia (mainly due to the lack of funds). The approach to the presentation of the exhibit is different, although it is the main and most important element of the exhibition. The items on display are surrounded by information and, if possible, displayed in a different way than just in showcases. The modern graphics, typography and spatial solutions used to design these exhibitions allow them to be included in a separate subgroup of exhibitions called by me **modern-traditional** (Figure 2).

⁴ B. Wawrzecka "Meeting with exhibitions", re-FORMA 2019 conference, Wrocław



Fig. 2

Transitional exhibitions⁵ are the dominant design form of the exhibitions nowadays. Their arrangement and composition are still traditional, but they incorporate multimedia, to a greater or lesser extent. The transitional exhibitions also include those whose fragments have been rearranged to accommodate the multimedia, full format photographs and bold graphic design and typography and the rest have been left unchanged. Multimedia in this type of exhibitions performs various functions: it is to attract and encourage younger audiences, mainly children, to become interested in the subject and objects displayed. Usually, touch screens are used for this purpose or a combination of screens with motion sensors. Through the games, they try to interest children in the history presented at the exhibition. The second function of multimedia directed towards the older audience is expanding their knowledge about exhibits, showing films, documents or additional descriptions. Due to the lack of space, these are usually small frames, displays or touch screens integrated into previously designed exhibitions. (Figure 3. Ethnographic Museum in Toruń and the Karkonosze Museum in Jelenia Góra) Sometimes one can find fragments of exhibitions, arranged very carefully, with extensive information, composing graphic and typographic elements, shaping the space through the form of display cases and incorporating multimedia elements into them. The rest of the exhibition, however, is presented in a traditional form (Maritime Museum in Gdańsk and the Karkonosze Museum in Jelenia Góra). Still at these exhibitions, we have the feeling of being in a museum and visiting museum halls. The exhibits on display are the most important elements, mostly presented without an extended cultural context. This way of meeting the expectations of the recipients by expanding the exhibitions content with extensive information or fun can be seen at exhibitions created several dozen years ago but also at modernized ones over the last 8–10 years. (The Świętokrzyskie Museum in Jelenia Góra, the Maritime Museum in Gdańsk, the Ethnographic Museum in Warsaw, the Ethnographic Museum in Gdańsk.)

5 B. Wawrzecka “Spotkanie z wystawami” konferencja re-FORMA 2019, Wrocław



Fig. 3

Last but not the least is the group of exhibitions I decided to call **multimedia exhibitions**.⁶ They have been created in the past 5 or 6 years. Their design decisions are completely different than for previous exhibitions. The main object of these exhibitions is experience. The exhibit is relegated to the background and serves only to document a broader idea, or it is not present at all. These exhibitions require a lot of space, they convey a huge dose of information on the historical background and all processes related to the issues presented at the exhibition. Designs where an exhibit is still present, integrate it into the overall arrangement. It becomes not the most important but a complementary element. These exhibitions are designed to create the desired atmosphere, to affect our senses like sight, hearing or sometimes even smell. Everything is carefully planned by the authors. While visiting the maze type of exhibitions traditional or transitional, we move freely around the rooms, going from one showcase to the other. The order does not matter in this case; we can turn back at any time, go right or left, turn right to the hall or in the opposite direction. On the other hand, contemporary multimedia exhibitions lead us along a specific sightseeing path, always pointing us in a specific direction. The entire exhibition is constructed in the form of a connected line of corridors. Sometimes it is artificially created as in the Emigration Museum or uses the layout of existing rooms as in the Schindler's Factory Museum.

These exhibitions arrange the space in a theatrical way, leading the visitor from one created scene to another. We can see, hear and sometimes even smell things. Everything is important, the texture of the floor, the shape and size of the room, light, color, flashing images of displays, sounds from directional microphones or the all-surrounding composition of typography and photos. Depending on the subject of the exhibition, an exhibit is integrated within the design of the scene, often barely noticeable in the overall arrangement of the whole as we can see in the Museum of

6 B. Wawrzecka "Spotkanie z wystawami" konferencja re-FORMA 2019, Wrocław



Fig. 4

the National Bank of Poland in Warsaw, Museum of Pan Tadeusz in Wrocław or it is completely absent, for instance in Hydropolis in Wrocław (Figure 4).

For an average user, it does not mean that modern multimedia exhibitions are less valuable than traditional ones. They are just completely different. They are adapted to the needs of contemporary man. They provide him with an inexhaustible amount of information in a very different form. These exhibitions offer something to everyone to choose from. Visiting such an exhibition does not require any additional knowledge from the field presented in it. Such exhibitions present a very wide range of information, from the most general to the most detailed. It is up to the visitor to choose the scope and content. Because of that and due to the various forms of communication, such exhibitions are interesting for both adults and children. Thanks to the designed images, some, even very complex, topics are easier to remember. We are brought up on phone icons and films in the 3D cinema, which is why such visually rich exhibitions meet our needs. (Figure 5. Polin Museum in Warsaw).

No matter the spatial design, such a richly developed arrangement of exhibition rooms full of graphics, texts and multimedia is sometimes difficult to accommodate with the need to show a large number of exhibits. An example of a good solution to this problem is the money exhibition at the National Bank of Poland, where it was possible to show a large number of coins and banknotes without losing anything of the rich visual arrangement of the interior. Undoubtedly, the small size of most of the exhibits was helpful in this case.

CHANGES IN THE DESIGN OF EXHIBITIONS

The four above-mentioned types of exhibitions require very different competences from designers. While traditional exhibitions could be designed even by museum staff with artistic skills, transitional exhibitions or even modern-traditional and in particular multimedia exhibitions, require cooperation of many specialists in areas

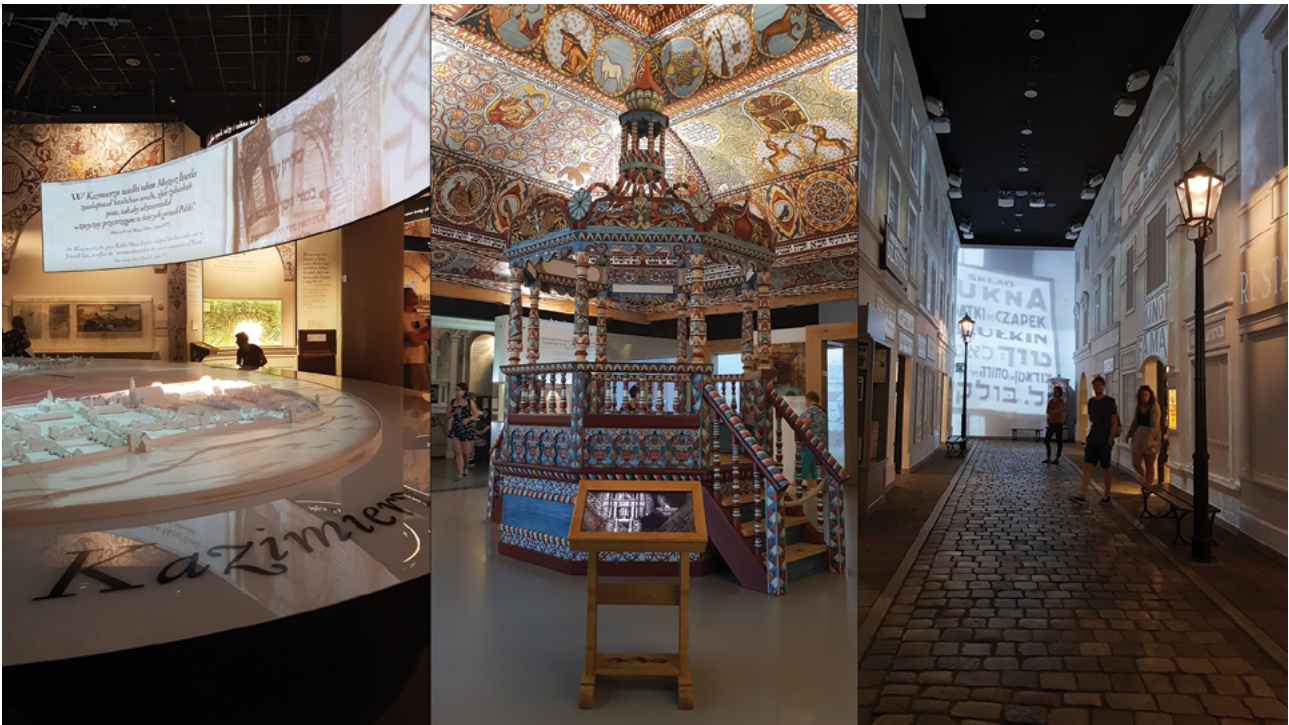


Fig. 5

such as graphic design, interior design, IT, scenography and specialists such as ethnographers, historians or archaeologists.

Traditional exhibitions without the use of multimedia elements, in the past, did not always require the involvement of designers. Very often these were exhibitions where a large number of artifacts were presented in showcases and descriptions were made on museum printers. As the years went by, the audience became more and more demanding, the technical possibilities increased, and the space of the exhibitions grew.

That is why the involvement of visual arts in the process of creating exhibitions has become essential. Exhibitions have gained more interesting and well-composed charts, uniform throughout the exhibition, better organization of the exhibition space. Simple arrangements have appeared in the rooms, showing the cultural context of the presented artifacts on a microscale, but still. There were also elements of visual communication guiding the visitor's steps. Currently, modern-traditional exhibitions (usually temporary ones) have a completely different artistic look. At such exhibitions, the possibility of using wallpapers with freely designed content is used. Modern typographic solutions go beyond the area of the boards; they are often emphasized by spot lighting of any color. The space can be shaped by large areas of color, because the paints are available in every possible color. Thanks to light structures of the walls, it is possible to freely shape the rooms. At such exhibitions, the artifact is still the most important and the amount of information available is limited by the lack of multimedia. The reception of such exhibitions, thanks to the use of all these solutions, is more friendly and understandable for the modern recipient. A good example are the exhibits at the Ethnographic Museum in Kraków and the Textile Museum in Łódź.

Transitional exhibitions are created all the time. The designer's task in this case is to skillfully integrate the multimedia elements into the existing exhibition structure and to design and program them. Usually, it is dealt with by specialized companies

that not only advise what multimedia can be used, but also program it. The changes that are introduced do not affect the overall appearance of the exhibition. However, if the museum decides to rearrange a part of the exhibition, the same process begins as for a large multimedia exhibition, only condensed. Such a change requires the cooperation of the designer with the author of the exhibition (a museum employee dealing with the substantive side of the exhibition) and the designer with a company preparing multimedia. Here, not the company, but the designer, determines the type of multimedia and the content of the programs. He can also design them so that they fit the whole of his vision of the artistic exhibition. Currently, transitional exhibitions (usually temporary ones) are designed as a whole. Presented objects are very important, but the exhibition has interactive and multimedia elements. As temporary exhibitions are smaller forms with less involvement of multimedia, the entirety of the solutions is usually supervised by a designer, hiring appropriate contractors.

Contemporary multimedia exhibitions are enormous undertakings. Due to the technical requirements of multimedia equipment, they require the design and construction of completely new buildings or full adaptation and construction works in the existing ones. Such exhibitions require the involvement of many specialists in various fields. Designing multimedia exhibitions has become a very complex undertaking, where individual parts of the sightseeing path created by the designer require a very skillful arrangement of the interior with multimedia elements, scenography, typography and other graphic elements.

VISITORS' EXPECTATIONS

The driving force behind such serious changes in the way exhibitions are designed is the changing needs of the recipients (ourselves). Before 2004 when Poland joined the European Union and opened its borders for Poles to travel freely, before the days of the Internet and computers (from 1991 till 2004 the access to computers was limited and before that time it was nonexistent), it was a great experience just to go to a museum and see unusual items from other parts of the world. Now that we can travel freely and the Internet provides us with information on almost everything, museums in their traditional form have become much less attractive. Now, the visitors not only want to get to know the presented artifacts through the process of viewing, but also expect the exhibitions to present a much wider range of knowledge than the contemplation of the monument itself can provide. They want to know the context of the presented items, the general cultural or historical processes related to them, and they want to be able to select the information themselves. They expect the presentation of this knowledge to be diverse and adapted to different ages. Adults want to expand their knowledge and children want to learn through play. As our recipient does not go to the exhibitions alone anymore, it is usually a family trip. The exhibition is therefore intended to teach and entertain regardless of age. In order to meet these requirements, exhibitions expand, not always spatially; but through the use of multimedia devices they are able to expand the scope of the presented substantive content. Usually visitors tend to read and learn as much as possible if they are interested in the subject of the exhibition. It results in extending the time of their visit to the museum and thus the need to provide visitors with a place to rest. Therefore, cafes and restaurants began to appear in museums. Carefully arranged places of rest began to attract people wishing to meet friends in an



Fig. 6

unusual place surrounded by art or history. It began to provide not only knowledge, but also entertainment and relaxation.⁷

WAYS OF ARRANGING SPACE AND DESIGN ELEMENTS OF EXHIBITIONS

Thanks to the technological possibilities in the field of construction, printing and digital media, it was possible to reinvent the way of presenting exhibits in museum rooms. In the past (1990s), the things could be displayed hanging on the walls, standing on the floor or on landings. The room always remained the same in its shape, and its color could only be changed by repainting the walls. Where this was not possible, fabrics were hung on the walls. Descriptions were sparse, presented on boards, because they had to be made by hand. Currently, it is possible to freely shape the space of the rooms without interfering with the walls of the building and adapting them to the needs of the designed exhibition. Light and mobile walls can be painted, covered with wallpapers or with various materials such as sheet metal or plexiglass. They can be fitted with display cases of any shape, matching the arrangement of the whole.

The approach to the presentation of historical items itself has also changed. Regardless of whether we are dealing with exhibitions with multimedia elements or contemporary exhibitions without multimedia, the guiding idea was to remove barriers between the visitor and the exhibit, or at least to make them as little visible as possible, where it is possible (Figure 6. Archaeological and Ethnographic Museum in Łódź, Textile Museum in Łódź). This leads to the reduction of showcases, and those that are necessary blend in with the scenery of the rooms. (Figure 7. Oskar Schindler's Enamel Factory Museum in Krakow). The visitor can commune with the

7) J. Derwisz, "Nowe muzeum w mieście. Zmiany w kształtowaniu funkcjonalno-prze-strzennym architektury współczesnych obiektów muzealnych", 72–81, *Środowisko Mieszkaniowe*, 2020



Fig. 7

exhibit through holographic projections, films or multimedia programs. A new form of exhibitions has also been created, in which historical artifacts do not appear at all, or hardly at all, in the form of a traditional object. These are the exhibitions and thematic museums dealing with scientific or technical topics, such as the Hydropolis Museum in Wrocław. (Figure 8.)

Since the designer can freely shape the space, the currently designed exhibitions guide visitors from one thematic view to the next. Each of them is a fully arranged space that affects all the senses of the visitor. We lose the feeling of being in the exhibition hall and we move into the world presented by the exhibition. This effect is possible thanks to treating the space like a film set. It can be fully realistic with authentic furniture or devices, or symbolic – influencing us to make cultural allusions, or abstract – arranged with the shape of the walls, color or typography (Figure 9. Silesian Museum, Toni Halik Museum in Toruń, Emigration Museum in Gdynia)

When designing exhibitions, one also needs to find a place for information. It has now become an integral part of the exhibition. This increased the importance of typography and its composition within the exhibition hall. It can be said that typography has disappeared from the information boards and has become an integral part of the designed room and space. No written information is accidental and the way of presenting it is always well thought out. Apart from multimedia devices, which are usually the basic information carrier with graphics and typography adapted to the exhibition design, typography can be hidden in photographs, posters or books, in more realistic interiors. It can constitute a significant or even a leading compositional element in more abstractly treated spaces, or blend into the atmosphere of a symbolic space. Typography is then noticeable, but it is not the dominant element. The selection of the appropriate typeface, size or color, and the composition of all those elements on the wall becomes an important design issue (Figure 10. Oskar Schindler's Enamel Factory Museum in Krakow, the Home Army Museum in Krakow, the Pan Tadeusz Museum in Wrocław)



Fig. 8



Fig. 9

An important element in the exhibition design is also involving the visitor in interaction with the exhibition. This can be achieved with simple elements such as magnetic boards, drawing places for children, or, for example, magnifying glasses. Most of all, however, multimedia is used for this purpose. It is thanks to technologies



Fig. 10

such as Augmented Reality (AR)⁸ that we can see things that do not exist physically in the surrounding space of the exhibition by applying the created graphics to the image that we see, through the camera lens on our phone or tablet in real time. The best example is the recently very popular Pokémon game that uses AR as the base of its operation. On the other hand, Virtual Reality allows you, after putting on goggles, to stay in a non-existent, artificially created space. Thanks to such measures, we can move into the world that is distant in time and space. We also have 3D Mapping at our disposal. It is the superimposition of moving images from projectors on solid structures such as building walls or steam, completely changing the visual perception of this structure, introducing a new shape and movement on the projected surface. The projection is very often accompanied by sound, which deepens the visual perception of the arrangement. A great example is the “Tokyo” exhibition at the Museum of Japanese Culture in Krakow, where with the help of geometric shapes, fragments of photos, abstract colors and music mixed with street sounds, a sensory image of the city was created, which you cannot see but feel. Thanks to sensory floors and motion sensors, we can track changes caused by our movement or learn through playing with shifting shapes on the floor. One of the most interesting applications of this technology are virtual books where you can flip through physically non-existent pages full of information from the fields presented at the exhibition with the movement of your hand. Such solutions can be found in the Pan Tadeusz Museum in Wrocław or Polin in Warsaw. Thanks to applications for touch screens, we can expand our knowledge on chosen topics from carefully selected material prepared by top specialists in the fields. The screens can have any dimension and shape (they can be square, rectangular or round). They can be easily integrated into any space arrangement. In addition to presenting the numerous

8 J. Andrzejczak, R. Szrajber “ARchive – new way of presenting and interaction with objects of cultural heritage in the museum space”, *Multimedia and Internet Systems: New Solutions*, 2012



Fig. 11

documents related to the presented exhibits, they are also used to show photos, sometimes in the form of thematic galleries and sometimes virtual walks thanks to the 360 ° panorama of photos. Touch screens are also used for fun. Through thematically matched games, they can introduce children to the most important content of the exhibition. Because most museums cannot be a living history museum, thanks to holographic displays we have a chance to meet characters from other eras right there at the museum hall. They are very realistic and three-dimensional. On the one hand, we know that they are not a real person; on the other hand, we are under the illusion of a real encounter.

Mobile applications guide us around exhibitions, as in the case of Hydropolis Museum. The variety of available solutions allows the designer to select the appropriate multimedia elements in order to familiarize the visitor with the subject of the presented exhibition in the best and most interesting way. (Figure 11. Gingerbread Museum in Toruń, Silesian Museum in Katowice, Museum of Silesian Uprisings)

One of the most important elements of a contemporary exhibition is its lighting. Most of the exhibitions with multimedia elements are usually plunged into darkness or twilight. This is probably due to the concern that the content of the screens is always clearly visible and exposed against the background of dark walls. It is also a way to create an atmosphere of mystery and peace. Exhibits emerging from the darkness, illuminated with colorful light, will attract the attention of the visitor, as it happens for instance in the Archaeological Museum in Krakow. One can also find exhibitions with very carefully arranged lighting in a color emphasizing the character of the room and kept in bright colors, for instance, in the Emigration Museum. The variety of types of lighting colors gives many opportunities to emphasize selected elements of the exhibition or create the intended visual experience. This is what happens at the completely abstract Tokyo exhibition at the Museum of Japanese Culture. (Figure 12. Archaeological Museum in Krakow, Museum of Japanese Culture in Krakow)

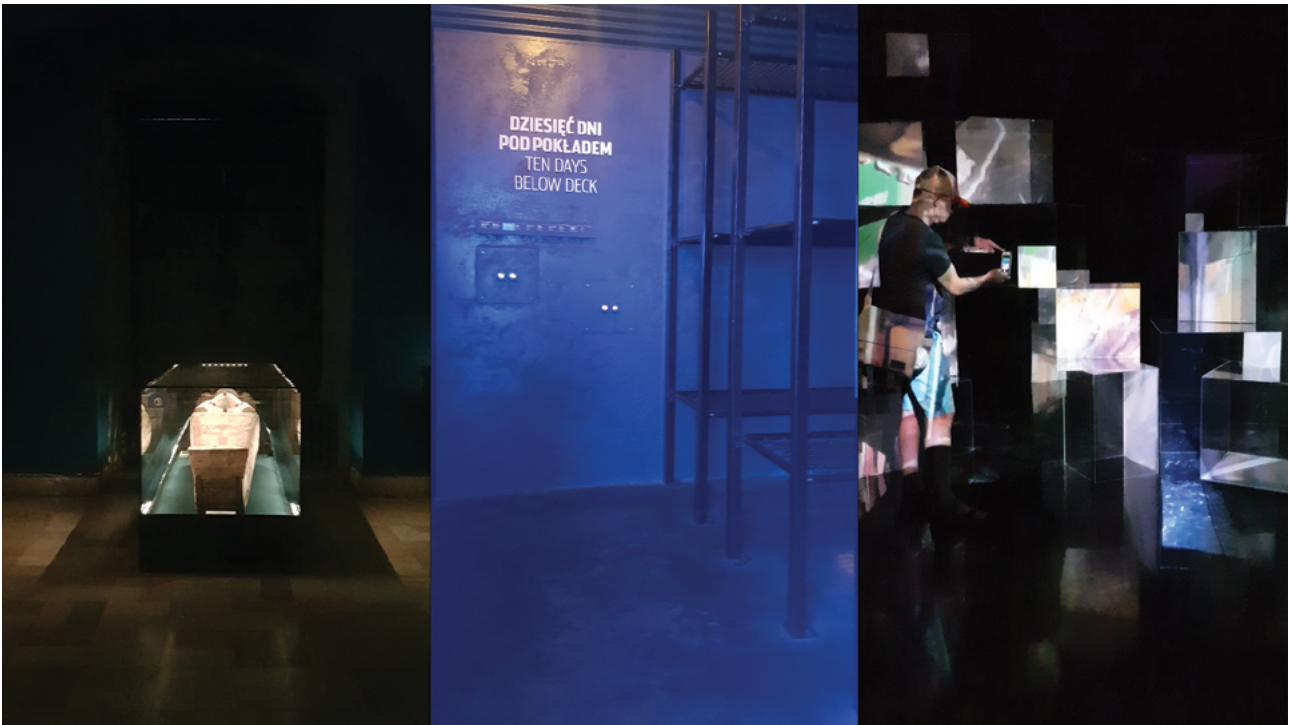


Fig. 12

Sound enters the exhibition space rarely, but more and more boldly. Sometimes these are sounds emitted somewhere in an undefined space and emphasizing the scene depicted in a given part of the exhibition, for instance the sound of the market on a market day, the roar of a burning cottage or the music played on the displayed instrument. Loudspeakers emitting point sound audible only in a limited space are used more often to provide the visitor, if he stands within them, with additional information. It is also worth mentioning the audio-guides which show us around through the use of the announcer's voice, help us to select the content that interests us and do not let us get lost at the exhibition.

They make it easier for the visually impaired to get to know the exhibition and eliminate the need to arrange the space for Braille inscriptions. So they are desirable from the point of view of the visitor. Various solutions are used in museums. In some, for example, as in the Museum of the Second World War in Gdańsk, they are an obligatory element, where visiting the exhibition without such a guide would be very difficult, or they are the element of the choice of the visitor who can view the exhibition by reading only the descriptions. In many places, due to the complicated GDPR procedures, audio guides are issued only at the explicit request of the visitor. Such situation takes place at the Home Army Museum in Krakow, where audio guides should be obligatory due to the very extensive and complicated subject matter of the exhibition, but they are not. There are very different techniques of using audio guides. Some of them are self-releasing in designated areas of the exhibition. Others are activated by approaching a point appropriately marked on the wall or such where by pressing large and well-marked buttons the appropriate fragment for listening is selected. (Emigration Museum in Gdynia, Polin Museum in Warsaw)⁹ Audioguides provide a sense of company to the visitor, but do not affect the exhibition design itself. They are a complementary element. (Fig 13. Museum under

⁹ B. Wawrzecka "Spotkanie z wystawami" konferencja re-FORMA 2019, Wrocław



Fig. 13

the market square in Kraków, Emigration Museum in Gdynia, Maritime Museum in Gdańsk)

Finally, it is worth mentioning the fragrance, which can be a deliberately used element of the exhibition. The smell of cookies or spices in the Gingerbread Museum or green moss in Hydropolis is a conscious effect on our sense of smell, making it easier to remember the presented content.

CONCLUSION

The modern way of designing exhibitions is a complex process, in which one has to reconcile the function of presenting the museums' collections with the constantly growing expectations of the visitor. At the same time, designers have at their disposal a huge range of plastic and technical tools that they can use. The final appearance of the exhibition and its reception by the audience depend only on their design decisions (apart from the financial abilities of the institution). Regardless of the subject matter presented, the size of the exhibition space, the number of exhibits and the possibility of using multimedia devices, the designer must have an idea for the visual whole of the exhibition and balance all available artistic and technical elements so that the majority of visitors leave the exhibition with a smile and the belief that they have learned something interesting, rather than with a headache and fatigue from the excess of elements that attract attention.

There are no ready-made solutions, but when it comes to design and technology the possibilities are endless.

LIST OF MUSEUMS WHOSE EXHIBITIONS SERVED AS THE BASIS FOR WRITING THIS ARTICLE

Archaeological Museum in Kraków, Museum of the Home Army in Kraków, Rynek Underground Museum in Kraków, Ethnographic Museum in Kraków, Oskar Schindler's Enamel Factory Museum in Kraków, Museum of Japanese Art, Technology and Culture in Kraków, Stained Glass Museum

and Workshop in Kraków, Emigration Museum in Gdynia, the Maritime Museum in Gdańsk, the Maritime Culture Center in Gdańsk, the Archaeological and Ethnographic Museum in Łódź, the Textile Museum in Łódź, the Ethnographic Museum in Słupsk, the Ethnographic Museum in Toruń, the Tony Halik in Toruń, the Museum of Toruń gingerbread in Toruń, the Ethnographic Museum in Wrocław, the Hydropolis Museum in Wrocław, the Moviegate Museum in Wrocław, the Pan Tadeusz Museum in Wrocław, the Ethnographic Museum in Warsaw, the Geological Museum in Warsaw, the Polin Museum in Warsaw, the Museum Dollhouses in Warsaw, the National Bank of Poland Museum in Warsaw, the Museum of Life in the People's Republic of Poland in Warsaw, the Karkonosze Museum in Jelenia Góra, the Silesian Uprisings Museum, and the Silesian Museum in Katowice.

ILLUSTRATIONS

(all photographs were done by the author):

(све фотографије је урадио аутор):

1. *Traditional exhibition.* the Geological Museum in Warsaw, the Ethnographic Museum in Słupsk, the Ethnographic Museum in Krakow.
Традиционална изложба. Геолошки музеј у Варшави, Етнографски музеј у Слупску, Етнографски музеј у Кракову.
2. *Modern – traditional exhibition.* The Archaeological and Ethnographic Museum in Łódź.
Модерно-традиционална изложба. Археолошки и етнографски музеј у Лођу.
3. *Transitional exhibition (traditional exhibit with recently incorporated multimedia).* Ethnographic Museum in Toruń and the Karkonosze Museum in Jelenia Góra.
Прелазна изложба (традиционална изложба са недавно уграђеном мултимедијом). Етнографски музеј у Торуну и Музеј Крконоша у Јелењој Гори.
4. *Multimedia exhibition.* the Museum of the National Bank of Poland in Warsaw, Museum of Pan Tadeusz in Wrocław. *Multimedia exhibition, without the old traditional artefacts.* Hydropolis in Wrocław.
Мултимедијална изложба. музеј Народне банке Пољске у Варшави, Музеј Пана Тадеуша у Вроцлаву. *Мултимедијална изложба, без старих традиционалних артефаката.* Хидрополис у Вроцлаву.
5. *Visually rich multimedia exhibition,* Polin Museum in Warsaw.
Визуелно бојата мултимедијална изложба, Полин музеј у Варшави.
6. *Current approach to the presentation of the historical items: removing barriers between the visitor and the exhibit.* Archaeological and Ethnographic Museum in Łódź, Textile Museum in Łódź.
Актуелни приступ представљању историјских предмета: уклањање баријера између посетиоца и изложбе. Археолошки и етнографски музеј у Лођу, Музеј текстила у Лођу.
7. *Multimedia exhibition, the approach to the presentation of the historical items: blending in the scenery.* Oskar Schindler's Enamel Factory Museum in Krakow.
Мултимедијална изложба, приступ представљању историјских предмета: спајање у сценографији. Музеј фабрике емајла Оскара Шиндлера у Кракову.
8. *Multimedia exhibition, dealing with scientific or technical topics.* Hydropolis Museum in Wrocław.
Мултимедијална изложба, која се бави научним или техничким темама. Музеј Хидрополис у Вроцлаву.
9. *Types of exhibition's design.* Realistic: Silesian Museum, symbolic: Toni Halik Museum in Toruń, abstract: Emigration Museum in Gdynia.
Врсте дизајна изложбе. Реалистични: Шлески музеј, симболични: Музеј Тонија Халика у Торуну, апстрактни: Музеј емиграције у Гдњини.
10. *Typography.* Oskar Schindler's Enamel Factory Museum in Krakow, the Home Army Museum in Krakow, the Pan Tadeusz Museum in Wrocław.
Типографија. Музеј фабрике емајла Оскара Шиндлера у Кракову, Музеј Домовинске војске у Кракову, Музеј Пан Тадеуш у Вроцлаву.
11. *Multimedia.* Gingerbread Museum in Toruń, Silesian Museum in Katowice, Museum of Silesian Uprisings.
Мултимедија. Музеј медањака у Торуну, Шлески музеј у Катовицама, Музеј шлеских устанака.
12. *Lighting.* Archaeological Museum in Krakow, Museum of Japanese Culture in Krakow.
Светло. Археолошки музеј у Кракову, Музеј јапанске културе у Кракову.
13. *Sound.* Museum under the market square in Kraków, Emigration Museum in Gdynia, Maritime Museum in Gdańsk.
Звук. Музеј испод пијачног трга у Кракову, Музеј емиграције у Гдњини, Поморски музеј у Гдањску.

REFERENCES

- Wawrzecka, B.** "Zastosowanie nowoczesnych środków przekazu i najnowszej technologii cyfrowej w projektowaniu wystaw muzealnych, stałych i czasowych", re-FORMA Conference, Wrocław, 2019
- Wawrzecka, B.** "Spotkania z wystawami. Przegląd tendencji i kierunków rozwoju w muzealnictwie w Polsce ze szczególnym uwzględnieniem multimediów", re-FORMA Conference, Wrocław, 2020
- Wawrzecka, B.** "Inner space of temporary exhibitions. Designing temporary exhibitions in historic interiors, unsuitable for exhibition purposes", 36/2019 *Zeszyty Artystyczne*, 2019
- Andrzejczak, J., Szrajber, R.** "ARhive – new way of presenting and interaction with objects of cultural heritage in the museum space", *Multimedia and Internet Systems: New Solutions*, 2012
- Derwisz, J.** "Nowe muzeum w mieście. Zmiany w kształtowaniu funkcjonalno-przestrzennym architektury współczesnych obiektów muzealnych", *Środowisko Mieszkalniowe 30/2020, Architektura XXI Wieku*, 2020

Беата ВАВЖЕЦКА

САВРЕМЕНЕ МУЗЕЈСКЕ ИЗЛОЖБЕ – ОДРЖИВОСТ МУЛТИМЕДИЈАЛНОГ И ГРАФИЧКОГ ДИЗАЈНА

Захваљујући расположивости интернета и мобилних телефона, постали смо зависни од доступности информација. Да би испунили ова очекивања, музеји и изложбе које се у њима организују полако постају информативни центри и места опуштања где се може доживети уметност и култура и учити историја на занимљив и све интерактивнији начин. Међутим, креирање нових поставки је дуготрајан и веома скуп процес. Не може сваки музеј себи да приушти такве промене. Стога, тренутно, музеји у Пољској нуде различите врсте поставки, од најстаријих традиционалних, преко оних у различитим фазама трансформације, до изложби у којима преовлађују мултимедији и најновија техничка решења. У погледу дизајна, изложбе се могу поделити у четири групе: традиционалне, прелазне, модерно-традиционалне и мултимедијалне. Свака од ових група има другачији приступ улози и начину представљања експоната, начину уређења простора и употреби мултимедија. Начин и опсег деловања, као и расположиви алати за дизајн, такође су се динамично мењали последњих година, захваљујући стално развијаним новим технологијама. Дизајнер тренутно има на располагању такве алате као што су: мултимедијални (VR, AR) рачунари, штампач великог формата, сценографија, типографија, боја у било којој замисливој нијанси, звук или могућност промене облика изложбеног простора. Захваљујући овим алатима, изложба делује на сва чула примаоца. Са повећањем сложености дизајна, улога дизајнера постаје све важнија. Коначан изглед изложбе и њена рецепција међу публиком зависе искључиво од дизајнерских решења (као и од финансијских могућности установе). Дизајнер мора да направи концепт визуелне целине изложбе и да у равнотежи све доступне уметничке и техничке елементе како би постигао најбоље резултате.

Кључне речи: одрживост, изложбе, мултимедији, дизајн