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Collections Emerge from the Shadows: Exhibition Design, or a Multi-sensory Approach to Reinvesting in Collections

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Exhibition Design, or a Multi-sensory Approach to Reinvesting in Collections by Viviana Gobbato





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ver the past 30 years, a number of studies have highlighted a commercial (Bayart *et al.* 1993) and event-based shift in museums (Mairesse 2002), which are often criticised for prioritising event management over investing in their collections—a phenomenon also fuelled by the fear that exhibiting collections harms their conservation (Gob *et al.* 2021, p. 71). Museums have thus developed a system of temporary exhibitions that seems to make permanent collections 'feel outdated' (Jacobi 2016, p. 31; 2017). Today's blockbuster exhibitions are characterised in particular by a

different, grandiose exhibition design that aims to create 'public surprise and excitement' (Drouguet 2005, p. 66), and curatorial and artistic exhibition design approaches are sometimes even considered works of art in their own right (Glicenstein 2009). Blockbuster exhibitions rely on immersive experiences of all kinds (Barker 1999; Jurčišinová et al. 2022), a reality criticised by some researchers for its excessive exuberance (Kavanagh 2000, p. 5), or for being reminiscent of theme parks (Chaumier 2011; Schwend 2012). The environmental consequences of such exhibitions have also been called into question, notably by ICOM France. Recently, Simode (2019) proposed, for example, favouring 'local loans' or recycling 'exhibition design elements' to offset museums' high carbon footprint. In short, in light of these studies, museums seem to be in the midst of an era characterised by blockbuster programming that allows sensational temporary exhibitions to overshadow permanent collections. However, in recent years, researchers have observed the rise of a new phenomenon that tempers such predictions. Several studies point to a growing interest in permanent art exhibitions. Bénichou (2013) examined artists' investments in and contributions to contemporary art museology, both in the constitution and interpretation of collections and archives. Fraser and Dubé-Moreau (2016) studied the practice of revitalising collections through performances, one that has also been applied to historical collections (Fraser 2016). In 2018, the journal *Muséologies* dedicated a special issue to practices such as carte blanche artist projects, artist residencies and travelling collections as ways for museums to reinvest in their permanent exhibitions (see, for example, Chevalier 2018; Earle 2018; Fraser 2018). In addition, the CIÉCO research group was recently founded in Quebec to study strategies for reviving permanent art collections, which have been challenged throughout the last century by the growing and increasingly media-driven prestige of temporary exhibitions.2 These studies highlight the opportunity seized by art museums to re-engage with their collections in the face of the event-driven imperative of temporary exhibitions and related practices.

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These trends have led to another phenomenon taking place in art museums today: the enhancement of collections through an exhibition design approach with a strong aesthetic and sensory impact. The Louvre-Lens (France 2012), the Twist Museum (Norway 2019) and the Pinacoteca Nazionale di Cagliari (Italy 2020) are just a few well-known examples. What are the intentions behind, reasons for and impacts of these new exhibition design strategies on the display of art collections? This article hypothesises that these practices are also part of the emerging trend of reinvesting in collections as described above. To explore this question, the article draws on an analysis of three contemporary cases of museums that have undergone recent renovations in 2018: the Nationalmuseum in Stockholm, the Islamic Gallery at the British Museum in London, and the twin 'Leonardo' and 'Raphael and Michelangelo' rooms at the Uffizi Gallery in Florence. These three museums were chosen because of the diversity of their collections, the different scopes of their renovations (involving exhibitions, departments and/or galleries), as well as the exhibition design techniques used (colour, light, décor, volume and/or spacing).

In order to better understand this phenomenon, it is necessary to clarify some of the terms used in this article. 'Exhibition design' denotes 'the whole range of techniques used in the design of a space' (Desvallées *et al.* 2010, p. 54). It is characterised by 'architecture and interior design, sound and light design, scenography, communication and interactivity, photography, video and graphics, audio, electronic and digital media' (Basso Peressut 2022, p. 581). It also involves the resulting ambiance in exhibitions, that consists, according to Desvallées, in 'the very general character in which an exhibition is perceived, encompassing volumes as well as light, sounds or scents' (2022, p. 65). Finally, this article will discuss the concept of an exhibition narrative as a spatial translation of the collection's message (Desvallées *et al.*, 2022; p. 190).



Fig. 1. Friedrich August Stüler, National Museum. Longitudinal section of 'Hall No III u IV' and wing section, Watercolour and pencil drawing on grey cardboard. (2017). © Anna Danielsson/Nationalmuseum

Methodological tools for studying exhibition spaces

he methodology used to analyse the three renovations was based on an experimental approach to the study of exhibition space. This method was more specifically conceived and applied in the context of the author's Doctoral research on museographic lighting strategies for collections in 30 European art museums. This method was then extended to exhibition design in general during courses the author taught at the Université Sorbonne Nouvelle on museographic and expographic criticism. It is also in line with the theoretical analysis of space formulated by Gharsallah-Hizem (2008), Tardy (2012), Chaumier (2012) and Tzortzi (2015). These four theoretical models are grounded in an understanding of the conceptual intention and underlying structure that composes a space in relation to the organisation of its expression, and in the context of a given museum and exhibition. The methodology also aligns more broadly with the museology research methods recently formulated by Mairesse and Van Geert (2021).

he author's method of collecting and analysing exhibition design strategies involved several stages. First, a general documentation of the museum was established in order to determine its history and context, including the origin, evolutions and environment of the site. Then, the author identified the specific space to be studied, such as a room, gallery or entire exhibition. The objective was then to describe the exhibition narrative, i.e., the theme, nature of the objects exhibited, their sensory characteristics and the configuration of the space in the exhibition. This was followed by a description of its design: that of the fixed walls and partitions, volumes, colours of the picture rails and coverings, surface materials, decorations and their historical periods, replicas, hierarchy of presentation, hanging, arrangement of the exhibition and artworks, natural and artificial lighting system, display cases and furniture, etc. The description also included a classification of the ambiance and its conceptual intentions, whether immersive, intimate, functional, theatrical, spectacular, playful, dreamlike, romantic, poetic or other. Samples were taken to supplement this information, including photographs, designers' notes

on their intentions, maps, diagrams, sketches and archival and bibliographic references.

ogether, these elements form a museographic examination, i.e., a developed record that serve as documentary support for the analysis. The discussion is carried out in comparison with the museum complex as a whole, its history, and other museological contexts and theories. It might also be supplemented by interviews with those responsible for the museum or project concerned. In the research presented in this article, for example, the author conducted three interviews with the directors of the Nationalmuseum in Stockholm, the British Museum in London and the Uffizi Gallery in Florence between August 2020 and September 2021. The interviews focused specifically on the lighting in these museums, but they also touched on a number of issues concerning the exhibition design renovations explored in this article.

How exhibition design enhances collections

The author's research on the collections of the three aforementioned museums led to an identification of some of the issues inherent in the basic components of exhibition design: colour, light, décor, volume and spacing. Before discussing these issues, these elements should be more broadly recontextualised in relation to museological theories concerning exhibition design and trends. More specifically, the observed phenomenon should be placed within the context of studies that examine exhibition design and its pedagogical function through multi-sensory approaches.

ehmbruck's work (1974) stressed the importance of considering lighting in museography, owing to its phycological and physiological impact on visitors' experiences. This approach to sensory elements such as light finds an interesting echo in the work of Eisner and Dobbs (1988), who evoked the concept of silent pedagogy with regard to exhibition design. Falk and Dierking (1992)

also acknowledged its implicit influence. Both museologists successively identified space, form, volume and colour as the basic elements for creating 'a place for learning' (Falk et al. 2000, p. 113). Staging has also been considered a way of communicating the exhibition narrative, notably by Noordegraaf (2004), Gharsallah-Hizem (2008) and Tzortzi (2015). The notion of ambiance has also emerged as a technique for investing in and mediating artworks. Böhme (2020), for example, questioned the aesthetics of ambiance and their contribution to the understanding of an artwork. Today, methods such as REMIND (Schmitt 2013) are used to evaluate these multi-sensory contributions to the construction of meaning for visitorssuch as scents (Castel 2018) and lighting (Gobbato et al. 2020). Exhibition design is thus part of a shift in multisensory and sensory mediations that seek to stimulate visitors' understanding through a physical approach (Verhaegen 2008).

his research accordingly explores new forms of museology geared towards the visitor's multi-sensory involvement, such as experiential museology (Chaumier 2018), emotional museology (Varutti 2020) and sensory museology (Lebat 2022). These theories fall within the framework of a pedagogy of emotion, i.e., 'certain contemporary exhibition practices [that] provoke multi-sensory encounters between the subject and the object of the gaze by means of the use of a range of tools in order to generate sensory experiences' (Witcomb 2015, p. 322). In light of these museological trends and this experiential shift, this article discusses contemporary exhibition design practices studied within three institutions and considers strategies for enhancing collections as techniques that involve visitors' bodies, senses and sensory perception.

Colour: structuring a new path

olour emerges as one of the first elements that distinguishes these exhibition design practices. An interesting use of colour can be seen in the transformation of the Nationalmuseum in Stockholm. Between 2012 and 2018, the museum underwent architectural and museographic renovations and restoration by Wingårdhs Architects to restore its original 19th-century architecture. In particular, the colours of the walls were restored to the palette chosen by the museum's designer, Friedrich August Stüler, but given a contemporary interpretation (Kåberg 2018). To understand this, some historical elements of the museum's architecture must be mentioned. German architect Stüler, who had already designed the Neues Museum in Berlin, was commissioned to design the Nationalmuseum in the 1840s. In his drawings, the architect included painted decorative elements for the museum's exhibition rooms (Fig. 1). These decorations emphasised saturated colours such as pink, red, green, blue and yellow. However, with the exception of some decorative paintings, the colours of his design were not respected, as darker shades, which were more in fashion at the time, were preferred. In the 20th century, the walls were painted mostly in light colours to create a 'white cube'

atmosphere. The recent renovations, on the other hand, aligned partly with a desire to respect the initial museographic plan by proposing a contemporary reinterpretation of the space.

he use of saturated colour emerges as an essential element in this strategy. This time, the colours of Stüler's decorative paintings were used for all of the picture rails, and were re-interpreted by ramping up the saturation. As a museum official noted during our meeting, this all-over approach 'created a more dynamic and varied experience'. The galleries and cabinets are all characterised by alternating colours of red, pink, green, yellow and blue (Fig. 2). The visitor thus discovers the spaces and collections in a series of ambiances defined by multiple colours. As another curator explained during our survey:

Choosing colours that contrast with the object you are showing enhance it and do not make it disappear into the wall. In this sense, the choice of each colour was the result of careful consideration: the palette was chosen to create the best aesthetic to enhance the objects and artworks. The idea was to draw inspiration from the way the colours were used historically in the galleries and establish a link with the objects displayed in the rooms.

These bright and bold colours help to set the collections apart from the background through contrast, structure the visit, grab the visitor's attention and bring the architect's original concept to life. The approach places the renovations in unique perspective, highlighting both history and aesthetics. This project was therefore born out of the intention to offer visitors a remarkable experience that differs from other traditional permanent exhibitions. It also reflects a strategy of enhancing the historical architecture according to the wishes of its designer.

owever, friction with certain stake-holders revealed initial difficulties in achieving support for the proposal, and for several reasons. As the curator explained during our meeting, 'I had to do a lot of presentations to talk about light, colours and space and show examples, demonstrations and impressions of art and objects next to different colours and samples'. In a way, these bright colours were as disturbing as they were enchanting. For one, they expanded the view from the objects to the space around it, breaking with museographic tradition and exposing the museum to critique.



Fig. 2. Sequential view of the cabinets in the collections, characterised by bright, saturated colours, such as green, pink, yellow and red. Nationalmuseum, Stockholm (2018). © Anna Danielsson/Nationalmuseum

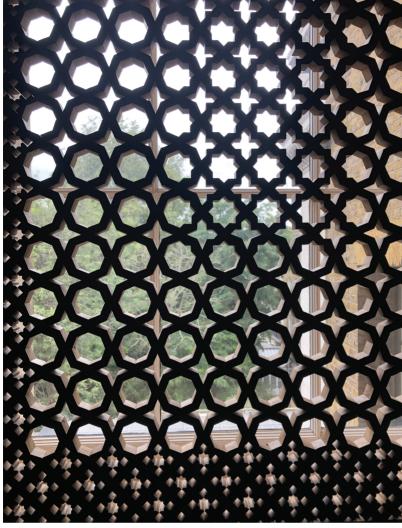


Fig. 3. Detail of the *mashrabiya* made by designer Ahmad Angawi. Room 42, British Museum Islamic Gallery, Albukhary Foundation Gallery (2021). © Viviana Gobbato

To bring this project to fruition also entailed a long-term approach, unlike one applied to temporary exhibitions. In short, the renovations represented a challenge for the institution, which nevertheless decided to take them on.

Le Corbusier and architectural polychromy

his strategic choice harks back to the colour theory developed by Charles-Édouard Jeanneret, known as Le Corbusier. Le Corbusier considered architectural polychromy as an element of architectural experience and understanding. For Le Corbusier, colour, in combination with light exposure, could conceal or highlight volumes and structure a space (Boesiger et al. 1974, p. 60; Rüegg 1997). This reflection had already emerged in his work on painting, where he noted early on that 'colours must be combined and applied to a form according to conditions and situations that are by no means arbitrary' (Ozenfant et al. 1925, p. 166). Le Corbusier used colour, for example, in the Galerie de Peintures at the Maison La Roche (1923 and 1925), an architectural work co-designed with Pierre Jeanneret (Sbriglio 1996), where it was intended to awaken the visitor to an observation of the artworks.

olychromy therefore asserts itself as a powerful tool for the construction of meaning. However, since the 18th century, the use of colour in permanent exhibitions has mainly been a response to trends in atmospheric tastes. For example, the galleries in Mannheim, Germany were covered with colourful fabrics during the 18th century (Hurley-Griener, 2010; pp. 209-210). In the 19th century, art exhibition spaces were characterised by tapestries and paintings in strong, dark colours, such as Pompeian red (Caygill et al. 1999). It was only at the turn of the 20th century that a maior shift occurred from this tradition to a search for environmental neutrality. According to Glicenstein (2009), the modern, stripped-down approach can

be traced back to the aesthetics of the Vienna Secession building designed by Joseph-Maria Olbrich in 1899. The exhibition of modern and then contemporary art progressively pursued a process of aesthetic 'sterilisation', which in the 1960s evolved towards the principle of the 'white cube' (O'Doherty 1986). These successive developments gave rise to a tradition around the use of colour in exhibition design which still characterises a large number of permanent exhibitions. Spaces for ancient Western collections feature pronounced and saturated tones, while spaces for modern and contemporary art collections are distinguished by white cube, black-box or light grey tones, depending on the type of artworks they display. The temporary exhibition has become an arena for wider experimentation with colour, which has perhaps also contributed to its success.

he example of the Nationalmuseum in Stockholm thus offers a reflection on the modern and revolutionary use of colour in the contemporary international museum scene. It shows that, in a simple but powerful gesture, colour can instantly structure the visual setting in which a collection is exhibited. Its conceptual intention lies in a renewed design and reinvigorated exhibition space, reflecting a will to showcase the artworks as much as the architecture, as well as create a visitor-centred experiential perspective. With 'neutral' tones such as white, a wall can stand out more through the effect of luminance.3 In contrast, from the polychromic perspective of Le Corbusier, monochromy or polychromy in saturated tones and less conventional hues can bring about a new perception of the space and consequently of the collections. This strategy should perhaps be further explored and studied in other contexts. Indeed, through an aesthetic (though technically relatively simple) shock, it seems to create a unique dynamic within the spaces of a permanent exhibition—and thus a new relationship with the public.

Lighting and décor: designing a gallery

écor and lighting also emerge as major components of the exhibition design strategy discussed here. They evidence specific contexts in implicit and subtle ways. The British Museum's Islamic Gallery is an example of the skilful use of such principles. Renovated between 2015 and 2018, the Albukhary Foundation Gallery exhibits a collection of objects, works of art, books and silver from West Africa to Southeast Asia and extending from 1500 to the present day. The renovation project was entrusted to Stanton Williams and the lighting to the Arup Group. The designers' intention was to adopt an aesthetic and sensory approach to enhance and reinterpret the gallery's collections.

n particular, natural light is harnessed and manipulated to evoke an architectural lighting environment specific to the regions from which the collections originate. The project was described as follows by a museum official during our meeting: 'With light playing an essential role in Islamic architecture, evoking a sense of the spiritual, Stanton Williams' design seeks to capture this spirit by focusing on the atmospheric manipulation of natural light entering the gallery.4 In addition, five side windows were covered with walnut wood mashrabiya, or 'Mangour window screens', made by artist and designer Ahmad Angawi.5 These partitions both conceal and reveal the external environment, performing the same function as in the traditional architecture of the regions from which the objects on display originate (Fig. 3). The installations provide a soft, dim atmosphere. As the museum official explained, 'We want the visitor to be able to appreciate the daylight and not just rely on artificial lighting. We want them to connect with the outside space'. The aim was also to make artefacts stand out. 'For example, there is a tombstone with calligraphy on the front. We had to find a balance with the lighting in front of it to bring out some of the reliefs.'

The desire to create a coherent whole is also reflected in the display of each object. The museum involved artists, creators and designers, specially commissioning a work from Idris Khan (OBE) as well as several works of art from students at the Prince's Foundation School of Traditional Arts. Their artworks are displayed in the gallery alongside the exhibits to evoke and interpret the cultural,

practical and functional context of the collections. At the same time, the gallery has adopted a logic of revitalising the collection by regularly rotating its pieces. These actions are part of an overall strategy of reinvesting in the collections, where the implicit and explicit contextual dimension is reflected in the ambiance, sensory elements, aesthetics, décor and participation of artists. What matters most is the connection between the visitor and the artworks.

his example shows how a gallery can reconnect with its collections by combining architecture, design and art. However, as with colour, these principles are not entirely new. In the 19th century, panoramas, dioramas, period rooms, streetscapes and ecosystems (zoological and botanical, in vitro) emerged as exhibition environments that specifically evoked the context of the collections' provenance. These typologies belong to a form of analogical museography, in Monpetit's sense: 'A process that takes after illustration as an image that accompanies another means of communication into which it is inserted' (1996, p. 56). Though essentially passé in art museums, such exhibition design typologies (notably period rooms) still characterise the staging of scientific collections. They are now more generally used in temporary art exhibitions to evoke the context of an artist's creative process, highlight the subjects represented in the artwork, or create an aesthetic shock. Lighting, on the other hand, creates an ambiance that envelops the visitor. It has also contributed to the very affirmation of the museum and its identity throughout history (Gobbato 2021b).

inally, these approaches move away from the belief that art museums should downplay their permanent exhibition design so as not to distract attention from their collections; recall the warning against the aestheticising effects of lighting that emerged at the Madrid Conference on Museology in 1934 (Stein 1935, p. 127). Today, lighting is recognised as having the capacity to contextualise, interpret and enhance artworks (Schielke 2020). These approaches therefore call for an exhibition design strategy based on a sensory and multi-sensory mediation of collections. Such a logic acknowledges, as Varutti reminds us, that 'emotions can be the basis of two-way communication between the museum

and visitors, but also, in return, between visitors and the museum, creating new opportunities for exchange and raising new questions' (2020, p. 175).

t is thus a matter of exploring the pedagogy of emotions, in Witcomb's sense (2015, p. 322), which uses reception and sensory experience to elicit emotion. This approach can also participate in the embodied cognition of visitors by stimulating sensory and physical capacities to contribute to the construction of meaning (Thompson et al. 2001; Shapiro 2014; Di Paolo et al. 2014). Furthermore, the contributions of exhibition design to embodied cognition are beginning to be studied and discussed in the museum, particularly in relation to lighting (Gobbato 2021a). These practices and strategies should be further investigated and developed beyond temporary exhibitions. They reflect new trends in the way museums are currently displaying and investing in their collections.

The case of the British Museum's Islamic Gallery thus offers an interesting reflection on the re-use of traditional exhibition design devices, such as lighting and décor, through unique reappropriation and commissions from contemporary artists. The design of an ambiance or atmosphere particularly allows the collection to be contextualised, which perhaps also raises the question of an anthropological approach to identifying references and investigating uses in other collections and museum contexts. According to Böhme (2020), these observations show that an ambiance can be designed and studied to influence the perception and embodied cognition of visitors—according to the narrative discourse of the exhibition and the intention of its curators. In this sense, the permanent presence of a museographer with a scientific background in museums and using a multi-sensory, inventive approach could provide expertise on the spatialisation of permanent art collections, according to their history and specific characteristics.



Fig. 4. View of the Leonardo room, Uffizi Gallery (2018).

© Uffizi Gallery. Used with permission from the Ministry of Culture. No reproduction/duplication permitted.



Fig. 5. View of the Leonardo room, Uffizi Gallery. Verrocchio and Leonardo, *Baptism of the Christ*, c. 1475 (2018). © Uffizi Gallery. Used with permission from the Ministry of Culture. No reproduction/duplication permitted.

Volume and spacing: contemplating an artwork

longside colour, natural light and décor, the design of volumes—picture rails, pedestals, display cases and hangings-also profoundly affects the ambiance of an exhibition. The Uffizi Gallery has recently adopted such an exhibition design. Its twin 'Leonardo' and 'Raphael and Michelangelo' rooms in particular offer a contemplative design. Renovated in 2018, the Leonardo room benefits from soft, dim lighting in response to the desire to recreate a church atmosphere, as the paintings on display, Annunciation (1472), The Baptism of Christ (1475) and Adoration of the Magi (1492), were intended for sacred spaces. The room is also equipped with projectors with very narrow beams (measuring six degrees) of two colour temperatures⁶ (3,000 K and 4,000 K), chosen in aesthetic accordance with the warmer or cooler tones of the artworks on display (Figs. 4 and 5). The Raphael and Michelangelo room is based on the same principles. Its overall lighting is, however, more intense, as the artworks were intended to be viewed in bright, daytime environments, such as palaces. As one museum curator explained during our meeting, 'The Leonardo room is much more dramatic. The light makes sense because these are church paintings. In the Raphael and Michelangelo room, being in daylight, you see more of the room because these paintings were meant to be seen in daylight environments, not in churches'. The Leonardo room also received a special paint treatment, with the paint applied using the a spatola technique traditionally applied in churches from the same period. Uffizi Gallery Director Eike Schmidt said that the layout of the room was designed 'to allow a slow, meditative kind of visit.8 The designers' intention was therefore to create a multi-sensory, meditative experience through the choice of a calculated exhibition design. The spacing of the artworks, empty volumes, effect of proximity provided by the volume of the display cases, subdued lighting, the accentuated and tinted lighting and the low hangings at eye level all create a sense of spatial, physical and aesthetic proximity. The elements used in the design are intended to implicitly evoke the lighting conditions in which the artworks were originally displayed and facilitate contemporary reception by bringing the artworks closer to the viewer to stimulate attentive viewing and contemplation.

his design is ultimately reminiscent of a museum layout that has long characterised a traditional architectural unit of the museum: the rotunda. The Roman Pantheon ideal formed the basis of a model that has changed and influenced Western monumental architecture for centuries (Plummer 2009). The rotunda was also held up as the ideal utopian space for the first exhibitions of collections (Fabianski 1990), particularly for sculptural masterpieces. The oculus at the top was also part of a new display technique (Gobbato 2021b). The Tribuna in the Uffizi Gallery (1583), the Sala della Rotonda in the Museo Pio-Clementino (1779), the rotunda in the Altes Museum (1830), the Rothko Chapel (1971) and, more recently, the circular gallery in the Bourse de Commerce in Paris (2021) are all architectural structures inspired by the Pantheon model. The logic of the rotunda is essentially based on four principles: spacing, a darkening of the atmosphere, the accentuation of light, and a panoptic view. It is a space designed to encourage slowing down, walking around and even contemplation and meditation. Applying these principles in a contemporary museum shows a desire to offer the visitor time to contemplate the artworks, and this may perhaps be a strategy that differentiates these exhibition design practices from those used in temporary exhibitions.

he example of the rooms in the Uffizi Gallery allows us to consider space as a primary technique for signalling attachment to collections by developing a sensory interpretation and a new relationship between visitors and artworks. This logic could prove to be a powerful ally in exhibition design in other contexts as well. Designing rooms for contemplating a few artworks, taking inspiration from the rotunda, could mean placing collections in a new permanent environment. In particular, doing so might highlight the diversity of certain artworks, which are sometimes stored in reserves for a long time, or new artistic acquisitions. However, a question remains as to how this design could be adapted to the exhibiting of other permanent collections as a strategy for enhancing them, using a spatial and contemplative exhibition design, oriented towards a 'slowing down' of the museum experience.

hese few examples have demonstrated a renewed interest in displaying collections using certain exhibition design strategies after several decades marked by temporary exhibitions in museums more focussed on hosting blockbuster events. The results show the simultaneous emergence (in 2018) of a new exhibition design language for art collections based on an exhibition narrative that uses aesthetic and sensory techniques geared towards the visitor's experience and their relationship with artworks and permanent exhibitions. They aim to stimulate, excite and involve visitors and their construction of meaning through a number of spatial components such as colour, lighting, décor and volumes.

Colours create ambiance. They can consist in a palette with an aesthetic, historical or heritage function. The aesthetic function can be based, for example, on the dominant colours of the works or on creating a contrasting effect. The historical function can mobilise dominant colours to evoke the environment in which artworks were created or originally exhibited. The heritage function can evoke, for example, colours inherent to the museum's architecture. Lighting is also an ally in creating ambiance. The presence of natural light or the modelling of artificial light creates a sensory experience of its own. Lighting can evoke the original contexts of the collections on display, highlight characteristics of the artworks and participate in the construction of meaning for visitors. The colour, direction, texture, intensity and even movement of natural and artificial light contribute to synthetic effects that can considerably modify the perception of the exhibition space and its artworks. Décor also emerges as evidence of the context in which the collections originated. A few elements scattered throughout the exhibition—resulting in particular from collaborations with artists and designers—can provide clues and enrich the exhibition discourse in order to reinforce the overall narrative, stimulate interpretation and reinforce the intention. This design, aesthetic and sensorial language thus seems to be based on a few components that can be remodelled to produce other spatial expressions, ambiances and experiences suited to the specific characteristics of the collection

The elements studied in this article thus confirm the hypothesis that these practices are part of the emerging trend of reinvesting in collections. From a museological point of view, these exhibition design strategies align with the recently formulated theories of experiential museology (Chaumier 2018), emotional museology (Varutti 2020) and sensory museology (Lebat 2022). Indeed, these approaches imply the use of silent (Eisner et al. 1988) and emotional pedagogy (Witcomb 2015), which mediate the exhibition narrative through an implicit and multi-sensory influence (Falk et al. 1992, p. 2000). This mobilisation of visual, emotional and sensory interpretation devices is not new. Remember that exhibition design was considered central for many museum directors and museologists who made their mark on the history of museums and exhibitions. In the late 19th century, for example, Bode designed the layout of the Kaiser-Friedrich Museum by seeking a mode of display that linked the Renaissance collections to their original context (Bode 1891). In the 1930s, Rivière used it to purify the exhibition space with hanging and lighting techniques that came to characterise the Musée National des Arts et Traditions Populaires (Weis 1989). Museum officials are finally daring to re-use aesthetic effects by building on past experiments and the success of event-based exhibitions. However, they are also developing a new approach that takes into account the whole of the permanent exhibition, department, gallery or even cabinet. The floor, gallery or room can thus function as an exhibition design device

independent of the collection as a whole. Moreover, combined with the basic exhibition design approach described above (i.e., colour, lighting, décor and volume), rotating artworks could help to define a new view of collections that are rarely shown, or to reconnect with masterpieces. The logic behind this perspective therefore encourages a transformation of space based on the presentation of the heritage that each museum conserves.

These new exhibition design approaches thus seem to bring to life the museum of the future as imagined by Eco (2015, pp. 44-45), to make 'the visit to the museum a memorable experience truly worthy of the Stendhal syndrome'. The reflections in this article do not, however, exclude the parallel development of temporary exhibitions. They do not call for turning away from the practice, which allows for international collaboration and a circulation of collections that is of value to the public, the scientific community and the museum landscape. Rather, they reflect choices of a contextual exhibition environment (Desvallées 1991) that more broadly suggest a change in the identity of the art museum, its practices of displaying collections and its relationship to the public. From that perspective, this phenomenon should continue to be researched in the context of the emerging trend of museums reinvesting in their permanent collections.

Notes

- 1 'Les musées, acteurs crédibles du développement durable' was the title of the series of conferences organised by ICOM France in February 2022. Available at: https://www.icom-musees. fr/actualites/les-musees-acteurscredibles-du-developpement-durable [Accessed 2 March 2022].
- 2 The research team is led by professor and researcher Johanne Lamoureux, with the participation of researchers Marie Fraser and Mélanie Boucher. Available at: http://cieco.umontreal.ca/[Accessed 12 August 2022].
- 3 Luminance is a photometric quantity that describes the amount of light emitted by a surface by emission, transmission or reflection.
- 4 Remarks published online on the Stanton Williams architecture firm website.

 Available at: https://www.stantonwilliams.com/projects/the-albukhary-foundationgallery-of-the-islamic-world/
 [Accessed 2 March 2022].
- 5 See article published on the British Museum website. Available at: https://islamicworld.britishmuseum.org/makingthe-gallery/ [Accessed 2 March 2022].
- 6 The colour temperature of a light source is characterised in relation to the colour of white light. It is expressed in Kelvin (K).
- 7 See press release published on the Uffizi Gallery website: https://www.uffizi. it/news/la-nuova-sala-di-leonardo [Accessed 2 March 2022].
- 8 Ibid.

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