

Wall texts in collection exhibitions

Bastions of enlightenment and interfaces for experience

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Abstract: *Taking the wall text in art museums as point of departure, this article investigates developments in museum media and communication practices in the exhibition room. We first present findings from a recent study of types and functions of wall texts used in permanent collection exhibitions in twelve Norwegian art museums, including a national museum of art. We then examine the types and functions of wall texts being planned and designed for the collection exhibitions in a new building for this national art museum, which will open in 2020. In our analytical focus on the wall text, we unpack how perspectives on enlightenment and experience become institutionally embedded in the interface of interpretive media. The study showed small but significant changes in a national art museum's organization, a new blended approach to digital interpretive media, and expanded types of wall texts, illustrating the premise that discursive and practical tensions between enlightenment and experience are at the core of new practices emerging in museums.*

Keywords: Art museums, texts, mediatization, curation, museum history.

Historically, texts on the walls of museums' permanent exhibitions of art have created a framework of stability and enlightenment, operating within a well-known symbolic system of language and narrative (Fritsch 2011a) and withstanding change in curatorial attitudes and practices over time. Texts are an essential part of composing an art exhibition, which entails mastering a complex set of works and communicative means that are anchored in art historical theories and historical practices. The wall text endures, even as the very concept

of text has been extended and distributed as multimodal content across mobile devices, social media platforms, and immersive interactives. According to Pavement (2019), it was precisely the modal limitations of the wall text that spurred early innovation and experimentation in museums with novel media products such as gramophones and cinema. In keeping with shifting orientations toward visitors and their needs at the beginning of the twentieth century, museums began to not only collect new media artworks but used new media

forms and formats as tools to enhance exhibits. An early example is the film library established at the Museum of Modern Art (MoMA) in 1935, which led to public screenings for large audiences, and then to “using film as a method of enhancing interpretation in the gallery” (Pavement 2019:34). A more recent history of experimentation with digital media to enhance art exhibits is traced by Samis (2019), who emphasizes the interpretive potential in multimodal narratives and storytelling while noting the “avoidance attitude” that distinguishes art museums from more accepting approaches in history, science and decorative arts museums.

To situate the role of wall texts in permanent exhibitions of art in museums today, we draw on Whitehead and Coffield’s (2018) notion of “interface”. In this perspective, the material and architectural delineations of “the wall” are acknowledged as part of a mediating environment – or interface – for visitors’ movement and meaning making in a gallery space. As such, the wall texts relate to specific works of art in a room, and to the empty space between and surrounding them on wall surfaces. But they also enter into a larger cartographic museum text (Whitehead 2011) that includes location signage, image markers, introductory panels and a changeable realm of oral and exterior semiotic resources (Jeanneret, Depoux, Luckerhoff, Vitalbo & Jacobi 2010). At the same time, in contrast to mobile information on leaflets, tablets and phones that visitors may choose to access – and which may not have been produced by curators or staff – wall texts are clearly the domain of the museum and remain under its control. The permanent presence of wall texts is part of the aesthetic, scholarly and contextual experience of exhibition rooms, whether the public chooses to read them or

not. As such, the wall text is both emblematic of the museum’s historical role as educational institution and a reflecting object for analyzing changing textual practices.

Taking the wall text as point of departure, this article investigates practical and institutional developments in museum media and communication in the exhibition room. We first present findings from a recent study of types and functions of wall texts used in “older” collection exhibitions of art in twelve Norwegian museums, including a national museum of art. We then examine the types and functions of wall texts being planned and designed for the art collection exhibitions in a new building for this national art museum, which will open in 2020. In our analytical focus on the wall text, we unpack how perspectives on enlightenment and experience become institutionally embedded in the interface of interpretive media. We conclude by reflecting on processes of cultural transformation in communication practices in art museums.

FOLLOWING THE TEXT

Expository catalogue texts were initially experienced as handheld gallery guides in art museums in the late 1800s and early 1900s but “in time curatorial interpretation found its way into the gallery space in the form of extended captions, wall panels and large format graphics” (Pavement 2019:43). Texts in art museums have been analyzed in museology, museum studies and visitor studies from different perspectives, to critically examine their role in the historical development of the museum as cultural institution (Bennett 1995; Bourdieu, Darbel & Schnapper 1990), practices of design and implementation (Fritsch 2011b; Hooper-Greenhill 1999), linguistic characteristics and communication modes (Ravelli 2006; Serrell

2015), digital platforms and multimodal content (Pierroux & Ludvigsen 2013; Schwan, Dutz & Dreger 2017), and visitors' social interactions, engagement and learning (Leinhardt & Knutson 2004; Jeanneret, Depoux, Luckerhoff, Vitalbo & Jacobi 2010; Pierroux, Qvale, Steier & Sauge 2014).

Although the use of text and labels in other types of museums is often a question of experimentation and applying "best practice," art historians have long viewed the text-work relationship in art museums as fraught; positioning phenomena of such different character in the same visual plane was often problematized as a threat to the latter (Solhjell 1998; Bal 2003). In practice, the dilemma requires navigating between views that, on the one hand, the artwork speaks best for itself and, on the other hand, text complements and enriches the exhibition experience also aesthetically. Moreover, as Pavement (2019) points out, there is the problem of the finite space of the gallery and concerns with overwhelming the visitor with visual information. However, with findings from visitor studies over several decades confirming that visitors both want and read texts that provide context for viewing and interpreting artworks in an exhibition (Screven 1992; Hooper-Greenhill 1999; Smith, Smith & Tinio 2017), practices and guidelines for writing and displaying different types of wall texts have been adopted and are increasingly accepted.

Despite general acceptance, the uses, types and content of wall texts in exhibitions of art – essentially unchanged since Enlightenment ideals in the early nineteenth century – remain an important and often controversial topic of discussion among curators and other museum staff, perhaps more so for collection exhibitions. In contrast to the more topical character of temporary exhibitions,

"permanent" exhibitions of art from the collections remain in place years at a time, with works selected, arranged and juxtaposed by curators to convey general and specific narratives carefully developed from art historical research (Bauer & Pierroux 2014). Tensions center on whether texts should be mounted on walls as a permanent part of the exhibition or only be made available to visitors "on demand" through handheld texts (e.g., leaflets, audio guides, and apps for phones and other devices), as well as on the modality, size, character, length and content of different text types. Moreover, as digital media, mobile devices, ubiquitous access to the internet, and context-aware technologies continue to blur text genres in museum communication, new forms of curatorial expertise and collaboration among museum staff and external consultants are required. Today, composing and editing interpretive texts in museums may entail writing cues for sequences of gesture-based interactive content (e.g., multi-touch tables, scannable texts, touch screens); prompts for collaboration and reflection; instructions for exploring and contributing to narrative content; and storyboarding film and audio tour scripts, among other functions (Pierroux & Ludvigsen 2013).

In terms of the effects of different text formats on visitors' behaviors and knowledge acquisition in art exhibitions, a recent study by Schwan, Dutz and Dreger (2017) compared how visitors engaged with information presented on labels, in longer interpretive texts on walls and on mobile tablets, and in audio guides. They found significant increases in visitors' dwell time and memory of text explanations and pictorial details when longer texts were used instead of brief labels alone, regardless of whether the interpretive texts were printed and wall-mounted next to

artworks or accessed interactively on mobile guide tablets. The study also confirmed the substantial modality benefits of audio guides, which “outperformed interpretive label and mobile guide conditions in terms of pictorial and textual memory” (p. 8). This effect is often explained by the cognitive advantages of simultaneously processing information in two separate channels. The study confirms research over several decades that has consistently shown clear interpretive advantages for visitors in “picture-plus” versus “picture-alone” conditions (Schwan, Dutz & Dreger 2017).

WALL TEXTS IN NORWEGIAN ART MUSEUMS 2002–2012

It is within this mediating interface that we explore museum practices in the design and implementation of wall texts in permanent exhibitions of art in Norway, and how these have transformed over a fifteen-year period. The data was collected in 2011–2012 as part of a larger project designed to identify types of art historical narratives in Norwegian art and decorative arts museums, and the representational means used to convey these narratives in permanent exhibitions (Falch, Haakestad, Qvale, Sauge & Solhjell 2015). A systematic reading of the museum as a cartographic text was conducted, inventorying what Jeanneret *et al.* (2010:56) call “semiotic registries (organization of space, written object materials, physical context for reading, types of documents displayed, etc.)” Staff at the participating museums completed a comprehensive questionnaire designed to register detailed information about communicative conventions and resources used in the exhibitions. In addition, documents such as photos, texts, drawings were part of the data corpus. To explore the historical use of

wall texts in art museums, we focus solely on data collected from the twelve participating art museums with permanent exhibitions, which ranged in age from one to nine years old at the time. Specifically, we analyzed the registered categories and quantities of *endo-textuals*, or texts prepared for visitors by the museum, on the walls in exhibition rooms. In keeping with the analytical focus described above, the registered use of texts designed as “movable” (e.g., guidebooks, room leaflets and audio guides) and introductory panels placed near the entrance to rooms were not included in the analysis.

In terms of content, the museums participating in the study registered different narrative approaches, e.g., whether texts had an introduction to the narrative or history that was shown in the exhibition, whether there was a floor plan, and whether the “overall” narrative, central concepts, or problems raised in the exhibition or other texts were explained or made explicit in the narrative. A precise morphological analysis (lexicon, syntax, enunciation, and semiotic structure) was not within the scope of the study. Visitor use of *endo-textuals* and *exo-textuals* (either bought on site or brought in by visitors) was similarly not included in the study.

To consider how wall texts in older exhibitions relate to contemporary text practices, we also present a study of the types and functions of wall texts being planned and designed for the new collection exhibitions at the national art museum. This analysis is based on internal documents prepared by the museum and a design consultant firm; interviews with curators and key staff members responsible for both the older permanent exhibition and the one currently being planned; and participant observations (second author) of ongoing planning within the museum. Although the

analysis of current plans is preliminary, in the sense final preparations of texts and materials are ongoing, the study lays the groundwork for future research, including studies of visitor use.

ANALYSIS

Typologies of museum text types have been developed over several decades. In this analysis, we refer to Beverly Serrell's description of text types in practice:

The most important types of interpretive labels in any exhibition are the title, introduction, section labels, group labels and captions. These labels help to organize the information and present the exhibition's rationale for looking like it does. Although these labels are developed as linear and hierarchical information, they may not be used in the 'right' order by visitors. Nevertheless, the labels still should have internal integrity, organization, and clear logic to the design (2015:31).

Drawing on Serrell's (2015) definitions, and in order of frequency, three types of wall text were identified in the twelve art exhibitions in our study: 1) titles, or non-interpretive identification labels, which provide minimal details about each artwork, such as artist name, title and date of artwork, material, ownership; 2) room texts, which are narratives (2–3 paragraphs, approximately 800 words) about the works in the room to provide context, stimulate curiosity and engage interest in viewing and reading more; and 3) captions, which are brief interpretive labels placed near the work title that provide context for a specific artwork. In the range of text types that were used, captions were considered the newest and most controversial, in that larger labels near artworks compete more noticeably for visual attention than the more discreet titles or

room texts, which are generally placed on walls without art or at remove from the artworks. However, only half the exhibitions used all three text types; three exhibitions used two text types, and three exhibitions used just one of these text types (titles). Moreover, across the exhibitions' nine-year age span we found no increase or change in pattern in terms of the number of different text types that were used; more recent exhibitions had as many (or as few) different text types as the oldest exhibition.

In terms of content, we found that the permanent exhibitions had a similar primarily national art historical narrative, followed by narratives that highlighted affiliations to regional, Scandinavian and Nordic, European and Western art. These may be understood as narrative schematic templates (Wertsch 2002; Andreassen & Pierroux 2013), defined as generalised narrative traditions that emerge over time to ground processes of collective remembering. *Chronological* and *style-based* approaches to presenting historical narratives were most common, while *themes in art history* was an alternative approach. An *aesthetic* approach, defined in the questionnaire as an arrangement that emphasized formal aesthetic elements in artworks across chronology, was also used in parts of exhibitions but seldom as a main strategy. Notably, most curators responded that they had the aim of conveying one or more specific narratives to visitors mainly by emphasizing contexts and connections between artworks through their arrangement and placement. These relations and contexts were not necessarily made explicit in the wall texts, however, pointing to a tension identified in New Museology (Vergo 1989; Bennett 1995) and by Bourdieu (1993) a quarter of a century ago; although wall texts are cloaked in the "democratic language"

44 of enlightenment ideals, they are part of an exhibition interface that also presumes “works of art have the power to awaken the grace of aesthetic enlightenment in anyone, however culturally uninitiated he or she may be” (Bourdieu 1993:237).

This ideal was reflected in the gallery rooms of the national art museum’s permanent collection as well, (Fig. 1) which employed only titles, room texts, and to a limited extent, captions in curatorial arrangements of art that included purposefully implicit and embodied juxtapositions for visitors to “read” within and across rooms (Bauer & Pierroux 2014; Jornet & Steier 2015). The exhibition, installed in 2011 and closed in 2018, was a schematic narrative template of the “history of art” chronologically arranged on the main floor of the National Gallery, a Neo-Renaissance building from nineteenth century. In keeping with the museum’s organizational structure and a process that involved leadership and members of a curatorial team, the chief curator was responsible for the overall selection, narrative, and arrangement of works, as well as the types, quantities and content of the texts. The exhibition catalogue and other texts further served as the basis for content for additional interpretive media and materials, including an audio guide tour. The editorial process for the audio content was led by an education curator in collaboration with an external consultant, and involved an iterative process in which a curatorial group was involved in mainly editing existing texts. Once the final texts were approved, they were read aloud by professional actors in Norwegian and English, recorded for use by visitors. In the permanent exhibition, this was the only multimodal endo-textual resource provided by the museum.

To summarize, this study found the tradition of a minimal use of wall text firmly

entrenched in permanent art exhibitions in Norwegian museums, from a time when aesthetic experience and vision were privileged as modes of enlightenment. As Whitehead & Coffield (2018:242) remind us, “interfaces are epistemological, whether by design or by accident. They don’t allow for any and all kinds of interaction, and the structuring nature of the interface isn’t neutral”. The relatively unchanged “picture-alone” approach to wall texts since the time of early museum galleries seems to confirm the fundamentally conservative nature of art museums (Samis 2019), and the view that a visitor has the capacity to construct meaning from art exhibitions on par with experts through primarily looking at artworks (Bauer & Pierroux 2014). This perspective on visitors’ drive and capacity for meaning making may be conceptualized in terms of *Bildung*, which refers to the German tradition of self-cultivation and implies life-long processes of personal and cultural maturation (Strand 2014). As *Bildungsmittel*, or means for self-cultivation, the wall texts in this study patrol a carefully arrayed field of projection, to become part of an interface “in which all objects of thought (...) can be ordered and compared” (Crary 1990:56).

WALL TEXTS IN A NEW NATIONAL ART MUSEUM 2016–2019

A new national museum building will open in 2020, with exhibition rooms on two large floors covering several city blocks. The design for the new permanent exhibitions has the aim of presenting updated knowledge about the museum’s collections and to convey originality, quality and depth in art historical scholarship, in education, in conservation, and in communication. The new exhibitions will also follow a largely chronological arrangement,



Fig. 1. Wall texts from permanent exhibition 'Dance of Life' (2010-2018) at the National Museum of Art, Architecture and Design, Oslo. Photograph: Annar Bjørgli.

with works from the design and decorative arts collections shown on the first floor (31 rooms) and the second floor showing works from the art collection, interspersed with works from the architecture collection (56 rooms). The overall chronological approach to an historical narrative thus differs from the previous exhibition in the National Gallery building in its emphasis on interdisciplinary interplay between art forms from the same time period – and occasionally across periods – to illustrate a particular theme or motive (Nasjonalmuseet 2016).

In addition to introduction panels and timelines for different sections of the exhibition, it was decided early in the planning stage in 2016 that four types of wall texts were to be used to communicate interpretive

material in all gallery spaces in the new building. Three types had previously been used in the museum's collection exhibitions: titles, room texts and captions, and it was decided following an internal process of evaluation and debate that these should continue to be used. The room texts will be clearly placed at the entrance to each gallery in the new building to present a room's narratives, setting a standard for the entire museum's communication approach. Further, each work of art will have a title, and selected works will have captions. *Group texts* is a new type of text that will provide additional art historical information about selected works, and several group texts may be placed on the same wall. Room texts, captions and group texts are carefully integrated with the overall room narrative.

The increase in both type and amount of wall texts represented a break with the museum's previous practices related to *Bildungsmittel*, and acknowledged a need to offer more interpretive resources to visitors (Nasjonalmuseet 2016, 2017). The museum director was also explicit at that time about his opposition to incorporating digital resources, screens or interactive displays in the new art galleries, considering such resources disruptions to experiencing art. Yet it was not long into the architectural design process before plans for the use of digital interpretive media changed. In 2016, the museum leadership established "documentary film" as a specific field, and an editorial board was formed to select and present film material from the collection in the new exhibition. It was quickly discovered that there were no suitable spaces in the plans for the new building to show films. In 2017, ideas for the use of media broadened from "documentary film" to "film and multimedia," and the plans changed to include such productions in exhibition rooms – primarily in the design and decorative arts sections but also in the art and architecture exhibition rooms, many of which would have benches available (Nasjonalmuseet 2017). In 2018, the field "documentary film" was formally changed to "digital communication" and a new multimedia editorial group was established to enhance interpretation in all exhibition rooms (Nasjonalmuseet 2018a).

An existing document for planning exhibition texts was adapted for use by curatorial teams to describe the types of digital materials and content required for each room. Based on guidelines developed in collaboration with external media consultants, these documents served as specifications for multimodal products that will be in place in the new national museum building place by 2020.

Our analysis of the specifications identified seven types of multimedia productions for different content and didactic and immersive purposes, or what Samis (2102:56) described as "intellectual modes of multimedia". These intellectual modes are 1) materials and techniques / artistic process; 2) historical context; 3) interactive map related to works on display; 4) specific installation; 5) sound atmosphere; and 6) "other" sound designs and 7) "other" interactives (Nasjonalmuseet 2018b). In general, the productions will be timed to last two minutes and available for "viewing, listening and interacting" on screen platforms that are permanently wall-mounted, bench-mounted and floor-mounted. The current design for wall-mounted screens has the form of vertical metal plate with a ledge at the bottom, angling away from the wall, with screen mounted to the ledge (Fig. 2). In addition, productions may be presented in larger format on screens mounted directly to the wall, on table screens, and as specific installations.

Eight of the fifty-six rooms for exhibiting art are currently planned to have permanent wall screens (nine small and two large), and nine additional rooms will have media produced for permanent seated stations, table screens and specific installations (Nasjonalmuseet 2018b). This is not a large number; thirty-nine of the fifty-six rooms dedicated to exhibiting works from the art and architecture collections will not have multimodal productions of any kind (70 percent). In contrast, only five rooms exhibiting works from design and decorative arts collections on the first floor will not have multimodal productions of some kind (13 percent). In other words, there is a markedly more reserved use of multimodal wall texts in the art and architecture exhibition than in the design and decorative arts exhibition. (These

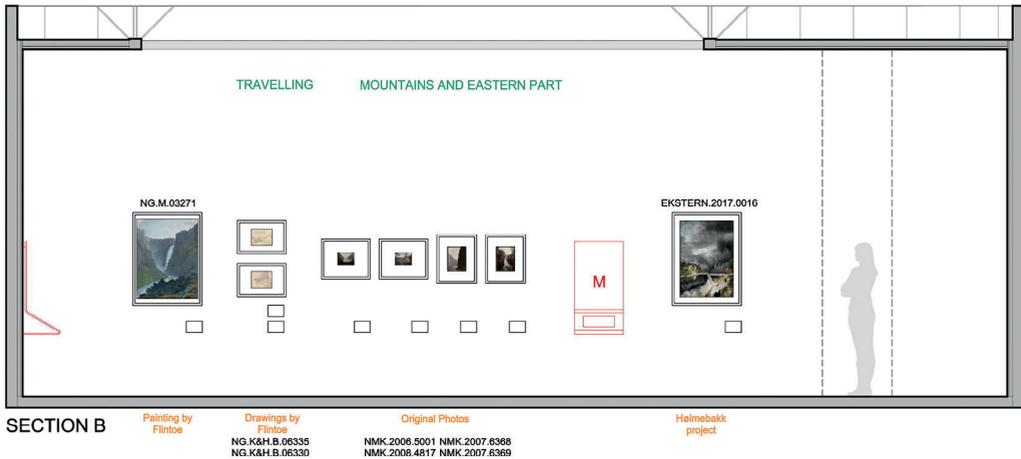


Fig. 2. Drawing showing design and placement of digital and analogue wall texts for a gallery in the new National Museum building. Drawing: Guicciardini & Magni Architects.

figures do not include two rooms dedicated solely to architecture, which have three screen-based wall texts each.)

To sum up, through an internal process of collaboration and debate that lasted several years, the use of four different wall text types, including a new category “group text,” became established as a new analogue practice by curators and those responsible for exhibitions in the new national museum building. Moreover, although modest in use, the communicative, experiential and educational potential of film and multimedia prevailed over an initial reluctance to include digital interpretive media in the collection exhibition rooms. And, rather than “adapting” existing catalogue texts to a new modality as in previous audio guide designs, the museum’s collection of films, sound recordings, and installations will serve as point of departure to create new types of multimodal products and experiences for specific exhibition rooms. A blended approach to wall texts, entailing “the seamless integration of interpretive technologies with

museum object and analogue resources” (Samis 2019:51), has thus been established as a new interface for experience.

REFLECTIONS

Against a background of conservative text use in Norwegian art museums, we explored a case in which a new building served as a large-scale intervention in existing practices. The wall text, a bastion of enlightenment that has historically privileged vision and aesthetic experience (Crary 1990; Bourdieu 1993), was transformed, broadening art’s interpretive realm by engaging more senses and inviting new experiential modes. At the same time, in contrast to the utopian visions and grand promises that spurred the collective imagination two decades ago, the case also illustrates how large aims for museum media innovations are often supplanted by what Samis (2019) characterized as conservative objectives. Citing examples of thwarted ambitious attempts by the J. Paul Getty Museum and the San Francisco Museum

of Modern Art, among other museums, Samis views the “normalization” of media communication by art museums as more practical than ideological; long regarded ideal testbeds for experimentation, the challenges and costs of implementing innovative and media-rich ubiquitous systems in museums using emergent technologies are not trivial.

The past fifteen years covered in this study have been a time of rapid change, both in museum media and communication technologies and in the research perspectives and methods employed to investigate the significance of these developments. Looking back on a research-practice partnership between the University of Oslo and the National Museum of Art, Architecture and Design that has now spanned a decade, we recognize the temptations, pitfalls and results of riding the hype curve of cutting-edge technologies (Samis 2019), from inflated expectations through disillusionment to eventually understanding what may constitute innovative and productive practices and relevant outcomes. In this case, cultural transformation at the organizational level was such an outcome, in the sense of a mediatisation process (Drotner, Dziekan, Parry & Schröder 2019) that cultivated specialization and new professional skills related to the design and use of digital interpretive media in the museum’s collection exhibitions.

In media studies theory, “mediatisation is a long-term, longitudinal process that implies transformations of practice and institutions taking place as an interplay between changes in communication and media and the personal, societal, political and cultural contexts in which they operate” (Drotner, Dziekan, Parry & Schröder 2019:8). The small but significant changes in a national art museum’s organization, the new blended approach to digital interpretive media, and

expanded types of wall texts, illustrate the premise for this special issue, that discursive and practical tensions between enlightenment and experience are at the core of new practices in museums.

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LITERATURE

- Andreassen, Ingvild & Palmyre Pierroux 2013. “How do you know that? A study of narrative and mediation at an archaeological excavation site.” *Nordisk Museologi* 1, 67–85. DOI: <https://doi.org/10.5617/nm.3092>
- Bal, Mieke 2003. “Visual Essentialism and the Object of Visual Culture.” *Journal of Visual Culture* 2:1, 5–32. DOI: <https://doi.org/10.1177/147041290300200101>
- Bauer, Daniela & Palmyre Pierroux 2014. “Expert and adolescent interpretive approaches in a national art museum.” *Museum Management and Curatorship* 29:3, 260–279. DOI: <https://doi.org/10.1080/09647775.2014.919162>
- Bennett, Tony 1995. *The Birth of the Museum*. London: Routledge.
- Bourdieu, Pierre 1993. *The Field of Cultural Production*. New York: Columbia University Press.
- Bourdieu, Pierre, Alain Darbel & Dominique Schnapper 1990. *The Love of Art: European art museums and their public*. Stanford: Stanford University Press. DOI: <https://doi.org/10.1525/ae.1992.19.2.02a00230>
- Crary, Jonathan 1990. *Techniques of the Observer*. Cambridge: MIT Press.
- Drotner, Kirsten, Vince Dziekan, Ross Parry

- & Kim Christian Schröder 2019. "Media, mediatization and museums: A new ensemble." In Kirsten Drotner, Vince Dziekan, Ross Parry & Kim Christian Schröder (eds.), *The Routledge Handbook of Museums, Media and Communication*. London: Routledge, 1–12. DOI: <https://doi.org/10.4324/9781315560168>
- Falch, Frank, Jorunn Haakestad, Anne Qvale, Birgitte Sauge & Dag Solhjell 2015. *Komparativ analyse av basisutstillinger i norske kunst- og kunstindustrimuseer 2011–2012*. (Comparative Analysis of Collection Exhibitions in Norwegian Art and Decorative Arts Museums 2011–2012). Nasjonalmuseet for kunst, arkitektur og design, KODE – Kunstmuseene i Bergen og Sørlandets Kunstmuseum. www.nasjonalmuseet.no, accessed September 15, 2018.
- Fritsch, Juliette 2011a. "How Can We Define the Role of Language in Museum Interpretation?" In Fritsch, Juliette (ed.), *Museum Gallery Interpretation and Material Culture*. New York: Routledge, 97–108. DOI: <https://doi.org/10.1111/j.1755-5825.1996.tb00771.x>
- Fritsch, Juliette (ed.) 2011b. *Museum Gallery Interpretation and Material Culture*. New York: Routledge.
- Hooper-Greenhill, Eilean 1999. "A New Communication Model for Museums." In Eilean Hooper-Greenhill (ed.), *The Educational Role of the Museum*. London: Routledge.
- Jeanneret, Yves, Annelise Depoux, Jason Luckerhoff, Valérie Vitalbo & Daniel Jacobi 2010. "Written Signage and Reading Practices of the Public in a Major Fine Arts Museum." *Museum Management and Curatorship* 25:1, 53–67. DOI: <https://doi.org/10.1080/09647770903529400>
- Jornet, Alfredo & Rolf Steier 2015. "The Matter of Space: Bodily performances and the emergence of boundary objects during multidisciplinary design meetings." *Mind, Culture, and Activity* 22, 129–151. DOI: <https://doi.org/10.1080/10749039.2015.1024794>
- Kidd, Jenny 2014. *Museums in the New Mediascape: Transmedia, Participation, Ethics*. Farnham: Ashgate. DOI: <https://doi.org/10.4324/9781315596532>
- Leinhardt, Gaea & Karen Knutson 2004. *Listening in on Museum Conversations*. Walnut Creek: Altamira Press.
- Nasjonalmuseet 2016. *Den faste samlingsutstillingen/ Basisutstilling i det nye Nasjonalmuseet*. Project document, Version 1 (June 7, 2016), 3 and 6–7.
- Nasjonalmuseet 2017. *Den faste samlingsutstillingen i det nye Nasjonalmuseet*. Project document, Version 9 (May 16, 2017), 6–7 and 8.
- Nasjonalmuseet 2018a. *Den faste samlingsutstillingen i det nye Nasjonalmuseet*. Project document, Version 12 (revised March 20, 2018), 11–13.
- Nasjonalmuseet 2018b). Internal document: *In-rooms AV-multimedia production form*, 2018. Overview form: quantity of production types, 2018.
- Pavement, Peter 2019. "The Museum as Media Producer: Innovation before the digital age." In Kirsten Drotner, Vince Dziekan, Ross Parry & Kim Christian Schröder (eds.), *The Routledge Handbook of Museums, Media and Communication*. London: Routledge, 31–46. DOI: <https://doi.org/10.4324/9781315560168>
- Pierroux, Palmyre & Sten Ludvigsen 2013. "Communication Interrupted: Textual Practices and Digital Interactives in Art Museums." In Kirsten Drotner, Vince Dziekan, Ross Parry & Kim Christian Schröder (eds.), *The Routledge Handbook of Museums, Media and Communication*. London: Routledge, 153–176. DOI: <https://doi.org/10.4324/9781315560168>
- Pierroux, Palmyre, Anne Qvale, Rolf Steier & Birgitte Sauge 2014. April 2–5, 201 *Posing with Art: Researching and Designing for Performative Acts of Interpretation*. Paper presented at the Museums and the Web 2014, Baltimore, MD.
- Ravelli, Louise J. 2006. *Museum Texts. Communication Frameworks*. New York: Routledge.

- 50 Samis, Peter 2019. "Revisiting the Utopian Promise of Interpretive Media. An Autoethnographic Analysis Drawn from Art Museums, 1991–2017." In Kirsten Drotner, Vince Dziekan, Ross Parry & Kim Christian Schröder (eds.), *The Routledge Handbook of Museums, Media and Communication*. London: Routledge, 47–66. DOI: <https://doi.org/10.4324/9781315560168-5>
- Schwan, Stephan, Silke Dutz & Felix Dreger 2017. "Multimedia in the Wild: Testing the Validity of Multimedia Learning Principles in an Art Exhibition." *Learning and Instruction* 55, 158–157. DOI: <https://doi.org/10.1016/j.learninstruc.2017.10.004>
- Screven, C. G. 1992. "Motivating Visitors to Read Labels." *International Laboratory for Visitor Studies* 2:2, 183–211.
- Serrell, Beverly 2015. *Exhibit Labels: An Interpretive Approach* (Second ed.). Lanham, MD: Rowman & Littlefield.
- Smith, Lisa F., Jeffrey K. Smith & Pablo P.L. Tinio 2017. "Time spent viewing art and reading labels." *Psychology of Aesthetics, Creativity, and the Arts*, 11:1, 77–85. DOI: <https://doi.org/10.1037/aca0000049>
- Solhjell, Dag 2001. *Formidler og formidlet. En teori om kunstformidlingens praksis*. Universitetsforlaget, Oslo.
- Strand, Torill 2014. "Philosophy of Education in the Present." In Papastephanou, Marianna, Torill Strand & Anne Pirrie (eds.), *Philosophy as a Lived Experience. Navigating through dichotomies of thought and action*. LIT Verlag, 243–257.
- Vergo, Peter 1989. *The New Museology*. London: Reaktion Books.
- Wertsch, James 2002. *Voices of Collective Remembering*. Cambridge: Cambridge University Press.
- Whitehead, Christopher & Emma Coffield 2018. "The multiple interfaces of engagement. Towards a new conception of gallery learning." *Museum & Society*, 16:2, 240–259.
- Whitehead, Christopher 2011. "Toward Some Cartographic Understandings of Art Interpretation in Museums." In Juliette Fritsch (ed.), *Museum Gallery Interpretation and Material Culture*. New York: Routledge, 53–67.

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